

Palisades Nuclear Plant: 27780 Blue Star Memorial Highway, Covert, MI 49043

October 17, 1995

Nuclear Regulatory Commission Document Control Desk Washington, DC 20555

DOCKET 50-255 - LICENSE DPR-20 - PALISADES PLANTFACILITY OPERATING LICENSE AND TECHNICAL SPECIFICATIONS CHANGE REQUEST - MISCELLANEOUS CHANGES

A request for a change to the Palisades Facility Operating License and Technical Specifications (TS) is enclosed. The following changes are proposed:

- A. Proposed Facility Operating License Changes:
 - 1. Paragraph 2.B.(2) is changed to reference 10 CFR 40 and to allow use of source materials as reactor fuel.
 - 2. Paragraph 2.E is reworded to delete reference to specific amendments and specific revisions in the listed titles of the Physical Security Plan Suitability Training and Qualification Plan, and Safeguards Contingency Plan.
 - 3. Several minor editorial changes are made to the license.
 - 4. Paragraph 2.F has been deleted.
- B. Proposed Technical Specifications and Basis changes:
 - 1. The pressurizer cooldown limit is changed from 100 to 200°F/hour.
 - 2. The word "shall" is added to TS 3.1.2c, where it had been omitted.
 - 3. "Average Hourly" is added to column headings in TS 3.1.2c.
 - 4. Action 3.3.3c is moved from page 3-31 to 3-30, where it would immediately follow actions 3.3.3a and 3.3.3b.

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- 5. The Shield Cooling System requirements are relocated to the FSAR.
- 6. The "3.25 times" limit is deleted from TS 4.0.2.
- 7. The expired notes added by Amendments 88 and 164 are deleted.
- 8. References to former Specification 6.9.3.3b have corrected.
- 9. The Design Features description of reactor fuel is expanded to include depleted and natural uranium.
- 10. An FSAR reference in the Design Features has been corrected.
- 11. Several TS bases are revised.

The enclosed TS change request includes the following attachments:

- 1. Proposed Facility Operating License Pages.
- 2. Existing License Pages with Proposed Changes Marked.
- 3. Proposed TS and Basis Pages.
- 4. Existing TS Basis Pages with Proposed Changes Marked.

While most of the proposed changes are administrative, the change restoring the pressurizer cooldown rate limit to 200°F per hour (TS change 1) will remove an unnecessary operation restriction during a forced or emergency cooldown. Therefore, approval of these proposed changes is requested as soon as practical. In addition, the changes which allow use of source material (License change 1 and TS change 7) will be needed to receive the fuel for cycle 13 which will use axial blankets. The fuel for that cycle is currently expected to arrive at the plant site about the end of 1996.

SUMMARY OF COMMITMENTS

This letter does not make or alter any commitments to the NRC.

Richard W. Smedley Manager, Licensing

CC Administrator, Region III, USNRC Palisades NRR Project Manager, USNRC Resident Inspector, USNRC - Palisades State of Michigan

Enclosure

CONSUMERS POWER COMPANY Docket 50-255 Request for Change to Facility Operating License DPR-20

It is requested that Facility Operating License DPR-20 and the Technical Specifications (TS) contained therein, issued to Consumers Power Company for the Palisades Plant, be changed as described below:

I. Changes

- A. Facility Operating License Changes:
 - 1. It is proposed that Paragraph 2.B.(2) is changed:

from: CPCo, pursuant to the Act and 10 CFR Part 70, 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, as supplemented and amended;

to: CPCo, 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;

2. It is proposed that Paragraph 2.E is changed:

from: The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans, including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21 are entitled: "Palisades Plant Physical Security Plan," through Revisions 25, dated June 4, 1990, approved June 13, 1990; "Palisades Plant Suitability Training and Qualification Plan, "through Revision 9, dated November 22, 1989, approved December 18, 1989; and "Palisades Plant Safeguards Contingency Plan," through Revision 2, dated September 30, 1988, approved November 8, 1988. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.

to: The licensee shall fully implement and maintain in effect all provisions of the Commission-approved "Palisades Plant Physical Security Plan," "Palisades Plant Suitability Training and Qualification Plan," and "Palisades Plant Safeguards Contingency Plan," and all approved amendments.

CPCo may make changes to these plans without prior Commission approval, if the changes do not decrease the safeguards effectiveness of the plans, in accordance with $10 \, \text{CFR} \, 50.54(p)(2)$.

