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HDI PNP 2022-031

10 CFR 50.90

September 14, 2022

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

Subject: License Amendment Request – Revise License Condition to Eliminate Cyber Security Plan Requirements

Palisades Nuclear Plant  
Docket No. 50-255  
Renewed Facility Operating License No. DPR-20

- References:
1. Letter from Entergy Nuclear Operations, Inc. to U.S. Nuclear Regulatory Commission, *Certifications of Permanent Cessation of Power Operations and Permanent Removal of Fuel from the Reactor Vessel*, (ADAMS Accession No. ML22164A067), dated June 13, 2022
  2. Letter from Holtec Decommissioning International, LLC to U.S. Nuclear Regulatory Commission, *Request for Exemptions from Certain Emergency Planning Requirements of 10 CFR 50.47(b); 10 CFR 50.47(c)(2); and 10 CFR Part 50, Appendix E*, (ADAMS Accession No. ML22192A134), dated July 11, 2022
  3. NRC Memorandum, Executive Director for Operations to NRC Commissioners, *Cyber Security Requirements for Decommissioning Nuclear Power Plants*, (ADAMS Accession No. ML16172A284), dated December 5, 2016

In accordance with Title 10 of the Code of Federal Regulations, Part 50, Section 90 (10 CFR 50.90), *Application for amendment of license, construction permit, or early site permit*, Holtec Decommissioning International, LLC (HDI), on behalf of Holtec Palisades, LLC (Holtec Palisades), hereby requests U.S. Nuclear Regulatory Commission (NRC) review and approval of a proposed amendment to revise the Palisades Nuclear Plant (PNP) Renewed Facility Operating License (RFOL) No. DPR-20. The proposed license amendment would revise the PNP RFOL to remove the Cyber Security Plan (CSP) requirements contained in License Condition 2.E.

In Reference 1, Entergy certified to the NRC, in accordance with 10 CFR 50.82, *Termination of license*, paragraph (a)(1)(i), that power operations ceased at PNP on May 20, 2022. In addition,

Entergy certified in accordance with 10 CFR 50.82 (a)(1)(ii), that the fuel was permanently removed from the PNP reactor vessel and placed in the PNP Spent Fuel Pool on June 10, 2022.

The proposed changes to the PNP RFOL are consistent with recent NRC guidance on cyber security requirements for decommissioning facilities (Reference 3).

The Enclosure to this letter provides a detailed description and evaluation of the proposed changes for PNP. Attachment 1 to the Enclosure contains a mark-up of the current RFOL page. Attachment 2 to the Enclosure contains the revised RFOL page, containing the proposed change.

The proposed changes have been evaluated in accordance with 10 CFR 50.91 (a), *Notice for public comment*, subparagraph (1), using the standards in 10 CFR 50.92, *Issuance of amendment*, paragraph (c), and it has been determined that the changes involve no significant hazards consideration. The basis for this determination is included in the Enclosure.

Holtec International has performed analyses demonstrating that for beyond design basis events at approximately 12 months after the shutdown of PNP, the spent fuel stored in the Spent Fuel Pool (SFP) will have decayed sufficiently that a minimum of 10 hours is available before the fuel cladding temperature of the hottest fuel assembly in the SFP reaches 900°C with a complete loss of SFP water inventory. The analyses establishing this approximate 12-month spent fuel decay time was provided to the NRC in Reference 2.

HDI requests NRC approval of this proposed license amendment request (LAR) by April 30, 2023, and that the amendment become effective on May 31, 2023, which is when the approximate 12-month spent fuel decay time is met. HDI also requests a 60-day implementation period for the LAR.

In accordance with 10 CFR 50.91(b), *State consultation*, Entergy is notifying the State of Michigan of this proposed license amendment by transmitting a copy of this letter, with its Enclosure, to the designated State of Michigan official.

This letter identifies no new regulatory commitments and no revisions to existing regulatory commitments.

Should you have any questions or require additional information, please contact Jim Miksa Regulatory Assurance Engineer at (269) 764-2945.

I declare under penalty of perjury that the foregoing is true and correct. Executed on September 14, 2022.

