UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of:))) Docket No. 50-320-LT	
GPU NUCLEAR, INC., METROPOLITAN EDISON)	
CO., JERSEY CENTRAL POWER & LIGHT CO.,)	
PENNSYLVANIA ELECTRIC CO., and TMI-2)	
SOLUTIONS, LLC)	
(Three Mile Island Nuclear Station, Unit 2)) May 11, 2020)	
)	

APPLICANTS' ANSWER OPPOSING PETITION FOR LEAVE TO INTERVENE AND HEARING REQUEST FILED BY ERIC JOSEPH EPSTEIN AND THREE MILE ISLAND ALERT, INC.

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APPLICANTS' ANSWER OPPOSING PETITION FOR LEAVE TO INTERVENE AND HEARING REQUEST FILED BY ERIC JOSEPH EPSTEIN AND THREE MILE ISLAND ALERT, INC.

I. INTRODUCTION

Pursuant to 10 C.F.R. § 2.309, GPU Nuclear, Inc. ("GPU Nuclear"), Metropolitan Edison Company, Jersey Central Power & Light Company, and Pennsylvania Electric Company (collectively referred to as the "FirstEnergy Companies")¹ and TMI-2 Solutions, LLC ("TMI-2 Solutions") (together with the FirstEnergy Companies, the "Applicants") submit this Answer opposing the Petition of Eric Joseph Epstein ("Mr. Epstein") and Three Mile Island Alert, Inc. ("TMIA") (together, "Petitioners") for Leave to Intervene and for a Hearing ("Petition") filed on

Contrary to Petitioners' repeated assertions (Petition at [PDF 2 n.1, 35, 71, 76 & n.74]), none of the FirstEnergy Companies, nor their parent company, FirstEnergy Corporation, recently emerged from bankruptcy with a new name. A formerly-affiliated company, FirstEnergy Solutions Corp., recently emerged from bankruptcy.

April 15, 2020.² Petitioners seek to intervene in the proceeding associated with Applicants' November 12, 2019 license transfer application ("LTA" or "Application").³

In their LTA, Applicants have asked the U.S. Nuclear Regulatory Commission ("NRC") to approve the direct transfer of control of the Possession Only License No. DPR-73 ("License") for Three Mile Island Nuclear Station, Unit 2 ("TMI-2") from the FirstEnergy Companies to TMI-2 Solutions.⁴ The Applicants are seeking the NRC's approval of this transfer to effectuate a transaction described in the October 15, 2019 Asset Purchase and Sale Agreement among the Applicants ("Purchase Agreement") enclosed with the Application.⁵ Subject to the satisfaction of all closing conditions, including the receipt of all required regulatory approvals, the Applicants are targeting a transaction closing date in the second half of 2020.

TMI-2 Solutions is a special purpose entity formed by EnergySolutions, Inc. ("EnergySolutions") to decommission TMI-2, manage Debris Material⁶ until acceptance by the U.S. Department of Energy ("DOE"), and terminate the NRC license and release the TMI-2 site. EnergySolutions' indirectly wholly-owned subsidiary EnergySolutions, LLC, will support TMI-2 Solutions in the physical decommissioning of TMI-2. EnergySolutions will serve as the counterparty to additional financial assurance mechanisms established for the TMI-2 project.

Petition of Eric Joseph Epstein and Three Mile Island Alert, Inc. for Leave to Intervene and for a Hearing (Apr. 15, 2020) (ML20106F216) ("Petition") [Note: Page numbering in the Petition restarts midway through the document, and section numbering is disjointed. Accordingly, this Answer uses the PDF page number for all pin citations].

See TMI-19-112, Letter from J. Sauger, TMI-2 Solutions, LLC, and G. Halnon, GPU Nuclear, Inc., to NRC Document Control Desk, "Application for Order Approving License Transfer and Conforming License Amendments," Attach. 1 (Nov. 12, 2019) (ML19325C600) ("LTA").

See generally id. The LTA also asks the NRC to approve conforming administrative amendments to the License to reflect the proposed transfer. *Id.* at 14.

⁵ Id., Encl. 1A (Proprietary Asset Purchase and Sale Agreement); 1B (Non-Proprietary Asset Purchase and Sale Agreement).

[&]quot;Debris Material" includes any remaining spent nuclear fuel, damaged core material, high-level waste, and Greater-Than-Class C ("GTCC") waste at TMI-2. *See id.* at 2.

TMI-2 is a non-operational pressurized water reactor on Three Mile Island in Londonderry Township, Pennsylvania, about ten miles southeast of Harrisburg. TMI-2 is co-located with Three Mile Island Nuclear Station, Unit 1 ("TMI-1"), which is separately owned and operated by Exelon Generation Company, LLC. On March 28, 1979, TMI-2 suffered a loss-of-coolant accident on March 28, 1979, which caused severe damage to the reactor core ("Accident").

During the cleanup following, approximately 99% of the fuel and damaged core material was removed and shipped to DOE's Idaho National Laboratory ("INL") pursuant to a contract with DOE for "Transportation, Storage, and Disposal Services for TMI-2 Reactor Core." DOE now has title to and possession of the removed fuel and damaged core material at the TMI-2 Independent Spent Fuel Storage Installation ("ISFSI") in Idaho (not at the TMI-2 site). DOE is the licensed owner and operator of that ISFSI, and DOE is responsible for maintaining the ISFSI and for the ultimate disposition of the removed fuel and damaged core material. Importantly, neither DOE's ISFSI license nor the material stored there are part of this LTA. Additionally, DOE is obligated to accept and dispose of the remaining Debris Material at TMI-2.

Following completion of the post-Accident cleanup, TMI-2 was placed in a Post-Defueling Monitored Storage ("PDMS") state, and preparations for decontamination and dismantlement were deferred until the license expiration for TMI-1 (so the units could be

DOE Contract Nos. DE-SC07-83ID12355 and DE-SC07-84ID12355 ("Reactor Core Contract"); and DE-SC07-85ID12554 ("Abnormal Waste Contract").

Facility: Three Mile Island Unit-2 Independent Spent Fuel Storage Installation; Licensee: United States Department of Energy; License No.: SNM-2508; Docket No.: 072-00020: Location: Idaho Operations Office, 1955 Fremont Ave., Idaho Falls, ID 83401.

⁹ LTA at 12 (referencing Standard Contract DE-CR01-83NE44477 ("TMI-2 Standard Contract")).

decommissioned simultaneously). ¹⁰ By way of background, licensees typically choose one of two decommissioning strategies: DECON or SAFSTOR. DECON is a general strategy in which radioactive contaminants are removed or decontaminated to a level that permits release of the property and termination of the NRC license. ¹¹ SAFSTOR is a strategy in which the facility is maintained during an extended period of safe storage (usually many decades) to allow radioactivity to decay, and afterward, the plant ultimately is dismantled and the property decontaminated. ¹² TMI-2's current PDMS status has been analogous to SAFSTOR for several decades.

Now that TMI-1 has permanently ceased operations, TMI-2 Solutions plans to commence the decommissioning for TMI-2 on an accelerated schedule and aims to complete the decommissioning, restoration, and release of the TMI-2 site 16.5 years after the license transfer.¹³ This is seventeen years earlier than the previous estimated schedule, which assumed deferral of decommissioning of TMI-2 until after the end of the licensed life of TMI-1.¹⁴

See Letter from M. Masnik to R. Long, "Issuance of Amendment No. 45 for Facility Operating License No. DPR-73 to Possession Only License for Three Mile Island Nuclear Station Unit 2 (TAC No. ML69115)" (Sept. 14, 1993) (Legacy ADAMS Nos. 9405190042 (cover letter), 9405190046 (amendment), 9405190048 (safety evaluation)). The license for TMI-1 expires on April 19, 2034, but it was permanently shutdown in September 2019. See TM-19-095, Letter from M. Gallagher to NRC Document Control Desk, "Certification of Permanent Removal of Fuel from the Reactor Vessel for Three Mile Island Nuclear Station, Unit 1," at 1 (Sept. 26, 2019) (ML19269E480).

See NRC Backgrounder, "Decommissioning Nuclear Power Plants," at 1 (July 2018) (ML040340625).

¹² Id

LTA, Encl. 7 at 1; TMI-19-164, Letter from K. Sealy, J. Sauger, and R. Workman, to NRC Document Control Desk, "Notification of 'Amended Post-Shutdown Decommissioning Activities Report' (PSDAR) for Three Mile Island, Unit 2 in Accordance with 10 CFR 50.82(a)(7)" (Dec. 12, 2019), Attach. 1, "Three Mile Island Nuclear Power Station, Unit 2 Post-Shutdown Decommissioning Activities Report, Revision 3," at 4 (Dec. 2019) (ML20013E535) ("PSDAR").

See TMI-15-093, Letter from G. Halnon to NRC Document Control Desk, "Three Mile Island Nuclear Station, Unit 2, Docket No. 50-320, Possession Only License No. DPR-73, Revision to Post-Shutdown Decommissioning Activities Report" (Dec. 4, 2015) (ML15338A222).

TMI-2 Solutions plans to divide its decommissioning efforts into two phases. Phase 1 focuses on planning, engineering and licensing activities, and remediation of the areas subject to the Accident.¹⁵ During the first 4-5 years of this phase, TMI-2 will remain primarily in a PDMS or analogous state (*i.e.*, SAFSTOR).¹⁶ Thereafter, TMI-2 will move out of PDMS into active decommissioning (*i.e.*, DECON) to perform a focused remediation of the remaining areas of the facility impacted by the Accident.¹⁷ The end goal of Phase 1 will be to remediate the reactor building and package the Debris Material, leaving TMI-2 in a similar position to a typical reactor at the end of its operating life.¹⁸ The goal of Phase 2 is the active decommissioning of the TMI-2 site to a level that permits the release of the site, other than an area that may be set aside for secure storage of the limited Debris Material until acceptance by the DOE.¹⁹

The Petition proffers three proposed contentions purporting to challenge the LTA. All three are inadmissible. First, in Proposed Contention 1, Petitioners claim that NRC regulations prohibit the Applicants from using an assumed two-percent annual real rate of return on funds in the nuclear decommissioning trust ("NDT") fund because the decommissioning cost estimate ("DCE") does not contemplate a "period of safe storage." This contention is inadmissible because Petitioners misread both the applicable regulation and the DCE. Thus, Proposed Contention 1 is unsupported and fails to dispute the pending Application.

Second, in Proposed Contention 2, Petitioners claim the LTA fails to satisfy applicable funding assurance requirements, because the DCE underestimates certain costs, and because

¹⁵ LTA, Encl. 7 at 1.

¹⁶ *Id*.

¹⁷ *Id*.

¹⁸ *Id.* at 10.

¹⁹ *Id*.

recent volatility in the securities markets has depleted the assets in the TMI-2 NDT fund. As detailed below, these counterfactual claims are entirely unsupported by sufficient authority or expert support—and often without even a basic explanation. In other words, the contentions rely on baseless speculation, which is insufficient for an admissible contention.

Furthermore, Petitioners' contentions were essentially copied-and-pasted from a recent petition in the Indian Point license transfer proceeding, but ignore significant factual differences between the two proceedings.²⁰ For example, Petitioners frequently cite regulations or principles that may have been applicable to the Indian Point proceeding (*e.g.*, 10 C.F.R. Part 72 regulations applicable to an ISFSI), but which are entirely inapplicable to the instant proceeding (because, unlike the proposed transfer in Indian Point, Applicants here are not seeking to transfer an ISFSI license). Overall, Petitioners' arguments fail to dispute the LTA at issue in *this* proceeding and are variously unsupported, immaterial, and out-of-scope for multiple reasons explained in the discussion below.

Finally, in Proposed Contention 3, Petitioners argue that "TMI-2 Solutions and its parents" may not rely on the funds in the NDT to demonstrate its financial qualifications.

However, Petitioners attempt to support Proposed Contention 3 with inaccurate claims about the Application and the financial assurances TMI-2 Solutions provides. Petitioners also challenge NRC regulations on financial assurance and make immaterial, unsupported claims about the adequacy of TMI-2 Solutions' corporate structure. Petitioners also repeat arguments from Proposed Contention 1 and Basis A. In the end, Proposed Contention 3 is inadmissible, because

Compare Entergy Nuclear Operations, Inc. (Indian Point Nuclear Generating Unit Nos. 1, 2, & 3), Petition of the State of New York for Leave to Intervene and for a Hearing (Feb. 12, 2020) (ML20043E118) ("NYS Petition") (proposed contentions NY-1, NY-2 and Bases B, F, G, H, and NY-3) with Petition (proposed contentions 1, 2 and Bases A-D, and 3) (using language identical to the New York petition, except for the names of the applicants); compare NYS Petition (proposed new Basis J for proposed contention 2) with Petition (proposed contention 2 Basis E) (again copying the contention essentially verbatim).

it is an impermissible challenge to NRC regulations, is unsupported, raises immaterial issues, and does not raise a genuine dispute with the Application.

Even if Petitioners had submitted an admissible contention—which they have not, for the myriad reasons explained below—the Petition must be rejected because Petitioners also have not demonstrated standing. The Petition claims that Mr. Epstein is entitled to standing as an individual and that TMIA is entitled to representational standing on behalf of its members. In the alternative, Petitioners request the Commission to grant them discretionary intervention. Petitioners demonstrate neither a credible basis for standing nor colorable justification for discretionary intervention.

Petitioners essentially rely on a presumption of standing due to their proximity to TMI-2. However, to invoke this presumption in a license transfer proceeding, petitioners are required to affirmatively demonstrate that the *proposed transfer* (*i.e.*, not merely the activities *already* authorized by the existing license) somehow could create an "obvious potential for offsite consequences." Petitioners have not remotely done so here. Nor do they satisfy the high bar for the Commission to take the extraordinary action of granting discretionary intervention.

In sum, each of the proposed contentions fails to satisfy one or more of the six admissibility criteria in 10 C.F.R. § 2.309(f)(1), and Petitioners have not demonstrated standing to intervene. Thus, the Petition must be denied for either or both of these reasons.

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Consumers Energy Co. (Big Rock Point Independent Spent Fuel Storage Installation), CLI-07-19, 65 NRC 423, 426 (2007) (quoting Exelon Generation Co. (Peach Bottom Atomic Power Station, Units 2 & 3), CLI-05-26, 62 NRC 577, 580-81 (2005)).

II. PROCEDURAL HISTORY

The Applicants filed the Application on November 12, 2019.²² On March 26, 2020, the NRC published a notice in the *Federal Register* informing the public that it is considering the LTA for approval, providing an opportunity for the public to submit written comments on the LTA, and offering an opportunity for persons whose interests may be affected by the approval of the LTA to file (within 20 days of the notice) hearing requests and intervention petitions ("Hearing Opportunity Notice").²³ The Hearing Opportunity Notice also contemplated that potential parties may need access to the Sensitive Unclassified Non-Safeguards Information ("SUNSI")²⁴ in the LTA for contention drafting purposes. Thus, it directed those potential parties to request access from the Applicants or file a motion with the Commission.²⁵ Applicants and Petitioners jointly filed a motion with the Commission for entry of a protective order to govern the disclosure of, access to, and use of SUNSI on April 13, 2020.²⁶ The Commission granted this motion and entered a protective order on April 17, 2020.²⁷ Applicants timely file this Answer opposing the Petition according to the provisions of 10 C.F.R. § 2.309(i)(1).

See LTA (cover letter at 1). On December 12, 2019, the Applicants filed with the NRC a revised PSDAR including an updated DCE. See PSDAR (cover letter at 1).

Three Mile Island Nuclear Station, Unit No. 2; Consideration of Approval of Transfer of License and Conforming Amendment, 85 Fed. Reg. 17,102 (Mar. 26, 2020) ("Hearing Opportunity Notice").

SUNSI in this context includes any proprietary commercial information that an applicant requests to be withheld from public disclosure.

Hearing Opportunity Notice, 85 Fed. Reg. at 17,104.

Joint Motion for Entry of a Protective Order (Apr. 13, 2020) (ML20104C148).

Order (Protective Order Governing the Disclosure of Sensitive Unclassified Non-Safeguards Information) (Apr. 17, 2020) (ML20108F660). The original order only listed Mr. Epstein as an "Authorized Recipient." However, the Pennsylvania Department of Environmental Protection ("PADEP") filed its own petition to intervene after the original joint motion was filed. *See* Petition of The Commonwealth of Pennsylvania, Department of Environmental Protection for Leave to Intervene and Request for an Extension of Time to File a Hearing Request (Apr. 15, 2020) (ML20106E887) ("PADEP Petition"). PADEP also sought access to SUNSI. Pursuant to a subsequent joint motion (ML20109A009), the Commission entered an amended order adding several PADEP representatives as "Authorized Recipients" of SUNSI. *See* Amended Protective Order Governing the Disclosure of Sensitive Unclassified Non-Safeguards Information (Resubmitted with Correct Digital Signature (Apr. 24, 2020) (ML20115E256).

III. REGULATORY FRAMEWORK

A. Reactor Decommissioning

Under NRC regulations, "decommissioning" a nuclear reactor means to safely remove the facility from service, reduce residual radioactivity to a level that allows releasing the property for unrestricted use (or restricted use subject to conditions, not proposed here) in accordance with NRC regulations in 10 C.F.R. Part 20, Subpart E, and terminate the license. NRC regulations require that applicants and licensees provide "reasonable assurance" that funds will be available for the decommissioning process. The primary methods of providing financial assurance for decommissioning permitted by the NRC are through: (1) prepayment; (2) an external sinking fund; (3) a surety, insurance, or another guarantee; or (4) a combination of these or equivalent mechanisms.

NRC regulations impose additional requirements that govern three sequential phases for decommissioning activities: (1) initial activities, (2) major decommissioning and storage activities, and (3) license termination activities.³¹ NRC regulations require a licensee to submit a PSDAR prior to or within two years following the permanent cessation of operations.³² The Staff notices its receipt of the PSDAR, makes the PSDAR available for public comment, and

²⁸ 10 C.F.R. § 50.2.

Id. § 50.75(a). The NRC requires nuclear power plant licensees to report to the agency the status of their decommissioning funds at least once every two years, annually within five years of the planned shutdown, and annually once the plant ceases operation. Id. § 50.75(f)(2).

³⁰ *Id.* § 50.75(e)(1)(i)-(iii), (vi).

³¹ See generally id. § 50.82(a).