- 3. It is proposed that several minor editorial changes be made to the license:
 - a) Consistent abbreviations have been used throughout the license; "the Commission" for the Nuclear Regulatory Commission and "CPCo" for Consumers Power Company.
 - b) Punctuation of series has been made consistent with the recommendations of NUREG 1379.
 - c) Where two different styles of writing are used to imply the same meaning the more concise wording has been used.
 - d) Subparagraph 1.D(ii) has been deleted.
 - e) The location of the Facility has been deleted from 2.B.(1).
 - f) Titles have been removed from 2.C.(1), 2.C.(2), and 2.E.
 - g) The first subparagraph after 2.C.(3)b has been deleted.
- 4. It is proposed that paragraph 2.F be deleted.
- B. Technical Specifications and Basis changes:
 - 1. It is proposed that TS 3.1.2b be changed:

from: The pressurizer heatup and cooldown rates be maintained $\leq 100^{\circ}F/hour^{**}$.

- to: The pressurizer heatup rate shall be maintained ≤ 100°F/hour**; the pressurizer cooldown rate shall be maintained ≤ 200°F/hour.
- 2. It is proposed that TS 3.1.2c be changed:

from: The primary coolant system (PCS) heatup and cooldown rates be maintained within the following limits:

to: The primary coolant system (PCS) heatup and cooldown rates shall be maintained within the following limits:

- 3. It is proposed that the words "Average Hourly" be added to the temperature rate limit column headings in TS 3.1.2c,
- 4. It is proposed that item 3.3.3c be moved from page 3-31 to 3-30.

- 5. It is Proposed that the requirements for operation of the Shield Cooling System, which do not meet the selection criteria of 10 CFR 50.36(c)(2)(ii), be relocated to the FSAR.
- 6. It is proposed that TS 4.0.2 be revised to delete the "3.25 times" limit in accordance with the guidance of GL 89-14. The wording would change:

from: Unless otherwise specified, each surveillance requirement shall be performed within the specified time interval with:

- a. A maximum allowable extension not to exceed 25% of the surveillance interval, and.
- b. A total maximum combined interval time for any three consecutive surveillance intervals not to exceed 3.25 times the specified surveillance interval.
- to: Each Surveillance Requirement shall be performed within the specified surveillance interval with a maximum allowable extension not to exceed 25 percent of the specified surveillance interval.
- 7. It is proposed that the note "10 days one time only, for the month of May 1985" be deleted from TS 3.7.2, and the note "For Cycle 11 only, this surveillance need not be performed until prior to startup for Cycle 12" be deleted from TS 4.1.2; 4.16.1c; 4.17.1; 4.17.2; 4.17.3; 4.17.4; 4.17.5; and 4.17.6.
- 8. It is proposed that reference to Specification 6.9.3.3b in two places on page 4-69 be changed to reference 10 CFR 50.4.
- It is proposed that the description of the reactor core in Design Features section 5.3.2b, be changed:

from: The reactor core shall consist of approximately 43,000 Zircaloy-4 clad fuel rods containing slightly enriched uranium in the form of sintered UO₂ pellets.

- to: The reactor core shall consist of approximately 43,000 Zircaloy-4 clad fuel rods containing depleted, natural, or slightly enriched uranium in the form of sintered $\rm UO_2$ pellets.
- 10. It is proposed that the figure referenced in Design Features section 5.3.2d be corrected from "Figure 3-5" to "Figure 3-2".
- 11. Several TS basis changes are also provided. These changes are intended to clarify the intent of the associated TS requirements.

II. <u>Discussion of Proposed Changes</u>

- A. Facility Operating License Changes
 - 1. Changing Paragraph 2.B.(2) to add reference 10 CFR part 40 and to allow use of source materials as reactor fuel, will allow use of depleted or natural uranium in addition to the currently allowed "slightly enriched uranium" as reactor fuel. The use of depleted or natural uranium in future core designs would result in enhanced fuel economy and reduced neutron leakage.

The first potential use of depleted or natural uranium would be selective fuel rod loading in the axial direction. Short distances at both the top and bottom of selected fuel rods would be loaded with depleted or natural uranium, depending on core location. The remaining length of these fuel rods would be loaded with slightly enriched uranium, as is currently done. The reduced enrichment zones at the top and bottom of the core are referred to as "Axial Blankets." With the continued use of low leakage loading patterns, the axial blankets will result in reduced fuel cost by optimizing the core power distribution.

The second potential use of depleted or natural uranium would be selective fuel rod loading in the radial direction. Selected fuel rods located near the exterior of the core would be loaded with depleted or natural uranium to reduce neutron leakage to the reactor vessel. This loading practice would be similar to the current practice of loading fuel bundles with several cycles of core residence into peripheral locations. The reduced U-235 content acts like a shield compared to a fuel rod with an enriched loading.

