



**Pre-Submittal Meeting  
Palisades Nuclear Plant  
Return to Power Operations  
Exemption to 10 CFR 50.82(a)(2)**



August 29, 2023

# Meeting Agenda

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# Introductions



- U.S Nuclear Regulatory Committee (NRC) Staff
  
- Holtec Decommissioning International, LLC (HDI)
  - Jean Fleming –Holtec International, Vice President of Licensing, Regulatory Affairs & PSA
  - Michael Schultheis –HDI, Manager of Regulatory Assurance for Palisades & Big Rock Point
  - Jim Miksa – HDI, Regulatory Assurance Engineer for Palisades & Big Rock Point

# Purpose & Outcome

- Purpose:
  - Present overview of requested exemption to 10 CFR 50.82(a)(2).
  - Introduce proposed implementation conditions
  
- Outcome:
  - Solicit NRC Staff Questions and Comments

# Proposed Exemption



- 10 CFR 50.82(a)(2) – Termination of License, Power Reactor Licensees

Upon docketing of the certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel, or when a final legally effective order to permanently cease operations has come into effect, the 10 CFR part 50 license no longer authorizes operation of the reactor or emplacement or retention of fuel into the reactor vessel.

- Exemption Request

Allow for a one-time rescission of the docketed certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel to remove the 10 CFR 50.82(a)(2) restriction that no longer authorizes operation of the PNP reactor or emplacement or retention of fuel into the PNP reactor vessel

# Regulatory References

- RG 1.184 C.2 (Decommissioning of Nuclear Power Reactors)

*The NRC deems receipt of the certification of permanent cessation of operation as a commitment by the licensee to cease operations on the specified date. Following submission of the certification of permanent cessation of operations, or at any time during the decommissioning process, if the licensee desires to operate the facility again, the licensee must notify the NRC of its intentions in writing. The NRC would handle approval to return the facility to operation on a case-by-case basis, and the approval would depend on the facility status at the time of the request to reauthorize operation.*

- NRC Region III letter to Mr. David Kraft cited in PRM-50-117 (Petition for rulemaking; denial, “Criteria to Return Retired Nuclear Power Reactors to Operations”)

*There are no regulations that would prohibit a licensee or any individual from requesting an exemption from the applicable NRC regulations related to termination of a license or following the certification that fuel has been permanently removed from the reactor vessel. If such an exemption to regulations in Part 50 of 10 CFR were requested, the applicant for the exemption would have to meet the regulatory requirements for an exemption that are set forth in 10 CFR 50.12.*

# Background



- The Governor of the State of Michigan voices support for power operations at Palisades Nuclear Plant (PNP) (April 20, 2022, and September 9, 2022)
- PNP Docketed 10 CFR 50.82(a)(1) Certifications, Permanent Cessation Power Operations, Permanent Removal of Fuel from Reactor Vessel (June 13, 2022)
- Permanently Defueled Technical Specifications implemented at PNP (June 15, 2022)
- PNP ownership and license transferred from Entergy to Holtec (June 28, 2022)
- Holtec holds a public meeting to present a proposed regulatory path for return of PNP to power operations (March 20, 2023)
- Holtec holds a public meeting to present a proposed regulatory framework for return of PNP to power operations with emphasis on exemption request to 10 CFR 50.82(a)(2) (May 24, 2023)

## Background

- The State of Michigan legislature expressed their support for the restart of PNP by approving a 2024 budget that includes 150 million dollars for the return of PNP to power operations (June 28, 2023)
- PNP Renewed Facility Operating License (RFOL) remains active (i.e., it has not been terminated)
- The PNP License Renewal 20-year term ends on March 24, 2031 (i.e., PNP return to power operations is currently within the License Renewal term)



# Detailed Description – Exemption Request

## ■ Regulation Analysis

- 10 CFR 50.82(a)(2) consists of a Licensee Action, Licensee Document(s), and a License Condition
- Action – “Docketing”
- Licensee Documents (Certifications) – Certification Letter, “Certifying permanent cessation of power operations,” and “permanent removal of fuel from the reactor vessel”
- Condition (Operating Restriction) “the 10 CFR Part 50 license no longer authorizes operation of the reactor or emplacement of fuel in the reactor vessel”

