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

July 18, 2025

MEMORANDUM TO: Jack Giessner,
Regional Administrator
Region III

Greg Bowman, Acting Director
Office of Nuclear Reactor Regulation

FROM: Jamie Pelton, Acting Director
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Signed by Pelton, Jamie
on 07/18/25

Philip McKenna, Acting Director
Division of Reactor Oversight
Office of Nuclear Reactor Regulation

Signed by McKenna, Philip
on 07/18/25

Jason Kozal, Director
Division of Operating Reactor Safety
Region III

Signed by Kozal, Jason
on 07/18/25

SUBJECT: TRANSITION TO OPERATIONAL STATUS AND TO THE REACTOR OVERSIGHT PROCESS FOR PALISADES NUCLEAR PLANT

On July 1, 2025, the NRC staff received a letter from Holtec Palisades, LLC (Holtec Palisades), stating its readiness to transition Palisades Nuclear Plant (PNP) to an operational status, as described in Inspection Manual Chapter (IMC) 2562, “Light-Water Reactor Inspection Program for Restart of Reactor Facilities following Permanent Cessation of Power Operations.” Holtec Palisades recommends in its letter the transition of Palisades to the Reactor Oversight Process (ROP) on August 25, 2025. The Palisades Restart Panel (PRP) has reviewed that letter and assessed the overall oversight effort to date. The PRP is informing the Office of Nuclear Reactor Regulation (NRR) Director and the Region III Administrator that the staff has completed its review of the set of licensing actions related to supporting the reauthorization of PNP (exemption, license transfer, and four license amendments) and plans to issue these actions on July 24, 2025. These license amendments become effective upon submittal of a request from Holtec to rescind the 10 CFR 50.82(a)(1) certifications for PNP; as of that date (also planned for August 25, 2025), PNP will officially exit the decommissioning process and resume all requirements necessary for an operating plant in accordance with its license.

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In addition, the PRP agrees with the Holtec Palisades' recommendation of entering the ROP on August 25, 2025.

The PRP and the Division of Reactor Oversight (DRO) in NRR have worked with Region III to develop a plan to provide an effective and efficient transition of the PNP, from a decommissioning status to the ROP. The plan has been implemented at PNP, and the staff anticipates that it will continue to refine this plan as it gains experience with the transition process. The PRP will approve any deviations from this transition plan and determine whether future updates are warranted.

Enclosures:
1. Reactor Oversight Process Transition Plan for PNP
2. Table 1 - PNP Performance Indicator Validity Summary

SUBJECT: TRANSITION TO OPERATIONAL STATUS AND TO THE REACTOR OVERSIGHT PROCESS FOR PALISADES NUCLEAR PLANT DATED: JULY 18, 2025

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# REACTOR OVERSIGHT PROCESS TRANSITION PLAN FOR PALISADES NUCLEAR PLANT

## Background

After more than 40 years of commercial operation, Entergy, the licensee for Palisades Nuclear Plant (PNP) at the time, certified to the NRC that it planned to permanently cease power operations at PNP no later than May 31, 2022. On May 20, 2022, PNP permanently ceased power operations. On June 10, 2022, Entergy certified that fuel was permanently removed from the PNP reactor vessel and placed in the spent fuel pool. In accordance with Paragraph (a)(2) of Section 50.82, "Termination of License," of Title 10 of the *Code of Federal Regulations* (10 CFR), upon docketing of the certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel, the 10 CFR part 50 license for PNP no longer authorized operation of the reactor or emplacement or retention of fuel into the reactor vessel. On May 13, 2022, the NRC issued Amendment No. 272 to the PNP Renewed Facility Operating License to reflect a permanently defueled status where operation of the reactor is not permitted. On June 28, 2022, the NRC issued a conforming amendment reflecting that the operating license for Palisades was transferred from Entergy to Holtec Decommissioning International and Holtec Palisades, LLC (collectively, Holtec) for the purpose of decommissioning Palisades.