³² *Id.* § 50.82(a)(4)(i).

holds a public meeting on its contents.³³ The PSDAR serves to inform the public and NRC Staff of the licensee's proposed activities, but approval is not required under the NRC rules.³⁴

Thus, without objections from the NRC Staff, the licensee may begin "major decommissioning activities" ninety days after the Staff receives the PSDAR.³⁵ Under NRC regulations, a licensee may not perform decommissioning activities that would "[f]oreclose release of the site for possible unrestricted use; [r]esult in significant environmental impacts not previously reviewed; or [r]esult in there no longer being reasonable assurance that adequate funds will be available for decommissioning."³⁶

The PSDAR must include a site-specific DCE.³⁷ Once a licensee submits its DCE, it generally is allowed access to the balance of the NDT fund monies for the remaining decommissioning activities with "broad flexibility."³⁸ However, the use of the NDT fund is limited in three important respects. First, withdrawals from the fund must be "for expenses for legitimate decommissioning activities consistent with the definition of decommissioning in [10 C.F.R.] § 50.2" or "for payments of ordinary administrative costs (including taxes) and other

³³ Id. § 50.82(a)(4)(ii). The Staff presents comments received at the public meeting held on the PSDAR and makes available to the public a written transcript of the meeting. See NRC, Regulatory Guide 1.185, "Standard Format and Content for Post-Shutdown Decommissioning Activities Report," Rev. 1 at 4 (June 2013) (ML13140A038) ("RG 1.185"). As discussed below, the PSDAR process does not create a hearing opportunity.

Decommissioning of Nuclear Power Reactors; Final Rule, 61 Fed. Reg. 39,278, 39,281 (July 29, 1996) ("1996 Decommissioning Rule"). In establishing the current process governing decommissioning, the NRC "eliminate[d] the need for an approved decommissioning plan before major decommissioning activities can be performed." *Id.*

³⁵ 10 C.F.R. § 50.82(a)(5). A "major decommissioning activity" for a nuclear power plant is defined as "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 [10 C.F.R.] § 61.55." *Id.* § 50.2.

³⁶ *Id.* § 50.82(a)(6).

³⁷ *Id.* § 50.82(a)(4)(i).

³⁸ See 1996 Decommissioning Rule, 61 Fed. Reg. at 39,285.

incidental expenses of the fund (including legal, accounting, actuarial, and trustee expenses)."³⁹ Second, the expenditure must not reduce the value of the NDT "below an amount necessary to place and maintain the reactor in a safe storage condition if unforeseen conditions or expenses arise."⁴⁰ Finally, the withdrawals must not "inhibit the ability of the licensee to complete funding of any shortfalls in the decommissioning trust needed to ensure the availability of funds to ultimately release the site and terminate the license."⁴¹

The Staff also monitors the licensee's use of the NDT through its review of the licensee's annual financial assurance status reports.⁴² Those reports must include, among other information, the amount spent on decommissioning activities, the amount remaining in the fund, and an updated estimate of the costs required to complete decommissioning.⁴³ If the licensee or NRC identifies a shortfall between the remaining funds and the updated cost to complete decommissioning (as a result of these annual status reports or otherwise), then the licensee must provide additional financial assurance.⁴⁴

Unless otherwise authorized, the site must be decommissioned within 60 years of the plant shutting down.⁴⁵ The licensee remains subject to NRC oversight until the decommissioning is completed and the license is terminated. The licensee must submit a license termination plan ("LTP") at least two years before the planned license termination date.⁴⁶ The

³⁹ 10 C.F.R. § 50.82(a)(8)(i)(A); *id.* § 50.75(h)(2).

⁴⁰ *Id.* § 50.82(a)(8)(i)(B).

⁴¹ *Id.* § 50.82(a)(8)(i)(C).

⁴² *Id.* § 50.82(a)(8)(v).

⁴³ *Id.* § 50.82(a)(8)(v)(A)-(B).

⁴⁴ *Id.* § 50.82(a)(8)(vi). The determination whether a shortfall exists takes into account a two percent annual real rate of return.

⁴⁵ *Id.* § 50.82(a)(3).

⁴⁶ *Id.* § 50.82 (a)(9)(i).

NRC, in turn, must notice receipt of the LTP in the *Federal Register*, make the plan available to the public for comment, schedule a public meeting near the facility to discuss the plan's contents, and offer an opportunity for a public hearing on the license amendment associated with the LTP.⁴⁷ The Commission may not approve the LTP (by license amendment) and terminate the license until it makes specific findings set forth in the regulations.⁴⁸

As part of the license termination process, the licensee conducts a sequence of site surveys consistent with the approach in the Multi-Agency Radiation Survey and Site Investigation Manual ("MARSSIM"). ⁴⁹ The first step is a Historical Site Assessment ("HSA"). An HSA is an investigation to collect existing information describing a site's history related to potential, likely, or known sources of radioactive and other site contamination. ⁵⁰ The HSA is followed by a site characterization survey later in the decommissioning process (to determine the nature and extent of contamination) and, eventually, a final status survey (to demonstrate satisfaction of the applicable release criteria). ⁵¹

NRC regulations also address the need to ensure adequate funds for the management of spent nuclear fuel ("SNF").⁵² As noted above, DOE has already removed (and possesses title to) approximately 99% of the fuel and damaged core material. Because the Accident occurred within the first few months of reactor operation, no SNF was otherwise stored at the TMI-2 site. Even so, the remaining approximately 1% of the Debris Material will be packaged and stored

47 *Id.* § 50.82 (a)(9)(iii).

⁴⁸ *Id.* § 50.82 (a)(10)-(11).

NUREG-1575, "Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)," Rev. 1 (Aug. 2000) (ML003761445) ("NUREG-1575").

⁵⁰ *See generally id.* at 2-22, 3-1.

⁵¹ *Id.* at 2-23, 2-24.

⁵² See 10 C.F.R. §§ 50.54(bb); 50.82(a)(8)(vii).

until DOE acceptance. The requirement to ensure adequate funding for the management of SNF also applies to the cost of managing the Debris Material.⁵³

Thus, the DCE must include the projected costs of managing the Debris Material until the Debris Material is assumed to be removed from the site.⁵⁴ The licensee must report annually to the NRC on the status of its funding to manage the Debris Material, including the amount of funds available, the projected cost of managing the Debris Material until DOE removes it, and if there is a funding shortfall, a plan to obtain additional funds to cover the cost.⁵⁵

B. Reactor License Transfers

Under Section 184 of the Atomic Energy Act of 1954, as amended ("AEA"),⁵⁶ an NRC reactor license, or any right under it, may not be "transferred, assigned[,] or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of [the] license to any person," unless the NRC first gives its consent in writing.⁵⁷ This statutory requirement is codified in 10 C.F.R. § 50.80 and applies to both direct and indirect license transfers.⁵⁸ Transferring control may involve either the licensed operator or any individual licensed owner of the facility.⁵⁹ Before approving a license transfer, the NRC reviews, among

See id. § 50.82(a)(8)(vii); LTA at 12 ("[P]ursuant to 10 CFR 50.33(k) and 50.54(bb), funds must be set aside for long-term storage of the Debris Material."). However, the requirement in Section 50.54(bb) to submit a formal plan for the management of such material is inapplicable to TMI-2. See infra note 172.

⁵⁴ 10 C.F.R. § 50.82(a)(4)(i).

⁵⁵ *Id.* § 50.82(a)(8)(vii).

Atomic Energy Act of 1954, Pub. L. No. 83-703, 68 Stat. 919 (codified as amended at 42 U.S.C. §§ 2011, et seq.).

⁵⁷ *Id.* § 184 (codified as amended at 42 U.S.C. § 2234).

See NRC Backgrounder, "Reactor License Transfers," at 1-2 (Jan. 2020) (ML040160803). A direct license transfer occurs when an entity seeks to transfer a license it holds to a different entity (e.g., when a plant is to be sold or transferred to a new licensee in whole or part). See id. An indirect license transfer takes place when there is a transfer of "control" of the license or of a license holder (e.g., as a result of a merger or acquisition at high levels within or among corporations. See id.

⁵⁹ *See id.* at 2.

other things, the technical and financial qualifications of the proposed transferees.⁶⁰ The transfer review, in other words, focuses on the "potential impact on the licensee's ability both to maintain adequate technical qualifications and organizational control and authority over the facility[,] and to provide adequate funds for safe operation and decommissioning."⁶¹

To grant a license transfer application, the NRC must find a "reasonable assurance" of financial qualifications. License transfer applicants for reactors that will be permanently shutdown at the time of the transfer may rely *solely* on the adequacy of the NDT to demonstrate reasonable assurance. Longstanding Commission precedent makes clear that the reasonable assurance standard does not require an applicant to meet an "absolute" or "beyond a reasonable doubt" standard. In other words, "reasonable assurance" is not synonymous with "absolute assurance." The NRC has historically interpreted "reasonable assurance" with the understanding that "some risks may be tolerated and something less than absolute protection is required." As

See 10 C.F.R. §§ 50.80(b)(1)(i), (c)(1); see also NUREG-1577, "Standard Review Plan on Power Reactor Licensee Financial Qualifications and Decommissioning Funding Assurance," Rev. 1 (Feb. 1999) (ML013330264) ("NUREG-1577").

Final Policy Statement on the Restructuring and Economic Deregulation of the Electric Utility Industry, 62 Fed. Reg. 44,071, 44,077 (Aug. 19, 1997).

^{62 10} C.F.R. § 50.33(f)(2).

⁶³ See, e.g., Oyster Creek License Transfer Safety Evaluation Report at 7-10 (June 20, 2019) (ML19095A457) ("Oyster Creek License Transfer SER"); Pilgrim License Transfer Safety Evaluation Report at 7-15 (Aug. 23, 2019) (ML19235A300) ("Pilgrim License Transfer SER").

⁶⁴ AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 262 n.142 (2009); Commonwealth Edison Co. (Zion Station, Units 1 & 2), ALAB-616, 12 NRC 419, 421 (1980); N. Anna Envtl. Coal. v. NRC, 533 F.2d 655, 667-68 (D.C. Cir. 1976) (rejecting the argument that reasonable assurance requires proof beyond a reasonable doubt and noting that the licensing board equated "reasonable assurance" with the preponderance standard).

Memorandum from F. Brown, Director, Office of New Reactors to New Reactor Business Line, "Expectations for New Reactor Reviews," at 4 (Aug. 29, 2018) (ML18240A410).

particularly relevant here, "the mere casting of doubt" on some aspect of an application is legally insufficient "to defeat a finding of reasonable assurance." 66

The AEA requires that the NRC offer an opportunity for hearing on a license transfer.⁶⁷ In 1998, the NRC adopted Subpart M of 10 C.F.R. Part 2 (10 C.F.R. §§ 2.1300 to 2.1331), authorizing the use of a streamlined license transfer process with informal legislative-type hearings, rather than formal adjudicatory hearings.⁶⁸ These rules cover any direct or indirect license transfer for which NRC approval is required, including those transfers that require license amendments and those that do not.⁶⁹ Section 2.1315 codifies the Commission's generic determination that any conforming amendment to an operating license that only reflects the license transfer action involves a "no significant hazards consideration." That same regulation provides that "[a]ny challenge to the administrative license amendment is limited to the question of whether the license amendment accurately reflects the approved transfer."

As part of the same rulemaking to streamline license transfer proceedings, the Commission also promulgated 10 C.F.R. § 51.22(c)(21). That regulation categorically excludes from environmental review "[a]pprovals of direct or indirect transfers of any license issued by

⁶⁶ Private Fuel Storage, LLC (Indep. Spent Fuel Storage Installation), CLI-00-13, 52 NRC 23, 31 (2000) (citing La. Energy Servs. (Claiborne Enrichment Center), CLI-97-15, 46 NRC 297 (1997); N. Atl. Energy Serv. Corp. (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201, 222 (1999)).

⁶⁷ AEA § 189.a(1)(A) (codified as amended at 42 U.S.C. § 2239(a)(1)(A)) ("In any proceeding under this chapter, for . . . application to transfer control, . . . the Commission shall grant a hearing upon the request of any person whose interest may be affected by the proceeding, and shall admit any such person as a party to such proceeding.").

See Streamlined Hearing Process for NRC Approval of License Transfers; Final Rule, 63 Fed. Reg. 66,721, 66,722 (Dec. 3, 1998) ("Subpart M Rule"); see also Changes to Adjudicatory Process; Final Rule, 69 Fed. Reg. 2,182, 2,214 (Jan. 14, 2004) (retaining streamlined process under Subpart M for license transfers without substantive changes).

⁶⁹ See Subpart M Rule, 63 Fed. Reg. at 66,727.

⁷⁰ 10 C.F.R. § 2.1315(a).

⁷¹ *Id* § 2.1315(b).

[the] NRC and any associated amendments of license required to reflect the approval of a direct or indirect transfer of an NRC license." This regulation reflects the NRC's finding that this category of action does not "individually or cumulatively have a significant effect on the human environment."

IV. PETITIONERS HAVE NOT PROPOSED AN ADMISSIBLE CONTENTION

To grant the Petition, the Commission must find that Petitioners have submitted at least one proposed contention that satisfies all six admissibility criteria in 10 C.F.R. § 2.309(f)(1). Petitioners have not done so here. Accordingly, the Petition must be denied.

A. Contention Admissibility Standards

Petitions to intervene must "set forth with particularity" the contentions a petitioner seeks to have litigated in a hearing. The requirements for an admissible contention are set forth in 10 C.F.R. § 2.309 (f)(1)(i)-(vi) and also described in the Hearing Opportunity Notice. The Commission's contention admissibility requirements are "strict by design." They seek "to ensure that NRC hearings 'serve the purpose for which they are intended: to adjudicate *genuine*, substantive safety and environmental issues placed in contention by qualified intervenors." The requirements thus reflect a "deliberate effort to prevent the major adjudicatory delays caused in the past by ill-defined or poorly-supported contentions that were admitted for hearing although

⁷² See Subpart M Rule, 63 Fed. Reg. at 66,728.

PPL Susquehanna, LLC (Susquehanna Steam Elec. Station, Units 1 & 2), CLI-15-8, 81 NRC 500, 503-04 (2015) (quoting 10 C.F.R. § 2.309(f)(1)); Susquehanna Nuclear, LLC (Susquehanna Steam Elec. Station, Units 1 & 2), CLI-17-4, 85 NRC 59, 74 (2017).

⁷⁴ See Hearing Opportunity Notice, 85 Fed. Reg. at 17,103.

Dominion Nuclear Conn., Inc. (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 NRC 349, 358 (2001).

Dominion Nuclear Conn., Inc. (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 213 (2003) (quoting Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, & 3), CLI-99-11, 49 NRC 328, 334 (1999)) (emphasis added) (internal citation omitted).

'based on little more than speculation.'"⁷⁷ To warrant an adjudicatory hearing, the NRC requires proposed contentions to have "some reasonably specific factual or legal basis."⁷⁸ The petitioner alone bears the burden to meet the standards of contention admissibility.⁷⁹

Under 10 C.F.R. § 2.309(f)(1), a petitioner must explain the basis for each proffered contention by stating alleged facts or expert opinions that support the petitioner's position and on which the petitioner intends to rely in litigating the contention at the hearing. ⁸⁰ To be admissible, the issue raised must fall within the scope of the proceeding and be material to the findings that the NRC must make with respect to the Application. ⁸¹ Contentions that challenge NRC regulations, ⁸² seek to impose requirements stricter than those imposed by the agency, ⁸³ or opine on how Staff should conduct its review ⁸⁴ are all outside the scope of NRC adjudicatory proceedings. A contention also must provide sufficient information to show a genuine dispute with the applicant on a material issue of law or fact. ⁸⁵ The contention must refer to the "specific portions of the Application. . . that the petitioner disputes," along with the "supporting reasons

⁷⁷ Susquehanna, CLI-15-8, 81 NRC at 504 (quoting Oconee, CLI-99-11, 49 NRC at 334).

⁷⁸ *Id.* (quoting *Millstone*, CLI-03-14, 58 NRC at 213).

⁷⁹ See Entergy Nuclear Operations, Inc. (Palisades Nuclear Plant), CLI-15-23, 82 NRC 321, 325, 329 (2015) ("[I]t is Petitioners' responsibility . . . to formulate contentions and to provide 'the necessary information to satisfy the basis requirement' for admission") (internal citation omitted).

⁸⁰ 10 C.F.R. § 2.309(f)(1)(ii), (v).

⁸¹ *Id.* § 2.309(f)(1)(iii)-(iv); *Susquehanna*, CLI-17-4, 85 NRC at 74.

^{82 10} C.F.R. § 2.335(a).

⁸³ See Entergy Nuclear Vt. Yankee, LLC (Vt. Yankee Nuclear Power Station), LBP-15-4, 81 NRC 156, 167 (2015); NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301, 315 (2012); GPU Nuclear, Inc. (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 206 (2000); Curators of the Univ. of Mo. (TRUMP-S Project), CLI-95-1, 41 NRC 71, 170 (1995).

See, e.g., Fla. Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 & 4), CLI-01-17, 54 NRC 3, 25 (2001) (quoting Balt. Gas & Elec. Co. (Calvert Cliffs Nuclear Power Plant, Units 1 & 2), CLI-98-25, 48 NRC 325, 350 (1998), aff'd sub nom Nat'l Whistleblower Ctr. v. NRC, 208 F.3d 256 (D.C. Cir. 2000), cert. denied, 531 U.S. 1070 (2001)) ("'[I]t is the license application, not the NRC Staff review, that is at issue in our adjudications.").

^{85 10} C.F.R. § 2.309(f)(1)(vi); Susquehanna, CLI-17-4, 85 NRC at 74.

for each dispute; or, if the petitioner believes that an application fails altogether to contain information required by law, the petitioner must identify each failure, and provide supporting reasons for the petitioner's belief."86

Petitioners may not incorporate by reference voluminous documents or affidavits with conclusory assertions to support a contention. As the Commission explained:

> Commission practice is clear that a petitioner may not simply incorporate massive documents by reference as the basis for or as a statement of his contentions. . . . Such a wholesale incorporation by reference does not serve the purposes of a pleading. . . . The Commission expects parties to bear their burden and to clearly identify the matters on which they intend to rely with reference to a specific point. The Commission cannot be faulted for not having searched for a needle that may be in a haystack.⁸⁷

In short, the Commission has refused to "sift through the parties' pleadings to uncover and resolve arguments not advanced by the litigants themselves."88

Here, Petitioners propose three contentions—one of which has five sub-parts. As detailed below, none of these satisfies all six contention admissibility criteria. Accordingly, they all must be rejected as inadmissible.

В. Proposed Contention 1 (Investment Returns) Is Inadmissible

In Proposed Contention 1, Petitioners allege that the cash flow analysis in the DCE impermissibly assumes investment returns on the funds in the NDT. More specifically, Petitioners assert:

> TMI-2 Solutions has failed to comply with 10 C.F.R. §§ 50.75 (b)(1) and (e)(1)(i) because the license transfer application and the

Susquehanna, CLI-17-4, 85 NRC at 74 (citing 10 C.F.R. § 2.309(f)(1)(vi)).

Pub. Serv. Co. of N.H. (Seabrook Station, Units 1 & 2), CLI-89-3, 29 NRC 234, 240-41 (1989) (citations omitted).