Sincerely,

**Jean A. Fleming**

Digitally signed by Jean A.  
Fleming  
Date: 2022.09.14 08:47:18 -04'00'

Jean A. Fleming  
Vice President, Licensing, Regulatory Affairs & PSA  
Holtec International

Enclosure: Description and Evaluation of the Proposed Change

Attachments:

1. Proposed Changes (mark-up) to Palisades Nuclear Plant Renewed Facility Operating License DPR-20 Page
2. Page Change Instructions and Revised Page for the Palisades Nuclear Plant Renewed Facility License DPR-20

cc: NRC Region III Regional Administrator  
NRC Senior Resident Inspector - Palisades Nuclear Plant  
NRC Project Manager – Palisades Nuclear Plant  
State of Michigan Official

**Enclosure**

HDI PNP 2022-031

**Description and Evaluation of the Proposed Change**

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## 1.0 SUMMARY DESCRIPTION

In accordance with Title 10 of the Code of Federal Regulations, Part 50, Section 90 (10 CFR 50.90), *Application for amendment of license, construction permit, or early site permit*, Holtec Decommissioning International, LLC (HDI), on behalf of Holtec Palisades, LLC (Holtec Palisades), hereby requests U. S. Nuclear Regulatory Commission (NRC) review and approval of a proposed amendment to revise the Palisades Nuclear Plant (PNP) Renewed Facility Operating License (RFOL) No. DPR-20. The proposed license amendment would revise the PNP RFOL to remove the Cyber Security Plan (CSP) requirements contained in License Condition 2.E. This change is requested to support the decommissioning of PNP.

## 2.0 DETAILED DESCRIPTION

This license amendment request (LAR) proposes to revise the PNP RFOL to remove the Cyber Security Plan (CSP) requirements contained in License Condition 2.E once PNP spent fuel has undergone a sufficient cooling period that would mitigate the risk of heat-up to clad ignition temperature within 10 hours.

In Reference 1, Entergy certified to the NRC, in accordance with 10 CFR 50.82, *Termination of license*, paragraph (a)(1)(i), that power operations ceased at PNP on May 20, 2022. In addition, Entergy certified in accordance with 10 CFR 50.82 (a)(1)(ii), that the fuel was permanently removed from the PNP reactor vessel and placed in the PNP Spent Fuel Pool (SFP) on June 10, 2022. As stated in 10 CFR 50.82(a)(2), once the certifications for permanent cessation of power operations and permanent removal of fuel from the reactor vessel are docketed, the 10 CFR Part 50 license for PNP no longer authorize operation of the reactor or emplacement or retention of fuel into the reactor vessel. With the fuel permanently removed from the reactor vessel, spent fuel will be stored onsite in the PNP SFP, or Independent Spent Fuel Storage Installation (ISFSI).

The PNP CSP and implementation schedule, as required by 10 CFR 73.54, "*Protection of digital computer and communication systems and networks*," consist of eight milestones. The milestones were completed as required by the schedule due date of March 31, 2019 (Reference 2).

The PNP RFOL contains the following cyber security requirement:

### CSP Paragraph Contained in License Condition 2.E. of the PNP RFOL

*HDI shall fully implement and maintain in effect all provisions of the Commission-approved cyber security plan (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Palisades CSP was approved by License Amendment No. 243 as supplemented by changes approved by License Amendment Nos. 248, 253, 259, and 264.*

In Reference 3, the NRC staff determined that 10 CFR 73.54 does not apply to reactor licensees that have submitted certifications of permanent cessation of power operations and permanent removal of fuel under 10 CFR 50.82(a)(1), and whose certifications have been docketed by the NRC as required by 10 CFR 50.82(a)(2). Notwithstanding this determination, any such licensee is still subject to its CSP license condition until it is removed from the license

pursuant to a 10 CFR 50.90 license amendment. The NRC determined that the CSP license condition requirements could be eliminated after a licensee's spent fuel has undergone a sufficient cooling period to mitigate the risk of heat-up to clad ignition temperature within 10 hours.

To support the decommissioning of PNP, this LAR is submitted to remove the cyber security requirements from the PNP license conditions prior to the completion of the transfer of spent fuel from the PNP SFP to dry storage within the ISFSI. This request considers the cooling period for spent fuel stored in the SFP after the PNP reactor has been permanently shut down. The evaluation included in this LAR is consistent with NRC guidance on cyber security requirements for decommissioning facilities (Reference 3).

