

October 26, 2001

U S Nuclear Regulatory Commission
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DOCKET 50-255 - LICENSE DPR-20 - PALISADES NUCLEAR PLANT
LICENSE AMENDMENT REQUEST: EXTENSION OF SELECTED PALISADES
PLANT TECHNICAL SPECIFICATION SURVEILLANCES

Pursuant to 10 CFR 50.90, Nuclear Management Company, LLC (NMC) requests Nuclear Regulatory Commission review and approval of a proposed license amendment for the Palisades Nuclear Plant. The proposed amendment adds a License Condition to extend certain Technical Specification surveillance requirement (SR) frequencies, one time, to account for the effects of the current extended outage. The normal performance frequency for the affected SRs is 18 months, not to exceed 22.5 months. The last time these SRs were performed was during the 2001 refueling outage, which concluded on May 10, 2001. The next time these SRs can practically be performed, as described in the enclosures, will be during the 2003 refueling outage. The current extended outage will necessarily delay the 2003 refueling outage. This will cause these SRs to expire prior to the 2003 refueling outage, when they would normally be performed. NMC requests NRC approval to extend these SR frequencies up to 65 days but no later than April 30, 2003.

NMC requests approval of this proposed license amendment by December 21, 2001, to support planning activities. NMC further requests a 60-day implementation period following amendment approval.

A copy of this request has been provided to the designated representative of the State of Michigan.

SUMMARY OF COMMITMENTS

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

Laurie Lahti

Laurie A. Lahti,
Manager, Licensing

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Enclosure 1: License Amendment Request (includes the description of proposed Amendment, determination of No Significant Hazards Consideration, and Environmental Consideration.)

Enclosure 2: Proposed changes to the Operating License.

Enclosures 3-6: Description and Technical Analysis for proposed changes.

**NUCLEAR MANAGEMENT COMPANY
PALISADES NUCLEAR PLANT
DOCKET 50-255**

**LICENSE AMENDMENT REQUEST
EXTENSION OF SELECTED PALISADES PLANT TECHNICAL SPECIFICATION
SURVEILLANCES**

To the best of my knowledge, the content of this license amendment request, which proposes to add a License Condition allowing a one-time extension of certain Technical Specification surveillance frequencies, is truthful and complete.

By Laurie Lahti
Laurie A. Lahti,
Manager, Licensing

Sworn and subscribed to before me this 26th day of OCTOBER, 2001

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

(seal)

ENCLOSURE 1

**NUCLEAR MANAGEMENT COMPANY
PALISADES NUCLEAR PLANT
DOCKET 50-255**

**LICENSE AMENDMENT REQUEST PURSUANT TO 10 CFR 50.90:
EXTENSION OF SELECTED PALISADES PLANT TECHNICAL SPECIFICATION
SURVEILLANCES**

1.0 INTRODUCTION

This letter is a request to amend Operating License DPR-20 for the Palisades Nuclear Plant. The proposed change would add a License Condition to allow the one-time extension of specified Technical Specification (TS) surveillance requirement (SR) frequencies. The extensions are necessary to account for the effects of the current extended outage. The normal performance frequency for the affected SRs is 18 months, not to exceed 22.5 months. The last time these SRs were performed was during the 2001 refueling outage, which concluded on May 10, 2001. The next time these SRs can practically be performed, as described in the enclosures, will be during the 2003 refueling outage. The current extended outage will necessarily delay the 2003 refueling outage. This will cause these SRs to expire prior to the 2003 refueling outage, when they would normally be performed. NMC requests NRC approval to extend these SR frequencies up to 65 days but no later than April 30, 2003.

2.0 DESCRIPTION OF THE PROPOSED AMENDMENT

It is proposed that the following License Condition be added to DPR-20:

"2.C.(5) In lieu of the specified frequencies, NMC may complete the surveillance requirements (SRs) noted in Table 2.C.(5) on Page 4a during the next refueling outage, but not later than April 30, 2003.

