

November 28, 2022

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

TMI-2 SOLUTIONS, LLC

Docket No. 50-320-LA-2

(License Amendment Request for Three Mile
Island Nuclear Station, Unit 2)

**NRC STAFF ANSWER TO ERIC JOSEPH EPSTEIN'S PETITION FOR LEAVE TO
INTERVENE AND HEARING REQUEST**

INTRODUCTION

In accordance with 10 C.F.R. § 2.309(i), the U.S. Nuclear Regulatory Commission (NRC, or Commission) staff (Staff) hereby files its answer to the hearing request and petition to intervene filed by Eric Joseph Epstein (the Petitioner, or Mr. Epstein).¹ The petition concerns a license amendment request (LAR) submitted by TMI-2 Solutions, LLC (TMI-2 Solutions, or the Licensee) for Three Mile Island Nuclear Station, Unit 2 (TMI-2). The LAR, if approved by the NRC, would revise the possession-only license, and associated technical specifications, to support the transition of TMI-2 from a Post-Defueled Monitoring Storage status to that of a facility undergoing decommissioning. The Petitioner proffers two related contentions asserting that, under the National Environmental Policy Act (NEPA), the LAR fails to consider the environmental harm to the surrounding area from airplane crashes, explosions, fires, or terrorist attacks at TMI-2, and the resulting radiological impacts from those hazards.

¹ See "Eric Joseph Epstein's Petition for Leave to Intervene and Hearing Request" (Nov. 3, 2022) (Agencywide Documents Access and Management System (ADAMS) accession no. ML22307A225) (Petition).

The petition is timely. However, for the reasons described below, the Petitioner has not demonstrated standing to intervene in this proceeding and has not proffered an admissible contention. Accordingly, the Board should deny the Petitioner's hearing request and intervention petition.

Below the Staff: (1) briefly describes the background of this proceeding; (2) discusses the legal principles governing standing; (3) analyzes the Petitioner's standing to intervene; (4) discusses the legal principles governing contention admissibility; and (5) analyzes the admissibility of the proffered contentions.

BACKGROUND

This proceeding concerns a LAR submitted by TMI-2 Solutions for Three Mile Island Nuclear Station, Unit 2. TMI-2 is a defueled non-operational pressurized water reactor located on the northern-most section of Three Mile Island near the eastern shore of the Susquehanna River in Dauphin County, Pennsylvania, about 10 miles southeast of Harrisburg, Pennsylvania.²

TMI-2 has not been operational since the March 28, 1979, accident that resulted in severe damage to its reactor core.³ TMI-2 was defueled in April 1990,⁴ and in 1993, the NRC issued a license amendment converting TMI-2's operating license to "possession-only."⁵ TMI-2

² Letter from Gregory H. Halnon (GPU Nuclear, Inc.) to NRC Document Control Desk (Dec. 12, 2019) (Notification of "Amended Post-Shutdown Decommissioning Activities Report" (PSDAR) for Three Mile Island, Unit 2 in Accordance with 10 CFR 50.82(a)(7)), Attachment 1 (ML20013E535) (PSDAR Rev. 3) at 2.

³ "Three Mile Island Accident of 1979 Knowledge Management Digest," NUREG/KM-0001, Revision 1, at 12 (June 2016) (ML16166A337).

⁴ SECY-93-238, "Three Mile Island Nuclear Station, Unit 2 Possession Only License Amendment," at 2 (ML12257A733). Approximately 99% of the spent fuel was removed from TMI-2, is currently stored at the Idaho National Engineering and Environmental Laboratory under the U.S. Department of Energy's authority. PSDAR Rev. 3 at 3.

⁵ U.S. Nuclear Regulatory Commission, Three Mile Island Nuclear Station, Unit No. 2 Possession Only License, Docket No. 50-320 (Sept. 1993) (ADAMS Legacy #9405190046).

is currently maintained in accordance with the NRC-approved SAFSTOR condition known as Post-Defueled Monitoring Storage (PDMS).⁶ Some residual fuel debris remains at TMI-2.⁷

By letter dated February 19, 2021,⁸ as later supplemented,⁹ TMI-2 Solutions submitted the LAR. The LAR, if approved, would revise the TMI-2 possession-only license (POL), and associated technical specifications (TS), to support the transition of TMI-2 from a PDMS status to that of a decommissioning facility.¹⁰ The LAR also proposes to remove or revise certain license conditions and TS requirements to reflect current plant conditions.¹¹ The LAR proposes to delete certain TS, Limiting Conditions for PDMS, and Surveillance Requirements that are no longer applicable to the facility; and to relocate the content of administrative controls into the Decommissioning Quality Assurance Program.¹²

On August 22, 2022, the NRC published a *Federal Register* notice that described TMI-2 Solutions' LAR, informed the public of the opportunity to request a hearing and to petition for leave to intervene, and described the NRC's preliminary determination, in accordance with 10 C.F.R. § 50.92(c), that the LAR involved no significant hazards consideration.¹³ The *Federal Register* notice provided a deadline of October 21, 2022, for the filing of a request for a hearing or petition for leave to intervene on the LAR.¹⁴

⁶ PSDAR Rev. 3 at 1.

⁷ See SECY-93-238, "Three Mile Island Nuclear Station, Unit 2 Possession Only License Amendment," at 3 (ML12257A733).

⁸ Letter from Gerard van Noordennen (TMI-2 Solutions, LLC) to NRC Document Control Desk (Feb. 19, 2021), Attachment 1 (ML21057A046) (LAR).

⁹ TMI-2 Solutions further supplemented its application on May 5, 2021 (ML21133A264); Jan. 7, 2022 (ML22013A177), Mar. 23, 2022 (ML22101A079); April 7, 2022 (ML22101A077); and May 16, 2022 (ML22138A285).

¹⁰ TMI-2 Solutions, LLC, Three Mile Island, Unit No. 2, 87 Fed. Reg. 51,454, 51,454 (Aug. 22, 2022).

¹¹ See Letter from Gerard van Noordennen (TMI-2 Solutions, LLC) to NRC Document Control Desk (Feb. 19, 2021), at 1-2 (Feb. 19, 2021) (ML21057A046).

¹² *Id.*

¹³ TMI-2 Solutions, LLC, Three Mile Island, Unit No. 2, 87 Fed. Reg. 51,454, 51,460 (Aug. 22, 2022).

¹⁴ 87 Fed. Reg. 51,454 (Aug. 22, 2022).

On October 12, 2022, the Petitioner requested that the Secretary of the Commission (SECY) extend the deadline to request a hearing from October 21, 2022, “until at least November 4, 2022;” SECY issued an order granting the Petitioner’s request on October 21, 2022.¹⁵ Mr. Epstein subsequently filed his request for hearing and petition to intervene on November 3, 2022, proffering two enumerated contentions asserting the lack of NEPA analysis regarding environmental harm from aircraft crashes, fire, explosions, or terrorist attacks at the TMI-2 facility, and the resulting radiological impacts from those hazards.¹⁶

Although the petition is timely, the petitioner does not meet the Commission’s standing requirements. Further, the petition does not meet the Commission’s contention admissibility requirements. As discussed below, the petition should be denied.