On February 1, 2023, as supplemented by letter dated March 13, 2023, Holtec submitted a regulatory path for the reauthorization of power operations at PNP, in which it considered the ability of the reactor to resume operations safely and in conformance with NRC licensing requirements for operating reactors. On September 28, 2023, Holtec submitted a one-time request for exemption from portions of 10 CFR 50.82(a)(2), to allow reactor power operations and retention of fuel in the reactor vessel at PNP. Following submission of the exemption request, Holtec submitted a license transfer request and four license amendment requests to restore the operating licensing basis of the plant. The staff has completed its review of this bundle of licensing actions (exemption, license transfer, and four license amendments) and plans to issue these actions on July 24, 2025, with a future implementation window, to transition the plant from its current decommissioning status, back to operational status. On July 1, 2025, the NRC staff received a letter from Holtec (ML25182A066) stating its readiness to transition to an operational status, as described in Inspection Manual Chapter (IMC) 2562, "Light-Water Reactor Inspection Program for Restart of Reactor Facilities following Permanent Cessation of Power Operations." Holtec recommends in its letter that PNP transition to the ROP on August 25, 2025.

## Objectives

The Reactor Oversight Process (ROP) Transition Plan is the plan for conducting NRC inspection and oversight of licensee restart activities prior to fuel loading and resumption of power operations. This memorandum describes the ROP transition plan for PNP.

## Regulatory Oversight Transition Plan for PNP

During decommissioning and before transitioning to the restart phase, the staff conducted inspections and assessments of licensee performance under the provisions of IMC 2561, "Decommissioning Power Reactor Inspection Program." Once the staff received the request for an exemption from 10 CFR 50.82(a)(2), and the licensee commenced restart activities, the staff

conducted inspections and assessments using both IMC 2561 and IMC 2562. The conduct of restart inspections is described in section 06.04 of IMC 2562. During implementation of IMC 2562 and IMC 2561, as appropriate, inspectors disposition issues in accordance with the NRC Enforcement Policy. As stated in IMC 2562, the restart panel recommends a point at which NRC oversight transitions to the ROP and oversight will continue under IMC 2515, "Light Water Reactor Inspection Program Operations Phase," and IMC 0305 "Operating Reactor Assessment Program."

## I. Inspection and Assessment of Operational Programs

### A. Decommissioning Phase

With PNP in the decommissioning phase, the staff conducted inspections and assessments using IMC 2561. Inspection issues were resolved using traditional enforcement per the NRC Enforcement Policy, as applicable.

### B. Restart Phase

Inspection activities during the restart phase are described in the PNP Restart Inspection Plan (ML24228A195). Baseline inspections, estimated at approximately 2000 to 3000 hours of effort to this point, are conducted by a range of reactor inspectors. These inspections focus on key safety assessments, including radiation protection and security plan reviews. Additionally, they address system modifications, return-to-service reviews, and surveillance testing, with subject matter experts providing support on specialized issues, such as steam generator operability.

Approximately 4000 hours of inspection effort are dedicated to team inspections, involving qualified Reactor Inspectors and subject matter experts. These inspections, some which will be completed after PNP transitions to the ROP, include Licensed Operator Examinations, emergency preparedness exercises, fire protection (NFPA-805 implementation), cybersecurity re-implementation, aging management reviews for license renewal, and problem identification and resolution.

Inspectors developed a Transition to Operational Status Issues List, which includes a description of the issue, its status, the status of NRC regulatory actions, and related inspection report details, as discussed in section 06.02 e. of IMC 2562. Open items on this list will need to be appropriately dispositioned by PNP prior to entering the applicable Technical Specification (TS) mode, but have been evaluated by the Restart Panel to not preclude issuance of the applicable license amendments and transition to the ROP. The Restart Panel assessment before the transition to the ROP included a review of any relevant open issues to ensure that each ROP cornerstone is ready to be monitored through the ROP.

Through the inspection and assessment effort conducted during the Restart phase, the PRP has assessed that PNP is ready to transition to an operational status. The PRP has determined that PNP will transition to the ROP in Column I of the Action Matrix. Inspection and assessment effort will continue as PNP enters the ROP on August 25, 2025, and as they progress through the mode changes in their Technical Specifications leading to starting up the reactor and to full power operations.

C. Transitioning to the ROP

The licensee provided an operational readiness letter with a proposed implementation date to implement the operational licensing bases, as described in IMC 2562. As stated in the memorandum, the NRC will transition regulatory oversight for PNP to the ROP on the implementation date, and all ROP cornerstones will be monitored. Inspection report periodicity will continue with bi-monthly inspection reports until the PRP determines that the reports can shift to normal quarterly reports.

The staff will use the IMC 0609 Significance Determination Process (SDP) for inspection findings and will assess the licensee's performance under the provisions in IMC 0305. The assessment will consider the results of all inspection activities conducted for the site (e.g., ROP baseline, operational program, startup testing), including any restart-related violations that remain open after the licensee has transitioned to the ROP.