[insert the following table on new Page 4a]

Table 2.C.(5)

Surveillance Requirement	Description
SR 3.3.3.3 (for Table 3.3.3-1, Item 3.a)	Channel Calibration of Safety Injection and Refueling Water Tank (SIRWT) Low Level.
SR 3.3.4.3 (for Table 3.3.4-1, Item 1)	Channel Functional Test of Safety Injection Signal (SIS) function.
SR 3.3.4.3 (for Table 3.3.4-1, Item 3)	Channel Functional Test of Recirculation Actuation Signal (RAS) function.
SR 3.3.5.1	Channel Functional Test of Diesel Generator Undervoltage Start logic.
SR 3.5.2.8 (High Pressure Safety Injection to Hot Leg 1 Valves MO-3082 and MO-3083 only)	Throttle valve position stop is in correct position.
SR 3.7.8.2 (Non-Critical Service Water Header Isolation Valve CV-1359 only)	Automatic valve actuates to the correct position on actual or simulated actuation signal.
SR 3.8.1.7	Emergency AC power performs as required on actual or simulated loss-of-offsite power (LOOP) signal.
SR 3.8.1.9	Emergency AC power performs as required on actual or simulated restoration of offsite power.
SR 3.8.1.10	Load sequencing for each automatic load sequencer.
SR 3.8.1.11	Emergency AC power performs as required on actual or simulated LOOP signal in conjunction with actual or simulated SIS.

“

3.0 BACKGROUND

The proposed License Condition would permit one-time extension of the test interval for selected surveillances that will come due prior to commencing the next refueling outage. Completion of the SRs described above would require either performance during the current CRDM outage or early entry into the next refueling outage. Performance during the current CRDM outage is not practicable as justified in Enclosures 3 through 6.

The following table provides specific information on each affected SR:

- a. Due date (18 months plus 25% extension allowed in SR 3.0.2, using channel/train surveillance that expires first).
- b. Maximum length of extension based on date of April 30, 2003.
- c. Enclosure providing justification for requested extension of SR interval.

Surveillance Requirement	Due Date	Maximum extension (days)	Justification location
SR 3.3.3.3 (for Table 3.3.3-1, Item 3.a)	March 4, 2003	57	Enclosure 3
SR 3.3.4.3 (for Table 3.3.4-1, Item 1)	February 25, 2003	64	Enclosure 4
SR 3.3.4.3 (for Table 3.3.4-1, Item 3)	March 4, 2003	57	Enclosure 3
SR 3.3.5.1	February 25, 2003	64	Enclosure 5
SR 3.5.2.8 (High Pressure Safety Injection to Hot Leg 1 Valves MO-3082 and MO-3083 only)	February 26, 2003	63	Enclosure 6
SR 3.7.8.2 (Non-Critical Service Water Header Isolation Valve CV-1359 only)	February 25, 2003	64	Enclosure 4
SR 3.8.1.7	February 24, 2003	65	Enclosure 4
SR 3.8.1.9	February 25, 2003	64	Enclosure 4
SR 3.8.1.10	February 25, 2003	64	Enclosure 4
SR 3.8.1.11	February 24, 2003	65	Enclosure 4

4.0 TECHNICAL ANALYSIS

Refer to Enclosures 3 through 6.

5.0 NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

Nuclear Management Company, LLC has evaluated whether or not a significant hazards consideration is involved with the proposed amendment using the three standards set forth in 10 CFR 50.92, "Issuance of Amendment." The following evaluation supports the finding that operation of the facility in accordance with the proposed change would not:

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

The proposed License Condition does not affect or create any accident initiators or precursors. As such, the proposed license condition does not increase the probability of an accident. The proposed license condition does not involve operation of the required structures, systems or components (SSCs) in a manner or configuration different from those previously recognized or evaluated.

The proposed surveillance requirement (SR) extension requests do not reduce the required operable SSCs of any of the affected Limiting Condition for Operation sections, does not increase the allowed outage time of any required operable SSCs, and does not reduce the requirement to know that the deferred SRs could be met at all times. Deferral of testing does not, by itself, increase the potential that the testing would not be met.

Therefore, operation of the facility in accordance with the proposed License Condition 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.

The proposed License Condition does not involve a physical alteration of any SSC or a change in the way any SSC is operated. The proposed license condition does not involve operation of any required SSCs in a manner or configuration different from those previously recognized or evaluated. No new failure mechanisms will be introduced by the SR deferrals being requested.

Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

The proposed License Condition does not, by itself, introduce a failure mechanism. Past performance of the SRs in question has demonstrated reliability in passing the deferred SRs. The required operable SSCs have not been reduced. The proposed license condition does not involve any physical changes to the plant or manner in which the plant is operated.

Therefore, the proposed License Condition would not involve a significant reduction in a margin of safety.