2. Removing the references to specific revisions in the plan titles included in Paragraph 2.E will eliminate the implication that the Facility Operating License must be amended when any subject plan revision is approved. Since Paragraph 2.E requires CPCo to implement and maintain in effect all provisions of the Commission-approved plans, removing the reference to specific revisions will not alter the need to have a revision approved prior to implementation.

While the specified revision numbers were appropriate at the time of issuance of the license, February 21, 1991, several subsequent revisions to these plans have been approved by the Commission:

The license specifies revision 25 of the Physical Security Plan; Revision 31 was approved on August 27, 1993. Portions of Revision 32 have been approved, and Revision 33 is currently under review.

The license specifies Revision 9 of the Suitability, Training and Qualification plan; Revision 14 was approved

on January 31, 1995.

The license specifies Revision 2 of the Safeguards Contingency plan; Revision 7 was approved on January 4, 1995.

In addition to deleting reference to specific revisions, Paragraph 2.E was reworded to explicitly require compliance with all approved amendments, and to delete the informational phrase "which contain Safeguards Information protected under 10 CFR 73.21".

A final sentence was added to clarify that changes which do not decrease the safeguards effectiveness of the plans may be made in accordance with 10 CFR 50.54(p)(2).

- 3. It is proposed that several minor editorial changes be made to the license:
 - a) Consistent abbreviations have been used throughout the license; "the Commission" for the Nuclear Regulatory Commission and "CPCo" for Consumers Power Company. The license currently uses both "the Commission" and "the NRC", and both "CPCo" and "the licensee". This change is proposed for consistency and brevity within the license.
 - b) Punctuation of series has been made consistent with the recommendations of NUREG 1379. Some series within the license included a comma before the final element; others did not. This change is proposed for consistency.
 - where two different styles of writing are used to imply the same meaning the more concise wording has been used in paragraphs 1.A, 1.F, 1,H, 1.I, and 2.C. Several paragraphs use wording like: "in accordance with the Commission's regulations in 10 CFR 70," while others use the more concise "pursuant to 10 CFR 70" or "in accordance with 10 CFR 70". The more concise wording is proposed.
 - d) Subparagraph 1.D(ii) has been deleted. It is redundant to paragraph 1.C.
 - e) The location of the Facility has been deleted from 2.B.(1). The location is specified in paragraph 2.A.
 - f) Paragraphs 2.C.(1), 2.C.(2), and 2.E are changed to remove the titles, "Maximum Power Level", "Technical Specifications", and "Physical Protection". Removing the titles from Paragraphs 2.C.(1), 2.C.(2), and 2.E will

result in a more consistent format for the license. No other paragraphs have titles, and there is nothing unique about the subject paragraphs which requires their being an exception.

- g) The first subparagraph listed after 2.C.(3)b has been deleted. It is redundant to 10 CFR 50.59.
- 4. Deleting paragraph 2.F will enhance the clarity of the license.

 A literal interpretation of this paragraph requires 24 hour reporting and 30 day written follow-up of any violation of those requirements included in license paragraph 2.C, which include:

All regulations in 10 CFR Chapter I,

All applicable provisions of the Act,

All rules, regulations and orders of the Commission,

All requirements of the Technical Specifications,

All requirements of the Environmental Protection plan, and

All provisions of the Fire Protection Plan.

Contrary to this literal interpretation, it is our understanding that this provision of the license is intended to implement 10 CFR 50.72 and 50.73. Since compliance with these regulations is required by paragraph 2.C, further implementation by paragraph 2.F is unnecessary.

- B. Technical Specifications and Basis changes
 - The pressurizer cooldown rate was changed from 200°F to 100°F by Amendment 163 to the Palisades TS. The appropriate cooldown rate is ≤ 200 °F/hour. The design for the pressurizer assumes a heatup rate of 100°F/hour and a cooldown rate of 200°F/hour for 500 cycles from 643°F to 70°F.

The 200°F/hour combined limit was issued in the original issue of the Palisades TS. Amendment 163 reduced the pressurizer heatup and cooldown rate limit from 200°F/hour to 100°F/hour to address an inconsistency between the heatup rate assumed in the pressurizer stress analysis and the pressurizer heatup rate limit in the TS. Since there are no physical means to attain a pressurizer heatup rate in excess of the assumed 100°F per hour, this change was proposed for consistency rather than safety.