Pac. Gas & Elec. Co. (Diablo Canyon Nuclear Power Plant, Units 1 & 2), CLI-02-16, 55 NRC 317, 337 (2002) (quoting Commonwealth Edison Co. (Zion Nuclear Power Station, Units 1 & 2), CLI-99-4, 49 NRC 185, 194 (1999)).

supporting PSDAR and decommissioning cost estimate impermissibly assume an annual two percent real rate of return on nuclear decommissioning trust monies.⁸⁹

Importantly, this assertion is incorrect as a matter of law. Under 10 C.F.R. § 50.75(e)(1)(i), a site-specific decommissioning estimate "may take credit for projected earnings on the prepaid decommissioning trust funds, using up to a [two] percent annual real rate of return from the time of future funds' collection through the projected decommissioning period, provided that the site-specific estimate is based on a period of safe storage that is specifically described in the estimate." Petitioners claim that neither the DECON approach (which TMI-2 Solutions has chosen) generally, nor the DCE, specifically, contemplate a period of safe storage. Thus, according to Petitioners, TMI-2 Solutions is prohibited from assuming an annual two percent real rate of return. As explained below, Petitioners are incorrect on all counts.

At best, Petitioners simply misread the applicable regulation and disregard the content of the DCE, which is insufficient for an admissible contention. These defects render Proposed Contention 1 inadmissible because it is unsupported by fact or law, as required by 10 C.F.R. § 2.309(f)(1)(v), and because it fails to demonstrate a genuine dispute with the Application, as required by 10 C.F.R. § 2.309(f)(1)(vi).

Petition at [PDF 31].

⁹⁰ *Id.* at [PDF 33, 37].

Seabrook, CLI-12-5, 75 NRC at 312 (noting a petitioner's "ironclad obligation" to review the application and relevant support thoroughly and accurately); Ga. Inst. of Tech. (Ga. Tech Research Reactor), LBP-95-6, 41 NRC 281, 300 (1995) (holding that a petitioner's "imprecise reading" of the application and alleged support "cannot serve to generate an issue suitable for litigation").

1. <u>Both DECON and SAFSTOR Involve Periods of Safe Storage</u>

As noted in the introduction to this Answer, licensees typically choose one of two decommissioning strategies: DECON or SAFSTOR. These general strategies were first conceived in the NRC's original decommissioning studies—NUREG/CR-0130 for pressurized water reactors ("PWRs") and NUREG/CR-0672 for boiling water reactors ("BWRs"). These studies were subsequently updated in NUREG/CR-5884 for PWRs and NUREG/CR-6174 for BWRs. Studies were subsequently updated in NUREG/CR-5884 for PWRs and NUREG/CR-6174 for BWRs.

The crux of Proposed Contention 1 is Petitioners' unsupported claim that DECON "does not contemplate a period of safe storage," and that only the SAFSTOR strategy involves a "period of safe storage." However, this assertion is incorrect. As the NRC has explained:

DECON, as defined by NUREG/CR-5884 and NUREG/CR-6174, comprises four distinct periods of effort: (1) preshutdown planning/engineering and regulatory reviews, (2) plant deactivation and *preparation for storage* (no dismantling activities are conducted during this period that would affect the safe operation of the spent fuel pool), (3) *plant safe storage* with concurrent operations in the spent-fuel pool until the pool inventory is zero, and (4) decontamination and dismantlement of the radioactive portions of the plant, leading to license termination

In NUREG/CR-5884 and NUREG/CR-6174, SAFSTOR is described as five distinct periods of effort, with the initial three periods identical to those of DECON. The fourth period is *extended* safe storage (50 years) with no fuel in the reactor storage pool, and

⁹² See NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants," Vol. 1, Part 7, Decommissioning Methods § 7.2.2 (May 1996) ("NUREG-1437"), available at https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1437/v1/part07.html# 1 176.

Id. (citing NUREG/CR-5884, "Revised Analyses of Decommissioning for the Reference Pressurized Water Reactor Power Station" (Nov. 1995) (ML14008A187) ("NUREG/CR-5884"); NUREG/CR-6174, "Revised Analyses of Decommissioning for the Reference Boiling Water Reactor Power Station" (July 1996) (ML14008A186) ("NUREG/CR-6174")).

Petition at [PDF 33] (emphasis in original).

⁹⁵ *Id.* at [PDF 33-34].

the fifth period is decontamination and dismantlement of the radioactive portions of the plant. 96

In other words, *both* DECON and SAFSTOR necessarily must involve periods of safe storage. The key difference is that SAFSTOR explicitly involves an *additional* period of "extended" safe storage. Petitioners' claim that 10 C.F.R. § 50.75(e)(1)(i) limits the assumed two percent annual real rate of return to licensees using the SAFSTOR method is unsupported. Moreover, the condition in 10 C.F.R. § 50.75(e)(1)(i) requiring that a site-specific estimate include a "period of safe storage" clearly can be satisfied by licensees using the DECON method.

Petitioners purport to find support for their erroneous interpretation of 10 C.F.R. § 50.75(e)(1)(i) in the Statement of Considerations ("SOC") for a 2002 rulemaking, in which it claims the Commission "explicitly rejected" application of the earnings credit for licensees using the DECON method. Nevertheless, Petitioners offer no further explanation of this dubious and misleading argument. Nor could they, because the SOC does *not* support this claim. Rather, the SOC explains that licensees certifying to the *generic formula amount* for decommissioning funding *may not* assume investment returns under the SAFSTOR method, whereas those with a site-specific DCE *may* assume investment returns under the SAFSTOR method. It further explains that licensees certifying to the generic formula and using the DECON method are limited to taking a pro-rata credit for seven years. Notably, the SOC does not discuss *any* limitation on licensees using the DECON method and certifying to a site-specific DCE, as TMI-2

NUREG-1437 §§ 7.2.2.1, 7.2.2.2, and 7.2.2.3 (emphasis added). NUREG-1437 also recognizes that, "[b]ecause of the delays in development of the federal waste management system, it may be necessary to continue operation of a dry fuel storage facility on the reactor site after the reactor systems have been dismantled and the reactor nuclear license terminated." *Id.* § 7.2.2.1. In other words, it contemplates a fifth (for DECON) or sixth (for SAFSTOR) period which entails ongoing ISFSI operations.

Petition at [PDF 38] (citing Decommissioning Trust Provisions, 67 Fed. Reg. 78,332, 78,338 (Dec. 24, 2002)).

Decommissioning Trust Provisions, 67 Fed. Reg. at 78,338.

⁹⁹ *Id*.

Solutions has done here. In fact, the point of the Commission's disposition of comments was to allow the 2% real rate of return for periods beyond 7 years only where the licensee uses a site-specific estimate. At the same time, it explicitly approved a seven-year earnings period (DECON) for those licensees relying on the generic formula. This confirms the Commission's intention that earnings during the assumed DECON period can be credited.

Furthermore, the propriety of this interpretation of 10 C.F.R. § 50.75(e)(1)(i) (*i.e.*, that a 2% rate of return is allowed in DECON scenarios) is demonstrated by longstanding agency precedent. Multiple NRC safety evaluations of various licensing actions have approved the use of a 2% real rate of return in site-specific cost estimates for applicants and licensees using the DECON method. This includes the very recent NRC approvals of direct transfers of the Oyster Creek and Pilgrim licenses to decommissioning contractors and the transfer of the Zion nuclear plant license to another Energy *Solutions* subsidiary in 2009. ¹⁰¹ In these situations and many others, the NRC has long interpreted its regulations to permit an assumed 2% real rate of return in site-specific cost estimates using the DECON method.

Fundamentally, Petitioners misread the condition in the regulation as limiting its application to decommissioning that involves an "[extended] period of safe storage." However, the word "extended" is not present in the regulation. Petitioners identify no basis to read into the regulation an additional uncodified word that would fundamentally alter its meaning, and identify no health and safety rationale for why the 2% annual real rate of return should be disallowed for the DECON decommissioning approach. In essence, Petitioners' core claim in

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See, e.g., Pilgrim License Transfer SER; Oyster Creek Exemption Issuance (June 20, 2019) (ML19112A318);
Zion License Amendment Safety Evaluation Report (May 4, 2009) (ML090930063) ("Zion License Amendment SER").

Proposed Contention 1 is contradicted by the plain text of the regulation and the NRC's historical application thereof. Therefore, the contention lacks the support required by 10 C.F.R. § 2.309(f)(1)(v), and fails to dispute the LTA on a material issue, contrary to 10 C.F.R. § 2.309(f)(1)(vi). 102

2. The PSDAR Specifically Describes a Brief Period of Safe Storage

Petitioners further claim that TMI-2 Solutions' cost estimate does not specifically describe a period of safe storage, as required by 10 C.F.R. § 50.75(e)(1)(i).¹⁰³ However, that assertion is mistaken. As explained above, ¹⁰⁴ TMI-2 currently is in a "period of safe storage." ¹⁰⁵ The PSDAR (which contains the DCE) explains that the "cleanup to meet the NRC post accident *safe storage* criteria was completed and accepted by the NRC with TMI-2 entering into post-defueling monitored storage in 1993." ¹⁰⁶ The PSDAR further specifies that this period will continue until "completion of all necessary engineering and licensing actions," at which time "TMI-2 Solutions will move into DECON with the goal to accelerate the decommissioning of TMI-2." ¹⁰⁷ In other words, TMI-2 will remain in a "period of safe storage" after the license is transferred, and before active decommissioning begins. That period is clearly "described" in the

Furthermore, to the extent Petitioners opine on what they believe NRC regulations *should* require, their arguments are also beyond the scope of this proceeding, contrary to 10 C.F.R. § 2.309(f)(1)(iii), because they constitute impermissible collateral attacks on NRC regulations without a waiver, contrary to 10 C.F.R. § 2.335.

Petition at [PDF 37].

¹⁰⁴ See supra Part I.

See also, e.g., Memorandum from J. Anderson to D. Broaddus, "Safety Evaluation Input for Proposed Changes to the Three Mile Island Nuclear Station Emergency Plan for Post-Shutdown and Permanently Defueled Condition," Encl. at 1 (Nov. 22, 2018) (ML18310A032) (noting TMI-2 "has a possession only license and is currently maintained in accordance with the NRC approved SAFSTOR condition (method in which a nuclear facility is placed and maintained in a condition that allows it to be safely stored and subsequently decontaminated) known as Post-Defueling Monitored Storage (PDMS).").

¹⁰⁶ PSDAR at 3 (emphasis added).

¹⁰⁷ Id. at 4. See also LTA, Encl. 7 at 1 ("The first 4-5 years under Phase 1 will be preparation for Decommissioning, including engineering work, procurement of long-lead time items, and infrastructure upgrades. During this time TMI-2 will remain in a PDMS or analogous state.").

relevant documentation. Thus, TMI-2 Solutions' cash flow analysis satisfies the requirements Section 50.75(e)(1)(i) for assuming an annual two percent real rate of return on nuclear decommissioning trust monies through the projected decommissioning period.

Because the allegedly-missing description of the period of safe storage is, in fact, provided, Petitioners' claim is unsupported, contrary to 10 C.F.R. § 2.309(f)(1)(v), and fails to demonstrate a genuine dispute with the LTA, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

* * *

In summary, Proposed Contention 1 is unsupported by fact or law and fails to dispute the actual content of the Application, contrary to 10 C.F.R. §§ 2.309(f)(1)(v) and (vi), and therefore should be denied as inadmissible.

C. <u>Proposed Contention 2 (Funding Assurance) Is Inadmissible</u>

In Proposed Contention 2, Petitioners allege that the DCE underestimates several costs related to license termination, spent fuel management, and site restoration. More specifically, Petitioners assert:

TMI-2 Solutions fails to show adequate decommissioning financial assurance and/or adequate funding for spent nuclear fuel management in violation of 10 C.F.R. §§ 50.33(f) and (k)(1), 50.40(b), 50.54(bb), 50.75(b)(1) and (e)(1)(i), 50.80(b)(1)(i), 50.82(a)(8)(vii), and 72.30(b) because the [sic] TMI-2 Solutions' Amended PSDAR and decommissioning cost estimate underestimates [sic] license termination, site restoration[,] and spent fuel management costs. 108

As a preliminary matter, this statement of the contention refers to several requirements that are categorically inapplicable to this proceeding. As noted in the introductory discussion above, Petitioners indiscriminately copied-and-pasted their proposed contentions from a pleading

Petition at [PDF 39].

in another NRC license transfer proceeding. 109 Regardless, Proposed Contention 2 fails to account for the specific facts of *this* proceeding involving TMI-2. For example, Applicants here have not requested an exemption seeking to use NDT funds (otherwise reserved for radiological decommissioning) for site restoration purposes. In the absence of such an exemption, there is no independent NRC requirement to demonstrate funding availability for "site restoration," which is non-radiological and beyond the NRC's jurisdiction. 110 Similarly, the LTA here does not seek to transfer a Part 72 ISFSI license. Thus Petitioners' citation to 10 C.F.R. § 72.30(b) is entirely inapt. These claims in the statement of the contention are inapplicable and immaterial to this proceeding, and identify no deficiency in the LTA.

More broadly, Proposed Contention 2 is comprised of five purported "bases"—essentially sub-contentions—which Petitioners claim collectively demonstrate an admissible contention. For the reasons detailed below, these sub-contentions, individually or collectively, fail to identify an admissible basis for a contention. Before addressing the individual bases, a discussion applicable to all of them regarding the multiple layers of protection against potential negative impacts to NDTs from potential unexpected costs or market fluctuations is instructive.

First, the NRC fully recognizes that cost estimates are precisely that—*estimates*. Indeed, the Commission imposes a standard of "reasonable assurance" on cost predictions different than it does on safety issues.¹¹¹ "The Commission will accept financial assurances based on *plausible* assumptions and forecasts, even though the possibility is not insignificant that things will turn

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¹⁰⁹ See id. at [PDF 53] (failing even to revise the copied material and incorrectly claiming TMI-2 Solutions has some obligation related to fuel "in storage at the *Indian Point ISFSI*") (emphasis added).

NUREG/CR-5884, App. L at L-1 ("the NRC does not exercise jurisdiction over removal of non-contaminated structures and restoration of the site").

¹¹¹ Seabrook, CLI-99-6, 49 NRC at 221-22.

out less favorably than expected."¹¹² In other words, the NRC's requirements for decommissioning financial assurance explicitly contemplate the possibility of unforeseen costs or market fluctuations. Accordingly, the broader framework for decommissioning financial assurance contemplates *multiple layers* of protection ("Layers of NDT Protection"—a concept akin to "defense in depth") that safeguard against negative impacts to NDTs from potential future cost adjustments, or market fluctuations, that could materialize as a decommissioning project progresses.

In the context of contention admissibility, this means that allegations of insufficient funding must demonstrate (with adequate support) two things: (1) that the cost estimate or funding mechanisms are premised on *implausible* assumptions; and (2) that the postulated insufficiency will defeat *all* of the Layers of NDT Protection. Both are necessary. The second demonstration is required because, otherwise, there would be no *material* impact on the NDT.¹¹³ The various Layers of NDT Protection are briefly described below.

1. Contingency: The first Layer of NDT Protection is the contingency allowance in the estimate itself. In fact, NRC guidance explicitly describes this as an "allowance for unexpected costs." Here, the DCE includes robust contingencies, including approximately 25% for Phase 1 and approximately 18% for Phase 2, commensurate with the uncertainty of each phase. These values were calculated using risk modeling software to quantitatively evaluate the integrated impact of uncertainty and discrete risk events on the project objectives, baseline schedule, and costs, as well as Energy Solutions' own significant experience decommissioning commercial and other reactors and facilities—all of which were reviewed in detail as part of the acquisition discussions between TMI-2 Solutions and the FirstEnergy Companies. (In other words, more than a

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¹¹² *Id.* (emphasis added).

Oconee, CLI-99-11, 49 NRC at 333-34 (quoting Rules of Practice for Domestic Licensing Proceedings—Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,172 (Aug. 11, 1989)) (To be material, a contention must raise an issue that could "make a difference in the outcome of the licensing proceeding.").

NRC Regulatory Guide 1.202, "Standard Format and Content of Decommissioning Cost Estimates for Nuclear Power Reactors," at 10 (Feb. 2005) (ML050230008) ("RG 1.202").

¹¹⁵ PSDAR at 10, tbl.1.

- "plausible assumption.") This contingency value is explicitly intended to account for "unknown or uncertain conditions." 116
- 2. <u>NDT Surplus</u>: Another Layer of NDT Protection is provided by any surplus in the NDT *above and beyond* the collective sum of the estimated costs (based on plausible assumptions) plus the contingency margin (calculated using risk-modeling software). Here, TMI-2 Solutions' DCE shows that over \$20 million is expected to remain in the NDT fund after the completion of decommissioning at TMI-2. 118
- 3. <u>Licensee Reporting</u>: A further Layer of NDT Protection is found in the licensee's obligation to submit annual reports. More specifically, licensees in decommissioning are obligated by law to submit to the NRC, every year, an *updated* estimate of the costs to complete decommissioning and to manage SNF until DOE takes title and possession of it.¹¹⁹ To the extent any unexpected costs might materially alter original cost estimates, those changes would be captured in these mandatory reports. Licensees also are required to notify the NRC in writing, with a copy to the affected state, of any changes to any actions in the PSDAR "that significantly increase the decommissioning cost." ¹²⁰
- 4. <u>Alternate Funding Mechanism</u>: Yet another Layer of NDT Protection is provided in this particular case. As noted in the DCE, "[i]n the event that future estimated costs or funding levels change significantly, TMI-2 Solutions will make the necessary adjustments to ensure that sufficient funds remain available for decommissioning."¹²¹
- 5. <u>Supplemental Financial Instruments</u>: Furthermore, as noted in the LTA, TMI-2 Solutions will have access to several different *supplemental* financial instruments for additional decommissioning funds, if needed, including: (i) a Back-Up & Provisional Nuclear Decommissioning Trust, segmented into a Back-Up Trust Account and a Provisional Trust Account; (ii) an Irrevocable Letter of Credit; (iii) an Irrevocable Disposal Capacity Easement; (iv) a Financial Support

¹¹⁶ Id. at 9. See also generally infra Part IV.C.1 (explaining that Basis A for Proposed Contention 2, challenging this contingency factor, is inadmissible).

See Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), CLI-19-11, 91 NRC ___, __ (Dec. 17, 2019) (slip op. at 27) (noting the safeguarding effect of a surplus, albeit in the context of a motion to stay).

¹¹⁸ PSDAR, Encl. 1B, tbl.1B-3.

¹¹⁹ See 10 C.F.R. § 50.82(a)(8)(v), (vii).

¹²⁰ *Id.* § 50.82(a)(7).

PSDAR at 10. *Accord Pilgrim*, CLI-19-11, 91 NRC at ___ (slip op. at 28 & n.87). Petitioners' claim in Proposed Contention 3 that TMI-2 Solutions may be unable to provide additional funding is meritless for the many reasons discussed *infra* in Part IV.D.