Based on the evaluation above, NMC has determined that the proposed changes do not involve significant hazards consideration.

6.0 ENVIRONMENTAL CONSIDERATION

NMC has determined that the proposed amendment would not change requirements with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20. The proposed amendment does not change surveillance requirements, but does provide a one-time extension for the specified surveillance frequencies. The proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

7.0 PRECEDENT

A search of NRC actions on license amendments revealed several applicable precedents concerning extension of SR intervals. These include:

Donald C. Cook Nuclear Power Plant, Unit 2, Docket 50-316, License DPR-74, Amendment 234. The NRC approval and Safety Evaluation were issued June 11, 2001. Scope included emergency diesel generator and station battery surveillances.

Clinton Power Station, Unit 1, Docket 50-461, License NPF-62, Amendment 129. The NRC approval and Safety Evaluation were issued June 12, 2000. Scope included logic system functional testing surveillances.

Palisades Plant, Docket 50-255, License DPR-20, Amendment 164. The NRC approval and Safety Evaluation were issued April 20, 1995. Scope included channel calibration and channel functional test surveillances.

8.0 CONCLUSION

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public. The Palisades Plant Review Committee has reviewed this amendment request and has determined that the change involves no significant hazards consideration. The Palisades Offsite Safety Review Committee has concurred in this determination.

ENCLOSURE 2

**NUCLEAR MANAGEMENT COMPANY
PALISADES NUCLEAR PLANT
DOCKET 50-255**

**LICENSE AMENDMENT REQUEST PURSUANT TO 10 CFR 50.90:
EXTENSION OF SELECTED PALISADES PLANT TECHNICAL SPECIFICATION
SURVEILLANCES**

**PROPOSED CHANGES TO THE OPERATING LICENSE
Pages 4 and 4a**

- For SRs that existed prior to this amendment whose intervals of performance are being reduced, the first reduced surveillance interval begins upon completion of the first surveillance performed after implementation of this amendment.
- For SRs that existed prior to this amendment that have modified acceptance criteria, the first performance is due at the end of the first surveillance interval that began on the date the surveillance was last performed prior to the implementation of this amendment.
- For SRs that existed prior to this amendment whose intervals of performance are being extended, the first extended surveillance interval begins upon completion of the last surveillance performed prior to the implementation of this amendment.

- (5) In lieu of the specified frequencies, NMC may complete the surveillance requirements (SRs) noted in Table 2.C.(5) on Page 4a during the next refueling outage, but no later than April 30, 2003. |

- 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 CPCo¹ 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.

¹On March 11, 1997, the name "Consumers Power Company" was changed to "Consumers Energy Company." Nuclear Management Company, LLC, hereinafter referred to as NMC, succeeds Consumers Energy Company as operator of the Palisades Plant. Consequently, NMC is authorized to act as agent for Consumers Energy Company and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

Table 2.C.(5)

Surveillance Requirement	Description
SR 3.3.3.3 (for Table 3.3.3-1, Item 3.a)	Channel Calibration of Safety Injection and Refueling Water Tank (SIRWT) Low Level.
SR 3.3.4.3 (for Table 3.3.4-1, Item 1)	Channel Functional Test of Safety Injection Signal (SIS) function.
SR 3.3.4.3 (for Table 3.3.4-1, Item 3)	Channel Functional Test of Recirculation Actuation Signal (RAS) function.
SR 3.3.5.1	Channel Functional Test of Diesel Generator Undervoltage Start logic.
SR 3.5.2.8 (High Pressure Safety Injection to Hot Leg 1 Valves MO-3082 and MO-3083 only)	Throttle valve position stop is in correct position.
SR 3.7.8.2 (Non-Critical Service Water Header Isolation Valve CV-1359 only)	Automatic valve actuates to the correct position on actual or simulated actuation signal.
SR 3.8.1.7	Emergency AC power performs as required on actual or simulated loss-of-offsite power (LOOP) signal.
SR 3.8.1.9	Emergency AC power performs as required on actual or simulated restoration of offsite power.
SR 3.8.1.10	Load sequencing for each automatic load sequencer.
SR 3.8.1.11	Emergency AC power performs as required on actual or simulated LOOP signal in conjunction with actual or simulated SIS.