DISCUSSION

I. Standing to Intervene

A. Applicable Legal Requirements

Under the Commission’s Rules of Practice, any person (petitioner) whose interest may be affected by a proceeding and who desires to participate as a party must file a written request for hearing or petition for leave to intervene. The petition must include the contentions that the petitioner seeks to litigate in the hearing.¹⁷ The presiding officer will grant the petition if it

¹⁵ Order of the Secretary of the Commission (Oct. 20, 2022) (ML22293B774). Mr. Epstein’s e-mailed request to SECY is contained as an attachment to the Order.

¹⁶ See Petition at 22, 28. The Staff has not addressed Mr. Epstein’s implied challenge to the Staff’s proposed no significant hazards consideration determination found at Petition at 2 and 6 n.6, because challenges to no significant hazards consideration determinations are barred under the Commission’s regulations. 10 C.F.R. § 50.58(b)(6) (“No petition or other request for review of or hearing on the staff’s significant hazards consideration determination will be entertained by the Commission”).

¹⁷ 10 C.F.R. § 2.309(a). As defined in 10 C.F.R. § 2.4, “*Person* means (1) any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, government agency other than the Commission . . . , any State or any political subdivision of, or any political entity within a State, any foreign government or nation, or other entity; and (2) any legal successor, representative, agent, or agency of the foregoing.”

determines that the petitioner has standing under 10 C.F.R. § 2.309(d) and has proposed at least one admissible contention that meets the requirements of 10 C.F.R. § 2.309(f).¹⁸

Under the general standing requirements set forth in 10 C.F.R. § 2.309(d)(1), a petition must state:

- (i) The name, address, and telephone number of the petitioner;
- (ii) The nature of the petitioner's right under the Atomic Energy Act of 1954 to be made a party to the proceeding;
- (iii) The nature and extent of the petitioner's property, financial, or other interest in the proceeding; and
- (iv) The possible effect of any decision or order that may be issued in the proceeding on the petitioner's interest.¹⁹

The regulations state that in ruling on a petition, the presiding officer "must determine, among other things, whether the petitioner has an interest affected by the proceeding considering the factors enumerated in" § 2.309(d)(1).²⁰ The Commission has insisted that "an intervenor have some direct interest in the outcome of a proceeding,"²¹ not merely an intellectual or academic interest.²² To this end, "the petitioner bears the burden to provide facts sufficient to establish standing,"²³ and for the purpose of a standing determination, the Commission is to "construe the petition in favor of the petitioner."²⁴

¹⁸ 10 C.F.R. § 2.309(a).

¹⁹ 10 C.F.R. § 2.309(d)(1).

²⁰ 10 C.F.R. § 2.309(d)(2). The presiding officer may also consider a request for discretionary intervention when a petitioner is determined to lack standing to intervene as a matter of right, where a sufficient showing is made with respect to the factors enumerated in 10 C.F.R. § 2.309(e).

²¹ *Exelon Generation Co., LLC* (Peach Bottom Atomic Power Station, Units 2 and 3), CLI-05-26, 62 NRC 577, 579 (2005).

²² *Id.* at 580 (citations omitted).

²³ *PPL Bell Bend, LLC* (Bell Bend Nuclear Power Plant), CLI-10-7, 71 NRC 133, 139 (2010).

²⁴ *Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-15-25, 82 NRC 389, 394 (2015); *Ga. Inst. Of Tech* (Georgia Tech Research Reactor, Atlanta, GA), CLI-95-12, 42 NRC 111, 115 (1995).

In certain reactor licensing proceedings, a petitioner may usually establish standing through traditional judicial concepts of standing or the Commission's "proximity presumption" standard, if applicable.²⁵ Turning first to traditional judicial concepts of standing, as the Commission observed, the NRC has "long applied contemporaneous 'judicial concepts of standing,'" which require "an actual or threatened injury that is fairly traceable to the challenged action, is likely to be redressed by a favorable decision, and arguably falls within the 'zone of interest'" protected by the Atomic Energy Act of 1954, as amended (AEA).²⁶ The "injury 'must be both concrete and particularized, not conjectural, or hypothetical.'"²⁷ "[T]he heart of the standing inquiry is whether the petitioner has 'alleged such a personal stake in the outcome of the controversy' as to demonstrate that a concrete adverseness exists which will sharpen the presentation of issues."²⁸ To have standing in an LAR proceeding, a petitioner "must assert an injury-in-fact associated with the *challenged license amendment*, not simply a general objection to the facility."²⁹ Accordingly, the petitioner "must establish 'a plausible nexus between the challenged license amendments and [petitioner's] asserted harm,'"³⁰ and is further required to "indicate *how* the particular license amendments at issue would increase the risk of an offsite release of radioactive fission products."³¹ Claims of potential radiological harm from a facility

²⁵ In certain cases, a licensing board may grant discretionary standing. See 10 C.F.R. § 2.309(e).

²⁶ *El Paso Elec. Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-20-07, 92 NRC 225, 230 (2020) (quoting *Calvert Cliffs 3 Nuclear Project, LLC and Unistar Nuclear Operating Servs., LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 915 (2009)).

²⁷ *Palo Verde*, CLI-20-7, 92 NRC at 230 (quoting *Sequoyah Fuels Corp. and General Atomics* (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 72 (1994)).

²⁸ *Sequoyah Fuels*, CLI-94-12, 40 NRC at 71 (quoting *Duke Power Co. v. Carolina Env'tl. Study Group, Inc.*, 438 U.S. 59, 72 (1978)).

²⁹ *Exelon Generation Co.* (Three Mile Island Nuclear Station, Units 1 and 2), LBP-20-2, 91 NRC 10, 26-27 (2020) (quoting *Comm. Edison Co.* (Zion Nuclear Power Station, Units 1 and 2), CLI-99-4, 49 NRC 185, 188 (1999) (citations omitted), *aff'g*, LBP-98-27, 48 NRC 271 (1998), *petition for review denied sub nom., Dienethal v. NRC*, 203 F.3d 52 (D.C. Cir. 2000) (unpublished table decision)).

³⁰ *TMI*, LBP-20-2, 91 NRC at 27 (quoting *Comm. Edison Co.* (Zion Nuclear Power Station, Units 1 and 2), LBP-98-27, 48 NRC 271, 277 (1998)).