- Agreement; and (v) a Parent Guarantee. These are anticipated to provide up to \$100 million in financial support at critical stages of the project.
- 6. Ongoing NRC Oversight & Regulatory Requirements: Finally, the NRC's ongoing regulatory oversight is an additional Layer of NDT Protection capable of ensuring transparent and adequate funding throughout the duration of the decommissioning project. 123 Indeed, the NRC has a rigorous and comprehensive regulatory regime for that very purpose. The NRC can mandate that the licensee provide "additional financial assurance to cover the estimated cost of completion." 124 In fact, the NRC's regulations prohibit any withdrawals from the NDT that could reduce it "below an amount necessary to place and maintain the reactor in a safe storage condition if unforeseen conditions or expenses arise" 125 or inhibit the licensee's ability to "ultimately release the site and terminate the license." 126 As the Commission has held, these strict requirements "provide reasonable assurance that adequate funds will remain to complete decommissioning by requiring [the licensee] and the Staff to monitor the projected cost of decommissioning and available funding and ensure more funding is available as needed." 127

Individually and collectively, Petitioners' bases A-E fail to demonstrate (with adequate support) *either* that the cost estimate or funding mechanisms are premised on entirely implausible assumptions *or* that the speculative insufficiency postulated by Petitioners will defeat *all* of the Layers of NDT Protection. Moreover, they certainly do not demonstrate *both*. Thus, Proposed Contention 2 fails to satisfy the Commission's contention admissibility criteria in 10 C.F.R. § 2.309(f)(1) in multiple respects, as detailed below.

LTA at 11. The Parent Guarantee is a commercial commitment from Energy *Solutions*, and it is not a parent guarantee that would meet the requirements of 10 C.F.R. § 50.75(e)(1)(iii)(B).

See generally 10 C.F.R. §§ 50.82(a). See also Pilgrim, CLI-19-11, 91 NRC __ (slip op. at 27-28) (describing the NRC's oversight process and noting its ability to safeguard against negative impacts from unforeseen circumstances).

¹²⁴ 10 C.F.R. § 50.82(a)(8)(vi).

¹²⁵ *Id.* § 50.82(a)(8)(i)(B).

¹²⁶ *Id.* § 50.82(a)(8)(i)(C).

Entergy Nuclear Vt. Yankee, LLC (Vt. Yankee Nuclear Power Station), CLI-16-17, 84 NRC 99, 118 (2016); see also Exelon Generation Co., LLC (Oyster Creek Nuclear Generating Station), CLI-19-6, 90 NRC ___, __ (June 18, 2019) (slip op. at 13) ("If new developments point to a projected funding shortfall, the NRC requires additional financial assurance to cover the estimated cost to complete the decommissioning.") (citation omitted).

1. Basis A (Contingency) Is Inadmissible

In Basis A, Petitioners allege that the Amended PSDAR and the DCE fail to consider the "substantial likelihood" that TMI-2 Solutions will discover additional radiological and non-radiological contamination after TMI-2 Solutions begins its decommissioning work. Specifically, Petitioners allege:

Because the Amended PSDAR and cost estimate failed to account for the likely existence of and cost to remediate additional radiological and non-radiological contamination, TMI-2 Solutions failed to show financial qualification or adequate decommissioning funding assurance as required under 10 C.F.R §§ 50.33(f) and 50.75(b) and (e)(1)(i). 128

Petitioners claim that TMI-2 Solutions "refused to conduct a site survey and relies on antiquated and questionable data" from past environmental reports and studies. ¹²⁹ As a result, Petitioners claim the DCE "ignores costs associated with fuel location, hot spots, flooding, staffing, overhead, and waste disposal" and also ignores the need to remediate additional radiological and non-radiological contamination surrounding the site. ¹³⁰ Petitioners also claim that the lack of a site survey led to the DCE's contingency amounts being "woefully inadequate" by assigning "virtually no value" to out-of-scope risks associated with the discovery of additional contamination at the site. ¹³¹

At its core, Basis B presumes that after years of painstaking clean up and decontamination of TMI-2 after the Accident, and 27 years of PDMS, (1) large amounts of unknown and undiscovered contamination exist at the site; (2) the existence and extent of the contamination could have been determined if TMI-2 Solutions conducted a pre-closing on-site

Petition at [PDF 43].

¹²⁹ *Id.* at [PDF 44].

¹³⁰ *Id.* at [PDF 45].

¹³¹ *Id.* at [PDF 46-47].

survey, and (3) the cost of remediating this contamination will overwhelm the contingencies in the DCE. These presumptions are mere speculation and, as shown below, unsupported.

a. <u>Petitioners' Claim that Undiscovered Contamination Exists At TMI-2 Is Unsupported</u>

In support of their claim that extensive, undiscovered contamination exists at the site,

Petitioners rely on their curated lists of events submitted as Exhibits A, C, D, E, and F. 132

Setting aside the lack of relevance of much of these exhibits, Petitioners must do more than generally cite lengthy exhibits to support the admission of a proposed contention. The

Commission expects parties to "clearly identify the matters on which they intend to rely with references to a specific point" rather than point to or incorporate voluminous documents. Nor will the Commission sift through pleadings and exhibits to search for "a needle that may be in a haystack." Petitioners' exhibits are nothing more than haystacks – less any needle. The exhibits list over forty years of different events at TMI, culled from public sources such as NRC reports and news clippings. Notably, nearly all of these events involve the operation of TMI-1, which is not part of the Application. The exhibits' lists of events involving TMI-2 primarily relate to events that occurred before the post-Accident cleanup was finished and TMI-2

Petition, Exhs. A (ML20106F218), C (ML20106F220), D (ML20106F221), E (ML20106F222), and F (ML20106F223). After complaining of Applicants' reliance on "antiquated" information, the only exhibit not drafted by Petitioners, themselves, is the Statement from Dr. Michio Kaku Concerning the Disposal of TMI Waste from August 1993. *See* Petition, Exh. B (ML20106F21). In Basis B, Petitioners accuse TMI-2 Solutions of relying on "antiquated and questionable" documents some of which were published *after* Dr. Kaku's Statement. *See* Petition at [PDF 44 n.23]. That aside, Dr. Kaku's Statement addressed the NRC's plan to dispose of TMI waste water in NUREG-0683, Programmatic Environmental Impact Statement Related to Decontamination and Disposal of Radioactive Wastes Resulting from March 28, 1979 Accident Three Mile Island Nuclear Station, Unit 2, Sup. No. 3 (Aug. 1989). In sum, Petitioners do not explain how Dr. Kaku's 1993 Statement is somehow relevant to the LTA today.

¹³³ Seabrook, CLI-89-3, 29 NRC at 241; see also Zion, CLI-99-4, 49 NRC at 194.

¹³⁴ Seabrook, CLI-89-3, 29 NRC at 241.

The document also contains several hyperlinks to supporting documents on TMIA's website, but the links do not work.

placed in PDMS. Simply put, to find any support in the exhibits for Basis A and Petitioners' claim that unknown contamination exists at TMI-2, Applicants (and the Commission) are left searching for the needle.

Exhibit A is a 77-page chronology of incidents at Three Mile Island from 1979 to 2020. The first 12 pages list events during the post-Accident cleanup of TMI-2, many of which have nothing to do with any contamination of the TMI-2 site. Those events that have some connection to possible contamination at TMI-2, however, occurred during the site cleanup. Petitioners' Exhibit A shows that these events, and any potential contamination, are known and understood. Put differently, Petitioners have not shown that TMI-2 Solutions is unaware of these same events and did not account for them in its DCE. That said, the bulk of Exhibit A (over 50 pages) lists events that occurred after the cleanup of TMI-2 and almost all involve TMI-1, not TMI-2. What is more, many of these events have nothing to do with contamination at either unit and catalog TMI-1's refueling outages, NRC inspection findings, and license amendments. Simply put, these types of "events" have no relevance whatsoever to the present condition or extent of contamination at TMI-2.

Petitioners' other exhibits also fail to show that unknown contamination likely exists at TMI-2 and generally lack relevance to the Application. To start, neither Exhibit B, a 1993 statement from Dr. Michio Kaku, nor Exhibit C, a list of health problems allegedly caused by the

¹³⁶ See Petition, Exh. A.

¹³⁷ Id. at [PDF 1-12]. Many events—for example protests at TMI and the start or completion of lawsuits—have no connection to undiscovered contamination at TMI-2. Other events—for example the discovery of damaged steam generator tubes—involve TMI-1, not TMI-2. See id.

¹³⁸ See, e.g., id. at [PDF 16] ("October 9, 2001 – TMI was shut down for a planned 29 day refueling outage.").

¹³⁹ See, e.g., id. at [PDF 46-49] (discussing the results of a recent NRC inspection of TMI Unit 1).

¹⁴⁰ See, e.g., id. at [PDF 51] (April 18, 2019 discussing Amendment Number 296 for Unit 1).

Accident, discusses the potential for unknown contamination at the site. Exhibit B is just Dr. Kaku's critique of the NRC's Programmatic EIS prepared in 1989 (which already was considered by the NRC in preparing the final document),¹⁴¹ and Exhibit C summarizes several epidemiological studies about the effects of the Accident, but has no relevance to the instant LTA.¹⁴² Thus, these exhibits do not support Basis A.

Exhibit D is a list of "Leaks, release (sic) & exposures at TMI."¹⁴³ Petitioners claim that pages one through four show that the "full extent of on-site radiological contamination has likely yet to be determined."¹⁴⁴ Much like Exhibit A, however, these pages list events at TMI-2 during the post-Accident cleanup and demonstrate that historical contamination at TMI-2 is well understood. The other events in Exhibit D involve TMI-1 and thus lack relevance. The contamination of the contam

Exhibit E lists "Fires and Fire-Related Challenges" at Three Mile Island. Most of these fire events involve TMI-1.¹⁴⁷ That said, Exhibit E lists six events (four minor fires and two cited NRC fire regulation violations) between February 1987 and June 2003.¹⁴⁸ However, Petitioners do not explain how any of these events caused unknown or unidentified contamination at TMI-2. Similarly, Exhibit F lists "Fitness for Duty Problems at Three Mile Island 1978-2008." Again,

NUREG-0683, "Programmatic Environmental Impact Statement Related to Decontamination and Disposal of Radioactive Wastes Resulting from the March 28, 1979 Accident Three Mile Island Nuclear Station, Unit 2," Supplement 2, "Disposal of Accident-Generated Water," App. A at A.131 to A.134 (June 1987), available at https://tmi2kml.inl.gov/Documents/6e-Guide-PEIS/NUREG-0683,%20SUPP.%202,%20PEIS,%20Disposal%2 0of%20Accident-Generated%20Water%20(1987-06).pdf.

Petition, Exhs. B, C. Petitioners also cite the 1984 dose assessment study by Dr. Jan Beyea and a 1985 study by David Lochbaum. *See* Petition at [PDF 18].

¹⁴³ *Id.*, Exh. D.

Petition at [PDF 48].

¹⁴⁵ *Id.*, Exh. D at 1-4.

See, e.g., id. at 5 (discussing a boric acid leak at TMI-1).

¹⁴⁷ *Id.*, Exh. E.

¹⁴⁸ *Id.* at 6-7.

¹⁴⁹ *Id.*, Exh. F.

nearly all of these events involve TMI-1; and Petitioners fail to explain how any fitness-for-duty issue may have contributed to additional contamination of the TMI-2 site.

As a whole, Petitioners' exhibits contain much information and catalog over forty years of events involving TMI from public sources. However, most of these events involve TMI-1, not TMI-2. As to the TMI-2 events, the lists appear to be from publicly-available sources, and are well known to the Applicants. Petitioners do not point to any information purporting to show *unknown* contamination at TMI-2. As a result, Applicants (and the Commission) are left to search for any alleged support because Petitioners did not meet their burden "to clearly identify the matters" that support their proposed contention "with references *to a specific point.*" ¹⁵⁰

b. <u>Petitioners' Claims About Insufficient Contingency Costs Are</u>
<u>Unsupported and Do Not Raise a Genuine Dispute with the Application</u>

Petitioners claim that TMI-2 Solutions' DCE "assigns no value to out-of-scope risk" and "ignores costs associated with fuel location, hot spots, flooding, staffing, overhead, and waste disposal." Petitioners also claim that the costs for these risks can be established only by a pre-LTA site-characterization study. Petitioners claim that TMI-2 Solutions is "deferring full site characterization until *after* they . . . prepared their cost estimate," and, as a result, "effectively ensures that unknown contamination, once discovered, will increase the project's cost," and lead to a decommissioning funding shortfall. 153

However, Petitioners' claims ignore the TMI-2 Solutions' statements in the DCE and PSDAR explaining that the cost estimate "recognizes the present state of TMI-2

¹⁵⁰ Seabrook, CLI-89-3, 29 NRC at 241.

Petition at [PDF 45].

¹⁵² *Id.* at [PDF 46].

¹⁵³ *Id.* at [PDF 47] (emphasis in original).

decontamination"¹⁵⁴ and *includes* "contingency for unknown or uncertain conditions" at the site. The contingency is \$188.56 million, which represents 17.8 percent of the total estimated project cost. Not surprisingly, the contingency for Phase 1, which includes remediating areas with high radiation areas to a level "generally consistent with a nuclear plant towards the end of its operational life," is larger on a percentage basis and is 25.4 percent of the Phase 1 estimate. 157

TMI-2 Solutions' \$188.56 million contingency for TMI-2 (17.8 percent)¹⁵⁸ is more than the corresponding contingencies reported for the decommissioning of Oyster Creek Nuclear Generating Station (15 percent) and Pilgrim Nuclear Power Station (17 percent).¹⁵⁹ It is in-line with the contingency for the decommissioning of Indian Point Energy Center (18 percent).¹⁶⁰ TMI-2 Solutions' much larger contingency for Phase 1 of the TMI-2 decommissioning (25.4 percent), recognizes the complexity of the work and the potential for more extensive remediation work required to remove Accident-related contamination—exactly what a contingency is intended to do.¹⁶¹

154 PSDAR at 9.

¹⁵⁵ LTA, Encl. 7 at 5.

¹⁵⁶ *Id.* at 6; PSDAR at 10.

¹⁵⁷ PSDAR at 6, 10; see also LTA, Encl. 7 at 1.

¹⁵⁸ LTA, Encl. 7 at 6; PSDAR at 10.

Letter from P. Cowan, HDI, to NRC Document Control Desk, "Notification of Revised Post-Shutdown Decommissioning Activities Report and Revised Site-Specific Decommissioning Cost Estimate for Oyster Creek Nuclear Generating Station," Revised DCE at 45 (Sept. 28, 2018) (ML18275A116); Letter from P. Cowan, HDI, to NRC Document Control Desk, "Notification of Revised Post-Shutdown Decommissioning Activities Report and Revised Site-Specific Decommissioning Cost Estimate for Pilgrim Nuclear Power Station," Revised DCE at 41 (Nov. 16, 2018) (ML18320A040).

Letter from A. Sterdis, HDI, to NRC Document Control Desk, "Post Shutdown Decommissioning Activities Report including Site-Specific Decommissioning Cost Estimate for Indian Point Nuclear Generating Units 1, 2, and 3" (Dec. 19, 2019) (ML19354A698).

TMI-2 Solutions prepared its cost estimate using the Atomic Industrial Forum's "Guidelines for Producing Commercial Nuclear Power Plant Decommissioning Cost Estimates," AIF/NESP-036 (May 1986). According to the NRC, this guideline is the most common methodology for developing decommissioning cost estimates. *See* NUREG-1713, "Standard Review Plan for Decommissioning Cost Estimates for Nuclear Power Reactors" at 22 (Dec. 2004).

Despite these facts, Petitioners never seriously discuss the contingency in TMI-2 Solutions' DCE and claim only that "the amount is woefully inadequate." Petitioners provide no analysis or expert opinion to support this bare assertion. Instead, Petitioners claim that the Application and PSDAR are lacking, because TMI-2 Solutions did not conduct a site survey before preparing its DCE. However, Petitioners cite no regulatory requirement for TMI-2 Solutions to conduct any type of survey before filing the Application or submitting the PSDAR. This is unsurprising, because there is none. Moreover, Petitioners ignore the fact that TMI-2 is in PDMS, and thus, access is strictly limited. As a result, there is little reason to expect changes from earlier surveys, unlike with an operating unit. Petitioners ignore the extensive site characterization that was previously undertaken at TMI-2 in connection with the removal of the spent fuel from the damaged core. However, Page 164

Petitioners also point to the decommissioning of Maine Yankee, where the amount of asbestos-containing material exceeded estimates, and Connecticut Yankee, where "[u]nforeseen radiological contamination" required additional costly remediation. However, it is unclear how the experience at either site is informative in the discussion of potential contamination at TMI-2—because the Petitioners failed to provide a factual comparison between the sites. Petitioners seem to suggest that similar issues could arise during TMI-2's decommissioning, but provide no support for this claim.

While there is always the possibility that TMI-2 Solutions could discover more contamination during decommissioning as it removes buildings and foundations, as there is at

Petition at [PDF 46].

¹⁶³ *Id.* at [PDF 44].

See, e.g., NUREG/KM-0001, "Three Mile Island Accident of 1979 Knowledge Management Digest," Supp. 1 (June 2016) (ML16166A358) (cataloging documents issued during the recovery and cleanup).

Petition at [PDF 50].

any large nuclear decommissioning project (or, for that matter, any sizeable industrial property), TMI-2 Solutions accounts for this possibility as part of its contingency in its DCE. ¹⁶⁶ By failing to provide an explanation or basis for its claim that TMI-2 Solutions' contingency is inadequate, Petitioners fail to raise a genuine dispute with the Application.

For all of the above reasons, Basis A is speculative and unsupported and does not raise a genuine issue with the Application. Thus, Basis A does not supply an admissible basis for Proposed Contention Epstein-2.

2. Basis B (Repackaging) Is Inadmissible

In Basis B, Petitioners allege the DCE improperly excludes costs associated with "repackaging" spent fuel (here, the Debris Material) for transportation offsite by the DOE. More specifically, they claim:

TMI-2 Solutions provide [sic] no basis for its failure to account either for costs associated with repackaging spent nuclear fuel for transport or, in the event repackaging is not required, for reimbursements to DOE of monies DOE paid or will pay to licensees for licensee packaging costs. TMI-2 Solutions therefore fails to demonstrate adequate funding for spent fuel management in violation of 10 C.F.R. §§ 50.54 (bb) and 50.82(a)(8)(vii)(B) and (C).

As explained below, Basis B is inadmissible for multiple reasons. As an initial matter, Basis B alleges a "violation" of NRC regulations. Inasmuch as Petitioners believe Applicants are not currently complying with NRC regulations, their recourse properly and exclusively lies in the 10 C.F.R. § 2.206 enforcement petition process, not in this license transfer proceeding. Moreover, the requirements in 10 C.F.R. § 50.82(a)(8)(vii)(B) and (C) are inapplicable and

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¹⁶⁶ See PSDAR at 9 ("The cost estimate recognizes the present state of TMI-2 decontamination, contingency for unknown or uncertain conditions, . . . and site remediation requirements.") (emphasis added).