## ■ Requested Exemption is a “One-Time” Alternative Action

- Action – “Docketing”
- Alternative Action – “one-time” rescission of the Docketed Certifications

## ■ Expected Result

- License Condition Retraction – 10 CFR 50.82(a)(2) Operating Restriction no longer applicable after docketing the “one-time” rescission of the certifications

NOTE: The operating restriction was the basis for the decommissioning licensing submittals

## Detailed Description - Implementation

- Recission of Certifications Impact to PNP Licensing Basis
  - PNP exits first decommissioning licensing basis period
    - June 13, 2022, through August ??, 2025
  - PNP enters second power operations licensing basis period
    - August ??, 2025 through March 24, 2031
  - The date that the requested exemption is implemented, (i.e., the date of certification recission, is referred to as the “transition date”)

## Detailed Description – Licensing Actions

- Additional Licensing Actions to Support Power Operations.
  - License transfer application (LTA) for PNP power operations operating authority
  - License Amendment Request (LAR) to RFOL, Technical Specifications (TS), and Environmental Protection Plan (EPP) to reinstate power operations technical requirements
  - LAR to RFOL and TS to reinstate power operations administrative requirements
  - LAR to Emergency Plan and Emergency Action Levels for a power operations plant
- Rescind Decommissioning Exemptions that are no longer applicable
- License Transfer and License Amendments are Effective on Transition Date

## Detailed Description – Licensee Actions

- Additional Licensee Actions to Support Power Operations.
  - Restore commitments closed based on decommissioning certifications
    - IAW NEI 99-04, *Guidelines for Managing NRC Commitment Changes*
  - Restore Updated Final Safety Analysis Report (UFSAR) to reflect power operations plant.
    - IAW 10 CFR 50.59, *Changes, tests and experiments*
  - Restore compliance to NRC Orders and industry initiatives
  - Restore Regulatory Programs and Operating Procedures (e.g.)
    - Quality Assurance Program
    - Inservice Inspection Program
    - Emergency Operating Procedures

# Implementation Conditions

- Effective Upon Receipt
  
- One-Time Recission of Decommissioning Certification Action May Not be Implemented at PNP Until:
  - License Transfer Application (LTA) Approved
  - RFOL / TS / EPP LARs (Including TS Admin LAR) Approved
  - Transfer Approval Conditions and Amendment Conditions Met
  
- Transition Notification Letter will Docket Exemption Conditions Met
  - For One-Time Recission of Decommissioning Certifications
  - Coincident with Recission of other Decommissioning Actions
  - Coincident with License Transfer Amendment Effective
  - Coincident with License Amendment(s) Effective
  - Considered Transition Date for PNP from Decommissioning to Power Operations

# Justification

- Authorized by Law
  - 10 CFR 50.12, “Specific exemptions,” Applicability Met
  - SECY-20-110, Denial for Rulemaking on Criteria to Return Retired Nuclear Power Reactors to Operations,” Cites use of exemption Process for this application
- Does not present an undue risk to public health and safety
  - Regulatory Requirements for Additional Licensing Actions will be met.
  - PNP Power Operations Licensing Bases (POLB) Restored
  - Systems, Structures, Components (SSCs) returned to Operable / Functional status as required by the Restored POLB.
- Consistent with common defense and security
  - Regulatory Requirements for safeguards and security programs for power operations restored

# Special Circumstances

- Application of 10 CFR 50.82(a)(2) Regulation
  - Prohibits power operations after docketing certifications
  - Purpose of certifications is to communicate formal entry into the decommissioning process
  - Not intended to prevent decommissioning certification rescission and return to power operations
  
- Compliance Hardship
  - Prevents returning 840 megawatts of safe and reliable carbon-free electricity to the electrical grid
  - Unfairly hinders economic development in the state due to loss of jobs and baseload energy supply
  
- Material Circumstances
  - Regulation designed for permanent shutdown at the end of a Plant license term
  - Not intended to prevent return to power operations during Plant license term
  - Repowering PNP is key part to a clean reliable energy supply for the state

# Precedent

- NRC Consideration Provided in Below Documents
  
- RG 1.184, “Decommissioning of Nuclear Power Reactors”
  - Acknowledges returning a plant to power operations after docketing Decommissioning Certifications
  - Approval dependent on plant status at time of request
  
