# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

# BEFORE THE COMMISSION

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In the Matters of	)
DTE ELECTRIC COMPANY (Fermi Nuclear Power Plant, Unit 2)	) ) Docket No. 50-341 )
DTE ELECTRIC CO. (Fermi Nuclear Power Plant, Unit 3)	) ) Docket No. 52-033-COL )
DUKE ENERGY CAROLINAS, L.L.C. (William States Lee III Nuclear Station, Units 1 and 2)	) Docket Nos. 52-018-COL ) 52-019-COL
ENTERGY NUCLEAR OPERATIONS, INC. (Indian Point Nuclear Generating Units 1 and 2)	) Docket Nos. 50-247-LR ) 50-286-LR )
FIRSTENERGY NUCLEAR OPERATING CO. (Davis-Besse Nuclear Power Station, Unit 1)	) Docket No. 50-346-LR )
FLORIDA POWER & LIGHT CO. (Turkey Point, Units 6 and 7)	) Docket Nos. 52-040-COL, ) 52-035-COL
LUMINANT GENERATION CO. L.L.C. (Comanche Peak Nuclear Power Plant, Units 3 and 4)	) Docket Nos. 52-034-COL, ) 52-035-COL
NEXTERA ENERGY SEABROOK, L.L.C. (Seabrook Station, Unit 1)	) Docket No. 50-443-LR )
NUCLEAR INNOVATION NORTH AMERICA L.L.C (South Texas Project, Units 3 and 4)	) Docket Nos. 52-012-COL, ) 52-013-COL
PACIFIC GAS & ELECTRIC CO. (Diablo Canyon Nuclear Power Plant, Units 1 and 2)	) Docket Nos. 50-275-LR, ) 50-323-LR
PROGRESS ENERGY FLORIDA, INC. (Levy County Nuclear Power Plant, Units 1 and 2)	) Docket Nos. 52-029-COL, ) 52-030-COL )

SOUTH TEXAS PROJECT NUCLEAR OPERATING CO. (South Texas Project, Units 1 and 2)	) Docket Nos. 50-498-LR, ) 50-499-LR
TENNESEE VALLEY AUTHORITY (Bellefonte Nuclear Power Plants, Units 3 and 4)	) Docket Nos. 52-014-COL, ) 52-015-COL
TENNESSEE VALLEY AUTHORITY (Sequoyah Nuclear Plant, Units 1 and 2)	) Docket Nos. 50-327-LR, ) 50-328-LR
TENNESSEE VALLEY AUTHORITY (Watts Bar Nuclear Plant, Unit 2)	) Docket No. 50-391-OL
UNION ELECTRIC CO. (Callaway Nuclear Power Plant, Unit 1)	) Docket No. 50-483-LR
VIRGINIA ELECTRIC AND POWER CO. d/b/a DOMINION VIRGINIA POWER and OLD DOMINION ELECTRIC COOPERATIVE (North Anna Power Station, Unit 3)	) Docket No. 52-017-COL ) ) ) _ )

### NRC STAFF CONSOLIDATED ANSWER TO PETITIONS TO SUSPEND FINAL REACTOR LICENSING DECISIONS, MOTIONS TO ADMIT A NEW CONTENTION, <u>AND MOTIONS TO REOPEN THE RECORD</u>

L. Sheldon Clark Counsel for NRC Staff

October 31, 2014

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### **INTRODUCTION**

Pursuant to 10 C.F.R. § 2.323(c) and the October 7, 2014, Commission Memorandum

and Order,<sup>1</sup> the staff of the U.S. Nuclear Regulatory Commission (Staff) hereby provides its

consolidated answer to filings submitted by Petitioners in the captioned proceedings on

September 29, 2014.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> DTE Elec. Co. (Fermi Nuclear Power Plant, Unit 3), CLI-14-09, 80 NRC \_\_ (Oct. 7, 2014) (slip op.).