Petition at [PDF 52].

therefore immaterial to this proceeding. ¹⁶⁸ Notwithstanding these defects that render Basis B inadmissible on its face, it also is inadmissible because the DCE fully accounts for all relevant costs related to packaging the Debris Material. Furthermore, Petitioners provide no support for their dubious claims that the Debris Material will need to be "repackaged," or that Applicants would owe some unspecified "reimbursement" to DOE. Accordingly, Basis B must be rejected.

a. The DCE Accounts for Costs Related to Packaging the Debris Material

The bulk of Petitioners' discussion in Basis B is devoted to establishing that a licensee is obligated, under the DOE Standard Contract, ¹⁶⁹ to bear the costs of transferring SNF to the DOE. Importantly, there is *no dispute* on this point. Petitioners correctly note that the Standard Contract generally assigns the obligation (*i.e.*, costs) of such transfers to the licensee, unless it can be shown that costs related to the transfer of SNF to DOE are increased due to DOE's breach of the Standard Contract. However, Petitioners assert that the DCE "fails to account for" this obligation. To the extent Petitioners imply TMI-2 Solutions has categorically disavowed its obligation to shoulder this expense, they are incorrect—TMI-2 Solutions has done no such thing. Indeed, TMI-2 Solutions fully acknowledges this obligation. To the extent Petitioners claim costs related to packaging the Debris Material are not included in the DCE, they are mistaken. ¹⁷²

These regulations impose a requirement to submit annual updates on spent fuel management funding after the DCE has been submitted. TMI-2 Solutions submitted its DCE just a few months ago, so this obligation has not yet arisen. In any event, compliance with 10 C.F.R. § 50.82(a)(8)(vii)(B) and (C) is not a finding the Staff must make to grant a license transfer. See, e.g., Pilgrim License Transfer SER; Oyster Creek License Transfer SER (neither of which include such a finding).

^{169 10} C.F.R. § 961.11 ("Standard Contract for Disposal of Spent Nuclear Fuel and/or High-Level Radioactive Waste").

¹⁷⁰ Petition at [PDF 53] (citing 10 C.F.R. § 961.11).

¹⁷¹ *Id.* at [PDF 52].

Petitioners also appear to fault the PSDAR for not including a "long-term management plan" for spent nuclear fuel, as purportedly required by 10 C.F.R. § 50.54(bb). *Id.* at [PDF 40]. However, the NRC has long acknowledged that this requirement is inapplicable to TMI-2. *See* TMI-2 Post-Defueling Monitored Storage Safety Analysis Report, Update 10 at App. H 3-16 (Aug. 23, 2013) (ML13238A221) (noting the requirements

As noted in the introductory discussion above, 99% of the fuel and damaged core material has already been removed from the TMI-2 site by the DOE and shipped to INL.¹⁷³ DOE possesses and holds title to that fuel and material.¹⁷⁴ Long-term management of DOE's fuel simply is not within the scope of this proceeding.¹⁷⁵ Thus, Petitioners' repeated references to the fuel currently stored in Idaho¹⁷⁶ are irrelevant and immaterial to this proceeding and do not identify any dispute with the LTA. Petitioners' bald assertion that trust funds have been used to manage casks owned by DOE has no foundation in fact.

The remaining Debris Material (1%) will be disposed of by DOE pursuant to the TMI-2 Standard Contract.¹⁷⁷ The PSDAR and DCE account for the cost of identifying, cleaning up, and packaging this material for long-term storage, largely as part of the Phase 1 costs. More specifically, these costs are included in the "Large Component & Building Source Term Reduction" and "Waste Packaging Transportation & Disposal" items in the decommissioning cost summary table in the PSDAR.¹⁷⁸ Further details regarding these costs are provided in the proprietary Enclosure 1A of the PSDAR. Thus, Petitioners' claim that "packaging-for-storage costs" have been "unreasonably omitted" from the DCE is patently incorrect. At bottom,

of Section 50.54(bb) and stating that, "[a]s the irradiated fuel which comprised the TMI-2 reactor core has been transferred to the possession of the Department of Energy[,] no funding plan is required for TMI-2.").

¹⁷³ LTA at 1.

¹⁷⁴ *Id*.

See, e.g., U.S. Department of Energy Idaho Operations Office; Three Mile Island Unit 2; Independent Spent Fuel Storage Installation, 84 Fed. Reg. 50,481 (Sept. 25, 2019) (noting that DOE is the licensee for the TMI-2 ISFSI at the Idaho National Laboratory).

¹⁷⁶ E.g., Petition at [PDF 52 n.37, 55-57].

The TMI-2 Standard Contract contemplated that new nuclear fuel might be loaded in the TMI-2 core, but also included any "damaged core material" that might remain after the completion of the Abnormal Waste Contract and Reactor Core Contract.

¹⁷⁸ PSDAR at 10, tbl. 1.

¹⁷⁹ *Id.* at [PDF 53].

Petitioners' claims are unsupported—and simply wrong as a matter of fact—and identify no deficiency in the LTA.

b. <u>Petitioners' Claim That "Repackaging" Will Be Required Is Unsupported</u> and Fails to Dispute the LTA

Next, Petitioners argue that the DCE omits costs related to an alleged need to "repackage" the Debris Material in the future, including the cost of constructing a "dry transfer station" ("DTS"). Petitioners claim a DTS would need to be constructed in order to transfer Debris Material from storage casks into DOE-provided transportation casks. However, these speculative claims also are unsupported and identify no deficiency in the LTA. The remaining material is characterized as "damaged core material," which is addressed in the TMI-2 Standard Contract. Standard

By way of background, irradiated material typically is loaded into a canister that is welded shut and then transferred (via a transfer cask) into a storage cask. Historically, some canisters were *only* compatible with storage casks and could not be used in transportation overpacks. However, modern dry storage systems utilize *multi-purpose canisters* ("MPC") suitable for storage, transportation, and disposal. In other words, once loaded into the MPC and welded shut, the material need not be re-canistered (in a spent fuel pool or DTS) prior to offsite transport. Rather, a transfer cask may be used (a second time) to transfer the MPC out of its storage cask and into a DOE-supplied transportation overpack.¹⁸²

As Petitioners correctly note, DOE could seek to amend the Standard Contract at some point in the future to accept material as-is (*i.e.*, inside a storage cask). Under that scenario, a licensee clearly would not need to repackage any material, and would not need to construct a DTS.

¹⁸¹ TMI-2 Standard Contract at App. A.

See generally NRC, Spent Fuel Storage in Pools and Dry Casks; Key Points and Questions & Answers, NRC.GOV, https://www.nrc.gov/waste/spent-fuel-storage/faqs.html#24 (last visited May 4, 2020) (Question: "After a plant is decommissioned there will be no infrastructure to handle the repackaging of spent fuel if the storage systems need replacement. Is there a plan for this contingency, and what are the safety implications of reopening the storage cask?") (Answer, in relevant part: "Most welded stainless steel canisters are designed to

Petitioners offer no support to explain why re-canistering (*i.e.*, "repackaging") of Debris Material would be required at TMI-2. To the extent Petitioners' argument can be read to suggest TMI-2's canisters will be *incompatible* with the transportation overpacks ultimately selected by DOE (thus requiring re-canistering), it is purely speculative. DOE has not yet identified any specific transportation systems that will be used, and there are no loaded canisters presently at the TMI-2 site. Thus, any claim of incompatibility is pure unsupported conjecture. Petitioners advance no other theory—much less, any factual or expert support—as to why "repackaging" or a DTS somehow would be required at TMI-2. Accordingly, these baseless arguments do not provide the basis for an admissible contention.

c. <u>Petitioners' Claim That DOE "Reimbursements" Have Been Improperly</u> <u>Omitted from the DCE Is Unsupported and Fails to Dispute the LTA</u>

Finally, Petitioners also suggest that some decades in the future, DOE could somehow seek to "recover" damages paid by DOE associated with loading TMI-2 fuel into storage casks, and that the DCE somehow should have accounted for such a scenario. 184 For many reasons, this argument is baseless. As an initial matter, Petitioners cannot represent any position of the U.S. government in this proceeding and cite no authority for a legal theory that the government can somehow recoup damages paid many years in the past under the terms of the Standard Contract in place at that time (*i.e.*, the current Standard Contract). That is not surprising because there is none. More importantly, the Debris Material remaining at TMI-2 has not yet been loaded into storage casks—and Applicants have neither sought nor received damages from DOE associated with this non-existent loading campaign. Petitioners' suggestion that DOE somehow could

be transportable inside a specifically designed transportation overpack. This allows fuel to be transported without directly handling the fuel.").

Or the result of indiscriminate plagiarism of another petition.

¹⁸⁴ Petition at [PDF 54-55].

"recover" monies it never paid in the first place is nonsensical. Simply put, Petitioners indiscriminately copied this argument from another proceeding without recognizing that it is entirely inapplicable to TMI-2. Thus, Basis B is baseless and insufficient for an admissible contention for this additional reason.

* * *

Ultimately, Basis B is unsupported, out-of-scope, immaterial, and fails to demonstrate a genuine dispute with the Application, contrary to 10 C.F.R. § 2.309(f)(1)(iii)-(vi), and thus fails to support the admissibility of Proposed Contention 2.

3. Basis C (Mixed Waste) Is Inadmissible

In Basis C, Petitioners allege the PSDAR and DCE underestimate decommissioning costs related to mixed waste. More specifically, Petitioners assert:

Because the Amended PSDAR and cost estimate fail to include disposal costs for the mixed waste products currently congealed, embedded and hidden, they underestimate waste disposal costs; TMI-2 Solutions fail [sic] to demonstrate adequate decommissioning financial assurance as required under 10 C.F.R. §§ 50.75(b) and (e)(1)(i). 185

In summary, Petitioners suggest that Applicants somehow disavow the "existence" of mixed waste at the site, and therefore have not included the costs of disposing of that waste in the DCE. However, Petitioners are factually mistaken on both counts. Thus, Petitioners fail to support their claims and fail to raise a genuine dispute with the LTA.

First, Applicants are well aware that mixed waste is present at the site, and have accounted for the disposal of this waste as part of the decommissioning project. As alleged support for their contrary claim, Petitioners cite to questions posed by the PADEP in an April 6,

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¹⁸⁵ *Id.* at [PDF 59].

¹⁸⁶ *Id*.

2020 letter to Chairman Svinicki. More specifically, the PADEP asked "How will TMI-2 Solutions dispose of any contaminated lead shielding, which is now mixed waste, that may be present in TMI Unit 2?" Applicants' response to DEP's letter explained the following:

Reactor site decommissioning projects typically encounter some level of RCRA hazardous materials used throughout the facility. Some of these materials are radioactively contaminated and as a result are "mixed waste". The EnergySolutions disposal facility in Clive[,] Utah is permitted to accept mixed waste, which is a combination of both RCRA hazardous and radioactive waste. Treatment technologies include macro encapsulation of radioactive lead solids and hazardous debris, stabilization of heavy metals, neutralization and solidification of contaminated liquids, thermal treatment of waste containing organic solvents, amalgamation of elemental mercury, and treatment of other unique waste streams.

Dealing with such wastes is neither new nor unique to TMI-2 and Energy *Solutions*. Proven techniques and processes are available, and staff are trained and qualified to deal with these materials in a manner that is in full compliance with applicable regulations. ¹⁸⁹

Thus, notwithstanding Petitioners' unsupported claim to the contrary, Applicants are clearly aware that mixed waste (including the lead shielding mentioned by the PADEP) is present at the site. Contrary to Petitioners' assertion that TMI-2 Solutions "unreasonably fails to advance a plan for the disposal" of this waste, ¹⁹⁰ Applicants clearly have contemplated a disposal plan—including the specific disposal facility to which it is expected to be sent—as part of the

¹⁸⁷ Id. at [PDF 61] (citing Letter from P. McDonnell to K. Svinicki, "Three Mile Island Unit 2 License Transfer" (Apr. 6, 2020) (ML20098D636) ("PADEP Letter")).

¹⁸⁸ PADEP Letter at 3.

See PADEP Petition, Exh. B (Letter from G. Halnon and J. Sauger to P. McDonnell (Apr. 13, 2020)), Encl. ("Detailed Commentary to Issues Raised by the Pennsylvania Department of Environmental Protection") at 5-6. See also id. at 5-7 (responding to the other questions cited in the Petition at [PDF 61]).

¹⁹⁰ Petition at [PDF 59].

decommissioning project.¹⁹¹ Thus, Petitioners' baseless claims cannot support an admissible contention.

Second, the costs associated with this waste and its disposal are, in fact, contemplated in the cost estimate. For example, such costs are included in the "Large Component & Building Source Term Reduction," "Waste Packaging Transportation & Disposal," and "Undistributed Costs" items in the decommissioning cost summary table in the PSDAR. Further details regarding these costs is provided in the proprietary Enclosure 1A to the PSDAR. Thus, the allegedly-omitted costs are, in fact, included in the estimate. Petitioners fail to acknowledge or engage with the estimated amount for these line items, and proffer no support for a claim that the amounts somehow are insufficient.

Petitioners speculate that mixed waste disposal costs were disregarded, merely because they are not *itemized* in the DCE. Nevertheless, Petitioners point to no requirement that a PSDAR or DCE list each and every occurrence of waste, nor does such a requirement exist. Indeed, the DCE is fully consistent with NRC guidance in Regulatory Guide 1.202, "Standard Format and Content of Decommissioning Cost Estimates for Nuclear Power Reactors." For example, that guidance suggests that applicants "[s]ummarize total decommissioning costs by period," "[s]ummarize the costs of services, supplies, and special equipment," and "[s]ummarize undistributed costs." Regulatory Guide 1.202 further indicates that a DCE will fully comply

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See also PADEP, "Docket ID NRC-2020-0082 Three Mile Island Nuclear Station, Unit No. 2; Consideration of Approval of Transfer of License and Conforming Amendment Docket No. 50-320 LT—Commonwealth of Pennsylvania Department of Environmental Protection Comments," at 3 (Apr. 27, 2020), available at https://www.regulations.gov/contentStreamer?documentId=NRC-2020-0082-0004&attachmentNumber=1&contentType=pdf (noting Applicants' response resolved their question regarding mixed waste "to the Department's satisfaction.").

¹⁹² PSDAR at 10, tbl. 1.

¹⁹³ RG 1.202.

¹⁹⁴ *Id.* at 1.202-9 (emphasis added).

with applicable NRC regulations if it discusses the general "methodology" used to develop the estimate. ¹⁹⁵ It also explains that total decommissioning costs should be separated into broad categories like "major radioactive component removal" and "radiological decontamination and dismantlement." ¹⁹⁶ Similarly, "[t]he purpose of the PSDAR is to provide the NRC and the public with a *general overview* of the licensee's proposed decommissioning activities." ¹⁹⁷

In other words, the level of granular detail Petitioners demand—*i.e.*, itemization of every parcel of waste to be disposed of during the decommissioning project—is far beyond the *summary*-level information the NRC's regulations require. Ultimately, a cost estimate that includes mixed-waste disposal costs in summary form is fully consistent with NRC guidance, and Petitioners do not claim or demonstrate otherwise. Thus, Petitioners have not identified any deficiency in the LTA.¹⁹⁸ At bottom, Basis C is entirely unsupported and fails to dispute the Application, contrary to 10 C.F.R. §§ 2.309(f)(1)(v)-(vi).

4. <u>Basis D (Project Timeline) Is Inadmissible</u>

In Basis D, Petitioners allege that the DCE underestimates costs, because it does not account for alleged cost increases that may be caused by project delays. More specifically, Petitioners claim:

TMI-2 Solutions projects an unreasonably short timeframe for the normalization process referred to as Phase 1; because unaccounted-for delays associated with these activities could increase project costs over the current estimate, the [sic] TMI-2

¹⁹⁵ *Id*.

¹⁹⁶ *Id.* at 1.202-10.

¹⁹⁷ RG 1.185 at 3 (emphasis added).

Furthermore, if Basis C is construed as a demand for an itemization of every occurrence of mixed waste, it also is an impermissible collateral attack on NRC regulations, contrary to 10 C.F.R. § 2.335(a), because the regulations require no such thing. Thus, Basis C also would be beyond the scope of this proceeding, contrary to 10 C.F.R. § 2.309(f)(1)(iii).

Solutions fails to show adequate decommissioning financial assurance as required by 10 C.F.R. §§ 50.75 (b) and (e)(1)(i). 199

Simply put, Petitioners layer speculation about cost atop speculation about delay. They claim that the estimated decommissioning timeline in the PSDAR is "unreasonably short"—but they fail to support their conclusory assertion. In essence, Petitioners contend that delays at other decommissioning reactor sites must be imputed to the TMI-2 decommissioning project. However, they offer no reasoned explanation—and more importantly, no meaningful factual comparison between TMI-2 and the decommissioning activities at the other sites—to justify this groundless claim. Petitioners merely aver that speculative unspecified delays at other sites perhaps could also occur at TMI-2 and perhaps could somehow increase decommissioning costs by some *speculative* unspecified amount. As noted throughout this Answer, gross speculation is insufficient for an admissible contention. Thus, as detailed below, Basis D is unsupported, immaterial, and fails to identify a genuine dispute with the Application, contrary to 10 C.F.R. §§ 2.309(f)(1)(iv)-(vi).

> Petitioners' Speculation Regarding the TMI-2 Decommissioning Timeline a. *Is Unsupported and Fails to Dispute the Application*

As alleged support for their dubious argument that the project schedule in the PSDAR is "unreasonably short," 200 Petitioners rely solely on a purported "history of delays" at other sites.²⁰¹ However, this generic statement fails to engage with or dispute relevant information in the LTA and is wholly inadequate to support an admissible contention.

As a general matter, to the extent Petitioners assert that decommissioning project timelines can be compared on an "apples-to-apples" basis, their assertion is unsupported.

Petition at [PDF 62].

Id.

²⁰¹ *Id.* at [PDF 64].

Timelines for any given task are not solely driven by technical limitations—they also may vary based on the relative *priority* placed on the task in the overall decommissioning schedule. Project management objectives such as cost minimization or occupational exposure "As Low As Reasonably Achievable" ("ALARA") can also shape project chronologies. Petitioners' sweeping generalization disregards the entire universe of site-specific factual and technical considerations that influence decommissioning timelines. It also discounts the fact that the TMI-2 decommissioning project will benefit from efficiencies gained through the iterative process of lessons learned on past projects and the accumulation of decommissioning operating experience more broadly. Ultimately, Petitioners' attenuated references to delays in other historical decommissioning projects fail to identify, with the required specificity, any deficiency in the estimated decommissioning project timeline in the PSDAR in this proceeding.

Put another way, Petitioners offer no support or explanation for their claim that the "history of delays at other facilities" demonstrates an omission or insufficiency in the LTA at issue here.²⁰² For example, Petitioners mention an adjustment in the expected segmentation schedule at Pilgrim.²⁰³ However, Petitioners do *not* identify:

- what caused the adjustment at Pilgrim;
- what factual and technical similarities may exist between the Pilgrim and TMI-2 decommissioning projects; or
- why a similar adjustment would be possible (much less, likely) at TMI-2.