D. Additional Inspection Guidance After Transitioning to the ROP

As noted above, the staff will conduct inspections under IMC 2515 for licensee activities. The IMC 2515 ROP inspections will initially comprise of applicable portions of the baseline inspection program for a single-unit site and additional inspections for Performance Indicators (PIs) that are not yet valid, as discussed below. The staff will disposition the findings identified during these inspections using the ROP SDP in IMC 0609.

## II. Performance Indicators

Following transition to the ROP, the NRC expects licensees to submit PI data in accordance with the guidance in Nuclear Energy Institute (NEI) 99--02, "Regulatory Assessment Performance Indicator Guideline," Revision 8, dated October 2024, and IMC 0608, "Performance Indicator Program." Table 1, below, provides a timetable that includes start dates for the PIs for PNP. The NRC staff will review the PI data to determine their accuracy and completeness in accordance with Inspection Procedure (IP) 71151, "Performance Indicator Verification." The PIs that do not provide valid indications of performance, because of a low number of critical hours or other reasons, will be referred to as invalid PIs. The NRC will characterize these PIs appropriately on the agency's website with an explanation as to why they are considered invalid. The transition to the full ROP will occur with the understanding that not all PIs will be immediately valid at the time of transition.

The PIs for the emergency preparedness, security, occupational radiation safety, and public radiation safety cornerstones will begin to be reported upon transitioning to the ROP. The staff will expect PNP to begin reporting this PI data for the quarter in which they transition to the ROP. IMC 0305 specifies the regulatory response for a valid PI that crosses a significance threshold after transitioning oversight into the ROP.

The NRC staff will also begin to conduct inspections within the Initiating Events (IE), Mitigating Systems (MS), and Barrier Integrity (BI) cornerstones once PNP is under ROP oversight. The associated IE and MS PIs will be valid once sufficient time has passed to accumulate enough representative data to provide a valid assessment result. This period varies depending on the PI. For example, IE cornerstone PI IE04 (Unplanned Scrams with Complications) will become valid after the unit has achieved initial criticality.

IE01 (Unplanned Scrams per 7,000 Critical Hours) and IE03 (Unplanned Power Changes per 7,000 Critical Hours) measure the rate of IEs over the total number of critical hours in the previous four quarters. To establish the necessary baseline of critical hours to prevent falsely inflating the indicator value, these indicators will become valid after four full calendar quarters have passed following initial criticality of the unit. For example, if the unit first completes the startup testing phase in September 2025, the data for IE01 and IE03 in the subsequent four quarters would be collected and reported, but the first time that this reported quarterly data will be used as an active input into the Action Matrix for assessment purposes would be for the third quarter of 2026 (data submitted in October 2026).

The ROP Working Group will evaluate any new or modified PIs. The frequently asked question process or revisions to NEI 99-02, or both, will provide guidance for initial implementation of these PIs.

The staff may conduct additional inspections in the event of an unplanned scram or unplanned power change, or for a review of other events that a valid PI would normally capture. The total number of samples completed for an IP may exceed the maximum specified from the inspection of these occurrences. The purpose of these inspections is to ensure that an event has been accurately assessed for significance and inclusion in the assessment process in the form of any dispositioned findings.

Table 1 describes each PI and includes bases. As the licensee approaches four quarters after either the IEs or MSs PIs have been monitored, if new information indicates that a PI may still not provide accurate assessment value, the frequently asked question process will be used in accordance with NEI 99-02 and IMC 0608 to determine how to proceed.

**Table 1 – PNP Performance Indicator Validity Summary**

| PI | When a PI Becomes Valid | Comments | Additional Inspection |
|---|---|---|---|
| **IE01: Unplanned Scrams per 7,000 Critical Hours** | This PI becomes valid four full calendar quarters after the unit completes the startup testing phase. | This indicator measures the rate of unplanned scrams over the previous four quarters. The indicator value is the number of unplanned scrams while the reactor was critical in the previous four quarters multiplied by the ratio of 7,000 hours to the total number of hours the reactor was critical in the previous four quarters. | **Yes** |
| **IE03: Unplanned Power Changes per 7,000 Critical Hours** | This PI becomes valid four full calendar quarters after the unit completes the startup testing phase. | This indicator measures the rate of unplanned power changes over the previous four quarters. The indicator value is the number of unplanned power changes in the previous four quarters multiplied by the ratio of 7,000 hours to the total number of hours the reactor was critical in the previous four quarters. | **Yes** |
| **IE04: Unplanned Scrams with Complications** | This PI becomes valid at completion of the startup testing phase. | This indicator measures the number of unplanned scrams with complications while the reactor was critical during the past four quarters. The indicator value is not dependent on the number of hours the reactor has been critical. This PI is valid the quarter in which the reactor becomes critical after the IE cornerstone has been transitioned to the ROP. | **Yes** |