<sup>&</sup>lt;sup>2</sup> The Petitioners in the captioned proceedings filed substantively identical filings that vary in their pagination. In order to provide consistency, the NRC Staff refers to the pagination in the filings submitted in the *South Texas Project* License Renewal proceeding. *See*, Petition to Suspend Final Decisions in All Pending Reactor Licensing Proceedings Pending Issuance of Waste Confidence Safety Findings (Sept. 29, 2014) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14272A615); Petitioner's Motion for Leave to File a New Contention Concerning the Absence of

The Petitioners' filings are as follows. The suspension petition (Petition) requests the suspension of final decisions in reactor licensing proceedings for the issuance of renewed licenses (LR), combined licenses (COLs), and operating licenses (OLs).<sup>3</sup> The motion for leave to file a new contention (New Contention)<sup>4</sup> requests admission of a contention asserting that the Nuclear Regulatory Commission (Commission or NRC) has failed to make findings required by the Atomic Energy Act (AEA) associated with spent nuclear fuel (SNF) disposal. The motion to reopen the record (Motion to Reopen), which was filed in several proceedings, requests reopening of closed proceedings, and was filed on some dockets with supporting affidavits. The Petitioners' submissions, as described below, do not satisfy the relevant legal requirements for suspending or staying proceedings, admitting a contention, or reopening the record in a closed proceeding. Accordingly, the Petitioners' requests should be denied.

#### PROCEDURAL BACKGROUND

On August 31, 1984, the Commission issued its Waste Confidence Decision (WCD).<sup>5</sup>

Therein, the Commission made five central findings of "reasonable assurance" that:

Required Waste Confidence Safety Findings in the Licensing Proceeding at South Texas Project Electric Generating Station Units 1 and 2 (Sept. 29, 2014) (ADAMS Accession No. ML14272A614) (filed in the South Texas license renewal docket). In some proceedings, petitioners also filed motions to reopen the record. *See, e.g.,* Motion to Reopen the Record for South Texas Project Units 1 & 2 Nuclear Power Plant (Sept. 29, 2014) (ADAMS Accession No. ML14272A609).

<sup>3</sup> From a procedural standpoint, the captioned proceedings can be divided into three categories. 1) In eight proceedings (*Watts Bar* OL, *South Texas Project* LR, *Sequoyah* LR, *Callaway* LR, *Levy County* COL, *North Anna* COL, *Comanche Peak* COL, and *William States Lee III* COL), other than the instant filing, there are no adjudicatory matters pending before either the Commission or the Licensing Board; 2) In seven proceedings (*Turkey Point* COL, *Bellefonte* COL, *Fermi* LR, *Indian Point* LR, *Diablo Canyon* LR, *Seabrook* LR, and *Davis-Besse* LR), there are other admitted or proposed contentions pending before a Licensing Board; and 3) in two proceedings (*Fermi* COL and *South Texas* COL), there are no admitted or proposed contentions pending before a Licensing Board; and 3) in two proceedings (*Fermi* COL and *South Texas* COL), there are no admitted or proposed contentions pending before a Licensing Board; but there are matters (e.g., petitions for review) pending before the Commission.

<sup>4</sup> In the Fermi license renewal proceeding, Petitioners filed a motion to amend and supplement an already filed contention. See Petitioners' Motion for Leave to Amend and Supplement Contention 3 Concerning the Absence of Required Waste Confidence Safety Findings in the Relicensing Proceeding for Fermi 2 Nuclear Power Plant," (Sept. 29, 2014) (ADAMS Accession No. ML14272A275).

<sup>5</sup> Waste Confidence Decision, 49 Fed. Reg. 34,658 (Aug. 31, 1984).

(1) [S]afe disposal of high level radioactive waste [(HLW)] and [SNF] in a mined geologic repository is technically feasible.

(2) [O]ne or more mined geologic repositories for commercial [HLW] and [SNF] will be available by the years 2007-2009, and that sufficient repository capacity will be available within 30 years beyond the expiration of any reactor operating license to dispose of existing commercial [HLW] and [SNF] originating in such reactor and generated up to that time.