Accordingly, per the provisions of 10 CFR 50.4, *Written communications*, and 10 CFR 50.90, HDI is submitting this request to amend the PNP RFOL to remove the cyber security requirements. The proposed change has been evaluated in accordance with 10 CFR 50.91, *Notice for public comment; State consultation*, paragraph (a)(1) using the criteria in 10 CFR 50.92, *Issuance of amendment*, paragraph (c), and HDI determined that the proposed change involves no significant hazards consideration, as discussed in Section 4.3 below.

Attachment 1 to this Enclosure contains the mark-up page of the PNP RFOL. Attachment 2 to this Enclosure contains the revised page of the PNP RFOL

### **3.0 TECHNICAL EVALUATION**

This LAR is based on the significantly reduced risks for a nuclear power facility that has permanently ceased operations and removed all fuel from the reactor vessel, and where the spent fuel has had sufficient time to cool down such that the spent fuel stored in the SFP cannot reasonably heat-up to clad ignition temperature within 10 hours (Reference 4). The spectrum of possible accidents is significantly reduced, and the risk of an offsite radiological release is significantly lower for a decommissioning facility with a permanently defueled reactor than an operating nuclear power reactor. Correspondingly, cyber security risk is reduced due, in part, to the fact that there are significantly fewer critical digital assets (CDAs) needed to protect against and assess radiological events at a decommissioning facility than in comparison to the number at an operating reactor.

In Reference 1, Entergy certified to the NRC, in accordance with 10 CFR 50.82(a)(1)(i), that power operations ceased at PNP on May 20, 2022. In addition, Entergy certified in accordance with 10 CFR 50.82 (a)(1)(ii), that the fuel was permanently removed from the PNP reactor vessel and placed in the PNP SFP on June 10, 2022. With PNP in a permanently defueled condition, the operational focus is with the spent fuel and the SFP cooling systems. In this condition, the spectrum of credible accidents is much smaller than for an operational plant. Further, the PNP certifications of permanent shutdown and placement in the defueled condition were docketed in accordance with 10 CFR 50.82(a)(2); thus, the RFOL for PNP no longer authorize operation of the PNP reactor or emplacement or retention of fuel in the reactor vessel. As such, the majority of the Design Basis Accident (DBA) scenarios postulated in the Updated Final Safety Analysis Report for PNP during power operations are no longer possible and were removed under the provisions of 10 CFR 50.59, *Changes, tests and experiments*.

## Accident Analysis Overview

With the termination of reactor operations and permanent removal of fuel from the PNP reactor vessel, the postulated accidents involving failure or malfunction of the reactor and supporting systems, structures, and components (SSCs) are no longer applicable to the PNP facility.

The HDI submittal, *Request for Exemptions from Certain Emergency Planning Requirements of 10 CFR 50.47(b); 10 CFR 50.47(c)(2); and 10 CFR 50, Appendix E*, (Reference 4) provides information on the disposition of accidents no longer applicable and the remaining incidents of concern. The analyses of the remaining incidents are summarized in the following sections.

### A. Consequences of Design Basis Accidents

The NRC approved the PNP Permanently Defueled Technical Specifications (PDTS) on May 13, 2022, with the issuance of PNP License Amendment No. 272 (Reference 5). The license amendment included the statement that the applicable DBAs for PNP in the permanently defueled condition are: (1) the Fuel Handling Accident (FHA) in the Fuel Handling Building, (2) the Postulated Cask Drop Accident (3) the accidental release of waste gas, and (4) the accidental release of waste liquid.

#### (1) The Fuel Handling Accident (FHA) in the Fuel Handling Building (FHB)

An FHA may occur in the FHB during movement of a fuel assembly. The fuel assembly is moved under water and the accident is assumed to occur when the fuel assembly is damaged. The FHA analysis assumed 22.5 feet of water above the stored fuel, which resulted in an effective decontamination factor of 183.07 and an overall decontamination factor for elemental iodine of 252 (Reference 6). The FHA utilizes the Alternate Source Term (AST) methodology described in Regulatory Guide 1.183, "Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors" (Reference 7).

The analysis demonstrates that after a decay time of 60 days following permanent cessation of power operations of the PNP reactor, with no credit taken for the operability of mitigating structures, systems, or components (SSCs), that a FHA in the SFP results in a dose of 0.014 rem Total Effective Dose Equivalent (TEDE) at the exclusion area boundary (EAB), which is below the Environmental Protection Agency's (EPA) early phase Protective Action Guideline (PAG) criteria of 1 rem TEDE for recommended evacuation.