³¹ *Zion*, CLI-99-4, 49 NRC at 189.

that are “not tied to the specific amendment at issue” are not sufficient;³² nor is merely describing the proposed license amendment and “alleging without substantiation that the changes will lead to offsite radiological consequences.”³³ While the petitioner does not need to show injury that would flow directly from the issuance of the license amendment, the petitioner must demonstrate a “realistic threat or direct injury,”³⁴ and “the chain of causation must be plausible.”³⁵

As an alternative to traditional judicial standing requirements, the Commission has recognized a “proximity presumption” for standing in certain reactor licensing proceedings. These proceedings commonly concern the NRC’s issuance of a construction permit, operating license, a license renewal for a power reactor,³⁶ and a significant license amendment, “such as the expansion of the capacity of a spent fuel pool.”³⁷ The proximity presumption for standing relieves a petitioner of the need to explicitly demonstrate injury, causation, and redressability, and instead permits the petitioner to establish standing based on the geographical zone of potential harm from a nuclear reactor.³⁸ Specifically, a petitioner may plead the proximity presumption if the petitioner lives,³⁹ has a significant property interest,⁴⁰ or otherwise has frequent contacts⁴¹ within 50 miles of a nuclear reactor. A petitioner must provide specific

³² *Int’l Uranium (USA) Corp.* (White Mesa Uranium Mill), CLI-01-21, 54 NRC 247, 251 (2001) (internal citations and quotation marks omitted).

³³ *Zion*, CLI-99-4, 49 NRC at 192.

³⁴ *White Mesa*, CLI-01-21, 54 NRC at 253.

³⁵ *Turkey Point*, CLI-15-25, 82 NRC at 394.

³⁶ *Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 915-916 (2009) (citing *Consumers Energy Co.* (Big Rock Independent Spent Fuel Storage Installation), CLI-07-19, 65 NRC 423, 426 (2007)).

³⁷ *St. Lucie*, CLI-89-21, 30 NRC at 329.

³⁸ *Peach Bottom*, CLI-05-26, 62 NRC at 581.

³⁹ *Calvert Cliffs*, CLI-09-20, 70 NRC at 915-16; *St. Lucie*, CLI-89-21, 30 NRC at 329.

⁴⁰ *Cleveland Elec. Illuminating Co.* (Perry Nuclear Power Plant, Unit 1) CLI-93-21, 38 NRC 87, 95 (1993).

⁴¹ *Consumers Energy Co.* (Palisades Nuclear Plant), CLI-07-18, 65 NRC 399, 410 (2007); see also *Peach Bottom*, CLI-05-26, 62 NRC at 581.

details concerning its contacts with that area, and a lack of specificity or omission of supporting information is grounds to reject a claim of standing.⁴²

Importantly, the Commission does not automatically grant standing under the proximity presumption for anyone who seeks it residing within 50 miles of a reactor facility.⁴³ Instead, the Commission will decide claims of proximity-based standing on a “case-by-case basis,”⁴⁴ taking the petitioner’s distance from the reactor site into account along with “the nature of the proposed action and the significance of the radioactive source.”⁴⁵ Relevant to this proceeding, the proximity presumption applies “only if the challenged license amendments present an obvious potential for offsite [radiological] consequences,”⁴⁶ which, in turn, depends on the ‘kind of action at issue, when considered in light of the radioactive sources at the plant.’”⁴⁷ Whether a reactor is “permanently [shut down] and defueled” is a factor that weighs against the potential for offsite consequences.⁴⁸ If the petitioner cannot demonstrate that the licensing action they seek to challenge raises an obvious potential for offsite consequences, the proximity-based standing presumption does not apply.⁴⁹

Lastly, under the Commission’s rules, a petitioner can request that the Board consider granting discretionary standing when the petitioner cannot establish its standing as of right under one of the standards above. However, the Board may only entertain this request if

⁴² *Private Fuel Storage L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999); *Bell Bend*, CLI-10-7, 71 NRC at 139.

⁴³ *TMI*, LBP-20-2, 91 NRC at 27.

⁴⁴ *Peach Bottom*, CLI-05-26, 62 NRC at 580.

⁴⁵ *Id.* at 580-81 (quoting *Georgia Tech*, CLI-95-12, 42 NRC at 116-17).

⁴⁶ *TMI*, LBP-20-2, 91 NRC at 28 (quoting *Zion*, LBP-98-27, 48 NRC at 276).

⁴⁷ *Id.* (quoting *Peach Bottom*, CLI-05-26, 62 NRC at 581).

⁴⁸ See *Zion*, CLI-99-4, 49 NRC at 187; see also *id.* at 191 ([G]iven the [shut down] and defueled status of the units, the license amendments do not on their face present any ‘obvious’ potential of offsite radiological consequences.”).

⁴⁹ See *Entergy Nuclear Operations, Inc.* (Palisades Nuclear Plant), CLI-08-19, 68 NRC 251, 269 (2008).

another petitioner “has established standing and at least one contention has been admitted so that a hearing will be held.”⁵⁰

B. Petitioner’s Standing to Intervene

1. Petitioner’s Argument

The Petitioner asserts that he has met the Commission’s standing requirements under both traditional judicial concepts of standing and the proximity presumption.⁵¹ He also “requests discretionary standing in the event he is denied standing as of right, or in the event none of his contentions are admitted.”⁵² However, as discussed below, even construing the petition in the light most favorable to the Petitioner,⁵³ the petitioner has not met the Commission’s standing requirements, and a grant of discretionary standing to Mr. Epstein would not be permitted by NRC regulations under these circumstances.

The Petitioner alleges that he “will suffer actual, concrete, particularized, and imminent injuries directly resulting from [the NRC] granting the challenged LAR, and that the injuries are likely to be prevented by a [favorable] decision”⁵⁴ The Petitioner states that he currently lives and works within 12 miles of TMI-2, and regularly has personal and professional obligations within 5 miles of the facility.⁵⁵ Mr. Epstein asserts that the issuance of the LAR will result in adverse health and safety risks “by dismantling the safety in depth protocol present during Post-Defueling Monitored Storage (“PDMS”) as mandated by the [NRC].”⁵⁶ He states that “TMI-2 Solutions plans to weaken the design and management of the equipment for a badly damaged reactor and its corpse,” and argues that the lack of “real time emergency preparedness, fire

⁵⁰ 10 C.F.R. § 2.309(e).

⁵¹ Petition at 10-19.

⁵² *Id.* at 16.

⁵³ See *Fla. Power and Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-15-25, 82 NRC 389, 394 (2015); *Georgia Tech.*, CLI-95-12, 42 at 115.

⁵⁴ Petition at 10.

⁵⁵ *Id.* at 11.

