



PNP 2026-054

10 CFR 50.90

10 CFR 50.91

October 2, 2026

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

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

Subject: Response to Request for Additional Information Regarding Emergency License
Amendment Request: One-Time-Use Amendment to Allow Alternative Fuel
Handling Method for the Recovery of Fuel Assembly DD41

By letter dated September 30, 2026 (Reference 1), in accordance with Title 10 of the Code of Federal Regulations (10 CFR) 50.90, *Application for amendment of license, construction permit, or early site permit* and 10 CFR 50.91, *Notice for public comment; State consultation*, Palisades Energy, LLC (Palisades Energy) requested U.S. Nuclear Regulatory Commission (NRC) approval of a one-time emergency change to the Renewed Facility Operating License (RFOL) for Palisades Nuclear Plant (PNP). The proposed License Amendment Request (LAR) would revise UFSAR Sections 9.11 *Fuel Handling and Storage Systems*, and 14.19 *Fuel Handling Accident*, to facilitate transport of fuel assembly DD41 from the reactor utilizing different plant equipment and following a different travel path than is described in the Updated Final Safety Analysis Report (UFSAR).

On October 1, 2026, the NRC and Palisades Energy conducted a conference call in which the NRC staff verbally and visually requested information in the form of questions related to the proposed LAR. On October 2, 2026, a follow-up conference call was conducted between the NRC and Palisades Energy. The purpose of the call was to provide verbal responses to the questions raised and to identify responses required to be docketed.

The enclosure to this letter provides Palisades Energy's responses to the questions that the NRC and Palisades Energy mutually agreed require a docketed response.

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

If you have any questions regarding this submittal, please contact Kyle Steffic, Regulatory Assurance Manager, at (269) 290-8915.

Respectfully,

**Michael
Schultheis**



Digitally signed by Michael Schultheis
DN: cn=Michael Schultheis, c=US,
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President,
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Reason: I am approving this document
Date: 2026.10.02 17:39:31 -04'00'

Michael Schultheis
Site Vice President
Holtec Palisades

References: 1. Holtec Palisades, LLC (Holtec Palisades) letter to U.S. Nuclear Regulatory Commission (NRC), *Emergency License Amendment Request: One-Time-Use Amendment to Allow Alternative Fuel Handling Method for the Recovery of Fuel Assembly DD41*, dated September 30, 2026 (ADAMS Accession No. ML26273A469)

Enclosure: Response to Request for Information

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

Enclosure

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Response to Request for Information

Response to Request for Information

Background:

By letter dated September 30, 2026, in accordance with Title 10 of the Code of Federal Regulations (10 CFR) 50.90, *Application for amendment of license, construction permit, or early site permit* and 10 CFR 50.91, *Notice for public comment; State consultation*, Palisades Energy, LLC (Palisades Energy) requested U.S. Nuclear Regulatory Commission (NRC) approval of a one-time emergency change to the Renewed Facility Operating License (RFOL) for Palisades Nuclear Plant (PNP). The proposed License Amendment Request (LAR) would revise UFSAR Sections 9.11 *Fuel Handling and Storage Systems*, and 14.19 *Fuel Handling Accident*, to facilitate transport of fuel assembly DD41 from the reactor utilizing different plant equipment and following a different travel path than is described in the Updated Final Safety Analysis Report (UFSAR).

On October 1, 2026, the NRC and Palisades Energy conducted a conference call in which the NRC staff verbally and visually requested information in the form of questions related to the proposed LAR. On October 2, 2026, a follow-up conference call was conducted between the NRC and Palisades Energy. The purpose of the call was to provide verbal responses to the questions raised and to identify responses required to be docketed.

The following are the NRC's questions and Palisades Energy's responses to the questions that the NRC and Palisades Energy mutually agreed require a docketed response.