ENCLOSURE 3

**NUCLEAR MANAGEMENT COMPANY
PALISADES NUCLEAR PLANT
DOCKET 50-255**

**LICENSE AMENDMENT REQUEST PURSUANT TO 10 CFR 50.90:
EXTENSION OF SELECTED PALISADES PLANT TECHNICAL SPECIFICATION
SURVEILLANCES**

**DESCRIPTION AND TECHNICAL ANALYSIS
FOR THE PROPOSED CHANGES TO
SR 3.3.3.3 (for Table 3.3.3-1, Item 3.a)
AND
SR 3.3.4.3 (for Table 3.3.4-1, Item 3)**

Description of the Current Requirements

Limiting Conditions for Operation (LCO) 3.3.3, "Engineered Safety Features (ESF) Instrumentation" requires all channel components necessary to provide an ESF actuation be operable. Surveillance Requirement (SR) 3.3.3.3 (for Table 3.3.3-1, Item 3.a) requires a channel calibration on the Safety Injection and Refueling Water Tank (SIRWT) low level switches which is a complete check of the instrument channel, including the sensor. A frequency of 18 months is specified.

LCO 3.3.4, "Engineered Safety Features (ESF) Logic and Manual Initiation" requires all components necessary to provide an ESF actuation be operable. SR 3.3.4.3 (for Table 3.3.4-1, Item 3) requires a channel functional test on the Recirculation Actuation Signal (RAS) actuation logic channels. A frequency of 18 months is specified.

Bases for the Current Requirements

For SR 3.3.3.3:

The surveillance verifies that the channel responds to a measured parameter within the necessary range and accuracy. Channel calibration leaves the channel adjusted to account for instrument drift between successive calibrations to ensure that the channel remains operational between successive surveillances. The frequency is based upon the assumption of an 18-month calibration interval for the determination of the magnitude of equipment drift in the setpoint analysis.

For SR 3.3.4.3:

This surveillance verifies that the required channels will perform their intended function when needed. The 18-month frequency is based on the need to perform this surveillance under the conditions that apply during a plant outage and the potential for an unplanned transient if the surveillance were performed with the reactor at power.

Need for Revision of the Requirements

SR 3.3.3.3 (for Table 3.3.3-1, Item 3.a) and SR 3.3.4.3 (for Table 3.3.4-1, Item 3) can only be performed with the unit shutdown. The SRs were last completed on April 18, 2001. In accordance with the Technical Specification frequency of 18 months, the SRs must be reperfomed no later than March 4, 2003. This date includes the 25% extension allowed by SR 3.0.2.

Completion of the SRs described above would require either performance during the current Control Rod Drive Mechanism (CRDM) outage or early entry into the next refueling outage. Performing the surveillance during the current CRDM outage is not practicable because the testing methodology used to determine the set points of the

SIRWT low level switches (SR 3.3.3.3) involves draining the SIRWT. The RAS actuation logic (SR 3.3.4.3) is tested coincidentally. Draining the SIRWT normally occurs while filling the Reactor Cavity in preparation for refueling. Since the Reactor Cavity is required to be maintained empty during the current CRDM outage to support CRDM repairs, draining of the SIRWT to the Reactor Cavity is not practicable during the current CRDM outage.

Description of Proposed Change

NMC proposes to add a License Condition to allow an extension of SR 3.3.3.3 (for Table 3.3.3-1, Item 3.a) and SR 3.3.4.3 (for Table 3.3.4-1, Item 3.) The proposed change would allow these SRs to be completed during the next refueling outage, but no later than April 30, 2003.

Bases for Proposed Change

The SIRWT low level switches have been inservice since 1971 and have not had a failure affecting their ability to perform their design function.

Review of the last three performances of the related test procedure (for the 1998, 1999, and 2001 refueling outages) showed that the SIRWT low level switches and RAS actuation logic channels have performed without failure on each occasion. In addition, the as-found values for the SIRWT low level switches were found within tolerance on all occasions and no adjustments were made, which indicates that instrument drift has been minimal in the past 5 years. This trend is expected to continue during the 57-day extension being requested.

Based on the information described above, the proposed extension would not significantly impact SIRWT low level switch and RAS actuation logic performance, reliability, and monitoring.