(3) [HLW] and [SNF] will be managed in a safe manner until sufficient repository capacity is available to assure the safe disposal of all [HLW] and [SNF].

(4) [I]f necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 30 years beyond the expiration of that reactor's operating license at that reactor's spent fuel storage basin, or at either onsite or offsite independent spent fuel storage installations [(ISFSIs)].

(5) [S]afe independent onsite or offsite spent fuel storage will be made available if such storage capacity is needed.<sup>6</sup>

In 1990, the Commission issued an update to the WCD, in which it revised Findings (2)

and (4), finding reasonable assurance that:

(2) [A]t least one mined geologic repository will be available within the first quarter of the twenty-first century, and that sufficient repository capacity will be available within 30 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of any reactor to dispose of the commercial [HLW] and [SNF] originating in such reactor and generated up to that time.

(4) [I]f necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 30 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of that reactor at its spent fuel storage basin, or at either onsite or offsite [ISFSIs].<sup>7</sup>

In 1999, the Commission again reviewed the WCD, and left it in place without revision.<sup>8</sup>

<sup>&</sup>lt;sup>6</sup> *Id.* at 34,659-60.

<sup>&</sup>lt;sup>7</sup> Waste Confidence Decision Review, 55 Fed. Reg. 38,474 (Sept. 18, 1990) (emphasis added).

<sup>&</sup>lt;sup>8</sup> Waste Confidence Decision Review: Status, 64 Fed. Reg. 68,005, 68,006-07 (Dec. 6, 1999).

In 2010, following its consideration of public comments on a proposed rule, the Commission adopted a second update to the WCD.<sup>9</sup> Therein, the Commission (a) reaffirmed three of its previous WCD Findings, and (b) updated WCD Findings (2) and (4), finding reasonable assurance that:

(2) [S]ufficient mined geologic repository capacity will be available to dispose of the commercial [HLW and SNF] when necessary.

(4) [I]f necessary, spent fuel generated in any reactor can be stored safely without significant environmental impacts for at least 60 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of that reactor in a combination of storage in its spent fuel storage basin or at either onsite or [ISFSIs].<sup>10</sup>

Based on these findings, the Commission then amended 10 C.F.R. § 51.23(a) titled "Temporary storage of spent fuel after cessation of reactor operation—generic determination of no significant environmental impact," and known as the Temporary Storage Rule (TSR).<sup>11</sup>

The Commission's 2010 revision of 10 C.F.R. § 51.23(a) was challenged by several

petitioners before the U.S. Court of Appeals for the District of Columbia Circuit. On June 8,

2012, the court rendered its decision in New York v. NRC, 681 F.3d 471 (D.C. Cir. 2012), in

which it held, inter alia, that the Commission's 2010 WCD Update and its revision of 10 C.F.R.

§ 51.23(a) were invalid. Specifically, the court found that the Commission's evaluation of the

risks of spent nuclear fuel was deficient in that: (a) the Commission's conclusion that

permanent storage will be available when necessary "did not calculate the environmental effects

of failing to secure permanent storage,"<sup>12</sup> and (b) its determination that spent fuel can safely be

<sup>&</sup>lt;sup>9</sup> Waste Confidence Decision Update, 75 Fed. Reg. 81,037 (Dec. 23, 2010).

<sup>&</sup>lt;sup>10</sup> *Id.* at 81,038 (emphasis added).

<sup>&</sup>lt;sup>11</sup> Consideration of Environmental Impacts of Temporary Storage of Spent Fuel After Cessation of Reactor Operation 75 Fed. Reg. 81,032 (Dec. 23, 2010) (Final Rule) (Emphasis added).