| PI | When a PI Becomes Valid | Comments | Additional Inspection |
|---|---|---|---|
| **MS05: Safety System Functional Failures** | This PI becomes valid the quarter in which the reactor first becomes critical. | This indicator monitors the number of events or conditions that prevented or could have prevented the fulfillment of the safety function of structures or systems in the previous four quarters. | **No** |
| **MS06, MS07, MS08, MS09, MS10: MSPI** | MSPI will remain invalid for a minimum of four quarters after the MS cornerstone has been transitioned to the ROP. The NRC and PNP will reach a decision on the exact number of quarters for each MSPI indicator to become valid via the PI Frequently Asked Questions (FAQ) process during ROP public meetings. | The MSPI is the sum of the changes in a simplified core damage frequency evaluation resulting from differences in unavailability and unreliability relative to industry standard baseline values. The MSPI is supplemented with system component performance limits. An unavailability index (UAI), unreliability index (URI), and a determination as to whether a system exceeded its component performance limits are reported data elements. MSPI is a 12-quarter rolling index for currently operating plants. Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Performance Indicator Guideline," currently does not provide guidance for determining MSPI validity during extended shutdowns, start-ups from extended shutdowns, or for plant restarts. The UAI is dependent on the number of critical hours over a 12-quarter period. Both the UAI and URI consider the past 12 quarters of data. | **Yes** |

| PI | When a PI Becomes Valid | Comments | Additional Inspection |
|---|---|---|---|
| **BI01: Reactor Coolant System (RCS) Specific Activity** | When this PI applies to a restarted plant, the PI becomes valid when the applicable modes for the RCS-specific activity technical specification (TS) requirements are entered. | This indicator monitors the maximum monthly RCS activity in accordance with the TS and is expressed as a percentage of the TS limit. The indicator is determined by multiplying 100 by the ratio of the maximum monthly value of calculated activity to the TS limit. The indicator is not dependent on the number of critical hours. A plant's TS specifies the modes in which the specific activity shall be within limits. | **No** |
| **BI02: RCS Leakage** | For a restarted plant, this PI becomes valid when the applicable modes for the RCS leakage TS requirements area are entered. | This indicator monitors the maximum monthly RCS leakage in accordance with the TS and is expressed as a percentage of the TS limit. The indicator is determined by multiplying 100 by the ratio of the maximum monthly value of identified (or total) leakage to the TS limit. The indicator is not dependent on the number of critical hours. A plant's TS specifies the modes in which the leakage shall be within limits. | **No** |

| PI | When a PI Becomes Valid | Comments | Additional Inspection |
|---|---|---|---|
| **EP01: Drill/Exercise Performance** | When this PI applies to a restarted plant at an existing site, the indicator will be valid the first quarter after the EP cornerstone has been transitioned to the ROP if the site has one ERO for all units.<br><br>When this PI applies to a restarted plant at an existing site, the indicator will be valid the fourth full quarter after the ROP takes effect if the new unit's ERO is separate from the other unit's or units' ERO. The licensee should still report the data elements except for the overall indicator value beginning the first quarter after the ROP is in effect for that unit and should start reporting the overall indicator value for the fourth full ROP quarter.<br><br>When this PI applies to a restarted plant at a new site, the indicator will be valid the fourth full quarter after the ROP takes effect. The licensee should still report the data elements except for the overall indicator value beginning the first quarter after the ROP is in effect for that unit and should start reporting the indicator value for the fourth full ROP quarter. | This indicator monitors timely and accurate licensee performance in emergency preparedness (EP) drills, exercises, and actual events when presented with opportunities for classification of emergencies, notification of offsite authorities, and development of protective action recommendations. The indicator is calculated as a ratio (expressed as a percentage) of the number of timely and accurate classifications, notifications, and protective action recommendations during the previous eight quarters to the total number of opportunities to perform these actions during the previous eight quarters.<br><br>The performance indicator should be valid the first quarter after the emergency preparedness cornerstone has been transitioned to the ROP without any grace period if the indicator is reported as a sitewide value rather than calculated separately per unit (i.e., the site has one emergency response organization (ERO) for all units). | **No** |
| **EP02: ERO Drill Participation** | When this PI applies to a restarted plant at an existing site, the indicator will be valid the first quarter after the emergency preparedness cornerstone has been transitioned to the ROP if the site has one ERO for all units.<br><br>When this PI applies to a restarted plant at an existing site, the indicator will be valid the fourth full quarter after the ROP takes effect if the new unit's ERO is separate from the other unit's or units' ERO. The licensee should still report the | This indicator monitors the participation of ERO members assigned to fill key positions in emergency preparedness performance-enhancing experiences. The indicator is calculated as a ratio (expressed as a percentage) of the number of ERO members assigned to key positions that have participated in a performance-enhancing evaluated drill, exercise or training, or actual event during the previous eight quarters to the total number of key positions assigned to ERO members. | **No** |