²⁰² *Id*.

Id. at [PDF 63]. This issue has been raised in the ongoing Pilgrim license transfer proceeding, but as applicants in that proceeding noted, the segmentation timeline adjustment did not impact the overall expected date for partial site release. See Entergy Nuclear Operations, Inc., et al. (Pilgrim Nuclear Power Station; Docket Nos. 50-293-LT, 72-1044-LT) Applicants' Answer Opposing the Motion of the Commonwealth of Massachusetts to Amend its Petition with New Information at 4 (Jan. 7, 2020) (ML20007E918) ("Pilgrim Applicants' Answer to Motion to Amend").

Petitioners simply assert that the fact-specific experiences at these sites necessarily must be imputed to TMI-2. Moreover, Petitioners' references to the experience at Connecticut Yankee²⁰⁴—a project that was performed over 20 years ago—ignore significant technological advancements and the accumulation of decommissioning experience across the past few decades. At bottom, absent reasoned explanations and corresponding support for the bulleted items above (which is clearly Petitioners' burden at this point in the proceeding),²⁰⁵ their demand falls short of identifying a genuine dispute with the Application.

Overall, Petitioners' challenge to the PSDAR's estimated project timeline is unsupported and fails to identify a genuine dispute, contrary to 10 C.F.R. §§ 2.309(f)(1)(v)-(vi).

b. <u>Petitioners' Speculation Regarding Delay-Related Costs Is Unsupported</u> <u>and Fails to Dispute the Application</u>

Even if Petitioners had established, with requisite support, that the project timeline in the PSDAR is insufficient (which it has not done), Basis D is inadmissible for the further and additional reason that it fails to support a claim that an (unspecified) schedule adjustment would necessarily increase costs, much less create a *material* deficiency in the NDT. Petitioners offer: (i) no alternative demonstration of an allegedly-appropriate project timeline; (ii) no explanation of how their projection differs from the timeline contemplated in the LTA; and (iii) no calculation (much less, an adequately-supported one) of the purported additional costs associated with that unspecified timeline. At most, Basis D claims that delays "generally" increase costs.²⁰⁶ This generic observation identifies no dispute with the LTA; and sheer speculation is insufficient to support a claim of increased costs here.

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Petition at [PDF 64].

²⁰⁵ See Palisades, CLI-15-23, 82 NRC at 325, 329.

Petition at [PDF 65].

For example, Petitioners allege that "unforeseen expansions of the project scope led to increases in project staffing costs" in the Humboldt Bay decommissioning project.²⁰⁷ However, they fail to cite any support for this claim. So too with the underlying premise of Petitioners' claim—that an unforeseen expansion of project scope per se delays overall timelines and per se increases costs. Even assuming arguendo that schedule adjustments in other projects at other sites caused delays and corresponding cost increases, Petitioners' discussion still fails to explain: (i) what facts led to those circumstances; (ii) what common factual predicate may exist between those projects and TMI-2; or (iii) why a similar cost increase purportedly must be assumed at TMI-2. Petitioners' overly simplistic and grossly speculative arguments fail to provide support for Basis D or identify a genuine dispute with the Application.

Moreover, to be material (i.e., to "make a difference in the outcome of the licensing proceeding"²⁰⁸), Petitioners would need to show not only that Applicants' project timeline assumptions are entirely implausible, but also that the increased costs (which Petitioners do not even purport to calculate) would be so great as to defeat all of the Layers of NDT Protection.²⁰⁹ Petitioners neither make, nor even attempt, such a showing. Thus, Basis D must be rejected for this additional reason.

Id. This argument, again, was copied from a petition in the Indian Point proceeding. There, NYS was simply pointing to a difference in estimated "staff costs" between the 2005 version of the Humboldt Bay decommissioning funding report versus the 2011 version, but supplied no support for a claim that the difference was the result of a "delay" or change in "project scope." See Entergy Nuclear Operations, Inc. (Indian Point Nuclear Generating Unit Nos. 1, 2, and 3), Applicants' Answer Opposing Petition for Leave to Intervene and Hearing Request Filed by the State of New York at 78 (Mar. 9, 2020) (ML20069K756).

Oconee, CLI-99-11, 49 NRC at 333-34 (quoting Procedural Changes, 54 Fed. Reg. at 33,172).

See supra Part IV.C (discussing the Layers of NDT Protection).

In short, Basis D:

- Claims (without adequate support) that delays in other decommissioning projects (including bare speculation about a potential delay at Pilgrim) have resulted in material cost increases;
- Speculates (without so much as an explanation) that such delays will occur at TMI-2;
- Speculates (without even the most basic mathematical calculation) that overall TMI-2 decommissioning costs somehow would increase as a result; and
- Presumes (without even engaging with the relevant LTA content and relevant regulatory oversight regime) that each and every one of the Layers of NDT Protection would be overcome by this speculative cost increase.

By any measure, this layered speculation is woefully inadequate for an admissible contention.²¹⁰ Accordingly, Basis D is unsupported and fails to demonstrate a material dispute with the Application.

5. Basis E (Market Fluctuations) Is Inadmissible

Finally, in Basis E, Petitioners allege that the LTA no longer demonstrates adequate funding assurance due to recent securities market fluctuations.²¹¹ The statement of Basis E essentially repeats the broad statement of Proposed Contention 2, claiming that:

The Applicant has failed to establish that the license transfer application will provide adequate decommissioning or spent fuel management funding assurance as required under 10 C.F.R. §§ 50.33(f) and (k)(1), 50.54(bb), 50.75(b)(1) and (e)(1)(i), and 72.30(b).²¹²

Again, as noted above, Petitioners' citation to 10 C.F.R. § 72.30(b) is entirely inapplicable to this proceeding, because the LTA does not seek to transfer a Part 72 ISFSI license. Thus, Petitioners' citation to 10 C.F.R. § 72.30(b) is immaterial and fails to identify or

See Crow Butte Res., Inc. (N. Trend Expansion Project), CLI-09-12, 69 NRC 535, 552 (2009) (admitting "contentions grounded on little more than guesswork would waste the scarce adjudicatory resources of all involved.").

²¹¹ Petition at [PDF 66-67].

²¹² *Id.* at [PDF 66].

support any alleged deficiency in the LTA. More broadly, Basis E suffers from multiple factual inaccuracies, rendering it unsupported and incapable of demonstrating a genuine dispute with the Application.

Basis E must be rejected for two primary reasons. First, Petitioners imply that the LTA relies *solely* on the NDT fund balance to demonstrate funding assurance. This is simply incorrect. The LTA relies on the "prepayment" method to demonstrate funding assurance, *regardless* of the NDT fund balances. It also includes other demonstrations of funding assurance, including an escrow account and letter of credit. Petitioners' copy-and-paste contention simply disregards the relevant information in the Application at issue in this proceeding. Second, Petitioners speculate (without any support) that the NDT fund value has "materially depreciated." This, too, is factually incorrect. The NDT fund value has not been materially affected by recent market fluctuations. Moreover, a condition to closing (and thus the transfer) is that the NDT contain sufficient funding. In sum, Basis E is out-of-scope, immaterial, unsupported, and fails to identify a genuine dispute with the LTA, contrary to 10 C.F.R. § 2.309(f)(1)(iii)-(vi).

a. <u>Petitioners Misapprehend the LTA's Funding Assurance Mechanisms</u>

The crux of Basis E is Petitioners' assertion that the LTA is insufficient because it relies on an NDT fund balance that is no longer sufficient to satisfy applicable funding assurance requirements.²¹⁴ Implicit in this argument is a suggestion that the LTA *solely* relies on the NDT fund balance. As demonstrated by the plain language of the LTA, this is incorrect. Petitioners

²¹³ *Id.* at [PDF 67].

²¹⁴ *Id.* at [PDF 66-67].

simply disregard the relevant discussion in the LTA, and therefore, Petitioners fail to support their claim or dispute the Application.

The DCE contemplates a beginning NDT balance based on the assumed value of the fund as of November 30, 2019.²¹⁵ Applicants noted that the projected NDT fund value "Upon Closing" is expected to be sufficient to provide adequate funding assurance, ²¹⁶ and the LTA notes that this is the *primary* basis for demonstrating funding assurance.²¹⁷ Notwithstanding, the LTA does not rely *solely* on this anticipatory expectation.

Rather, the LTA commits to "prepayment" of the *full amount* necessary to demonstrate adequate funding assurance.²¹⁸ In other words, even assuming *arguendo* that the future market value of the NDT fund at the time of closing is less than the amount necessary to demonstrate adequate funding assurance, the LTA commits to "prepayment" of the full amount.²¹⁹ Petitioners' suggestion that the LTA solely relies on the present value of the NDT fund reads-out this commitment and disregards directly relevant information in the LTA. Thus, it is not a sustainable or supported reading of the LTA.

Furthermore, the NRC Staff need not make a *predictive* finding of reasonable assurance regarding TMI-2 Solutions' *ability* to prepay. Rather, the prepayment commitment is a *precondition* to transferring the license. To the extent Petitioners suggest that market fluctuations somehow could render insufficient the prepayment method authorized in NRC regulations, it identifies no basis for its claim, which also would be an improper and out-of-scope

²¹⁵ See DCE, Encl. 1-B, tbl.1B-3.

²¹⁶ LTA at 2.

²¹⁷ *Id.* at 9-10.

²¹⁸ *Id.* at 10.

²¹⁹ *Id*.

challenge to the regulations.²²⁰ At bottom, because the market fluctuations noted by Petitioners alter neither the amount necessary to demonstrate adequate funding assurance, nor the "prepayment" commitment in the LTA (against which the NRC Staff conducts its review), this information fails to demonstrate any material deficiency in the LTA.

Additionally, Basis E improperly disregards the belt-and-suspenders approach to funding assurance presented in the LTA. "Beyond the NDT, TMI-2 Solutions will have access to additional Decommissioning funding assurance instruments worth up to \$100 million dollars throughout the most critical phases of the project."²²¹ More specifically:

TMI-2 Solutions will also be able to draw upon several different financial instruments for additional Decommissioning funds if needed: (i) a Back-Up & Provisional Nuclear Decommissioning Trust, segmented into a Back-Up Trust Account and a Provisional Trust Account; (ii) an Irrevocable Letter of Credit; (iii) an Irrevocable Disposal Capacity Easement; (iv) a Financial Support Agreement; and (v) a Parent Guarantee. Further description of these instruments, as well as the form of the Financial Support Agreement and Parent Guarantee, can be found in Enclosure 4A.²²²

Petitioners fail to acknowledge or engage with any of this directly-relevant information in the LTA or explain how it somehow could be insufficient here. In summary, nothing in Basis E challenges the amount necessary to satisfy applicable funding assurance requirements, or the overarching "prepayment" compliance basis in the LTA, *regardless* of the current value of the NDT fund. Accordingly, Basis E is inadmissible as out-of-scope, immaterial, unsupported, and for failing to demonstrate a material dispute with the LTA.

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²²⁰ 10 C.F.R. § 2.335.

²²¹ LTA at 10.

²²² *Id.* at 11.

b. <u>Petitioners' Claim Regarding a "Material Decline" in the NDT Fund</u> <u>Value Is Unsupported and Untrue</u>

Petitioners offer their own unvarnished speculation that the NDT fund value has "materially depreciated."²²³ Importantly, they offer zero support for this claim. None exists, because their assertion is untrue. In fact, the value of the TMI-2 NDT fund remains materially the same as described by the Applicants in the LTA and reported in TMI-2's most recent decommissioning funding status report. Petitioners' unsupported—and factually inaccurate—claims to the contrary are insufficient for an admissible contention.

Petitioners also miss that the Purchase Agreement,²²⁴ which underpins the transfer, specifies as a condition to closing in Section 7.1.4 that the NDT must have \$800 million in assets. If that condition is not met, the parties must otherwise reach agreement as to how to address any difference in funding, to be memorialized in an amendment to the Purchase Agreement. Applicants are thus aware of the risk of market fluctuations and have taken reasonable precautions to ensure that the TMI-2 purchase will not close unless sufficient funds to support the project are available in the NDT. More importantly, Petitioners fail even to acknowledge these precautions, much less identify a genuine material deficiency in the LTA.

c. <u>Petitioners' Suggestion that Applicants Are Required to Update the LTA Is</u> <u>Incorrect as a Matter of Law</u>

Petitioners fault the LTA for failing to "account for" securities market fluctuations that occurred four months *after* it was filed, and claim the present NDT fund values are "incongruent with the information provided in the [LTA]." Assuming Petitioners are not purporting to demand clairvoyance, their argument implies that the Applicants are under some obligation to

Petition at [PDF 67].

²²⁴ LTA, Exh. 1.

²²⁵ *Id*.

update the LTA, after submission, to immediately notify the NRC of some undefined threshold market decline. Importantly, Petitioners point to no controlling legal authority for this proposition. Nor could it, because none exists. NRC regulations require only annual updates²²⁶ and do not otherwise require interim reports.²²⁷ Additionally, consideration of events that occur *after* submission of a license transfer application, but before an update is due, implicate the *NRC Staff's review*, not the integrity of the application itself.²²⁸ However, the Staff's review is not subject to challenge in an adjudicatory proceeding; and challenges thereto are beyond the scope of this proceeding.

* * *

Overall, Basis E fails to dispute the application, raises out-of-scope and immaterial issues, and is entirely counterfactual, contrary to the requirements of 10 C.F.R. § 2.309(f)(1)(iii)-(vi).

D. Proposed Contention 3 (Financial Qualifications) Is Inadmissible

Proposed Contention 3 is a wide-ranging challenge to TMI-2 Solutions' financial qualifications and the value of the NDT. Petitioners allege:

The license transfer application and supporting materials fail to show TMI-2 Solutions is financially qualified within the meaning of 10 C.F.R. §§ 50.33(f), 50.40(b), 50.80(b), 50.82(a), and 72.30(b). 229

^{226 10} C.F.R. § 50.75(f)(1) (requiring annual updates on the status of decommission funding for a plant "that is involved in a merger or an acquisition."); NRC Regulatory Guide 1.159, "Assuring the Availability of Funds for Decommissioning Nuclear Reactors," Rev. 2 at 21 (Oct. 2011) (same). See also 10 C.F.R. § 50.82(a)(8)(v) ("After submitting its site-specific DCE... the licensee must annually submit to the NRC, by March 31, a financial assurance status report.").

See generally Entergy Nuclear Operations, Inc. (Indian Point Nuclear Generating Unit Nos. 1, 2, and 3), Applicants' Answer to the State Of New York's Motion for Leave to Amend Contentions NY-2 and NY-3 at 10-13 (Apr. 20, 2020) (ML20111A329).

²²⁸ See generally id. at 13-16.

²²⁹ Petition at [PDF 68].

In support of this proposed contention, Petitioners make several inaccurate claims about the Application and the financial assurances that TMI-2 Solutions will provide to fund the decommissioning, if necessary. Petitioners also misinterpret NRC regulations and precedent on financial assurance requirements and license transfer applications. These claims are either out-of-scope, immaterial, unsupported, or fail to raise a genuine dispute with the Application.

Petitioners also repeat claims from Proposed Contention Epstein-1 about the assumed two percent rate of return on the investments in the NDT and also repeat arguments from Basis 2-E about market fluctuations and their impact on the current value of the NDT.²³⁰ For the sake of brevity, Applicants incorporate its responsive argument here by reference.²³¹

In the end, no part of Proposed Contention 3 raises an admissible contention, and it should be rejected accordingly.

1. Petitioners' Claims Regarding Financial Assurance Are an Impermissible Challenge to NRC Regulations, Raise Issues Outside the Scope of This Proceeding, and Do Not Raise a Genuine Dispute with the Application

Petitioners claim that the Application is deficient, because TMI-2 Solutions' "over reliance on [the NDTs] to demonstrate financial qualification does not meet regulatory standards." Petitioners also claim that the Application does not show that TMI-2 Solutions is "adequately capitalized" or that it "has the independent financial ability to meet its obligations." In addition, Petitioners claim that TMI-2 Solutions "can not [sic] offer any

²³⁰ *Id.* at [PDF 75-76, 78-79].

See supra Parts IV.B and IV.C.5.

Petition at [PDF 73].

²³³ *Id*.

financial guarantee based on its independent strength" nor be able to obtain financial assurances from third parties.²³⁴

To start, there is no merit to Petitioners' claim that TMI-2 Solutions overly relies on the NDT to demonstrate its financial qualifications and does not meet regulatory standards. This is yet another inapt argument, indiscriminately lifted from another proceeding, ²³⁵ claiming applicants cannot rely solely on the NDT to demonstrate financial qualifications. The Application here does *not* do that. Even if it did, this argument is contradicted by NRC precedent. NRC Staff has twice approved license transfer applications for nuclear generating plants that would be permanently shutdown at the time of the transfer, where the transfer applicants relied solely on the funds in the NDTs to establish their financial qualifications. ²³⁶ For both plants—Oyster Creek and Pilgrim—the NRC found that the reliance on funds available in the NDTs satisfied the financial assurance and financial qualification requirements of 10 C.F.R. §§ 50.33(f), 50.33(k)(1), 50.54(bb), 50.75, and 50.82(a). ²³⁷

The Application makes clear that although the funds in the NDT are sufficient to complete decommissioning, TMI-2 Solutions is also providing \$100 million in additional financial support. Thus, TMI-2 Solutions does *not* rely solely on the funds in NDT to demonstrate its financial qualifications. As explained in the Application, "TMI-2 Solutions will have access to the resources of *four* different financial instruments for the purposes of completing Decommissioning . . . beyond the assets of the TMI-2 NDT." These additional

²³⁴ *Id.* at [PDF 72].

²³⁵ See NYS Petition at 54-58.

²³⁶ See Oyster Creek License Transfer SER at 7-10; Pilgrim License Transfer SER at 7-15.

Ovster Creek License Transfer SER at 10; Pilgrim License Transfer SER at 15.

²³⁸ LTA at 2, 11.

²³⁹ *Id.*, Encl. 4B at 1 (emphasis added).

financial instruments include: (1) a Back-Up & Provisional Nuclear Decommissioning Trust; (2) an irrevocable Letter of Credit from a reputable financial institution; (3) an Irrevocable Disposal Capacity Easement; and (4) a financial support agreement with Energy *Solutions*. These commitments refute Petitioners' claim that TMI-2 solutions cannot offer financial guarantees or obtain financial assurances from third parties.

Moreover, the types of financial assurances that TMI-2 Solutions will provide are all acceptable under NRC regulations to demonstrate financial assurance and/or to demonstrate financial qualifications.²⁴¹ Yet, Petitioners call them a metaphorical "Maginot Line," and accuse TMI-2 Solutions of playing a "nuclear parlor game" with its financial assurances.²⁴² In pressing this needless and groundless attack, Petitioners are impermissibly challenging the NRC's financial assurance regulations, which are outside the scope of this proceeding.²⁴³

Petitioners also argue that TMI-2 Solutions' "over reliance on [the NDT]" to show its financial qualifications "does not meet regulatory standards," and that TMI-2 Solutions must show that it has "the independent financial ability" to meet its financial decommissioning obligations.²⁴⁴ Conspicuously, Petitioners cite no law, rule, or regulation that imposes such a requirement. Nor is there one. Simply put, Petitioners are trying to impose financial requirements *beyond* those in NRC's regulations, which is also impermissible.²⁴⁵

²⁴⁰ *Id.* at 1-2.