⁵⁶ *Id.*

protection, and radiation monitoring programs” makes him and the community vulnerable in the event of a plane crash, explosion, fire, or terrorist attack that causes radioactive releases.⁵⁷ Mr. Epstein contends that the issuance of the LAR “truncates,”⁵⁸ “weakens,”⁵⁹ and “undermines the cleanup by deleting and modifying the [TS] for PDMS, surveillance requirements, and administrative controls, as well as several license conditions, including the storage of high-level radioactive waste for an indefinite period of time” at the site.⁶⁰

2. Staff Position on Standing

As discussed in detail below, Mr. Epstein does not meet the Commission’s traditional judicial standing requirements. A petitioner’s injury with regard to standing must be both “concrete and particularized, not conjectural, or hypothetical,”⁶¹ and importantly, the petitioner must demonstrate an injury-in-fact that is “associated with the *challenged license amendment*.”⁶² Here, the petition generally alleges that if the LAR is granted, Mr. Epstein and the community will be “vulnerable in the event of an airplane crash, explosion, fire, or terrorist attack causing radioactive releases.”⁶³ But the Petitioner fails to explain why or how the LAR, if granted, would increase the probability of an external hazard like an explosion, fire, or terrorist attack; indeed, it is not clear what the nexus of these concerns is to the request currently before the Commission. The amendment proposes to remove or revise certain license conditions and TS requirements to reflect current plant conditions.⁶⁴ In general, the LAR proposes to delete

⁵⁷ *Id.*

⁵⁸ *Id.* at 19.

⁵⁹ *Id.* at 11.

⁶⁰ *Id.*

⁶¹ *Palo Verde*, CLI-20-07, 92 NRC at 230 (quoting *Sequoyah Fuels Corp. and General Atomics* (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 72 (1994)).

⁶² *Zion*, CLI-99-4, 49 NRC at 188.

⁶³ Petition at 10.

⁶⁴ See Three Mile Island, Unit 2, License Amendment Request Decommissioning Technical Specifications with No Significant Hazards Consideration, at 1 (Feb. 19, 2021) (ML21057A046).

TS, Limiting Conditions for PDMS, and Surveillance Requirements that only applied to the facility in the PDMS condition and are no longer applicable; and to relocate the content of administrative controls into the Decommissioning Quality Assurance Program.⁶⁵ While Mr. Epstein argues that the proposed LAR “weakens the cleanup by deleting and modifying TS for PDMS, surveillance requirements, and administrative controls, as well as several license conditions,”⁶⁶ this general assertion fails to specify what proposed changes to the license would in any way weaken the cleanup or would cause him an injury-in-fact related to the license amendment at hand.⁶⁷

Relatedly, Mr. Epstein also fails to establish how the LAR, if granted, would increase the risk of an offsite release of radioactive fission products,⁶⁸ and does not explain how the hazards cited in his contention would cause him radiological harm where he lives and works (5 to 12 miles away from the facility, respectively). The TMI-2 Solution’s LAR “proposes to remove or revise certain license conditions and TS requirements to reflect current plant conditions,” and “the changes propose the elimination of those TS no longer applicable based on current plant radiological conditions and updated safe fuel mass limits.”⁶⁹ The LAR states that 99% of TMI-2’s fuel was removed from the site;⁷⁰ and while limited fuel debris remains, the LAR addresses the impacts about which the petitioner is concerned and determines that they are not credible.⁷¹ Notably, Mr. Epstein does not dispute these statements in the application, and in fact, he seems to agree with the Licensee that criticality of the fuel debris is not credible. Citing Norman

⁶⁵ *Id.*

⁶⁶ Petition at 15.

⁶⁷ *See Zion*, CLI-99-4, 49 NRC at 188.

⁶⁸ *See id.* at 189.

⁶⁹ LAR at 2.

⁷⁰ *Id.*

⁷¹ *See, e.g., id.* at 25, 26 (“The results of this calculation demonstrate that the core debris cannot be configured into an arrangement whereby a criticality event is possible . . . All credible operational upset conditions associated with the remaining fuel in the facility are bounded such that a criticality accident during decommissioning operations is not credible.”).

Rasmussen, the Petitioner contends that, while “super criticality” could result at TMI-2 where borated water is removed, the Petitioner opines that “[t]his scenario is unlikely, but possible during an explosion, fire or crash.”⁷² The Petitioner cites to no additional support for challenging the Licensee’s analysis that a criticality event causing offsite impacts is not possible as a result of this LAR.

Likewise, Mr. Epstein cannot benefit from the presumption of proximity-based standing in this proceeding because he has not demonstrated an increased potential for offsite consequences resulting from this licensing action. In a reactor license amendment proceeding such as this, “a petitioner cannot base his or her standing simply upon a residence or visits near the plant, unless the proposed action quite ‘obvious[ly]’ entails an increased potential for offsite consequences.”⁷³ While the Petitioner states that he lives and works 5-12 miles from the facility,⁷⁴ he falls short in “provid[ing] a credible showing of any offsite releases in the face of [the] LAR analysis.”⁷⁵ That is, Mr. Epstein’s general assertions throughout his petition that “airplane crashes, explosions, fires, or terrorist attacks *could* result in radioactive releases that would be directly harmful to the Petitioner”⁷⁶ fails to dispute any analysis in the LAR, let alone refer to any aspect of the application, that would obviously increase the potential of an offsite release. At bottom, the Petitioner has not supplied the required information to demonstrate that the LAR, if granted, would “obviously”⁷⁷ increase the potential for offsite radiological consequences.

⁷² Petition at 7.

⁷³ *Zion*, CLI-99-4, 49 NRC at 191 (citing *Fla. Power and Light Co.* (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329-30 (1989)).

⁷⁴ Petition at 11.

⁷⁵ See *TMI*, LBP-20-2, 91 NRC at 30.

⁷⁶ Petition at 19 (emphasis added).

⁷⁷ See *Zion*, CLI-99-4, 49 NRC at 191 (citing *St. Lucie*, 30 NRC at 329-30).

The Commission has already assessed similar standing arguments for a decommissioning reactor facility. In *Zion*, a licensee requested changes to its technical specifications and associated license conditions to reflect the permanently shut down and defueled conditions of both Zion units,⁷⁸ and an individual sought to establish standing based on his residence approximately 10 miles away from the facility and other contacts with the area.⁷⁹ The Commission concluded that the proximity-based presumption did not apply given “the shutdown and defueled status of the units,” adding that “all of the fuel at Plant Zion is in the spent fuel pool,” and that “[b]ecause neither reactor will ever operate again, the scope of activities at the plant has been greatly reduced” and “the spectrum of accidents and events that remain credible is significantly reduced.”⁸⁰ Regarding traditional standing, the Commission considered the condition of the plant, and the nature of the “challenged license amendments . . . [which were] based largely on the non-operational status and concomitant reduced scope of work at the facility.”⁸¹ Thus, the type of accident that could result from the LARs at issue was “anything but self-evident.”⁸² The Commission held that the petitioner had failed to show a nexus between his proximity to Zion and the potential for any offsite consequences that might affect him,⁸³ concluding that the petitioner failed to establish standing based on “conclusory” and “unsubstantiated” claims, some of which “patently have no relation to the license amendments at issue.”⁸⁴

⁷⁸ *Zion*, CLI-99-4, 49 NRC at 187.