ENCLOSURE 4

**NUCLEAR MANAGEMENT COMPANY
PALISADES NUCLEAR PLANT
DOCKET 50-255**

**LICENSE AMENDMENT REQUEST PURSUANT TO 10 CFR 50.90:
EXTENSION OF SELECTED PALISADES PLANT TECHNICAL SPECIFICATION
SURVEILLANCES**

**DESCRIPTION AND TECHNICAL ANALYSIS
FOR THE PROPOSED CHANGES TO
SR 3.3.4.3 (for Table 3.3.4-1, Item 1),
SR 3.7.8.2 (Non-Critical Service Water Header Isolation Valve CV-1359 only),
SR 3.8.1.7,
SR 3.8.1.9,
SR 3.8.1.10, and
SR 3.8.1.11**

Description of the Current Requirements

Limiting Conditions for Operation (LCO) 3.3.4, "Engineered Safety Features (ESF) Logic and Manual Initiation" requires that all components necessary to provide an ESF actuation be operable. Surveillance Requirement (SR) 3.3.4.3 (for Table 3.3.4-1, Item 1) requires a channel functional test on the Safety Injection Signal (SIS) manual initiation channels, actuation logic channels and bypass removal channels. A frequency of 18 months is specified.

LCO 3.7.8, "Service Water System (SWS)" requires two SWS trains to be operable to provide the required redundancy to ensure that the system functions to remove post accident heat loads, assuming the worst single active failure occurs coincident with the loss of offsite power. This LCO is applicable in Modes 1, 2, 3, and 4. SR 3.7.8.2 verifies proper automatic operation of the SWS valves on an actual or simulated actuation signal. A frequency of 18 months is specified. CV-1359, Non-Critical Service Water Header Isolation Valve, is one of the SWS valves that receives an automatic actuation signal from SIS to close.

LCO 3.8.1, "AC Sources – Operating" requires two qualified circuits between the offsite transmission network and the onsite Class 1E Electrical Power Distribution System and an independent diesel generator (DG) for each safeguards train to ensure availability of the required power to shut down the reactor and maintain it in a safe shutdown condition after an anticipated operational occurrence or a postulated design basis accident (DBA). The following SRs are performed when plant is shutdown (Modes 5 or 6) at a frequency of 18 months:

SR 3.8.1.7 demonstrates the as designed operation of the standby power sources during loss of the offsite source. This SR verifies actions encountered from the loss of offsite power, including shedding of the nonessential loads and re-energizing of the emergency buses and respective loads from the DG.

SR 3.8.1.9 ensures that the manual synchronization and load transfer from the DG to the offsite source can be made and that the DG can be returned to ready to load status when offsite power is restored.

SR 3.8.1.10 ensures that if power is lost to bus 1C or 1D, loads are sequentially connected to the bus by the automatic load sequencer. The sequencing logic controls the permissive and starting signals to motor breakers to prevent overloading of the DGs by concurrent motor starting currents.

SR 3.8.1.11 requires testing which ensures in the event of a DBA coincident with a loss of offsite power, the DGs are capable of supplying the necessary power to ESF systems so that the fuel, Primary Coolant System (PCS), and containment design limits are not exceeded.

Bases for the Current Requirements

These surveillances verify that the required channels will perform their intended functions when needed. The 18-month frequency is based on the need to perform these Surveillances under the conditions that apply during a plant outage and the potential for an unplanned transient if the Surveillance were performed with the reactor at power.

Need for Revision of the Requirements

These SRs were last completed as noted in the table below. In accordance with the Technical Specification frequency of 18 months, the SRs must be reperformed no later than the due date noted in the table below, which includes the 25% extension allowed by SR 3.0.2.

Surveillance Requirement	Last Performed	Due Date
SR 3.3.4.3 (for Table 3.3.4-1, Item 1)	April 11, 2001 (Right Train) April 17, 2001 (Left Train)	February 25, 2003 March 3, 2003
SR 3.7.8.2 (Non-Critical Service Water Header Isolation Valve CV-1359 only)	April 11, 2001 (Right Train) April 17, 2001 (Left Train)	February 25, 2003 March 3, 2003
SR 3.8.1.7	April 10, 2001 (Right Train) April 17, 2001 (Left Train)	February 24, 2003 March 3, 2003
SR 3.8.1.9	April 11, 2001 (Right Train) April 17, 2001 (Left Train)	February 25, 2003 March 3, 2003
SR 3.8.1.10	April 11, 2001 (Right Train) April 17, 2001 (Left Train)	February 25, 2003 March 3, 2003
SR 3.8.1.11	April 10, 2001 (Right Train) April 17, 2001 (Left Train)	February 24, 2003 March 3, 2003

Completion of the SRs described above would require either performance during the current Control Rod Drive Mechanism (CRDM) outage or early entry into the next refueling outage. Performance during the current CRDM outage is not practicable. All of the above listed SRs are performed with integrated design basis accident surveillance procedures which are performed when the unit is shutdown. All equipment actuated by SIS and/or a loss-of offsite power is tested during performance of these procedures. For performance during the current outage, the alignment and

control of plant equipment to support performance of these tests creates a potential challenge to reactor safety without providing an overall benefit in safety.