#### (2) The Postulated Cask Drop Accident

The PNP Defueled Safety Analysis Report (DSAR) evaluates the postulated cask drop accidents. The analysis included a scenario in which a cask is dropped onto spent fuel which has decayed for 90 days. The scenario assumes the Fuel Handling Building (FHB) charcoal filter is not operating and all radiation is released unfiltered from the FHB. The accident results in a dose of 0.08 rem at the EAB which is below the EPA's early phase PAG criteria of 1 rem TEDE for recommended evacuation.



(3) The Accidental Release of Waste Gas

The atmospheric dispersion coefficients and the source term for the FHA discussed above bound those of the design basis gas decay tank rupture (GDTR), and the volume control tank rupture accident is no longer applicable in the permanently defueled condition. Therefore, it can be concluded that the dose consequences of the FHA bound the dose consequences of the GDTR with the same decay period.

(4) The Accidental Release of Waste Liquid

The accidental release of waste liquid incidents discussed in the DSAR include failure of the primary system makeup storage tank or the utility water storage tank, or an accidental discharge to the circulating water discharge canal. The primary system makeup storage tank and the utility water storage tank have administrative controls that maintain tank activity concentration such that 10 CFR Part 20, *Standards for Protection Against Radiation*, dose limits would not be exceeded in the event of a tank failure. These concentration limits will be maintained in the permanently defueled condition. To prevent an accidental discharge to the circulating water discharge canal PNP has administrative controls and automatic interlocks, together with the fail-safe design of the instrumentation and control devices. These administrative and design features provide assurance against any discharge of liquid wastes that would exceed 10 CFR Part 20 limits and as such would not approach the EPA early phase PAG criteria of 1 rem TEDE after a 90-day fuel decay period.

HDI has concluded that the PNP design and administrative controls ensure that radioactive liquid leakage or spillage will be retained within the facility or within 10 CFR Part 20 dose limits.

## **B. Consequences of Beyond Design Basis Events**

### **Spent Fuel Assembly Heat Up During a Theoretical Drain Down Event**

The analyzed beyond-design-basis event (BDBE) scenario that progresses to a condition where a significant offsite release might occur involves the very unlikely BDBE where the SFP drains in such a way that all modes of cooling or heat transfer are assumed to be unavailable, which is postulated to result in an adiabatic heat-up of the spent fuel. The analyses, provided in Reference 4 Enclosure Attachment 1, compared the heat load limits for the hottest fuel assembly and for a 2X2 group of assemblies stored in the PNP SFP, to a criterion proposed in Commission Paper SECY-99-168, *Improving Decommissioning Regulations for Nuclear Power Plants*, (Reference 8) that is applicable to offsite emergency response for nuclear power reactors in the decommissioning process. This criterion considers the time for the hottest assembly to heat up from 30°C to 900°C adiabatically. A heat up time of 10 hours from the time the spent fuel is uncovered, was determined to be sufficient to take mitigating actions and, if necessary, offsite protective measures without offsite emergency preplanning addressing the facility.

The bounding analysis for the PNP SFP for BDBEs demonstrates that approximately 12 months after shutdown, a minimum of 10 hours is available before the fuel cladding temperature of the hottest fuel assembly in the SFP reaches 900°C with a complete loss of SFP water inventory.

As stated in NUREG-1738, *Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants*, (Reference 9), 900°C is an acceptable temperature to use for assessing the onset of fission product release under transient conditions (to establish the critical decay time for determining availability of 10 hours to evacuate) if fuel and cladding oxidation occurs in air. Based on the results of the analysis, in the unlikely event of a beyond design basis event, 10 hours is available to initiate appropriate mitigating actions to restore a means of heat removal to the spent fuel and, if governmental officials deem warranted, for authorities to implement offsite protective actions using a comprehensive approach to emergency planning to protect the health and safety of the public before the hottest fuel assembly reaches the rapid oxidation temperature.

Because of the time it would take for the adiabatic heat up to occur, there is ample time to respond to any partial drain down event that might cause such an occurrence by restoring cooling or makeup or providing spray to the PNP SFP. As a result, the likelihood that such a scenario would progress to a zirconium fire is not deemed credible.