At the time the changes made by Amendment 163 were proposed, it was not realized that a 100°F/hour cooldown rate might become limiting under any anticipated operating conditions, so it was proposed to simply change the combined heatup and cooldown limit from 200°F/hour to 100°F/hour. During implementation of Amendment 163, operations personnel realized that the new cooldown rate limit would unnecessarily restrict the rate of

Primary Coolant System depressurization following a steam generator tube rupture.

- 2. The word "shall" was inadvertently omitted from TS 3.1.2c. This change will restore the intended wording.
- 3. The addition of "Average Hourly" to the temperature limit column headings of TS 3.1.2c is intended to clarify the intent of the requirement. Amendment 163 altered the wording of the temperature rate limit TS to:

The primary coolant system (PCS) heatup and cool down rates be maintained within the following limits:

The pre-Amendment 163 wording was:

The average heatup or cooldown rate in any one hour time period shall not exceed the heatup or cooldown rate limit when one or more PCS cold leg is less than the corresponding "Cold Leg Temperature" below.

The implementation of Amendment 163 raised the question as to whether there had been a change in intent of the TS. Neither the intent of the TS nor the analysis methodology used to develop the limits have changed from issuance of the former wording (Amendment 131). The next-to-last basis paragraph on page 3-9 still refers to "average heatup rate" and "average hourly cooldown rate".

- 4. The movement of action 3.3.3c from page 3-31 to 3-30 is administrative. It is necessary because, when newly numbered TS 3.3.4 and 3.3.5 were proposed by our letter of October 5, 1994, and issued by Amendment 163, these new items were inadvertently located between action "3.3.3b" and action "3.3.3c" which was located on the following page. This change moves action "3.3.3c" so that it is in its proper location on the page. This change does not alter the TS requirements.
- 5. The deletion of Specification 3.15 for operation of the Shield Cooling System, which do not meet any of the criteria of 10 CFR 50.36(c)(2)(ii), and relocation of relevant information to the FSAR is an administrative change. The Shield Cooling System is not a safety grade system, does not contribute to plant response to any accident or transient, is not used as a success path in any of the Emergency Operating Procedures, and its functioning, or failure to function has no effect on any result of the Palisades PRA. The system is not automatically restarted following a loss of offsite power. Its functional requirements are discussed in the revisions to the FSAR. The TS contain no Action Statements or Surveillance Requirements pertaining to the Shield Cooling System.

Since this system does not meet any of the criteria listed in 10 CFR 50.36(c)(2)(ii), it is proposed that these requirements be relocated to the FSAR.

- 6. Generic Letter (GL) 89-14 encouraged licensees to propose changes to plant TS which would delete the "3.25 times" limit from TS 4.0.2. This change is proposed in accordance with the guidance of that GL. The proposed wording of TS 4.0.2 is taken from GL 89-14, which states that it has been found to be acceptable. The basis for TS 4.0.2 has also been revised in accordance with the guidance of GL 89-14.
- 7. Amendment 88 added a note to allow a one-time only diesel generator allowed outage time extension to ten days during May 1985. Amendment 164 added several notes allowing a one-time deferral of several surveillance requirements during Cycle 11. Notes stating "For Cycle 11 only, this surveillance need not be performed until prior to startup for Cycle 12" were added modifying refueling interval surveillance for some snubber tests and some instrument calibrations. Operation during Fuel Cycle 11 has been completed. Deletion of these notes is requested to remove unnecessary clutter from the TS.
- 8. Reference to Specification 6.9.3.3b in two places on page 4-69 has been changed to reference 10 CFR 50.4. Amendment 154 had renumbered Specification 6.9.3.3 to 6.9.4 without revising page 4-69. Specification 6.9.4b, however, references 10 CFR 50.4. The proposed change provides a more direct reference.
- 9. Changing the core description in Section 5.3.2b to include the use of depleted and natural uranium in addition to the currently specified "slightly enriched uranium" supports Facility Operating License change number 1, above. The discussion provided for that proposed change applies to this change.
- 10. The FSAR figure referenced in Design Features section 5.3.2d is incorrect. When the Updated FSAR was produced, the subject figure was revised to remove fuel designations applicable only to the initial core and its number was changed from 3-5 to 3-2. The TS reference to that figure was not updated. This change corrects that omission.

11. Basis changes:

The additional text included in the basis for TS 3.17 has caused some text to appear on different pages. Change bars were not included for text which was only moved from one page to another. The change bars, therefore, indicate actual textual changes. Basis pages which contain no altered text have no change bars.

a. The basis for Specification 3.1.1.g has been changed to reflect the 22 psi uncertainty used in the verification of

the $T_{\rm inlet}$ equation for the Cycle 12 Disposition of Events Report, and to correct a reference to Figure 3.0, which was relocated to the COLR by Amendment 169.