- SECY-20-110, “Denial of Petition for Rulemaking on Criteria to Return Retired Power Reactors to Operations”
  - Regulatory Framework exists to address return to power operations after decommissioning certifications are docketed



# Environmental Assessment

- 10 CFR 51.22(c)(25) Categorical Exclusion
- PNP power operations RFOL term, prior to docketing the decommissioning certifications and implementation of Permanently Defueled Technical Specifications was authorized until March 24, 2031.
- An independent environmental review is in progress to validate that the proposed exemption and supporting licensing actions are bounded by the environmental impact findings of the PNP Final Environmental Statement (FES, NUREG-0343) with 1978 Addendum, and the PNP RFOL Supplemental Environmental Impact Statement (SEIS, NUREG 1427, Supp 27).

# Environmental Assessment

- No Significant Hazards Consideration
  - No changes to design configuration or operation of the plant as constructed
  - No relaxations in criteria used to establish safety limits or safety system settings or TS LCOs that were in effect during power operations prior to the decommissioning certifications.
- No significant change in the types or significant increase in the amounts of any effluents that may be released offsite.
  - No physical plant changes
  - Restoration of SSCs to monitor and limit the amounts of effluents released ensures the 1972 FES, the 1978 final addendum, and the 2006 license renewal SEIS environmental impacts are not significantly changed.
  - Resumed power operations conducted under existing environmental permits

# Environmental Assessment

- No significant increase in individual or cumulative public or occupational dose.
  - Plant programs and processes to support an operating plant will be restored to ensure 10 CFR 20 limits are not exceeded. The previous radiological impacts to the public, as evaluated in the FES and 1978 Addendum for the original 40 years and the Supplemental Environmental Impact Statement (SEIS) for the additional 20 years is still bounding.
- No significant construction impact
  - The exemption does not involve physical plant changes
- No significant increase in potential or consequences from radiological accidents.
  - Plant design configuration and operation will be restored to ensure no significant changes from the previously evaluated power operations accidents.

# Environmental Assessment

- Involves 10 CFR 51.22(c)(25)(vi)(I) requirements (administrative in nature)
- Docketing Decommissioning Certifications communicates formal entering into the decommissioning process.
- Exemption request is a one-time recession of the docketed decommissioning certifications to communicate exiting the decommissioning process, and formal entering into a second period of power operations at PNP.
- Recission of docketed decommissioning certifications removes 10 CFR 50.82(a)(2) restrictions preventing entering a second period of power operations at PNP
- The second period of power operations is within the previously evaluated Power Operations RFOL term.
- No physical plant changes are proposed to support this exemption or to restore the previously evaluated POLB.

# Schedule



Title	Submit	Request Approval	Effective
Exemption	Sept 2023	Oct 2024	Aug 2025
License Transfer	Oct 2023	Nov 2024	Aug 2025
Power Ops Tech Specs	Oct - Nov 2023	Nov - Dec 2024	Aug 2025
Power Ops Admin Tech Specs	Oct - Nov 2023	Nov - Dec 2024	Aug 2025
Emergency Plan – Power Ops	Nov - Dec 2023	Dec 2024 - Jan 2025	Aug 2025

Effective Date – Transition Date, Palisades Transitions from Facility in Decommissioning to Power Operations Plant

# Decommissioning Licensing Actions

- Permanently Defueled Emergency Plan LAR and Exemption
  - HDI will Implement Independent of Repower Project (60 Days Implementation Period)
  - Frees Operations Staff to Commence Operator License Training
  
- Onsite and Offsite Insurance Exemptions
  - HDI will only implement if Repower Project is NOT pursued
  - Condition the Effectiveness on Repower Project decision
  - No longer effective upon docketing the RG 1.184 notification of desire to repower PNP
  
- Cyber Security License Condition Removal LAR
  - HDI will only implement if Repower Project is NOT pursued
  - Condition Effectiveness on Repower Project decision
    - Effective delay period of 180 days after issuance and 60 days to implement  
OR
    - Docketed HDI request to revise 180 days effective delay period  
OR
    - No longer Effective upon docketing the RG 1.184 notification of desire to repower PNP

# Questions / Comments



- NRC Staff Questions or Comments?

# Thank You



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