## **Conclusion**

The underlying purpose of the CSP is to ensure that SSCs required to safely operate a plant and protect public health and safety are not affected by cyber-attacks. There are no DBAs that can result in an offsite radiological release exceeding the EPA PAG limits and consequently there is a significant reduction in radiological risk from a potential cyber-attack, and there is sufficient time (at least 10 hours) to take prompt mitigative actions in response to a postulated BDBE zirconium fire. Thus, the elimination of the cyber security requirements from the PNP RFOL is appropriate.

## **4.0 REGULATORY ANALYSIS**

### **4.1 Applicable Regulatory Requirements/Criteria**

10 CFR 73.54, *Protection of digital computer and communication systems and networks*, establishes the requirements for licensees to maintain and implement a CSP. Section 73.54 of the regulation states ... *each licensee currently licensed to operate a nuclear power plant under part 50 of this chapter shall submit, as specified in §50.4 and § 50.90 of this chapter, a cyber security plan that satisfies the requirements of this section for Commission review and approval.* In accordance with 10 CFR 50.54, *Conditions of licenses*, upon approval, the CSP becomes a condition in the 10 CFR 50 license. PNP has an approved CSP as described in License Condition 2.E. of the PNP RFOL.

The PNP license condition requires HDI to fully implement and maintain in effect all provisions of the Commission-approved CSP, including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The CSP provisions contained in these license conditions continue to apply until they are removed pursuant to a 10 CFR 50.90 license amendment.

In Reference 1, Entergy certified to the NRC, in accordance with 10 CFR 50.82(a)(1)(i), that power operations ceased at PNP on May 20, 2022. In addition, Entergy certified in accordance with 10 CFR 50.82 (a)(1)(ii), that the fuel was permanently removed from the PNP reactor vessel and placed in the PNP Spent Fuel Pool (SFP) on June 10, 2022. As stated in

10 CFR 50.82(a)(2), once the certifications for permanent cessation of power operations and permanent removal of fuel from the reactor vessel are docketed, the 10 CFR Part 50 license for PNP no longer authorize operation of the reactor or emplacement or retention of fuel into the reactor vessel.

When the final rule for 10 CFR 73.54 was issued in March 2009, neither ISFSI only facilities nor other facilities that were in the process of decommissioning were required to comply with the cyber security requirements. The NRC specifically limited cyber security requirements to a *licensee currently licensed to operate a nuclear power plant under part 50*. In Reference 3, the NRC staff determined that 10 CFR 73.54 does not apply to reactor licensees that have submitted certifications of permanent cessation of power operations and permanent removal of fuel under 10 CFR 50.82(a)(1), and whose certifications have been docketed by the NRC as required by 10 CFR 50.82(a)(2). Notwithstanding this determination, any such licensee is still subject to its CSP license condition until it is removed from the license pursuant to a 10 CFR 50.90 license amendment. The NRC determined in Reference 3 that the CSP license condition requirements could be eliminated after a sufficient cooling period to mitigate the risk of heat-up to clad ignition temperature within 10 hours.

#### 4.2 Precedent

The NRC staff has approved similar LARs to delete the CSP license condition requirements from several 10 CFR 50 licenses. For example, the NRC issued a license amendment for the Three Mile Island Unit 1 dated December 4, 2020 (Reference 10).

#### 4.3 No Significant Hazards Consideration

Holtec Decommissioning International, LLC (HDI) is requesting a license amendment to the Palisades Nuclear Plant (PNP) Renewed Facility Operating License (RFOL) to modify License Condition 2.E, for the Cyber Security Plan (CSP). This PNP license condition requires HDI to implement and maintain in effect all provisions of the Commission-approved CSP, including changes made pursuant to the authority of 10 CFR 50.90, *Application for amendment of license, construction permit, or early site permit*, and 10 CFR 50.54(p). Specifically, the proposed change is to amend the PNP license to remove the cyber security requirements condition. HDI evaluated whether or not a significant hazards consideration is involved with the proposed license amendment by focusing on the three standards set forth in 10 CFR 50.92, *Issuance of amendment*, as discussed below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

All power operations at Palisades Nuclear Plant (PNP) have ceased and all spent fuel has been removed from the PNP reactor vessel. Spent fuel at PNP will be stored either in the Spent Fuel Pool (SFP) or Independent Spent Fuel Storage Installation (ISFSI). Therefore, the spectrum of possible transients and accidents at PNP is significantly reduced compared to an operating nuclear power reactor.