⁷⁹ *Id.* at 191.

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² *Id.* at 192 (quoting LBP-98-27, 48 NRC at 277).

⁸³ *Id.* (quoting LBP-98-27, 48 NRC at 277, and approving the *Zion* Licensing Board’s statement that “nowhere does the Petitioner set forth a plausible or credible casual chain” or “explain how the risk of such an accident is increased by the Applicant’s proposed amendments”).

⁸⁴ *Id.* at 193.

This same analysis applies to Mr. Epstein's standing in this proceeding.⁸⁵ Like the reactors at Zion, TMI-2's reactor is permanently shut down and defueled, will never operate again, and the scope of accidents and spectrum of credible accidents is correspondingly reduced.⁸⁶ The LAR at issue would revise the POL to modify and delete certain TS to facilitate decommissioning of the unit, and make modifications that account for the current status of the facility.⁸⁷ Instead of explaining how these proposed modifications to the POL could result in specific offsite radiological consequences, Mr. Epstein simply asserts that the LAR "will result in adverse health and safety risks."⁸⁸ This abstract statement does not constitute a specific showing of injury under *Zion*. Therefore, the Board should find that the Petitioner has neither established standing under traditional standing or the proximity presumption.

Finally, Mr. Epstein requests discretionary standing under 10 C.F.R. § 2.309(e) "in the event he is denied standing as of right, or in the event none of his contentions are admitted."⁸⁹ However, a licensing board can only consider this request "when at least one requestor/petitioner has established standing and at least one admissible contention has been admitted so that a hearing will be held."⁹⁰ Because Mr. Epstein is the lone petitioner in this proceeding, and because "discretionary standing . . . is not an independent basis to establish standing,"⁹¹ the Board should also deny Mr. Epstein's request for discretionary standing under 10 C.F.R. § 2.309(e).

⁸⁵ In a recent license amendment proceeding concerning the shutdown Three Mile Island facility, a licensing board pointed to the Commission's *Zion* decision in determining Mr. Epstein's standing. See *TMI*, LBP-20-2, 91 NRC at 29-30.

⁸⁶ See *supra* at pp. 3; PSDAR Rev. 3 at 5-6; LAR at 2-3.

⁸⁷ See LAR at 2.

⁸⁸ Petition at 10, 15.

⁸⁹ *Id.* at 16.

⁹⁰ 10 C.F.R. § 2.309(e).

⁹¹ *TMI*, LBP-20-2, 92 NRC at 28.

II. Legal Standards for Contention Admissibility

A. General Requirements

The legal requirements governing the admissibility of contentions are set forth in 10 C.F.R. § 2.309(f)(1)-(2). Specifically, a petition must “set forth with particularity” the contentions that a petitioner seeks to raise, and, for each contention, the petition must:

- (i) Provide a specific statement of the issue of law or fact to be raised or controverted;
- (ii) Provide a brief explanation of the basis for the contention;⁹²
- (iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;⁹³
- (iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;⁹⁴
- (v) Provide a concise statement of the alleged facts or expert opinions that support the petitioner’s position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the petitioner intends to rely to support its position on the issue;⁹⁵ and

⁹² Contentions cannot be based on speculation and must have “some reasonably specific factual or legal basis.” *Entergy Nuclear Vt. Yankee, LLC and Entergy Nuclear Operations, Inc.*, (Vermont Yankee Nuclear Power Station), CLI-15-20, 82 NRC 211, 221 (2015).

⁹³ All proffered contentions must be within the scope of the proceeding as defined by the Commission in its initial hearing notice and order referring the proceeding to the licensing board. *See Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-00-23, 52 NRC 327, 329 (2000). Consequently, any contention that falls outside the specified scope of the proceeding must be rejected. *See Pac. Gas and Elec. Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427, 435-36 (2011).

⁹⁴ “A dispute at issue is material if its resolution would make a difference in the outcome of the licensing proceeding.” *Holtec Int’l* (HI-STORE Consolidated Interim Storage Facility), CLI-20-4, 91 NRC 167, 190 (2020) (internal quotations omitted).

⁹⁵ The petitioner is obliged to present the facts and expert opinions necessary to support its contention. *See USEC Inc.* (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 457 (2006) (it is the petitioner’s responsibility to satisfy the basic contention admissibility requirements; Boards should not have to search through a petition to “uncover” arguments and support for a contention, and “may not simply ‘infer’ unarticulated bases of contentions”). *See also Ariz. Pub. Serv. Co.* (Palo Verde Nuclear Generating Station, Units 1, 2 and 3), CLI-91-12, 34 NRC 149, 155 (1991).

- (vi) Provide sufficient information to show that a genuine dispute exists with the applicant or licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.⁹⁶

Further, "contentions must be based on documents or other information available at the time the petition is to be filed, such as the application, supporting safety analysis report, environmental report or other supporting document filed by an applicant or licensee, or otherwise available to a petitioner."⁹⁷ "On issues arising under the National Environmental Policy Act, the petitioner shall file contentions based on the applicant's environmental report."⁹⁸ However, if a license amendment applicant does not include an environmental report in its application but instead proposes the use of categorical exclusions, a petitioner may challenge the categorical exclusion by either demonstrating "special circumstances" or demonstrating that "the license amendment would result in increased offsite releases of effluents or increased individual or cumulative occupational radiation exposure."⁹⁹

The Commission's regulations governing contention admissibility are intended to "focus litigation on concrete issues and result in a clearer and more focused record for decision."¹⁰⁰

⁹⁶ To show that a genuine dispute exists the contention "must include references to specific portions of the application that the petitioner disputes and the supporting reasons for each dispute" and if the petitioner believes that the application fails to contain information on a relevant matter, "the contention must identify each failure and the supporting reasons for the petitioner's belief." *Exelon Generation Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), CLI-20-11, 92 NRC 335, 342 (2020).

⁹⁷ 10 C.F.R. § 2.309(f)(2).

⁹⁸ *Id.*

⁹⁹ *Entergy Nuclear Operations, Inc.* (Indian Point, Unit 2), CLI-16-5, 83 NRC 131, 144 (2016).

¹⁰⁰ See, e.g., *S. Nuclear Operating Co.* (Vogtle Electric Generating Plant, Unit 3), LBP-20-8, 92 NRC 23, 46 (2020) (quoting "Changes to Adjudicatory Process," 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004)); *Crow Butte Res., Inc.* (In Situ Leach Facility, Crawford, NE), LBP-15-15, 81 NRC 598, 601 (2015).