- b. The basis for TS 3.11.1 was changed to reflect the capability of the new plant computer to perform a Channel Check of the incore instruments on-line rather than offline as was formerly done. During the 1995 refueling outage these aging computers were replaced with a new computer system.
- c. The basis for TS 3.16 regarding the SIRW Tank Low Level actuation of the Recirculation Actuation Signal (RAS) was changed to clarify the conditions under which the RAS could occur in as little as 20 minutes.
- d. The basis for TS 3.17 was changed to correct and enhance Table B 3.17-1. That table provides information on instruments which affect multiple TS.
- e. The basis for TS 3.17.6 item 1, Neutron Flux Monitoring while shutdown, was changed to clarify the effect on channel operability of the failure of either (but not both) a wide range or a source range part of a channel.
- f. The basis for TS 3.17.6 item 2, rod position indication, was changed to provide additional information about the functions of the rod position indication equipment.
- g. The bases for TS 3.17.6 item 13, Rod Group Sequencing Control and Out of Sequencing Alarm, and item 18, Power Dependant Insertion Limit Alarm, have been changed to reflect changes in the plant computer system. The plant formerly used two digital computer systems, a Primary Information Processor (PIP) and a Secondary Position Indication (SPI). During the 1995 refueling outage these aging computers were replaced with a new computer system.

III. Analysis_of No Significant Hazards Consideration

Consumers Power Company finds this proposed Technical Specifications change involve no significant hazards, therefore, a no significant hazards determination in accordance with 10 CFR 50.92(c) is justified.

Among the four Facility Operating License and nine Technical Specifications changes proposed, only two, the allowance to use source material as reactor fuel in Paragraph 2.B.(2) of the License, and the restoration of the pressurizer cooldown rate limit to 200°F per hour, affect the physical plant, its systems, or its operation. The remainder of the proposed changes are administrative:

Modifying the Operating License paragraphs 2.B and 2.C, Deleting Operating License paragraph 2.F, Making editorial changes to the license, Modifying the wording of Specification 3.1.2, Moving action "3.3.3c" from page 3-31 to page 3-30, Relocating Shield Cooling requirements to the FSAR, Deleting the "3.25 times" restriction from Specification 4.0.2, Revising a reference in Specification 4.14.6, and Deleting expired Technical Specification notes,

Since these changes have no effect on the physical plant or its operation, they cannot involve a significant increase in the probability or consequences of an accident previously evaluated, create the possibility of a new or different kind of accident from any previously evaluated, or involve a significant reduction in a margin of safety.

The following evaluation supports the finding that operation of the facility in accordance with the two non-administrative changes would not:

1. <u>Involve a significant increase in the probability or consequences of an accident previously evaluated.</u>

Use of Source Material as reactor fuel: The use of depleted or natural uranium, defined as "Source Material" by 10 CFR 40.4, in addition to the currently allowed "slightly enriched uranium" would not affect the physical plant or its operation in any way which could increase the probability of any previously evaluated accident. Its use would not introduce any new kind or additional amount of fission product material. Therefore, use of source material as reactor fuel would not affect the consequences of an accident previously evaluated.

Restoration of the Pressurizer Cooldown Rate Limit: The Palisades Technical Specifications contain a single limit, item 3.1.2 b, for both heatup and cooldown rates for the pressurizer. The October 5, 1994 change request proposed changing that limit from 200°F/hour to 100°F/hour solely due to its inconsistency with the pressurizer design analysis. Fatigue calculations in the pressurizer design analysis assumed a heatup rate of 100°F/hour and a cooldown rate of

200°F/hour. Until issuance of Amendment 163, the Technical Specifications contained a single limit for both heatup and cooldown rates of 200°F/hour. Although the installed equipment is not capable of exceeding the 100°F/hour heatup limit, the October 5, 1994 change request proposed a revised limit to assure that the Technical Specification limit was not less restrictive than the design analysis. The higher pressurizer cooldown rate does not affect the results of our analyses which determined the PCS Pressure-Temperature limits or the LTOP setting requirements of the Technical Specifications.