Questions:

1. In the License Amendment Request section 3.2.1, *Dose Comparisons*, it is stated, the two conditions that are evaluated are normal conditions as designed, as well as conditions from an accidental drop of the canister that assumes a complete loss of neutron and gamma shielding. The Dose Evaluation for the Fuel Transfer Canister executive summary (Reference 1) states that for a drop accident no damage to the canister is expected that would have significant impact on dose rates and that dose rates around the canister are expected to be essentially the same as for normal conditions. Was an analysis performed for an accidental drop of the canister assuming a complete loss of neutron and gamma shielding? If so, are the dose rates around the canister still expected to be essentially the same as normal conditions?
2. Will Palisades Energy be performing a survey (Chemistry Sample) of the fuel assembly just before the top of the Fuel Transfer Canister (FTC) is placed to ensure that movement of the assembly did not cause loss of integrity of any of the fuel rods?
3. Please confirm that the load path does not cross fuel assemblies within the reactor and that load paths within the Spent Fuel Pool Building are consistent with standard cask handling. Also, confirm that the safe load path does not travel in the vicinity of safe shutdown Structures, Systems and Components (SSCs).

4. Please confirm that the bundle integrity has been confirmed/assessed to support the planned lift from the reactor vessel to ensure fuel rod bundle integrity and prevent damage.

Responses:

1. Yes. A draft analysis was performed assuming total loss of neutron and gamma shielding. However, following the positive results from the FTC Drop Analysis contained in HI-2261346, *Fuel Transfer Canister Drop Analysis* (Reference 2), a complete loss of shielding was deemed not credible and subsequently removed from the radiological consequences analyses prior to review and approval.
2. Yes. A primary coolant system (PCS) sample will be obtained after fuel assembly DD41 is placed in the FTC and before the FTC lid is installed. The sample will be analyzed for radionuclide concentrations and the results compared with PCS radionuclide concentrations established prior to fuel movement.

The comparison will be used to identify any significant increase in radionuclide concentrations that could indicate fuel rod cladding damage or loss of fuel assembly fission product barrier integrity resulting from the removal and transfer process. This provides a means of assessing fuel integrity before the FTC is closed.

3. FHSO-19A, Recovery of Fuel Assembly DD41, has a prerequisite, step 3.1.c, that requires all fuel assemblies in the reactor vessel West of fuel assembly DD41 to be removed from the reactor vessel. DD41 will then be lifted from the reactor vessel to the reactor cavity. Once secured within the FTC, DD41 will be lifted from the reactor cavity and transported directly to the Equipment Hatch trolley as directed by FHSO-19A. There are no safe shutdown SSCs in or in the vicinity of this travel path. While in Containment, DD41 will not travel over any fuel assemblies. With DD41 moved on the trolley to the Spent Fuel Pool (SFP) side of the Equipment Hatch, DD41 will then be lifted and travel North on the West side of the SFP in SFP Heavy Load Path #1 to the North end of the SFP. This path will take the canister over the North Tilt Pit where spent fuel is currently stored. After reaching the North end, DD41 will then be moved to the Northeast corner of the SFP and be placed in the SFP cask laydown area utilizing a portion of SFP Heavy Load Path #4. Use of SFP Heavy Load Path #1 is the normal load path used to move all material, regardless of weight, in and out of Containment. SFP Heavy Load Path #4 is the load path used for moving casks between the cask washdown pit and the SFP.
4. Assembly DD41 integrity has been qualitatively assessed by underwater camera visual examination in preparation for the planned lift from the reactor vessel. In addition, chemistry sampling has been completed to confirm no fuel rod cladding damage. Furthermore, the fuel movement device was fabricated accounting for information from the qualitative assessment, including the bow of the assembly and the deflection of the upper tie plate, and the device is designed to provide positive control of

the assembly via the structural guide bars of the assembly in alignment with the grid straps.

References:

1. HI-2261303, *Dose Evaluation for the Palisades Transfer Canister*
2. HI-2261346, *Fuel Transfer Canister Drop Analysis*