The Commission has explained that the contention admissibility rules are “strict by design.”¹⁰¹

“Failure to satisfy any of the six pleading requirements renders a contention inadmissible.”¹⁰²

The rules require “a clear statement as to the basis for the contentions and the submission of . . . supporting information and references to specific documents and sources that establish the validity of the contention.”¹⁰³ Although a petitioner does not have to prove its contention at the admissibility stage,¹⁰⁴ the contention admissibility standards are meant to only afford hearings to those who “proffer at least some minimal factual and legal foundation in support of their contentions.”¹⁰⁵ The petitioner must provide some support for the contention, either in the form of facts or expert testimony, and failure to do so requires that the contention be rejected.¹⁰⁶ The Commission has long held that the “basis” requirements are intended to: (1) ensure that the contention raises a matter appropriate for adjudication in a particular proceeding; (2) establish a

¹⁰¹ *Indian Point*, CLI-16-5, 83 NRC at 136 (citing *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001) and *S. Carolina Elec. & Gas Co.* (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-1, 71 NRC 1, 7 (2010)). The Commission has stated that it “should not have to expend resources to support the hearing process unless there is an issue that is appropriate for, and susceptible to, resolution in an NRC hearing.” Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004).

¹⁰² *Indian Point*, CLI-16-5, 83 NRC at 136; see also *Duke Energy Corp.* (Oconee Nuclear Station), CLI-99-11, 49 NRC 328, 334-35 (1999) (the heightened contention admissibility rules are designed to preclude contentions “based on little more than speculation”). The requirements are intended, *inter alia*, to ensure that a petitioner reviews the application and supporting documents prior to filing contentions; that contentions are supported by at least some facts or expert opinion known to the petitioner at the time of filing; and that there exists a genuine dispute before a contention is admitted for litigation, to avoid the practice of filing contentions which lack any factual support and seeking to flesh them out later through discovery. *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), LBP-91-35, 34 NRC 163, 167-68 (1991).

¹⁰³ *AmerGen Energy Co.* (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 118-19 (2006) (quoting *Palo Verde*, CLI-91-12, 34 NRC at 155-56).

¹⁰⁴ *Private Fuel Storage L.L.C.* (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 139 (2004).

¹⁰⁵ *Oconee*, CLI-99-11, 49 NRC at 334.

¹⁰⁶ *Palo Verde*, CLI-91-12, 34 NRC at 155; accord, *Indian Point*, CLI-16-5, 83 NRC at 136. See “Rules of Practice for Domestic Licensing Proceedings—Procedural Changes in the Hearing Process,” 54 Fed. Reg. at 33,170 (“This requirement does not call upon the intervenor to make its case at this stage of the proceeding, but rather to indicate what facts or expert opinions, be it one fact or opinion or many, of which it is aware at that point in time which provide the basis for its contention.”).

sufficient foundation for the contention to warrant further inquiry into the assertion; and (3) put other parties sufficiently on notice of the issues to be litigated.¹⁰⁷

Under Commission caselaw, and absent a waiver, a proffered contention must be rejected if it challenges applicable statutory requirements, regulations, or the basic structure of the Commission's regulatory process.¹⁰⁸ Attempts by a petitioner to advocate for requirements stricter than those imposed by regulation constitute collateral attacks on the Commission's rules and are therefore inadmissible.¹⁰⁹

III. Admissibility of the Petition's Proffered Contentions

The Petition contains two enumerated contentions that allege that the LAR does not comply with NEPA. The contentions, as framed by the Petitioner, are captured below, and are identical other than the second contention's inclusion of the issue of criticality. In supporting the contentions, however, the petition cites the same arguments for both contentions. Therefore, the NRC Staff will address both contentions together in subpart A, below.

A. Petition's Proposed Contentions

Contention: Epstein, #1: The [Applicant's] License Amendment Request fails to consider the potential harm to the surrounding area from airplane crashes, explosions and fires or terrorist attacks.¹¹⁰

Contention: Epstein, #2: The [Applicant's] License Amendment Request Report fails to consider the potential harm to the surrounding area from recrit[i]cality due to airplane crashes, explosions and fires or terrorist attacks.¹¹¹

¹⁰⁷ *Oconee*, CLI-99-11, 49 NRC at 328; *see also Phila. Elec. Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20-21 (1974).

¹⁰⁸ As set forth in 10 C.F.R. § 2.335(a), "no rule or regulation of the Commission . . . is subject to attack . . . in any adjudicatory proceeding," in the absence of a waiver petition granted by the Commission. *See also Dominion Nuclear Conn.* (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 218 (2003). Further, any contention that amounts to an attack on applicable statutory requirements or represents a challenge to the basic structure of the Commission's regulatory process must be rejected. *Id.*

¹⁰⁹ *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301, 315 (2012) (citations omitted); *See Peach Bottom*, ALAB-216, 8 AEC at 20-21 (explaining that a contention that seeks to raise an issue that is not proper for adjudication in the proceeding or that does not apply to the facility in question, or seeks to raise an issue that is not concrete or litigable must also be rejected).

¹¹⁰ Petition at 22.

¹¹¹ *Id.* at 28.

1. Alleged Bases for Petition's Contentions

In both contentions, the petition maintains that the Licensee's LAR does not comply with NEPA "because it failed to consider the potential for harm that would result from an airplane crash, explosion, fire[,] or terrorist attack."¹¹² The petition asserts that the Licensee ignores these "safety challenges"¹¹³ despite the site's "history of fires,"¹¹⁴ security vulnerabilities, and proximity to an international airport,¹¹⁵ and that "significant and reasonably foreseeable environmental harm could result in [criticality] from an airline crash explosion, fire or terrorist attack."¹¹⁶

For example, in support of both contentions, the petition appears to argue that the LAR was not conservative in its criticality calculation, and, quoting Dr. Kaku, appears to dispute the amount of fuel debris left in the reactor core.¹¹⁷ The petition also claims that, while unlikely, the removal of borated water from the reactor core could result in "super criticality" during an explosion, fire, or crash.¹¹⁸ The petition also challenges or is dissatisfied with the Licensee's answer to one of the Staff's requests for additional information (RAI), asserting that TMI-2 Solutions "discarded the NRC's guidance," "ignored historical studies based on visual evidence suggested by the NRC and supported by the NRC," and "dismissed dose exposures as

¹¹² *Id.* at 22, 28.

¹¹³ *Id.* at 22. Notwithstanding the assertion that the stated hazards are also "safety challenges," all enumerated contentions in the petition were pled as environmental contentions under NEPA. Commission caselaw requires contentions to be pled with sufficient specificity to put opposing parties on notice of which claims they will actually have to defend. See *DTE Electric Co.* (Fermi Nuclear Power Plant, Unit 2), CLI-15-18, 82 NRC 135, 146 n.53 (2015) (citing *Ks. Gas and Elec. Co.* (Wolf Creek Generating Station), ALAB-279, 1 NRC 559, 579 (1975)).