When the change was proposed, it was not realized that the more limiting cooldown rate might adversely, and unnecessarily, affect plant operation. This proposed change to the Technical Specifications would separate the limits for heat up rate and cooldown rate, returning the specified cooldown rate to the original value which was consistent with plant design. The current heatup rate limit, which is also consistent with the design, would be retained. The proposed pressurizer cooldown rate will allow depressurizing of the Primary coolant system and flooding the pressurizer steam space without undue restriction. The more rapid depressurization would be important in the event of a steam generator tube rupture.

Therefore, operation of the facility in accordance with the proposed change to the Technical Specifications would not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Create the possibility of a new or different kind of accident from any previously evaluated.

Use of Source Material as reactor fuel: The use of depleted or natural uranium, defined as "Source Material" by 10 CFR 40.4, in addition to the currently allowed "slightly enriched uranium" would not affect the design (other than the fuel enrichment), configuration, or operation of the plant. Therefore this change cannot create the possibility of a new or different kind of accident from any previously evaluated.

Restoration of the Pressurizer Cooldown Rate Limit: The proposed change to the Technical Specifications would bring the plant within the assumptions of the design documents for the pressurizer and in line with the Accident analysis for the rapid reduction of the primary coolant system pressure. With the lower rate specified in the present technical specification, the depressurization of the PCS will be delayed to maintain the lower pressurizer cooldown rate.

Therefore, operation of the facility in accordance with the proposed change to the Technical Specifications would not create the possibility of a new or different kind of accident from any previously evaluated.

3. Involve a significant reduction in a margin of safety.

Use of Source Material as reactor fuel: The use of depleted or natural uranium, defined as "Source Material" by 10 CFR 40.4, in addition to the currently allowed "slightly enriched uranium" would not affect the Safety Limits, Limiting Conditions for Operation or other operating limits, or the safety analyses which they support. Therefore, the margin of safety is unaffected.

Restoration of the Pressurizer Cooldown Rate Limit: The proposed change to the Technical Specifications would bring the plant in line with the design analysis. This will not reduce the margin of safety since the higher rate is the basis for the present margin of safety.

Therefore, the proposed change to the Technical Specifications would not involve a significant reduction in a margin of safety.

IV. Conclusion

The Palisades Plant Review Committee has reviewed this Facility Operating License and Technical Specifications change request, entitled "Miscellaneous Changes", and has determined that the change involves no significant hazards consideration. This change has been reviewed by the Nuclear Performance Assessment Department. A copy of this change request has been sent to the State of Michigan.

CONSUMERS POWER COMPANY

To the best of my knowledge, the contents of this Facility Operating License and Technical Specifications change reguest, proposing several miscellaneous changes, are truthful and complete.

Thomas J. Palmisano Plant General Manager

Sworn and subscribed to, before me, this 17 day of October 1995.

Le ani Morse

LeAnn Morse, Notary Public Berrien County, Michigan Acting in Van Buren County

My commission expires February 4, 1997

ATTACHMENT 1

Consumers Power Company Palisades Plant Docket 50-255

OPERATING LICENSE AND TECHNICAL SPECIFICATIONS CHANGE REQUEST

Proposed Facility Operating License Pages

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, DC 20555

CONSUMERS POWER COMPANY DOCKET NO. 50-255 PALISADES PLANT FACILITY OPERATING LICENSE

License No. DPR-20

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for a license filed by Consumers Power Company (CPCo) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and 10 CFR Chapter I, and all required notifications to other agencies or bodies have been duly made;
 - B. Construction of the Palisades Plant (the facility) has been completed in conformity with Provisional Construction Permit No. CPPR-25 and the application, as amended, the provisions of the Act, and the regulations of the Commission, and has been operating under a provisional operating license since March 24, 1971;
 - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission (except as exempted from compliance in Section 2.D. below);
 - D. There is reasonable assurance that the activities authorized by this Facility Operating License can be conducted without endangering the health and safety of the public;
 - E. CPCo is technically qualified to engage in the activities authorized by this license, as amended, in accordance with 10 CFR Chapter I;
 - F. CPCo has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements";
 - G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;
 - H. The issuance of this license is in accordance with 10 CFR Part 51 and all applicable requirements have been satisfied; and
 - I. The receipt, possession, and use of source, byproduct, and special nuclear material as authorized by this license will be in accordance with 10 CFR 30, 40, and 70.