<sup>&</sup>lt;sup>12</sup> New York v. NRC, 681 F.3d at 471-473; *cf. id.* at 478-79.

stored at nuclear plant sites for sixty years after the expiration of the plant's license "failed to properly examine future dangers and key consequences,"<sup>13</sup> by not properly examining "the risk of [spent fuel pool] leaks" and "the potential consequences of pool fires."<sup>14</sup> On this basis, the court vacated the Commission's WCD Update and Temporary Storage Rule, and remanded the matter to the Commission.<sup>15</sup>

The court's ruling in *New York v. NRC* prompted the filing of new contentions in various NRC proceedings. On August 7, 2012, the Commission issued CLI-12-16, in which it announced that it "will not issue licenses dependent upon the [WCD] or Temporary Storage Rule until the court's remand is appropriately addressed."<sup>16</sup> Further, the Commission stated that "[t] o the extent that [it] takes action with respect to waste confidence on a case-by-case basis, litigants can challenge such site-specific agency actions" in NRC adjudications; and it directed affected Atomic Safety and Licensing Boards (Boards) to hold all of the newly filed waste confidence/temporary storage contentions in abeyance pending further Commission order.<sup>17</sup>

Following its issuance of a generic environmental impact statement (GEIS) and affirmation of a revised rule codifying its generic determinations regarding the environmental impacts of continued spent fuel storage beyond a reactor's licensed operating life ("continued

<sup>15</sup> *Id.* at 483.

<sup>16</sup> Calvert Cliffs 3 Nuclear Project, LLC & Unistar Nuclear Operating Services, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-12-16, 76 NRC 63, 67 (Aug. 7, 2012).

<sup>17</sup> *Id.* at 67-69, *citing Union Elec. Co. d/b/a Ameren Missouri* (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 168-71 (2011).

<sup>&</sup>lt;sup>13</sup> *Id.* at 473; *cf. id.* at 478-79.

<sup>&</sup>lt;sup>14</sup> *Id.* at 479; *cf. id.* at 481-82.

storage"),<sup>18</sup> on August 26, 2014, the Commission issued its decision in CLI-14-08.<sup>19</sup> Therein, the Commission held that the GEIS and revised rule cured the deficiencies identified by the New York Court, adopted the revised rule, and lifted its suspension of final licensing decisions based on the revised rule and supporting GEIS. In addition, the Commission dismissed the long term storage/waste confidence-related contentions in seven COL and license renewal proceedings and terminated those proceedings; it directed the Boards in all proceedings other than *Indian Point<sup>20</sup>* to reject the spent fuel storage/waste confidence contentions pending before them; and it directed the *Indian Point* Board to dismiss the contentions pending before it to the extent that they are resolved by the Commission's generic determinations and to resolve all other portions of those contentions in accordance with the contention admissibility standards in 10 C.F.R. § 2.309(c) and (f).

On September 19, 2014, the Commission published the final Continued Storage Rule and supporting GEIS in the *Federal Register*.<sup>21</sup> Subsequently, Petitioners filed their Petition, New Contention, and Motion to Reopen<sup>22</sup> in numerous individual license renewal, COL, and OL

<sup>19</sup> Calvert Cliffs 3 Nuclear Project, LLC, & Unistar Nuclear Operating Services, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-14-08, 80 NRC (Aug. 26, 2014) (slip op.).

<sup>20</sup> Calvert Cliffs, CLI-14-08, 80 NRC at \_ (Aug. 26, 2014) (slip op. at 10).

<sup>21</sup> Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel, 79 Fed. Reg. 56,263 (Sept. 19, 2014); Continued Storage of Spent Nuclear Fuel, 79 Fed. Reg. 56,238 (Sept. 19, 2014) (Final Rule). The rule became effective on October 20, 2014. 79 Fed. Reg. at 56,238.

<sup>&</sup>lt;sup>18</sup> See NUREG-2157, Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel (Aug. 2014) (ADAMS Accession No. ML14188B749) (GEIS) (NUREG-2157). The Final Report of NUREG-2157 is available in two volumes at ADAMS Accession No. ML14196A105 and ML14196A107 (Sept. 2014).

