

NUCLEAR REGULATORY COMMISSION

[Docket No. 50-0320; NRC-2024-0099]

TMI-2*SOLUTIONS*, LLC;

Three Mile Island Nuclear Station, Unit No. 2;

Environmental Assessment and Finding of No Significant Impact

AGENCY: Nuclear Regulatory Commission.

ACTION: Notice; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is issuing a final environmental assessment (EA) and finding of no significant impact (FONSI) for a proposed amendment of NRC Possession Only License (POL) DPR-73 for the Three Mile Island Nuclear Station, Unit No. 2 (TMI-2), located in Londonderry Township, Dauphin County, Pennsylvania. The proposed amendment would ensure that TMI-2 Energy Solutions (TMI-2*Solutions*, the licensee) can continue decommissioning the facility in accordance with NRC regulations. TMI-2*Solutions* will be engaging in certain major decommissioning activities, including the physical demolition of buildings previously deemed eligible for the National Register of Historic Places (NRHP). The EA, “Environmental Assessment for Specific Decommissioning Activities at Three Mile Island, Unit 2 in Dauphin County, Pennsylvania,” documents the NRC staff’s environmental review of the license amendment application.

DATES: The EA and FONSI referenced in this document are available on August 8, 2024.

ADDRESSES: Please refer to Docket ID **NRC-2024-0099** when contacting the NRC about the availability of information regarding this document. You may obtain

publicly available information related to this document using any of the following methods:

- **Federal Rulemaking Website:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2024-0099**. Address questions about Docket IDs to Stacy Schumann; telephone: 301-415-0624; email: Stacy.Schumann@nrc.gov. For technical questions, contact the individual listed in the “For Further Information Contact” section of this document.

- **NRC’s Agencywide Documents Access and Management System (ADAMS):** You may obtain publicly available documents online in the ADAMS Public Documents collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the search, select “Begin Web-based ADAMS Search.” For problems with ADAMS, please contact the NRC’s Public Document Room (PDR) reference staff at 1-800-397-4209, at 301-415-4737, or by e-mail to PDR.Resource@nrc.gov. The ADAMS accession number for each document referenced (if it is available in ADAMS) is provided the first time that it is mentioned in this document.

- **NRC’s PDR:** The PDR, where you may examine and order copies of publicly available documents, is open by appointment. To make an appointment to visit the PDR, please send an email to PDR.Resource@nrc.gov or call 1-800-397-4209 or 301-415-4737, between 8 a.m. and 4 p.m. eastern time (ET), Monday through Friday, except Federal holidays.

- **Project Website:** Information related to the TMI-2 project can be accessed on NRC’s TMI-2 public website at <https://www.nrc.gov/info-finder/decommissioning/power-reactor/three-mile-island-unit-2.html>.

FOR FURTHER INFORMATION CONTACT: Jean Trefethen, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-0867; email: Jean.Trefethen@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Background

The Three Mile Island Nuclear Station (TMINS) is approximately 16 kilometers (10 miles) southeast of Harrisburg, Pennsylvania. The TMINS site includes Three Mile Island Nuclear Station, Unit 1 and TMI-2. It encompasses approximately 178 hectares (440 acres), including the adjacent islands on the north end, a strip of land on the mainland along the eastern shore of the river, and an area on the eastern shore of Shelley Island. The TMINS site has significance in U.S. history because it is the site of the nation's most serious commercial nuclear power plant accident, occurring at TMI-2. On March 28, 1979, TMI-2 experienced an accident initiated by interruption of secondary feedwater flow which led to a core heat up that caused fuel damage. The partial meltdown of the reactor core led to a very small offsite release of radioactivity. In response to this accident many changes occurred at nuclear power plants including emergency response planning, reactor operator training, human factors engineering, radiation protection and heightened NRC regulatory oversight.

II. Discussion

By letter dated February 22, 2023 (ADAMS Accession No. ML23058A064), TMI-2*Solutions* requested an amendment to POL No. DPR-73. TMI-2*Solutions* will be engaging in certain major decommissioning activities, including the physical demolition of buildings previously deemed eligible for the NRHP. Because the impacts on the historic properties from these decommissioning activities have not been previously evaluated and are not bounded by the impact's discussion in NUREG-0586, "Final

Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities,” TMI-2 *Solutions* requested an amendment that would require evaluation of the impacts of the decommissioning activities on the NRHP-eligible properties, in compliance with paragraph 50.82(a)(6)(ii) of title 10 of the *Code of Federal Regulations* (10 CFR).

Pursuant to 36 CFR 800.8, the NRC used its National Environmental Policy Act process for developing the EA to facilitate consultation pursuant to section 106 of the National Historic Preservation Act (NHPA).

Adverse effects to historic properties would result from decommissioning activities at TMI-2. Therefore, the NRC and consulting parties proceeded with development of a programmatic agreement (PA) to resolve adverse effects. The draft PA was issued for public comment through a *Federal Register* notice dated March 6, 2024 (89 FR 16037). One comment was received and considered before finalizing the PA. The PA addresses the potential direct and indirect adverse effects from the decommissioning activities and ensures that appropriate mitigation measures are implemented. The NRC’s EA references the final PA and, therefore, conclude NHPA section 106 consultation.