The only design Bases Accidents (DBA) that could potentially result in an offsite radiological release at PNP is a Fuel Handling Accident (FHA) involving spent fuel stored in the PNP SFP, Cask Drop Accident, Accidental Release of Waste Gas, and Accidental Release of Waste Liquid. An analysis indicates that after a decay time of approximately 12 months following permanent cessation of power operations, there is no longer any possibility of an offsite radiological release from a DBA that could exceed the United States (U.S.) Emergency Protection Agency's (EPA) Protective Action Guidelines (PAGs). With this significant reduction in radiological risk based on the PNP reactor being shut down for more than 376 days (approximately 12 months) the consequences of a cyber-attack are also significantly reduced.

Additionally, per a U.S. Nuclear Regulatory Commission (NRC) Memorandum, *Cyber Security Requirements for Decommissioning Nuclear Power Plants* (ADAMS Accession No. ML16172A284) (Reference 3), the NRC staff determined that 10 CFR 73.54 does not apply to reactor licensees that have submitted certifications of permanent cessation of power operations and permanent removal of fuel under 10 CFR 50.82(a)(1), and whose certifications have been docketed by the NRC as required by 10 CFR 50.82(a)(2). The PNP certifications were submitted and docketed in accordance with 10 CFR 50.82(a)(1) and 10 CFR 50.82(a)(2), after all fuel was moved to the PNP SFP.

The bounding analyses for the PNP SFP, which was provided to the NRC in, *Request for Exemptions from Certain Emergency Planning Requirements of 10 CFR 50.47(b); 10 CFR 50.47(c)(2); and 10 CFR Part 50, Appendix E*, ADAMS Accession No. ML2219A134 (Reference 4), for beyond design basis events demonstrate that 376 days (approximately 12 months) after shutdown of PNP a minimum of 10 hours is available before the fuel cladding temperature of the hottest fuel assembly in the SFP reaches 900°C with a complete loss of SFP water inventory. The site-specific analysis, *Holtec Spent Fuel Pool Calculations*, which was included in the Enclosure Attachment 1 to Reference 4 (ADAMS Accession No. ML2219A134) determined that sufficient time will have passed prior to the requested effective date for this license amendment such that the spent fuel stored in the PNP SFP cannot reasonably heat-up to clad ignition temperature within 10 hours.

This proposed change does not alter previously evaluated accident analysis assumptions, introduce or alter any initiators, or affect the function of facility structures, systems, and components (SSCs) relied upon to prevent or mitigate any previously evaluated accident or the manner in which these SSCs are operated, maintained, modified, tested, or inspected. The proposed change does not involve any facility modifications which affect the performance capability of any SSCs relied upon to prevent or mitigate the consequences of any previously evaluated accidents.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

This proposed change does not alter accident analysis assumptions, introduce or alter any initiators, or affect the function of facility SSCs relied upon to prevent or mitigate any previously evaluated accident, or the manner in which these SSCs are operated, maintained, modified, tested, or inspected. The proposed change does not involve any facility modifications which affect the performance capability of any SSCs relied upon to mitigate the consequences of previously evaluated accidents and does not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No

Plant safety margins are established through limiting conditions for operation and design features specified in the PNP Permanently Defueled Technical Specifications that were approved for PNP on May 13, 2022, (ADAMS Accession No. ML22039A198) (Reference 5). The changes did not involve any changes to the initial conditions that establish safety margins and does not involve modifications to any SSCs which are relied upon to provide a margin of safety. Because there is no change to established safety margins as a result of this proposed change, no significant reduction in a margin of safety is involved.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, HDI concludes that the proposed license amendment does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of no significant hazards consideration is justified.