<sup>&</sup>lt;sup>22</sup> On October 1, 2014, on some dockets, Petitioners submitted a set of errata to their Petition to remove references to two organizations erroneously listed as participating in the Petition. See, e.g., Errata to Petition to Suspend Final Decisions in All Pending Reactor Licensing Proceedings Pending Issuance of Waste Confidence Safety Findings (Oct. 1, 2014) (ADAMS Accession No. ML14274A547) (filed in the Levy COL docket). Petitioners in the Levy COL proceeding filed a motion to withdraw their Motion to Reopen on October 2, 2014, because the Board had not yet closed the record in that proceeding. See Intervenors' Unopposed Motion to Withdraw Their Motion to Reopen the Record (Oct. 2, 2014) (ADAMS Accession No. ML14275A224). Staff does not oppose that motion.

proceedings on September 29, 2014. On October 20, 2014, the Continued Storage Rule became effective.

### DISCUSSION

The Petition, New Contention, and Motion to Reopen fail to meet the applicable Commission requirements for the reasons discussed in the following sections. Each of these should, therefore, be dismissed.

I. The Petition Does Not State a Sufficient Basis for Suspending or Staying Final Decisions in Reactor Licensing Proceedings

Petitioners' suspension request is based on a legal argument that the NRC has not made required findings under the AEA in connection with the disposal of spent nuclear reactor fuel before it may issue reactor licenses. However, the Petitioners failed to address, much less satisfy, the legal standards that apply to this extraordinary remedy.<sup>23</sup> The Petition also may be understood as a request for an adjudicatory stay of reactor licensing decisions. To the extent that the Petition constitutes a stay request, it does not address or meet the well-established criteria for justifying a stay. Furthermore, the Commission has adequate regulatory means to address any unlikely disposal-related risk to the public health and safety. As detailed below, therefore, Petitioners' suspension request should be denied.

A. Petitioners Have Not Established a Proper Legal Basis for Suspending Final Decisions in Reactor Licensing Proceedings

When determining whether to suspend a proceeding, the Commission considers "whether moving forward with the adjudication will jeopardize the public health and safety, prove an obstacle to fair and efficient decision making, or prevent appropriate implementation of any

<sup>&</sup>lt;sup>23</sup> See Fermi, CLI-14-07, 80 NRC at \_\_\_\_, \_\_\_ (July 17, 2014) (slip op. at 8), *quoting Union Elec. Co. d/b/a Ameren Missouri* (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 158 (2011) ("Suspending a proceeding is a 'drastic action' that we will not take 'absent immediate threats to public health and safety, or other compelling reason."")

pertinent rule or policy changes."<sup>24</sup> Absent some immediate threat to public health and safety, the Commission is reluctant to suspend proceedings in light of the "substantial public interest in efficient and expeditious administrative proceedings."<sup>25</sup>

Petitioners have not shown that moving forward with reactor licensing proceedings will jeopardize the public health and safety.<sup>26</sup> Indeed, Petitioners' request is based on a legal argument, not a factual argument related to circumstances where public health and safety is immediately implicated. The need to dispose of SNF, the issue to which the Petitioners' claims are directed, is not imminent for any of the captioned facilities. Moreover, currently-operating reactors that may have their licenses renewed are already safely storing spent nuclear fuel onsite, and new facilities that are not yet licensed (or that may be licensed during the pendency of resolving Petitioners' claims) will not have an imminent need to dispose of SNF.<sup>27</sup> Petitioners have presented no evidence that permanent disposal is currently necessary, or that AEA

<sup>&</sup>lt;sup>24</sup> Duke Energy Corp. (McGuire Nuclear Station Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-01-27, 54 NRC 385, 389-90 (2001) (McGuire-Catawba), *quoting Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC 376, 380 (2001) (PFS).

<sup>&</sup>lt;sup>25</sup> *Duke Energy Corp.* (Oconee Nuclear Station Units 1, 2 & 3), CLI-99-11, 49 NRC 328, 339 (1999), *quoting Duke Power Co.*(Catawba Nuclear Station, Units 1 & 2), 17 NRC 1041, 1048 (1983) (citing *WSTE-TV, Inc. v. FCC*, 566 F.2d 333, 337 (D.C. Cir. 1977)).