In accordance with NRC’s regulations in 10 CFR part 51, “Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions,” that implement the National Environment Protection Agency (NEPA), the NRC staff has prepared an EA documenting its environmental review of the license amendment application. Based on the environmental review, the NRC has made a determination that the proposed action will not significantly affect the quality of the human environment and that a FONSI is therefore appropriate.

III. Summary of Environmental Assessment

The EA is publicly available in ADAMS under Accession No. ML24197A005. A

summary description of the proposed action and expected environmental impacts is provided as follows.

Description of the Proposed Action

The proposed action is to amend POL No. DPR-73 so that TMI-2 *Solutions* can continue with certain major decommissioning activities planned under Phase 2 of its decommissioning schedule. Phase 2 decommissioning activities include the removal of any radioactive components in preparation for demolition of structures, decommissioning and dismantlement of the TMI-2 site to a level that permits the release of the site, except for an area potentially to be set aside for storage of fuel-bearing material (small quantities of spent nuclear fuel, damaged core material, and high-level waste) on the independent spent fuel storage installation, backfilling of the site, license termination plan submittal and implementation, and site restoration activities. In order to comply with 10 CFR 50.82(a)(6)(ii), TMI-2 *Solutions* requested that NRC evaluate the impacts of certain major decommissioning activities on historic and cultural resources and NRHP-eligible properties. The definition of major decommissioning activity is in 10 CFR 50.2, which states “major decommissioning activity means, for a nuclear power reactor facility, any activity that results in permanent removal of major radioactive components, permanently modifies the structure of the containment, or results in dismantling components for shipment containing greater than class C waste in accordance with § 61.55 of this chapter.” Due to radioactive contamination, the TMI-2 structures must be demolished and removed during decommissioning.

Environmental Impacts of the Proposed Action

In the EA, the staff assessed the potential environmental impacts from the proposed license amendment to the following resource areas: land use; visual and scenic resources; the geologic environment; surface and groundwater resources;

ecological resources; air quality; noise; historic and cultural resources; socioeconomic conditions; environmental justice; public and occupational health; transportation; and waste generation and management. The NRC staff also considered the cumulative impacts from past, present, and reasonably foreseeable actions when combined with the proposed action. The TMI-2 Historic District would be adversely affected by the TMI-2 decommissioning, and adverse effects cannot be avoided. The mitigation of adverse effects to the TMI-2 Historic District will be completed in accordance with the TMI-2 Demolition and Decommissioning Programmatic Agreement (NRC 2024a).

As part of the NRC's consultation under section 7 of the Endangered Species Act, NRC staff determined that the proposed action may affect but is not likely to adversely affect the Indiana bat (*Myotis sodalis*), northern long-eared bat (*Myotis septentrionalis*), tricolored bat (*Perimyotis subflavus*), monarch butterfly (*Danaus plexippus*), northeastern bulrush (*Scirpus ancistrochaetus*), or green floater (*Lasmigona subviridis*). The NRC staff transmitted a letter to the U.S. Fish and Wildlife Service (FWS) for its review and concurrence on May 24, 2024 (ADAMS Accession No. ML24120A324). The FWS concurred with the NRC's findings on July 15, 2024 (ADAMS Accession No. ML24199A062).

All other potential impacts from the proposed action were determined to be not significant, as described in the EA. The NRC staff found that there would be no significant negative cumulative impact to any resource area from the proposed action when added to other past, present, and reasonably foreseeable actions.

Environmental Impacts of the Alternative to the Proposed Action

As an alternative to the proposed action, the NRC staff considered denial of the proposed action (*i.e.*, the "no-action" alternative). Under the no-action alternative, the NRC would deny the licensee's request to allow for the continuation of major

decommissioning activities under Phase 2. In this case, the NRC staff would not review the historic and cultural resource impacts of the major decommissioning activities as defined in 10 CFR 50.2 and would therefore disallow the removal of NRHP-eligible structures and any impacts to historic and cultural resources. However, due to the presence of radioactive contamination, TMI-2 structures, including the NRHP-eligible structures, must be removed during the decommissioning process. Therefore, the NRC staff concludes that denying the amendment request is not a reasonable alternative.

IV. Finding of No Significant Impact

In accordance with the NEPA and 10 CFR part 51, the NRC staff has conducted an environmental review of a request for an amendment to POL No. DPR-73. The proposed amendment would revise the POL to allow the licensee to conduct decommissioning at TMI-2 covering activities that were not previously addressed in the staff's environmental assessments (site-specific historical and cultural resources). Based on its environmental review of the proposed action, the NRC staff has made a finding of no significant impact in the EA. Therefore, the NRC staff has determined, pursuant to 10 CFR 51.31, that preparation of an environmental impact statement is not required for the proposed action and a FONSI is appropriate.

Dated: August 2, 2024.

For the Nuclear Regulatory Commission.

/RA/

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and Financial Support,
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