Description of Proposed Change

NMC proposes to add a License Condition to allow an extension of the above listed SRs. The proposed change would allow these SRs to be completed during the next refueling outage, but no later than April 30, 2003.

Bases for Proposed Change

Review of the last three performances of related test procedures (for the 1998, 1999, and 2001 refueling outages) showed that equipment has functioned as designed on each occasion.

NMC will continue to conduct channel functional testing to support a related SR (SR 3.3.4.1) with a specified frequency of 92 days. This SR is conducted using an installed test circuit to test many of the features associated with SIS and LOOP. NMC will also continue to conduct monthly diesel generator (DG) testing required by LCO 3.8.1 which demonstrates DG operability. These will provide an ongoing opportunity to promptly identify and correct conditions that may impact SIS or DG System operation, and provide assurance that the SIS and DG Systems will function properly if needed.

Based on the information described above, the proposed extension would not significantly impact SIS and DG System performance, reliability, and monitoring.

ENCLOSURE 5

**NUCLEAR MANAGEMENT COMPANY
PALISADES NUCLEAR PLANT
DOCKET 50-255**

**LICENSE AMENDMENT REQUEST PURSUANT TO 10 CFR 50.90:
EXTENSION OF SELECTED PALISADES PLANT TECHNICAL SPECIFICATION
SURVEILLANCES**

**DESCRIPTION AND TECHNICAL ANALYSIS
FOR THE PROPOSED CHANGES TO
SR 3.3.5.1**

3 Pages

Description of the Current Requirement

Limiting Conditions for Operation (LCO) 3.3.5, "Diesel Generator (DG) – Undervoltage Start (UV Start)" requires that three channels per bus of each UV Start instrumentation function be operable when the associated DG is required to be operable. The UV Start supports safety systems associated with Engineered Safety Features (ESF) actuation. Surveillance Requirement (SR) 3.3.5.1 requires operability to be demonstrated at least once per 18 months by performing a channel functional test on each UV Start logic channel to ensure that the logic channel will perform its intended function when needed.

Bases for the Current Requirement

The UV Start supports safety systems associated with ESF actuation. A successful test of the required contact(s) of a channel relay may be performed by the verification of the change of state of a single contact of the relay. This clarifies what is an acceptable channel functional test of a relay. This is acceptable because all of the other required contacts of the relay are verified by other Technical Specifications and non-Technical Specifications tests at least once per refueling interval with applicable extensions. The frequency of 18 months is based on the plant conditions necessary to perform the test.

Need for Revision of the Requirement

SR 3.3.5.1 was last completed on April 11, 2001 (for the Right channel) and April 17, 2001 (for the Left channel.) In accordance with the Technical Specification frequency of 18 months, the SR must be reperformed no later than February 25, 2003 (for the Right channel) and March 3, 2003 (for the Left channel.) These dates include the 25% extension allowed by SR 3.0.2.

Completion of SR 3.3.5.1 would require either performance during the current Control Rod Drive Mechanism (CRDM) outage or early entry into the next refueling outage. Performance during the current CRDM outage is not practicable. SR 3.3.5.1 is performed with integrated design basis accident surveillance procedures which are performed when the unit is shutdown. All equipment actuated by SIS and/or a loss-of offsite power are tested during performance of these procedures. For performance during the current outage, the alignment and control of plant equipment to support performance of these tests creates a potential challenge to reactor safety without providing an overall benefit in safety.

Description of Proposed Change

NMC proposes to add a License Condition to allow an extension of SR 3.3.5.1. The proposed change would allow this SR to be completed during the next refueling outage, but no later than April 30, 2003.

Bases for Proposed Change

Review of the last three performances of related test procedures (for the 1998, 1999, and 2001 refueling outages) showed that the diesel generator undervoltage logic circuits performed without failure on each occasion.