¹¹⁴ Petition at 22.

¹¹⁵ *Id.* at 22, 28.

¹¹⁶ *Id.* at 22, 28.

¹¹⁷ *Id.* at 23; see *id.* at 31 (arguing that the Licensee dismisses "the EIS (NRC, 1981); PEIS, (NRC, 1981), GEND, (Bechtel, DOE; et al, 1983-1986; SER, (1985), TMI-2 Debris Grab Samples, (DOE; 1986); GEIS, (NRC, 1988 and 2002), PEIS, Supplement 3, NRC, 1989), and (PDMS/POL. NRC, 1993)."). None of these documents are attached to the Petition.

¹¹⁸ Petition at 23.

inconsequential,” and alleges that the Licensee disregarded earlier site studies with regards to the High Integrity Container (HIC) fire event.¹¹⁹ Mr. Epstein argues that “both the NRC and TMI-2 Solutions ignored the Commission’s review of the Tokai-Mura criticality accident [in Japan],”¹²⁰ and accordingly, the root causes and lessons learned from that criticality accident should apply to TMI-2 in this licensing action.¹²¹

2. Staff Position on Contention Admissibility

Both contentions are inadmissible under 10 C.F.R. § 2.309(f)(1)(vi) because the Petitioner has not provided sufficient information to demonstrate that there is a genuine dispute with the LAR on a material issue of law or fact. It is a petitioner’s burden to supply “some reasonably specific factual or legal basis” for its contentions.¹²² A petitioner must “provid[e] a reasoned basis or explanation” for its conclusion¹²³ that is more than mere speculation and more than a bare or conclusory assertion.¹²⁴

Specifically, while Mr. Epstein alleges that TMI-2 Solutions did not “consider the potential harm to the surrounding area from airplane crashes, explosions and fires[,] or terrorist attacks” and “consider the potential harm to the surrounding area from [criticality]” due to those hazards, the petition fails to connect those asserted claims with the licensing action and applicable requirements at hand. Although the petition is correct that the stated impacts are not specifically evaluated in the application, this is because the Licensee asserted that the proposed changes

¹¹⁹ *Id.* at 24.

¹²⁰ *Id.* at 29. Mr. Epstein indicates that the Commission reviewed this event in April 2020, but no document is attached, or any citation to a document is provided in the Petition.

¹²¹ *Id.* at 29-30.

¹²² *PPL Susquehanna, LLC* (Susquehanna Steam Electric Station, Units 1 and 2), CLI-15-8, 81 NRC 500, 504-06 (2015) (quoting *Millstone*, CLI-03-14, 58 NRC at 213); *AmerGen Energy Co.* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 260-61 (2009).

¹²³ *USEC*, CLI-06-10, 63 NRC at 472 (citation omitted).

¹²⁴ *See Entergy Nuclear Vt. Yankee, LLC* (Vermont Yankee Nuclear Power Station), CLI-16-12, 83 NRC 542, 558 (2016); *USEC*, CLI-06-10, 63 NRC at 472.

to the POL meet the criteria for a categorical exclusion under 10 C.F.R. § 51.22(c)(9).¹²⁵ In support of its assertion, TMI-2 Solutions analyzed the proposed changes of the LAR using the criteria in 10 C.F.R. § 51.22(c)(9), which applies to amendments to licenses for a reactor under part 50 provided where (i) the amendment involves no significant hazards consideration; (ii) there is no significant change in the types or significant types or significant increase in the amounts of any effluents that may be released offsite; and (iii) there is no significant increase in individual or cumulative occupational radiation exposure.¹²⁶ The Licensee asserted that, “[p]ursuant to 10 CFR [§] 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.”¹²⁷

An applicant’s proposed categorical exclusion in a LAR is not immune from challenge by the public. Petitioners may “avail themselves” of the opportunity to challenge categorical exclusions “either by showing special circumstances or by showing that the license amendment, if granted, would increase offsite releases of effluents or increase individual or cumulative occupational radiation exposure.”¹²⁸ However, the petition does not address the LAR’s proposed application of a categorical exclusion *at all*,¹²⁹ and accordingly, has not demonstrated a genuine dispute with the LAR on a material issue of law or fact under 10 C.F.R. § 2.309(f)(1)(vi). Thus, both NEPA-related contentions should be dismissed.¹³⁰

¹²⁵ LAR at 76.

¹²⁶ 10 C.F.R. § 51.22(c)(9)(i)-(iii).

¹²⁷ LAR at 77. The staff notes that it has not made any determination as to the ultimate sufficiency of this claim by the Licensee.

¹²⁸ See, e.g., *TMI*, LBP-20-2, 91 NRC at 38 (quoting *Indian Point*, CLI-16-5, 83 NRC at 144, 145) (internal quotations omitted). Mr. Epstein was a party to that proceeding in which the licensing board dismissed his NEPA-related contention under these grounds.

¹²⁹ Cf. *Pa’ina Hawai’i, LLC*, LBP-06-4, 63 NRC 99, 113-14 (2006) (finding that a categorical exclusion did not preclude admission of environmental contention when petitioner “identified a specific omission in the Staff’s analysis,” described “the basis for its allegations, and “affirmatively assert[ed] that special circumstances are present that preclude the application of the categorical exclusion.”).

¹³⁰ Mr. Epstein seems to take issue with the Licensee’s response to the NRC Staff’s request for additional information (RAI) on September 29, 2022, (ML22276A024), where the Petition alleges the Licensee

The proffered contentions are also inadmissible under 10 C.F.R. § 2.309(f)(1)(v) because they do not adequately provide facts or expert opinions that support the petition's position. The petition makes oblique reference to various studies (and at times, quotes asserted experts) to support the contentions, but the petition does not explain how the information in those references supports the claims in the petition, nor does it adequately identify those references in multiple cases. Additionally, the petition does not provide the qualifications of the experts being cited.¹³¹ Parties in a proceeding "are entitled to a fair chance to defend. [They are] therefore entitled to be told at the outset, with clarity and precision, what arguments are being advanced and what relief is being sought."¹³² As other licensing boards have found, the Commission's "contention rule is strict by design and does not permit the filing of a vague, unparticularized contention, unsupported by affidavit, expert, or documentary support,"¹³³ so these contentions should not be admitted for hearing.

The petition also cites many issues that are out of the scope of this proceeding and therefore controvert 10 C.F.R. § 2.309(f)(1)(iii). For example, concerning the terrorism aspects of

"discarded the NRC's guidance and argued that the NRC's suggestions [concerning accident risk frequency and combustibles] were misguided." Petition at 24 (citing pages 4-12).