¹⁰ C.F.R. § 50.75(e)(1)(iii); see also Oyster Creek, CLI-19-6, 90 NRC __, __ (slip op. at 6) (discussing acceptable methods of demonstrating adequate financial assurance).

²⁴² Petition at [PDF 72-73].

²⁴³ 10 C.F.R. § 2.335(a).

Petition at [PDF 73].

When a contention advocates for stricter requirements than NRC's regulations impose, the Commission considers it an impermissible attack on its regulations. See Vt. Yankee, LBP-15-4, 81 NRC at 167; Seabrook, CLI-12-5, 75 NRC at 315; Oyster Creek, CLI-00-6, 51 NRC at 206; TRUMP-S Project, CLI-95-1, 41 NRC at 170.

Because Proposed Contention 3 pulls heavily from the State of New York's Proposed Contention NY-3 in the Indian Point license transfer proceeding,²⁴⁶ it seems that Petitioners are adopting New York's incorrect interpretation of NRC regulations on the level and type of financial qualifications required for a license transfer. The Commission, however, already has spoken directly on this issue and explained that it does not require absolute certainty in financial projections:

[T]he level of assurance the Commission finds it reasonable to require regarding a licensee's ability to meet financial obligations is less than the extremely high assurance the Commission requires regarding the safety of reactor design, construction, and operation. The Commission will accept financial assurances based on *plausible assumptions and forecasts*, even though the possibility is not insignificant that things will turn out less favorably than expected. Thus, the mere casting of doubt on some aspects of proposed funding plans is not by itself sufficient to defeat a finding of reasonable assurance.²⁴⁷

The NRC also has a rigorous and comprehensive regulatory regime to provide continual assurance that funding for decommissioning remains adequate after a plant permanently ceases operation.²⁴⁸ This includes required annual reporting on the adequacy of decommissioning funding assurance for decommissioning TMI-2.²⁴⁹ Based on these annual reports, the NRC can require—*in the future*—any necessary adjustments to the decommissioning funding assurance, restrict withdrawals from the NDT, or both, to ensure that the NDT can fund decommissioning activities and ultimately release the site and terminate the license.²⁵⁰ As the Commission has

²⁴⁶ See NYS Petition at 54-68.

²⁴⁷ Seabrook, CLI-99-6, 49 NRC at 221-22 (emphasis added).

See generally 10 C.F.R. § 50.82(a); see also NUREG-1577 at 5 ("Decommissioning funding assurance for nuclear power plants is governed by 10 CFR 50.33(k), 50.75, and 50.82 in a three-stage process.").

²⁴⁹ 10 C.F.R. §§ 50.82(a)(8)(v) and (a)(8)(vii).

²⁵⁰ *Id.* § 50.82(a)(8)(i)(A)-(C).

held, its strict oversight and reporting requirements in its regulations "provide reasonable assurance that adequate funds will remain to complete decommissioning by requiring [the licensee] and the Staff to monitor the projected cost of decommissioning and available funding and ensure more funding is available as needed."²⁵¹

Thus, contrary to Petitioners' claims, the Application meets the NRC's requirements for showing adequate financial assurance.²⁵²

2. <u>Petitioners' Claim That TMI-2 Solutions Is a "Corporate Aberration" and Unfit to Hold an NRC License Is Unsupported, Immaterial, and Does Not Raise a Genuine Dispute with the Application</u>

Petitioners also make several claims about TMI-2 Solutions' corporate structure and call it a "fictional company that exists on paper only" and a "corporate aberration." Petitioners suggest that TMI-2 Solutions' corporate structure, and that of its corporate parents, is somehow nefarious and appear to claim that LLCs should be ineligible or are *per se* unqualified to hold NRC licenses. Petitioners' claims, however, are unsupported—and plainly incorrect.

Petitioners' claims ignore the clear weight of NRC precedent, in which the NRC has granted operating licenses to many LLCs to operate nuclear facilities. In fact, there are ten different LLCs currently licensed by the NRC to operate 38 nuclear plants. Petitioners also ignore NRC precedent in which the NRC has approved license transfers of shutdown (or shutting down)

Vt. Yankee, CLI-16-17, 84 NRC at 118; see also Oyster Creek, CLI-19-6, 90 NRC at ___ (slip op. at 13) ("If new developments point to a projected funding shortfall, the NRC requires additional financial assurance to cover the estimated cost to complete the decommissioning.") (citation omitted).

²⁵² See 10 C.F.R. §§ 50.33(f), 50.33(k)(1), 50.54(bb), 50.75.

²⁵³ Petition at [PDF 72].

²⁵⁴ *Id.* at [PDF 72-73].

See NRC, LIST OF POWER REACTOR UNITS, available at https://www.nrc.gov/reactors/operating/list-power-reactor-units.html (Braidwood 1 & 2, Brunswick 1 & 2, Byron 1 & 2, Catawba 1 & 2, Clinton, Comanche Peak 1 & 2, Dresden 2 & 3, Duane Arnold, FitzPatrick, Hope Creek 1, LaSalle 1 & 2, Limerick 1 & 2, McGuire 1 & 2, Oconee 1, 2, & 3, Peach Bottom 2 & 3, Point Beach 1 & 2, Quad Cities 1 & 2, Robinson 2, Salem 1 & 2, Seabrook 1, Shearon Harris 1, Susquehanna 1 & 2).

nuclear plants to LLCs—including other Energy*Solutions* subsidiaries²⁵⁶—for purposes of decommissioning.²⁵⁷ Accordingly, Petitioners' claims on this issue are unsupported, immaterial, and do not raise a genuine dispute with the Application.

* * *

In summary, Proposed Contention 3 is an impermissible attack on NRC regulations. Additionally, it is immaterial, unsupported, raises issues outside the scope of this proceeding, and does not raise a genuine dispute with the application, contrary to 10 C.F.R. § 2309(f)(1)(iii)-(vi), and therefore should be denied as inadmissible.

V. PETITIONERS HAVE NOT DEMONSTRATED STANDING

Petitioners assert that Mr. Epstein has standing to intervene as an individual in this proceeding, and that TMIA has standing in a representational capacity.²⁵⁸ Petitioners also suggest that they should be granted discretionary intervention under 10 C.F.R. § 2.309(e).²⁵⁹ As demonstrated below, neither Mr. Epstein nor TMIA has established standing to intervene in this proceeding as a matter of right under 10 C.F.R. § 2.309(d). Nor have they satisfied the strict

See, e.g., Letter from M. Vaaler, NRC, to B. Nick, Dairyland Power Cooperative, "Order Approving Transfer of the License for the La Crosse Boiling Water Reactor from the Dairyland Power Cooperative to LaCrosse Solutions, LLC and Conforming Administrative License Amendment (CAC No. L53096)" (May 20, 2016) (ML16123A055) (approving transfer to LaCrosse Solutions, LLC); Letter from J. Hickman, NRC, to J. Christian, ZionSolutions, "Order Approving Transfer of Licenses and Conforming Amendments Relating to Zion Nuclear Power Station, Units 1 & 2 (TAC Nos. J00341 & J00342)" (May 4, 2009) (ML082840443) (approving transfer to ZionSolutions, LLC).

See, e.g., Letter from A. Snyder, NRC, to B. Hanson, Exelon, "Order Approving Transfer of the License for the Oyster Creek Nuclear Generating Station and Conforming License Amendment (EPID# L-2018-LLM-0002)" (June 20, 2019) (ML19095A463) (approving transfer to Oyster Creek Environmental Protection, LLC and Holtec Decommissioning International, LLC); Letter from S. Wall, NRC, to C. Bakken, Entergy, "Pilgrim Nuclear Power Station – Order Approving Direct and Indirect Transfer of License and Conforming License Amendment" (Aug. 22, 2019) (ML19170A101) (approving transfer to Holtec Pilgrim, LLC and Holtec Decommissioning International, LLC).

²⁵⁸ Petition at [PDF 17, 20]. The Petition does not assert that TMIA has organizational standing.

²⁵⁹ See id. at [PDF 17] (referencing 10 C.F.R. § 2.309(e) and claiming Mr. Epstein's participation would "assist in developing a sound record").

requirements for discretionary intervention. Petitioners' failure to demonstrate standing requires that the Petition be denied.²⁶⁰

A. <u>Legal Standards For Standing</u>

To determine whether a petitioner presents a cognizable interest to intervene in a proceeding, the Commission applies contemporaneous judicial concepts of standing.²⁶¹ The petitioner bears the burden to provide facts sufficient to establish standing.²⁶² As relevant here, a petitioner may satisfy that burden in one of three ways.

1. <u>Traditional Standing</u>

First, a petitioner may demonstrate traditional standing. This requires a showing that a person or organization has suffered or might suffer a concrete and particularized injury that is:

(1) fairly traceable to the challenged action; (2) likely redressable by a favorable decision; and

(3) arguably within the zone of interests protected by the governing statutes—here, the AEA.²⁶³

These criteria are known as injury-in-fact, causality, and redressability. Although a petitioner need not show that the injury flows directly from the challenged action, it must still show that the

¹⁰ C.F.R. § 2.309(a). Alternatively, if the Commission determines that Petitioners have not proffered an admissible contention—as it should for the reasons set forth in this Answer—then it need not address Petitioners' standing to intervene in this proceeding. See Susquehanna, CLI-15-8, 81 NRC at 503 n.19 ("Because [the petitioner's] contentions all fall far short of our contention admissibility standards, we need not address his standing to intervene.").

²⁶¹ Fla. Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 & 4), CLI-15-25, 82 NRC 389, 394 (2015) (citation omitted).

See U.S. Enrichment Corp. (Paducah, Kentucky Gaseous Diffusion Plant), CLI-01-23, 54 NRC 267, 272 (2001) (citing Commonwealth Edison Co. (Zion Nuclear Power Station, Units 1 & 2), CLI-00-5, 51 NRC 90, 98 (2000)).

²⁶³ Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 915 (2009).

"chain of causation is plausible." Finally, a petitioner must show that "its actual or threatened injuries can be cured by some action of the tribunal." ²⁶⁵

An organization seeking to intervene in its own right must satisfy the same standing requirements as an individual.²⁶⁶ To address the injury requirement, an organization such as TMIA must show that the license transfer "would constitute 'a threat to its organizational interests.'"²⁶⁷ The Commission does not recognize standing for an organization seeking to "act as a 'private attorney general' in order to raise environmental or safety matters that are of general concern."²⁶⁸

2. Representational Standing

Finally, an organization may seek to establish representational standing based on the standing of one or more individual members. To establish representational standing, an organization must: (1) show that the interests it seeks to protect are germane to its own purpose; (2) identify at least one member who qualifies for standing in his or her own right; (3) show that it is authorized by that member to request a hearing on his or her behalf; and (4) show that neither the claim asserted nor the relief requested require an individual member's participation in

Sequoyah Fuels Corp. (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 75 (1994); see also Crow Butte Res., Inc. (In-Situ Leach Facility, Crawford, Nebraska), CLI-09-9, 69 NRC 331, 345 (2009).

²⁶⁵ Sequoyah Fuels Corp. (Gore, Oklahoma Site), CLI-01-2, 53 NRC 9, 14 (2001).

FirstEnergy Nuclear Operating Co. (Beaver Valley Power Station, Units 1 & 2; Davis-Besse Nuclear Power Station, Unit 1; Perry Nuclear Power Plant, Unit 1), CLI-20-5, 92 NRC ___, __ (Apr. 23, 2020) (slip op. at 5) (citing Consumers Energy Co. (Palisades Nuclear Power Plant), CLI-07-18, 65 NRC 399, 411(2007)).

Id. (slip op at 5-6) (quoting Crow Butte Res., Inc. (Marsland Expansion Area), CLI-14-2, 79 NRC 11, 18 (2014); Ga. Inst. of Tech. (Ga. Tech Research Reactor), CLI-95-12, 42 NRC 111, 115 (1995); see also Int'l Uranium (USA) Corp. (White Mesa Uranium Mill), CLI-01-21, 54 NRC 247, 252 (2001).

²⁶⁸ Id. (slip op. at 6) (quoting Entergy Nuclear Operations, Inc. (Palisades Nuclear Plant), CLI-08-19, 68 NRC 251, 269-70 (2008); Palisades, CLI-07-18, 65 NRC at 411-12)). See also Curators of the Univ. of Mo. (TRUMP-S Project), LBP-90-30, 32 NRC 95, 103 (1990) ("[I]ntervenors may not act as private attorneys-general and raise issues that are of concern to them but do not affect them directly.").

the organization's legal action.²⁶⁹ If the affidavit of the member lacks a statement that the member wants and has authorized the organization to represent his or her interests, the presiding officer should not infer that authorization.²⁷⁰

3. Proximity-Based Standing

In certain, limited NRC proceedings, a petitioner may use the proximity presumptions the Commission has created to simplify standing requirements for individuals who reside within or have frequent contacts with a geographic zone of potential harm. In proceedings that involve *construction or operation* of a nuclear power plant, the zone is considered the area within a 50-mile radius of the site. In such proceedings, "proximity" standing rests on the presumption that an accident associated with the nuclear facility (*i.e.*, reactor) could adversely affect the health and safety of people working or living offsite but within a certain distance of that facility.²⁷¹ The petitioner has the burden to show that the proximity presumption applies.²⁷²

The NRC has held that the proximity presumption may be enough to confer standing on an individual or group in Part 50 proceedings involving reactor "construction permits, operating licenses, or *significant* license amendments thereto," such as those involving a physical expansion of the facility²⁷³ or extended power uprates.²⁷⁴ As the Commission has noted, "those cases involve[] the construction or operation of the reactor itself, with clear implications for the offsite environment, or major alterations to the facility with a clear potential for offsite

²⁶⁹ Palisades, CLI-07-18, 65 NRC at 409 (citation omitted).

²⁷⁰ Duquesne Light Co. (Beaver Valley Power Station, Unit 2), LBP-84-6, 19 NRC 393, 411 (1984).

²⁷¹ Calvert Cliffs, CLI-09-20, 70 NRC at 915 (citations omitted).

NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), LBP-17-7, 86 NRC 59, 75 (2017).

²⁷³ Fla. Power & Light Co. (St. Lucie Nuclear Power Plant, Units 1 & 2), CLI-89-21, 30 NRC 325, 329 (1989) (citations omitted) (emphasis added).

²⁷⁴ See, e.g., Tenn. Valley Auth. (Browns Ferry Nuclear Plant Units 1, 2, & 3), LBP-16-11, 84 NRC 139, 144 n.26 (2016), aff'd on other grounds, CLI-17-5, 85 NRC 87, 94 & 90 n. 17 (2017).

consequences."²⁷⁵ To establish proximity standing, a petitioner must provide "fact-specific standing allegations, not conclusory assertions," as the Commission "cannot find the requisite 'interest' based on . . . general assertions of proximity."²⁷⁶

The NRC, however, applies a more stringent standard to proceedings involving approvals lacking a "clear potential for offsite consequences." That includes license transfer proceedings, such as here, where the Commission "determine[s] on a case-by-case basis whether the proximity presumption should apply, considering the 'obvious potential for offsite [radiological] consequences,' or lack thereof, from the application at issue, and specifically 'taking into account the nature of the proposed action and the significance of the radioactive source." Thus, "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." The petitioner "cannot seek to obtain standing . . . simply by . . . alleging without substantiation that the changes will lead to offsite radiological consequences."

4. <u>Discretionary Intervention</u>

Pursuant to 10 C.F.R. § 2.309(e), the Commission may consider a request for discretionary intervention where a party lacks standing to intervene as a matter of right under

²⁷⁵ St. Lucie, CLI-89-21, 30 NRC at 329-30.

²⁷⁶ Palisades, CLI-07-18, 65 NRC at 410 (emphasis added).

St. Lucie, CLI-89-21, 30 NRC at 329-30; see also Boston Edison Co. (Pilgrim Nuclear Power Station), LBP-85-24, 22 NRC 97, 98-99 (1985), aff'd on other grounds, ALAB-816, 22 NRC 461 (1985) (residence 43 miles from the plant is inadequate for standing related to a spent fuel pool expansion).

²⁷⁸ Big Rock Point ISFSI, CLI-07-19, 65 NRC at 426 (quoting Peach Bottom, CLI-05-26, 62 NRC at 580-81).

²⁷⁹ *Zion*, CLI-99-4, 49 NRC at 191 (rejecting proximity presumption argument in license amendment proceeding due to plant's shutdown and defueled status) (alteration in original) (citation omitted).

²⁸⁰ *Id.* at 192.

10 C.F.R. § 2.309(d)(1). However, discretionary intervention may be granted only when at least one petitioner has established standing and at least one contention has been admitted for hearing.²⁸¹ In addition to addressing the factors in 10 C.F.R. § 2.309(d)(1), a petitioner who seeks intervention as a matter of discretion (if it is determined that standing as a matter of right is not demonstrated) must specifically address in his or her initial petition the six factors set forth in 10 C.F.R. § 2.309(e), which the Commission will consider and balance.²⁸² Of the six factors, primary consideration is given to the first factor—assistance in developing a sound record.²⁸³ The petitioner has the burden to establish that the factors in favor of intervention outweigh those against intervention.²⁸⁴

B. Mr. Epstein Has Not Demonstrated Standing

Mr. Epstein claims to have individual standing because he lives and operates a business 12 miles from TMI-2 and serves as a local school board member, and because he purportedly is interested in the proposed license transfer and has sought to intervene in other proceedings related to TMI-2.²⁸⁵ Mr. Epstein claims his "economic stake as a business owner, homeowner,

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²⁸¹ 10 C.F.R. § 2.309(e). *See also PPL Susquehanna LLC* (Susquehanna Steam Elec. Station, Units 1 & 2), LBP-07-10, 66 NRC 1, 21 n.14 (2007) ("[D]iscretionary standing [is] only appropriate when one petitioner has been shown to have standing as of right and [there is an] admissible contention so that a hearing will be conducted.").

Factors weighing in *favor* of allowing intervention include: (i) the extent to which the petitioner's participation would assist in developing a sound record; (ii) the nature of petitioner's property, financial or other interests in the proceeding; and (iii) the possible effect of any decision or order that may be issued in the proceeding. *See* 10 C.F.R. § 2.309(e)(1)(i)-(iii). Conversely, factors weighing *against* allowing intervention include: (i) the availability of other means whereby the petitioner's interest might be protected; (ii) the extent to which petitioner's interest will be represented by existing parties; and (iii) the extent to which petitioner's participation will inappropriately broaden the issues or delay the proceeding. *See id.* § 2.309(e)(2)(i)-(iii).