NMC will calibrate the undervoltage sensing relays during the current CRDM outage per SR 3.3.5.2. NMC will also continue to conduct monthly diesel generator (DG) testing required by LCO 3.8.1 which demonstrates DG operability. These will provide an ongoing opportunity to promptly identify and correct conditions which may impact DG UV operation, and provide assurance that the DG UV will function properly if needed.

Based on the information described above, the proposed extension would not significantly impact DG UV performance, reliability, and monitoring.

ENCLOSURE 6

**NUCLEAR MANAGEMENT COMPANY
PALISADES NUCLEAR PLANT
DOCKET 50-255**

**LICENSE AMENDMENT REQUEST PURSUANT TO 10 CFR 50.90:
EXTENSION OF SELECTED PALISADES PLANT TECHNICAL SPECIFICATION
SURVEILLANCES**

**DESCRIPTION AND TECHNICAL ANALYSIS
FOR THE PROPOSED CHANGES TO
SR 3.5.2.8 (HPSI to Hot Leg 1 Valves MO-3082 and MO-3083 only)**

Description of the Current Requirement

Limiting Conditions for Operation (LCO) 3.5.2, "Emergency Core Cooling Systems [ECCS]-Operating" requires (in Modes 1 and 2, and in Mode 3 with Primary Coolant System (PCS) temperature greater than or equal to 325°F), two independent and redundant ECCS trains to ensure that sufficient ECCS flow is available, assuming there is a single failure affecting either train. Additionally, individual components within the ECCS trains may be called upon to mitigate the consequences of other transients and accidents. The hot leg injection piping connects the High Pressure Safety Injection (HPSI) Train 1 header and the HPSI Train 2 header to the PCS hot leg. Hot leg injection motor-operated valve throttle position and installed flow orifices cause HPSI flows to be split approximately equally between hot and cold leg injection paths.

Surveillance Requirement (SR) 3.5.2.8 verifies the open position limit switch on each HPSI hot leg isolation valves is set to establish a predetermined flow split between the HPSI injection entering the PCS hot leg and cold legs. An 18-month frequency is specified.

Bases for the Current Requirement

For long term core cooling after a large break loss-of-coolant accident (LOCA), hot leg injection is used to assure that for a large cold-leg PCS break, net core flushing flow can be maintained and excessive boric acid concentration in the core which could result in eventual precipitation and core flow blockage will be prevented.

The 18-month frequency is based on the need to perform this SR under the conditions that apply during a plant outage and the potential for unplanned transients if the surveillance were performed with the reactor at power. The 18-month frequency is also acceptable based on consideration of the design reliability of the equipment and operating experience. Equipment performance is monitored as part of the Inservice Testing Program.

Need for Revision of the Requirement

The SR was last completed on April 12, 2001. In accordance with the Technical Specification frequency of 18 months, the SR must be reperformed no later than February 26, 2003. This date includes the 25% extension allowed by SR 3.0.2. During the current CRDM outage the plant will be maintained in Mode 5 with the reactor head installed and all reactor head closure bolts fully tensioned. Full flow testing, which is needed to satisfy this SR, can only be performed when the plant is in Mode 6 with the reactor head removed. This is because LCO 3.4.12, "Low Temperature Overpressure Protection (LTOP) System" requires that both High

Pressure Safety Injection (HPSI) Pumps be incapable of injecting into the PCS with the reactor head installed. The HPSI Pumps are required to be operated to perform this SR. Therefore, the next practicable opportunity for performing this SR is during the next refueling outage when appropriate plant conditions can be established.

Description of Proposed Change

NMC proposes to add a License Condition to allow an extension of SR 3.5.2.8 (for HPSI to Hot Leg 1 Valves MO-3082 and MO-3083 only.) The proposed change would allow this SR to be completed during the next refueling outage, but no later than April 30, 2003.

Bases for Proposed Change

Review of the last three performances of the related test procedure (for the 1998, 1999, and 2001 refueling outages) showed that the Hot Leg Injection Valves (MO-3082 and MO-3083) performed without failure on each occasion.

The Hot Leg Injection Valves (MO-3082 and MO-3083) currently meet the Palisades Maintenance Rule program goals for both availability and reliability. In addition, no maintenance has been performed on these valves since the last surveillance test that could affect the flow rates.

Based on the information described above, the proposed extension would not significantly impact ESS/HPI System performance, reliability, and monitoring.