- Provisional Operating License No. DPR-20, dated March 24, 1971 as amended, is superseded in its entirety by Facility Operating License No. DPR-20 hereby issued to Consumers Power Company (CPCo) to read as follows:
 - A. This license applies to the Palisades Plant, a pressurized light water moderated and cooled reactor and electrical generating equipment (the facility). The facility is located in Van Buren County, Michigan, and is described in CPCo's Updated Final Safety Analysis Report, as supplemented and amended, and in CPCo's Environmental Report, as supplemented and amended.
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
 - CPCo, pursuant to Section 104b of the Atomic Energy Act of 1954, as amended, and 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," to possess, use, and operate the facility in accordance with the limitations set forth in this license;
 - (2) CPCo, 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) CPCo, 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 and radiation monitoring equipment calibration, and fission detectors in amounts as required;
 - (4) CPCo, 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) CPCo, 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 license shall be deemed to contain 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 to the additional conditions specified or incorporated below:
 - (1) CPCo is authorized to operate the facility at steady-state reactor core power levels not in excess of 2530 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. ___, and the Environmental Protection Plan contained in Appendix B are hereby incorporated in the license. CPCo shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.
 - (3) CPCo 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:
 - a. CPCo may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.
 - b. CPCo may alter specific features of the approved fire protection program provided:
 - Such changes do not result in failure to complete the fire protection program as approved by the Commission. CPCo shall maintain in auditable form, a current record of all such changes, including an analysis of the effects of the change on the fire protection program and shall make such records available to the Commission Inspectors upon request. All changes to the approved program shall be reported annually, along with the FSAR revision; and
 - Temporary changes to specific fire protection features which may be necessary to accomplish maintenance or modifications are acceptable provided interim compensatory measures are implemented.

D. The facility has been granted certain exemptions from the requirements of Section III.G of Appendix R to 10 CFR Part 50, "Fire Protection Program for Nuclear Power Facilities Operating Prior to January 1, 1979." This section relates to fire protection features for ensuring the systems and associated circuits used to achieve and maintain safe shutdown are free of fire damage. These exemptions were granted and sent to CPCo in letters dated February 8, 1983, July 12, 1985, and July 23, 1985.

In addition, the facility has been granted certain exemptions from Appendix J to 10 CFR Part 50, "Primary Reactor Containment Leakage Testing for Water Cooled Power Reactors." This section contains leakage test requirements, schedules and acceptance criteria for tests of the leak-tight integrity of the primary reactor containment and systems and components which penetrate the containment. These exemptions were granted and sent to CPCo in a letter dated December 6, 1989.

These exemptions granted pursuant to 10 CFR 50.12, are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security. With these exemptions, the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.

- E. CPCo shall fully implement and maintain in effect all provisions of the Commission-approved "Palisades Plant Physical Security Plan," "Palisades Plant Suitability Training and Qualification Plan," and "Palisades Plant Safeguards Contingency Plan," and all approved amendments. CPCo may make changes to these plans without prior Commission approval, if the changes do not decrease the safeguards effectiveness of the plans, in accordance with 10 CFR 50.54(p)(2).
- F. CPCo shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.
- G. This license is effective as of the date of issuance and shall expire at midnight on March 14, 2007.

FOR THE NUCLEAR REGULATORY COMMISSION

Thomas E.Murley/Signed/

Thomas E. Murley, Director Office of Nuclear Reactor Regulation

Date of Issuance: February 21, 1991

ATTACHMENT 2

Consumers Power Company Palisades Plant Docket 50-255

OPERATING LICENSE AND TECHNICAL SPECIFICATIONS CHANGE REQUEST

Existing Facility Operating License Pages With Proposed Changes Marked

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, DC 20555

CONSUMERS POWER COMPANY DOCKET NO. 50-255 PALISADES PLANT FACILITY OPERATING LICENSE

License No. DPR-20

- 1. The Nuclear Regulatory Commission (the Commission—or the NRC) has found that:
 - A. The application for a license filed by Consumers Power Company (the licensee(PCo) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I, and all required notifications to other agencies or bodies have been duly made;
 - B. Construction of the Palisades Plant (the facility) has been completed in conformity with Provisional Construction Permit No. CPPR-25 and the application, as amended, the provisions of the Act and the regulations of the Commission, and has been operating under a provisional operating license since March 24, 1971;
 - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission (except as exempted from compliance in Section 2.D. below);
 - D. There is reasonable assurance (i)—that the activities authorized by this Facility Operating License 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 set forth in 10 CFR Chapter I (except as exempted from compliance in Section 2.D. below);
 - E. Consumers Power Company PCo is technically qualified to engage in the activities authorized by this license, as amended, in accordance with the Commission's regulations set forth in 10 CFR Chapter I;
 - F. Consumers Power Company PCo has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
 - G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;