## **5.0 ENVIRONMENTAL CONSIDERATION**

The proposed change removes the existing CSP license condition requirements from the PNP RFOL. The proposed change is confined to safeguards matters and does not involve any significant construction impacts. Accordingly, the proposed change meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22, *Criterion for categorical exclusion: identification of licensing and regulatory actions eligible for categorical exclusion or otherwise not requiring environmental review*, paragraph (c)(12). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

## 6.0 REFERENCES

1. Letter from Entergy Nuclear Operations, Inc. to U.S. Nuclear Regulatory Commission, *Certifications of Permanent Cessation of Power Operations and Permanent Removal of Fuel from the Reactor Vessel*, (ADAMS Accession No. ML22164A067), dated June 13, 2022
2. U.S. Nuclear Regulatory Commission letter to Entergy Nuclear Operations, Inc., *Palisades Nuclear Plant – Issuance of Amendment Re: Cyber Security Plan Implementation Schedule (CAC No. MF9523; EPID L-2017-LLA-0199)*, (ADAMS Accession No. ML17328B033), dated December 15, 2017
3. NRC Memorandum, Executive Director for Operations to NRC Commissioners, “Cyber Security Requirements for Decommissioning Nuclear Power Plants,” (ADAMS Accession No. ML16172A284), dated December 5, 2016
4. Holtec Decommissioning International, LLC (HDI) letter to U.S. Nuclear Regulatory Commission, *Request for Exemptions from Certain Emergency Planning Requirements of 10 CFR 50.47(b); 10 CFR 50.47(c)(2); and 10 CFR Part 50, Appendix E*, (ADAMS Accession No. ML22192A134), dated July 11, 2022
5. U.S. Nuclear Regulatory Commission letter to Entergy Nuclear Operations, Inc., *Palisades Nuclear Plant – Issuance of Amendment No. 272 Re: Permanently Defueled Technical Specifications (EPID L-2021-LLA-0099)*, (ADAMS Accession No. ML22039A198), dated May 13, 2022
6. Entergy Nuclear Operations, Inc. letter to U.S. Nuclear Regulatory Commission, *License Amendment Request to Revise Renewed Facility Operating License and Technical Specifications for Permanently Defueled Condition*, (ADAMS Accession Package No. ML21152A108), dated June 1, 2021
7. NRC Regulatory Guide 1.183, *Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors*, (ADAMS Accession No. ML003716792), dated July 31, 2000
8. U.S. NRC Commission Paper, SECY-99-168, *Improving Decommissioning Regulations for Nuclear Power Plants*, (ADAMS Accession No. ML992800087), dated June 30, 1999
9. U.S. NRC NUREG-1738, *Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants*, (ADAMS Accession No. ML010430066), dated February 2001
10. NRC Letter to Exelon Nuclear, “Three Mile Island Nuclear Station, Unit 1 – Issuance of Amendment No. 301 Re: Removal of Cyber Security Plan License Condition (EPID L-019-LLA-0251),” (ADAMS Accession No. ML20297A627), dated December 4, 2020

**Proposed Changes (Mark-Up)**  
**to Palisades Nuclear Plant**  
**Renewed Facility Operating License DPR-20**

(showing proposed changes; deletions are shown with strikethrough)

D. [deleted]

E. HDI shall fully implement and maintain in effect all provisions of the Commission-approved physical security, 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 combined set of plans, which contains Safeguards Information protected under 10 CFR 73.21, is entitled: "Palisades Nuclear Plant Physical Security Plan."

~~HDI shall fully implement and maintain in effect all provisions of the Commission-approved cyber security plan (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Palisades CSP was approved by License Amendment No. 243 as supplemented by changes approved by License Amendment Nos. 248, 253, 259, and 264.~~

F. [deleted]

G. Holtec Palisades and HDI 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.



**Page Change Instructions**  
**and**  
**Revised Page for the Palisades Nuclear Plant**  
**Renewed Facility License DPR-20**

2 pages follow

**Page Change Instructions**

**ATTACHMENT TO LICENSE AMENDMENT NO. [###]  
RENEWED FACILITY OPERATING LICENSE NO. DPR-20  
DOCKET NO. 50-255**

Remove the following pages of Palisades Plant Renewed Facility Operating License and replace with the attached revised Palisades Plant Renewed Facility License. The revised pages are identified by amendment number and contains a line in the margin indicating the area of change.

**REMOVE**

Page 5

**INSERT**

Page 5

- D. [deleted]
- E. HDI shall fully implement and maintain in effect all provisions of the Commission-approved physical security, 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 combined set of plans, which contains Safeguards Information protected under 10 CFR 73.21, is entitled: "Palisades Nuclear Plant Physical Security Plan."
- F. [deleted]
- G. Holtec Palisades and HDI 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.