| PI | When a PI Becomes Valid | Comments | Additional Inspection |
|---|---|---|---|
| | data elements except for the overall indicator value beginning the first quarter after the ROP is in effect for that unit and should start reporting the overall indicator value for the fourth full ROP quarter.<br><br>When this PI applies to a restarted plant at an existing site, the indicator will be valid the fourth full quarter after the ROP takes effect. The licensee should still report the data elements except for the overall indicator value beginning the first quarter after the ROP is in effect for that unit and should start reporting the indicator value for the fourth full ROP quarter. | The performance indicator should be considered valid the first quarter after the emergency preparedness cornerstone has been transitioned to the ROP without any grace period if the indicator is reported as a sitewide value rather than calculated separately per unit (i.e., the site has one ERO for all units). | |
| **EP04: Emergency Response Facility and Equipment Readiness (ERFER)** | When this PI applies to a restarted plant at an existing site, the indicator will be valid the first quarter after the emergency preparedness cornerstone has been transitioned to the ROP. | This indicator monitors the number of occurrences during a quarter that the Technical Support Center or Emergency Operations Facility is nonfunctional, or equipment necessary to implement the emergency plan is not available or functional, such that an RSPS function or response action could not be performed for greater than 168 continuous hours from the time of discovery and no compensatory measure(s) was implemented | **No** |
| **OR01: Occupational Exposure Control Effectiveness** | When this PI applies to a restarted plant, it becomes valid the quarter that the occupational radiation safety cornerstone is transitioned to the ROP. | This indicator does not depend on the operational status of the plant (e.g., critical hours) and is intended to be valid during extended shutdowns and subsequent startups. A total of four quarters after startup would not need to elapse for the data to be valid. Data can be valid before completing four quarters. | **No** |

| PI | When a PI Becomes Valid | Comments | Additional Inspection |
|---|---|---|---|
| **PR01: Radiological Effluent Technical Specifications (RETS)/Offsite Dose Calculation Manual (ODCM) Radiological Effluent Occurrence** | When this PI applies to a restarted plant, it becomes valid the quarter that the public radiation safety cornerstone is transitioned to the ROP. | This indicator calculates the number of radiological effluent occurrences (dose rates from liquid and gaseous effluents that exceed the rates listed in NEI 99-02) per site in the previous four quarters. The occurrences are based on RETS and the ODCM. This indicator is independent of the operational status of the plant (e.g., critical hours) and is intended to be valid during extended shutdowns and subsequent startups. A total of four quarters after startup would not need to elapse for the data to be valid. Data can be valid before completing four quarters after startup. | **No** |
| **PP01: Protected Area Security Equipment Performance Index** | When this PI applies to a restarted plant, it becomes valid the quarter that the security cornerstone is transitioned to the ROP. | This indicator monitors the availability of security equipment. The PI value is the sum of two indices divided by two. The two indices are the number of compensatory hours (the hours a security officer needs to be posted because of the unavailability of security equipment) in the previous four quarters divided by the product of a normalization factor and 8,760 hours. This indicator is independent of the operating mode of the plant and is intended to be valid during extended shutdowns and subsequent startups. A total of four quarters after startup would not need to elapse for the data to be valid. Data can be valid before completing four quarters after startup. | **No** |