- H. The issuance of this license is in accordance with 10 CFR Part 51 of the Commissions's regulations and all applicable requirements have been satisfied; and
- I. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR 30, 40 and 70.
- 2. Provisional Operating License No. DPR-20, dated March 24, 1971 as amended, is superseded in its entirety by Facility Operating License No. DPR-20 hereby issued to Consumers Power Company (the licensee or CPCo) to read as follows:
 - A. This license applies to the Palisades Plant, a pressurized light water moderated and cooled reactor and electrical generating equipment (the facility). The facility is located in Van Buren County, Michigan, and is described in the licensee PCo's Updated Final Safety Analysis Report, as supplemented and amended, and in the licensee PCo's Environmental Report, as supplemented and amended.
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
 - (1) CPCo, pursuant to Section 104b of the Atomic Energy Act of 1954, as amended, and 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," to possess, use and operate the facility at the designated location in Van Buren County, Michigan, in accordance with the procedures and limitations set forth in this license;
 - (2) CPCo, pursuant to the Act and 10 CFR Parts 40 and 70, to receive, possess, and use at any time 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) CPCo, pursuant to the Act and 10 CFR Parts 30, 40 and 70, 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) CPCo, 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 without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
 - (5) CPCo, 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 license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations 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

The licensee PCo is authorized to operate the facility at steadystate reactor core power levels not in excess of 2530 Megawatts thermal (100 percent rated power) in accordance with the conditions specified herein.

(2) Technical-Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 169, and the Environmental Protection Plan contained in Appendix B are hereby incorporated in the license. The licensee Pto shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

- (3) The licensee PCo 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:
 - a. The licensee PCo may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.
 - b. The licenseeCPCo may alter specific features of the approved fire protection program provided:
 - Such-changes do not otherwise involve a change in a license condition or technical specification or result in an unreviewed safety question (see 10 CFR 50.59);
 - Such changes do not result in failure to complete the fire protection program as approved by the Commission. The Licensee PCo shall maintain in auditable form, a current record of all such changes, including an analysis of the effects of the change on the fire protection program and shall make such records available to the Nuclear Regulatory Commission Inspectors upon request. All changes to the approved program shall be reported annually, along with the FSAR revision; and

- Temporary changes to specific fire protection features which may be necessary to accomplish maintenance or modifications are acceptable provided interim compensatory measurers are implemented.
- D. The facility has been granted certain exemptions from the requirements of Section III.G of Appendix R to 10 CFR Part 50, "Fire Protection Program for Nuclear Power Facilities Operating Prior to January 1, 1979." This section relates to fire protection features for ensuring the systems and associated circuits used to achieve and maintain safe shutdown are free of fire damage. These exemptions were granted and sent to the licensee Pto in letters dated February 8, 1983, July 12, 1985, and July 23, 1985.

In addition, the facility has been granted certain exemptions from Appendix J to 10 CFR Part 50, "Primary Reactor Containment Leakage Testing for Water Cooled Power Reactors." This section contains leakage test requirements, schedules and acceptance criteria for tests of the leak-tight integrity of the primary reactor containment and systems and components which penetrate the containment. These exemptions were granted and sent to the licensee PCo in a letter dated December 6, 1989.

These exemptions granted pursuant to 10 CFR 50.12, are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security. With these exemptions, the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.

E. Physical Protection

The licensee PCo shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans, including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21 are entitled: "Palisades Plant Physical Security Plan," through Revisions 25, dated June 4, 1990, approved June 13, 1990; "Palisades Plant Suitability Training and Qualification Plan, "through Revision 9, dated November 22, 1989, approved December 18, 1989; and "Palisades Plant Safeguards Contingency Plan," and all approved amendments. through Revision 2, dated September 30, 1988, approved November 8, 1988. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein. CPCo may make changes to these plans without prior Commission approval, if the changes do not decrease the safeguards effectiveness of the plans, in accordance with 10 CFR 50.54(p)(2).

F. Except as otherwise provided in the Technical Specifications or Environmental Protection Plan, the licensee shall report any violations of the requirements contained in Section 2.C of this license in the following manner: initial notification shall be made within 24 hours to the NRC-

Operations Center via the Emergency Notification System with written follow up within thirty days in accordance with the procedures described in 10 CFR 50.73(b), (c), and (e).

- The licensee PCo shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.
- This license is effective as of the date of issuance and shall expire at midnight on March 14, 2007.

FOR THE NUCLEAR REGULATORY COMMISSION

Thomas E.Murley/Signed/

Thomas E. Murley, Director Office of Nuclear Reactor Regulation

Date of Issuance: February 21, 1991