See Gen. Pub. Utils. Nuclear Corp. (Oyster Creek Nuclear Generating Station), LBP-96-23, 44 NRC 143, 160 (1996).

See Nuclear Eng'g Co., Inc. (Sheffield, Ill., Low-Level Radioactive Waste Disposal Site), ALAB-473, 7 NRC 737, 744 (1978) (requiring potential discretionary intervenor to show "that it is both willing and able to make a valuable contribution to the full airing of the issues . . . in this proceeding").

Petition at [PDF 8-11].

and taxpayer are immediately impacted by lack of funding, incomplete and underfunding of the decommissioning fund."²⁸⁶ He also argues that "[a]dditional radioactive releases – planned and unplanned – as well as converting TMI-2 into a permanent high-level radioactive waste site as planned by EnergySolutions, would be harmful to Mr. Epstein's health and financial interests."²⁸⁷ Finally, Mr. Epstein claims, without support, that he "has been exposed to radiation consistently since 1978," and that such exposures "are likely to reoccur due to the flawed plan submitted by TMI-2."²⁸⁸ These statements constitute the totality of Mr. Epstein's arguments in support of his claim that he has standing.

Mr. Epstein's arguments are patently insufficient to establish standing to intervene in this license transfer proceeding. As a threshold matter, the mere fact that Mr. Epstein or TMIA may (or may not) have demonstrated standing in prior NRC proceedings is irrelevant. Indeed, the Commission *rejected* such an argument by Mr. Epstein in a prior proceeding, noting that "Mr. Epstein could not rely on other boards' findings of standing in the two prior proceedings concerning the Susquehanna facility." The Commission reiterated that "a petitioner must make a fresh standing demonstration in *each* proceeding in which intervention is sought because a petitioner's circumstances may change from one proceeding to the next." 290

Here, Mr. Epstein, who, despite being a *pro se* litigant, is familiar with the NRC's standing requirements by virtue of his involvement in prior proceedings,²⁹¹ fails to provide all of

²⁸⁶ *Id.* at [PDF 9].

²⁸⁷ *Id*.

²⁸⁸ *Id.* at [PDF 16].

²⁸⁹ PPL Bell Bend, LLC (Bell Bend Nuclear Power Plant), CLI-10-7, 71 NRC 133, 138 (2010).

²⁹⁰ *Id.* (emphasis in original); *see also id.* ("[T]he Board correctly found that it may focus only on the support Mr. Epstein presented with respect to *this proceeding* in ruling on his standing to intervene.") (emphasis in original).

Petition at [PDF 17] (Mr. Epstein touting his "thirty five years of experience . . . intervening before . . . the Nuclear Regulatory Commission.").

the information required by 10 C.F.R. § 2.309(d). That regulation provides that a petition for leave to intervene "must" state: (1) the name, address, and telephone number of the requestor or petitioner; (2) the nature of the petitioner's right under the Act to be made a party to the proceeding; (3) the nature and extent of the petitioner's property, financial or other interest in the proceeding; and (4) the possible *effect* of any decision or order that may be issued in the proceeding *on the petitioner's interest*.²⁹² Here, the Petition fails entirely to address this fourth element of Section 2.309(d).

Notably, a prior Commission decision (CLI-05-26) stemming from Mr. Epstein's failed attempt to intervene in a license transfer proceeding involving Peach Bottom Units 2 and 3 underscores the instant Petition's deficiencies. In *Peach Bottom*, the Commission noted that "Mr. Epstein must demonstrate (among other things) that the proposed [action] would injure his financial, property, or other interests." The Commission found, as in this case, that "Mr. Epstein never squarely addresses this 'injury' requirement." In so doing, the Commission noted that Mr. Epstein's involvement in various activities related to the plant, "both personal and through organizations," "do not demonstrate injury," as a "mere intellectual or academic interest in a facility or proceeding is insufficient, in and of itself, to demonstrate standing." 295

Insofar as Mr. Epstein demands proximity standing by virtue of his being an "area resident," he still fails to establish standing to intervene in this proceeding. Again, the

²⁹² 10 C.F.R § 2.309(d) (emphasis added).

Peach Bottom, CLI-05-26, 62 NRC at 579 (citing 10 C.F.R. § 2.309(d); Yankee Atomic Electric Co. (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1, 6 (1996)).

²⁹⁴ Id

²⁹⁵ Id. at 579-80; cf. Bell Bend, CLI-10-7, 71 NRC at 140 ("Mr. Epstein's additional claim that he is on the board of directors of two organizations with interests within 50 miles of the site is likewise insufficiently specific to articulate the requisite pattern of regular contacts with the area.") (citation omitted).

Commission's ruling in *Peach Bottom* is instructive and directly applicable here. In that case, the Commission noted that the threshold question "is whether the kind of action at issue, when considered in light of the radioactive sources at the plant, justifies a presumption that the licensing action 'could plausibly lead to the offsite release of radioactive fission products from ... the ... reactors."²⁹⁶ It emphasized that "[t]he burden falls on the petitioner to demonstrate this."²⁹⁷ If the petitioner fails to show that the subject licensing action raises an "obvious potential for offsite consequences," then the standing inquiry reverts to a "traditional standing' analysis of whether the petitioner has made a specific showing of injury, causation, and redressability."²⁹⁸

In finding that Mr. Epstein had failed to demonstrate that the then-pending license transfers presented "an obvious potential for offsite consequences," the Commission revisited its ruling (CLI-99-4) in the *Zion* license amendment proceeding approximately six years earlier.²⁹⁹ In that case, which involved a license amendment intended to reflect the Zion plants' shutdown and defueled condition, a petitioner sought to establish standing based on the facts that his residence was within 8½ -9 miles of the plant, his children's schooling was within 12 miles, and his own and/or his wife's regular errands and business trips took them to within 1 mile of the plant.³⁰⁰ The Commission affirmed the Board's conclusion that the license amendments at issue

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Peach Bottom, CLI-05-26, 62 NRC at 581 (quoting Commonwealth Edison Co. (Zion Nuclear Power Station, Units 1 & 2), LBP-98-27, 48 NRC 271, 277 (1998), aff'd, CLI-99-4, 49 NRC 185 (1999), petition for review denied, Dienethal v. NRC, 203 F.3d 52 (D.C. Cir. 2000) (table)).

²⁹⁷ *Id*.

²⁹⁸ Id

²⁹⁹ *Id.* at 582-83 (discussing the facts and holding involved in CLI-99-4).

³⁰⁰ Id. at 582 (citing Zion, LBP-98-27, 48 NRC at 273-74, aff'd, CLI-99-4, 49 NRC at 191-93).

created no "obvious potential for offsite consequences" and that "proximity standing" should not be granted.³⁰¹

Like the petitioner in *Zion*, Mr. Epstein has failed to explain how the particular license transfer at issue in *this proceeding* would increase the risk of an offsite release of radioactive fission products or might cause him radiological injury.³⁰² The Commission's rationale for affirming the Board's standing ruling in the *Zion* proceeding applies even more to this case:

Here, given the shutdown and defueled status of the units, the license amendments do not on their face present any "obvious" potential of offsite radiological consequences. All of the fuel at Plant Zion is in the spent fuel pool. The significant nuclear activities still ongoing at Plant Zion are the storage and handling of spent fuel bundles in the pool. Because neither reactor will ever operate again, the scope of activities at the plant has been greatly reduced. Accordingly, "the spectrum of accidents and events that remain credible is significantly reduced." The challenged license amendments, including reductions in crew shift staffing, are based largely on the nonoperational status and concomitant reduced scope of work at the facility. The Licensing Board thus reasonably concluded that "the type accident credibly could of that ... from these license amendments is anything but self-evident. 303

The discussion presented in the LTA, which Mr. Epstein's standing arguments ignore, reinforces his clear failure to identify any "obvious" potential for offsite radiological consequences or radiological injury to him *from the proposed license transfer*. Among other things, the LTA explains that "the proposed transfer will not result in any change in the types, or any increase in the amounts, of any effluents that may be released off-site, and will not cause any increase in individual or cumulative occupational radiation exposure." Indeed, the only

³⁰¹ *Id.* (citing *Zion*, LBP-98-27, 48 NRC at 276, *aff'd*, CLI-99-4, 49 NRC at 191).

³⁰² Zion, CLI-99-4, 49 NRC at 189-90.

³⁰³ Id. at 191-92 (internal citations omitted). As the Commission noted, the risk primarily stemmed from storage of SNF at the site. Id. There is no stored SNF at TMI-2, as it already has been moved to DOE's ISFSI. Thus, the potential for offsite consequences is even more attenuated here.

³⁰⁴ LTA at 14.

changes to the actual license would be administrative in nature—to reflect the name of the new licensee. The proposed license amendment *does not* involve any change in the design or licensing basis, plant configuration, the status of TMI-2, or the requirements of the License. In other words, the proposed transfer would neither authorize, prohibit, nor alter—in any way—the activities permitted to be undertaken by the current licensee under the existing license.

Furthermore, although Mr. Epstein suggests that his interests somehow could be harmed if the NDT were underfunded, he fails to *explain* the basis for this naked assertion. More importantly, he fails to acknowledge or engage with relevant content in the LTA stating that, in such a situation, TMI-2 Solutions would "defer[] active Decommissioning work, if necessary, to preserve or grow NDT funds." Indeed, NRC regulations contemplate that, if an NDT is found to be underfunded, the licensee will "place and maintain the reactor in a safe storage condition." Mr. Epstein does not claim that he somehow could be harmed, or that some "obvious" potential for offsite consequences could result, simply because the facility is placed in a safe storage condition—which is precisely what would happen if the underfunding speculated by Mr. Epstein were to materialize.

Overall, Mr. Epstein's standing claims merely raise generalized historical concerns about the site, and generalized grievances about decommissioning the facility. Petitioners fail entirely to establish a "plausible nexus" between the *specific* license transfer at issue in this proceeding and any harm to Mr. Epstein's alleged interests.³⁰⁹ In other words, they simply have not

³⁰⁵ *Id*.

³⁰⁶ *Id.* (emphasis added).

³⁰⁷ *Id.* at 11.

³⁰⁸ 10 C.F.R. § 50.82(a)(8)(i)(B).

³⁰⁹ Zion, CLI-99-4, 49 NRC at 188.

presented any information or analysis to support a conclusion that the *specific* change in the proposed licensee, here, presents an any potential for offsite consequences—much less an "obvious" one. Notably, the Commission recently rejected standing for a petitioner with a purported academic interest in the proceeding, but no clear connection between the specific proceeding and any alleged radiological harm to the petitioner (precisely like Mr. Epstein), on the basis that the petitioner failed to distinguish its interest from that of a "private attorney general." So too here. Petitioners' generalized grievances, which are not specifically tailored to this proceeding, have failed to demonstrate that Mr. Epstein has either traditional or proximity-based standing.

C. TMIA Has Not Demonstrated Standing

Petitioners assert that TMIA seeks standing to represent two of its members in this proceeding, and that those members' interests extend to "all aspects of [TMI-2]'s radiological decommissioning, spent nuclear fuel management, and site restoration."³¹¹ They also vaguely assert that the "risk to their health and safety, and to their environment, if the site is not fully cleaned up, has been ongoing for 41 years."³¹²

TMIA's representational standing claim fails for the same reasons discussed in Section V.B above. In short, TMIA has failed to identify at least one member who qualifies for standing in his or her own right. Mr. Epstein does not qualify for standing for the reasons set forth above, and neither do TMIA members Joyce Corradi and Patricia Longnecker, whose nearly-identical declarations are attached to the Petition.

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Beaver Valley, CLI-20-5, 92 NRC at __ (slip op. at 9-10) (finding that the petitioner did "not show[] how the posited radiological harm from the license transfer would concretely injure its interests.").

Petition at [PDF 21].

³¹² *Id*.

Both Ms. Corradi and Ms. Longnecker state that they "live within ten miles of Three Mile Island." Petitioners claim, without support, that TMIA's members "will be at risk if there is a shortfall in the [NDT fund] that prevents the site from being fully cleaned up and restored to the original site status." TMIA speculates that underfunding could lead to the site being "abandoned" or "unusable" and therefore "diminish all nearby property values."

Nevertheless, just like Mr. Epstein, Petitioners do not establish a "plausible nexus" between an alleged harm to Ms. Corradi's and Ms. Longnecker's interests and the *specific* license transfer at issue in this proceeding. The Petition fails to engage with the reality that, if the underfunding theorized by TMIA and its members ever came to fruition, the site would be placed in a safe storage condition. They plead no facts, and do not claim, that this outcome (which they do not even acknowledge) somehow could harm their interests. Thus, the Petition fails to demonstrate that an order approving TMI-2 Solutions as the licensee for the facility—and making no other changes to the scope of activities currently authorized under the license—somehow would harm their interests or pose some "obvious" potential for offsite consequences.

In short, given the failure of any TMIA member to identify an injury-in-fact that is plausibly linked to the proposed license transfer, and Petitioners' failure to demonstrate an "obvious" potential for offsite consequences from the specific and limited licensing action at issue here, TMIA has not satisfied the requirements for representational standing.

Corradi Declaration at 2, ¶ 5; Longnecker Declaration at 2, ¶ 5.

Petition at [PDF 21].

³¹⁵ *Id.* at [PDF 28].

Zion, CLI-99-4, 49 NRC at 188; see also id. at 192-93 (noting that the petitioner must show some "plausible chain of causation," some scenario suggesting how these particular license amendments would result in a distinct new harm or threat to him [or her]," and not rely on "conclusory allegations" with "no relation to the license amendments at issue").

D. <u>Petitioners Have Not Demonstrated Entitlement to Discretionary</u> Intervention

Petitioners' alternative request for discretionary intervention under 10 C.F.R. § 2.309(e) also must be rejected.³¹⁷ Pursuant to that regulation, the Commission may consider a request for discretionary intervention where a party lacks standing to intervene as a matter of right under 10 C.F.R. § 2.309(d)(1). However, discretionary intervention may be granted only when at least one petitioner has established standing and at least one contention has been admitted for hearing.³¹⁸ Such is not the case as demonstrated in this filing—Petitioners clearly have failed both to establish standing and proffer an admissible contention, and no other party has submitted an admissible contention.

Furthermore, Petitioners fail to address each of the six factors or criteria enumerated in Section 2.309(e)³¹⁹ and show that a balancing of those factors militates in favor of the Commission's exceptional granting of discretionary intervention status.³²⁰ In support of their request, Petitioners merely aver that Mr. Epstein's participation "will assist in developing a sound record."³²¹ Petitioners do not attempt to explain why that is the case—a significant omission given that Petitioners' proposed contentions were simply copied-and-pasted from another proceeding and raise numerous issues entirely inapplicable to this proceeding.³²² If

³¹⁷ See Petition at [PDF 17].

³¹⁸ 10 C.F.R. § 2.309(e); see also Susquehanna, LBP-07-10, 66 NRC at 21 n.14 ("[D]iscretionary standing [is] only appropriate when one petitioner has been shown to have standing as of right and [there is an] admissible contention so that a hearing will be conducted.").

³¹⁹ See supra note 282.

See Sheffield, ALAB-473, 7 NRC at 744 (requiring potential discretionary intervenor to show "that it is both willing and able to make a valuable contribution to the full airing of the issues . . . in this proceeding").

Petition at [PDF 18].

Petitioners address none of the considerations that NRC tribunals typically have considered as potential indicia of a petitioner's ability to contribute to development of a sound record. Such considerations include: (i) a petitioner's showing of significant ability to contribute on substantial issues of law or fact that will not be otherwise properly raised or presented; (ii) the specificity of such ability to contribute on those substantial issues of law or fact; (iii) justification of time spent on considering the substantial issues of law or fact; (iv) the

Petitioners cannot be bothered to tailor their contentions to the actual proceeding at issue, it seems unlikely they would be capable of assisting in developing a "sound" record here. Indeed, as the Petition, standing declarations, and Attachments clearly demonstrate, Petitioners seek to participate in this proceeding to re-litigate decades-old grievances and raise countless out-of-scope issues. A record littered with such matters would not be "sound." In fact, it would run counter to the Commission's goal of adjudicatory efficiency.

Furthermore, Petitioners fail to demonstrate any subject matter expertise regarding decommissioning or license transfers, either as to technical or financial issues. Indeed, the Petition exposes their lack of understanding of even the most basic concepts related to licensing and corporate structures.³²³ Finally, Petitioners fail to address any of the other discretionary intervention factors specified in Section 2.309(e). The burden of convincing the Commission that a petitioner can make a valuable contribution to the agency's decision-making process lies with the petitioner.³²⁴ Petitioners have not come remotely close to meeting that burden here.

VI. <u>CONCLUSION</u>

As established above, Petitioners have not proffered a contention that satisfies the contention admissibility requirements in 10 C.F.R. § 2.309(f)(1). Petitioners also have not demonstrated standing to intervene. Therefore, the Commission should reject the Petition in its entirety for either or both of these reasons.

ability to provide additional testimony, particular expertise, or expert assistance; and (v) specialized education or pertinent experience. *See Duke Power Co.* (Catawba Nuclear Station, Units 1 & 2), LBP-81-1, 13 NRC 27, 33 (1981) (and cases cited therein); *Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 & 4), LBP-90-24, 32 NRC 12, 16-17 (1990), *aff'd*, ALAB-952, 33 NRC 521, 532 (1991).

³²³ E.g., Petition at [PDF 26 & n.26] (conflating TMI-1 and TMI-2, and failing to understand that they have different licensees); [PDF 56 & n.48] (failing to understand that the TMI-2 ISFSI is owned and operated by DOE and is not within the scope of this proceeding); [PDF 2 n.1, 35, 71 n.63, 76 and 77] (failing to comprehend that the FirstEnergy Companies and TMI-2 were not affected by the bankruptcy involving other formerly-affiliated companies).

³²⁴ See Sheffield, ALAB-473, 7 NRC at 744.

Respectfully submitted,

Executed in Accord with 10 C.F.R. § 2.304(d)

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Dated in Washington, DC this 11th day of May 2020

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of: GPU NUCLEAR, INC., METROPOLITAN EDISON))) Docket No. 50-320-LT)
CO., JERSEY CENTRAL POWER & LIGHT CO.,)
PENNSYLVANIA ELECTRIC CO., and TMI-2)
SOLUTIONS, LLC)
(Three Mile Island Nuclear Station, Unit 2)) May 11, 2020
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CERTIFICATE OF SERVICE

Pursuant to 10 C.F.R. § 2.305, I certify that, on this date, a copy of the foregoing "Applicants' Answer Opposing Petition for Leave to Intervene and Hearing Request Filed by Eric Joseph Epstein and Three Mile Island Alert, Inc." was served through the Electronic Information Exchange (the NRC's E-Filing System), in the above-captioned docket.

Signed (electronically) by Ryan K. Lighty Ryan K. Lighty, Esq. MORGAN, LEWIS & BOCKIUS LLP 1111 Pennsylvania Avenue, N.W. Washington, D.C. 20004 (202) 739-5274 ryan.lighty@morganlewis.com

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