Insofar as this assertion is meant to be a contention or element thereof, the Board should dismiss it as vague and not specific enough to put the parties on notice for a claim to defend. See *Fermi*, CLI-15-18, 82 NRC at 146 n.53 (citing *Wolf Creek*, ALAB-279, 1 NRC at 579). Moreover, the Commission has opined that "RAIs are a 'routine means' for the Staff to ask for clarification or additional corroborating information from an applicant. . . . Rarely will pointing to an RAI, without more, suffice as support for an admissible contention." *Susquehanna*, CLI-15-8, 81 NRC at 506 (2015) (quoting *Oconee*, CLI-99-11, 49 NRC at 336). Accordingly, this aspect of this contention should not be admitted.

¹³¹ See, e.g., Petition at 6-7 (referring to an alleged "Distenfeld Study" by a licensee of TMI-2, GPU Nuclear, that apparently estimated that 1322 kg of fuel debris was left in TMI-2 and claiming Dr. Norman Rasmussen disagreed with the "Distenfeld Study" and said there was 935 kg of fuel debris at the bottom of TMI-2. The "Distenfeld Study" is not attached to the Petition, nor is a submitted affidavit from Dr. Rasmussen); Petition at 23 (referring and quoting "Dr. Kaku" without citation to any report or study regarding the amount of uranium debris estimates, presumably at TMI-2, to "give critical mass" to dispute the Licensee; notably, there is no affidavit from Dr. Kaku provided in the Petition).

¹³² *Fermi*, CLI-15-18, 82 NRC at 146 n.53 (quoting *Wolf Creek*, ALAB-279, 1 NRC at 576).

¹³³ *Powertech USA, Inc.* (Dewey-Burdock In Situ Uranium Recovery Facility), LBP-14-5, 79 NRC 377, 385 n.38 (quoting *Shieldalloy Metallurgical Corp.* (Amendment Request for Decommissioning of the Newfield N.J. Facility), LBP-07-5, 65 NRC 341, 352 (2007) (internal quotation marks and footnotes omitted)).

the contentions, the petition cites *San Luis Obispo Mothers for Peace v. NRC*¹³⁴ as binding authority on the NRC in this case, but this is mistaken.¹³⁵ In *San Luis Obispo Mothers for Peace*, the United States Court of Appeals for the Ninth Circuit held that the NRC's categorical refusal to consider the environmental effects of potential terrorist attacks on nuclear facilities was not reasonable. The Commission interpreted the Ninth Circuit's *San Luis Obispo Mothers for Peace* decision to require it to consider the environmental effects of terrorism in its environmental analyses under NEPA, but only to those facilities licensed by the NRC in the Ninth Circuit: "Today, notwithstanding a recent decision by the United States Court of Appeals for the Ninth Circuit, holding that the NRC may not exclude NEPA-terrorism contentions categorically, we reiterate our longstanding view that NEPA demands no terrorism inquiry."¹³⁶ The TMI-2 facility is not located within the jurisdiction of the Ninth Circuit but rather in the Third Circuit. In a similar case, *New Jersey Department of Environmental Protection v. NRC*,¹³⁷ the Third Circuit affirmatively departed from the Ninth Circuit's reasoning on this issue. Thus, no terrorism analysis under NEPA is required.¹³⁸

As to the petition's claim that the NRC and the Licensee should have addressed the events of the 1999 Tokai-Mura fuel cycle accident, this aspect of the claim is outside the scope of this proceeding under 10 C.F.R. § 2.309(f)(1)(iii) and fails to show a genuine dispute with the application under 10 C.F.R. § 2.309(f)(1)(vi). There are no requirements for the Licensee to address this event in a LAR, and the Petitioner cites to none, much less any specific details about the incident itself, its relevance to the LAR, or a referenced Commission study in 2020.

¹³⁴ 449 F.3d 1016, 1030 (9th Cir. 2006).

¹³⁵ Petition at 25, 27, 33, 34.

¹³⁶ *AmerGen Energy Co. (Oyster Creek Nuclear Generation Station)*, CLI-07-8, 65 NRC 124, 126.

¹³⁷ 561 F.3d 132 (3d Cir. 2009).

¹³⁸ The NEPA terrorism aspect of the contention is also inadmissible under relevant NRC caselaw. See *Peach Bottom*, ALAB-216, 8 AEC at 20-21 (explaining that a contention that seeks to raise an issue that is not proper for adjudication in the proceeding or that does not apply to the facility in question or seeks to raise an issue that is not concrete or litigable must also be rejected).

To the extent that the petition alleges that different requirements ought to apply to TMI-2, such a claim is barred by regulation.¹³⁹ Therefore, this aspect of the contention should be denied.

Lastly, the petition also contains information that is outside the scope of this proceeding because the nexus of that information to the LAR is not clear, and the petition does not contain any discussion of its applicability. For example, the petition cites and presumably seeks to rely on certain NRC guidance documents in support of the proffered contentions, like NUREG/CR-4910, "Relay Chatter & Operator Response After a Large Earthquake,"¹⁴⁰ but fails to adequately explain the relevance of this guidance to a defueled reactor facility. As another licensing board recently instructed Mr. Epstein in a separate proceeding concerning the Three Mile Island site, "directing a licensing board to an essentially undifferentiated mass of material with the claim that it contains relevant information will not fulfill the contention admissibility standards of section 2.309(f)(1)."¹⁴¹

For the foregoing reasons, the Petitioner's contentions should not be admitted.

¹³⁹ 10 C.F.R. § 2.335(a) ("no rule or regulation of the Commission . . . is subject to attack . . . in any adjudicatory proceeding," in the absence of a waiver petition granted by the Commission); *see also Millstone*, CLI-03-14, 58 NRC at 218.

¹⁴⁰ *See, e.g.*, Petition at 27, 34.

¹⁴¹ *TMI*, LBP-20-2, 91 NRC at 39 n.50 (citing *USEC Inc.*, CLI-06-10, 63 NRC at 457).

CONCLUSION

For the reasons set forth above, the NRC Staff respectfully submits that the Petitioner has not demonstrated standing to intervene in this proceeding and has not proffered at least one admissible contention as required by 10 C.F.R. § 2.309(f)(1). Accordingly, the petition should be denied.

Respectfully submitted,

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Dated in Silver Spring, Maryland
this 28th day of November 2022

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

TMI-2 SOLUTIONS, LLC

(License Amendment Request for Three Mile
Island Nuclear Station, Unit 2)

Docket No. 50-320-LA-2

Certificate of Service

Pursuant to 10 C.F.R § 2.305, I hereby certify that copies of the foregoing “NRC STAFF ANSWER TO ERIC JOSEPH EPSTEIN’S PETITION FOR LEAVE TO INTERVENE AND HEARING REQUEST,” have been served upon the Electronic Information Exchange (the NRC’s E-Filing System), in the captioned proceeding, this 28th day of November 2022.

/Signed (electronically) by/

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Dated in Silver Spring, Maryland
this 28th day of November 2022