<sup>&</sup>lt;sup>26</sup> In certain proceedings where Petitioners filed a Motion to Reopen, they also submitted declarations alleged to include information supporting their claims that the motion raises a significant safety issue. *See, e.g.*, Declaration of Dr. Arjun Makhijani In Support of Motions to Reopen the Record of NRC Reactor Licensing and Re-Licensing Proceedings (Sept. 29, 2014) (ADAMS Accession No. ML14272A636) (filed in the William S. Lee III COL docket). Notably, the Petition does not reference any of these declarations. The declarations are voluminous and pertain largely to claims of economic harms and safety risks in the distant future. Not only do these declarations not address immediate threats to public health and safety, but their lengthy and unspecified claims contradict longstanding Commission precedent that information incorporated by reference should not force a reader to "sift through it in search of asserted factual support." *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301, 332 (2012).

<sup>&</sup>lt;sup>27</sup> See NUREG-1801, Rev. 2 *Generic Aging Lessons Learned Report* at VII.A2 (Dec. 2010) (ADAMS Accession No. ML103490041); see also 10 C.F.R. § 72.240(b) (conditions for spent fuel storage cask renewal include submission of aging analyses demonstrating continued safety for extended operation and a description of the aging management program to be used to ensure that aging does not affect the safety function of components).

findings regarding disposal are needed prior to licensing a reactor, to avoid jeopardizing public health and safety, or that it will become so in the immediate future.

Past instances where the Commission has declined to suspend a proceeding reinforce the high bar that exists for this remedy. Indeed, the Commission did not find this threshold met even where, in contrast to Petitioners' present request, an immediate threat to the public health and safety was alleged. In one recent example, the Commission denied a petition to suspend reactor licensing decisions following the earthquake and tsunami events affecting the power plants at Fukushima Daiichi.<sup>28</sup> Additionally, following two other events in the United States with potential implications for reactor licensing, namely the Three Mile Island accident and the terrorist attacks on September 11, 2001, the Commission declined to suspend pending adjudications.<sup>29</sup> Given that the Commission did not consider suspending reactor licensing decisions to be justified even following these events, where immediate public health and safety threats were alleged, no reading of the Petition justifies granting such a remedy.

Not only have Petitioners failed to show that proceeding with reactor licensing represents any immediate threat to public health and safety, they also have not addressed or shown sufficient legal authority to justify a suspension of licensing. The Commission's decision to suspend licensing decisions in light of the holding in *New York v. NRC* was predicated on the D.C. Circuit's invalidation of generic environmental findings underpinning reactor licensing. Petitioners' own generalized arguments regarding the AEA's requirements provide no similarly conclusive basis to support an extraordinary remedy like the suspension of reactor licensing.<sup>30</sup> Moreover, the Commission's recent decision to lift the suspension on final reactor licensing decisions—following a multi-year process in which the agency developed the legal and technical

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<sup>&</sup>lt;sup>28</sup> Union Elec. Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 166 (2011).

<sup>&</sup>lt;sup>29</sup> See *McGuire-Catawba*, CLI-01-27, 54 NRC at 390; *PFS*, CLI-01-26, 54 NRC at 381-82.

<sup>&</sup>lt;sup>30</sup> See *infra* at 15-18.

bases for the Continued Storage Rule, developed a multi-volume supporting analysis in the GEIS, and engaged in substantial public outreach and thorough response to public comments reflects a deliberate determination that the Continued Storage Rule and the GEIS satisfy the court's concerns in *New York v. NRC* and are legally sufficient to resume making final decisions in reactor licensing proceedings. For these reasons, the Petitioners have shown no legally sufficient basis to grant the Petition; it should be dismissed.

### B. The Petition Does Not Satisfy the Requirements for Staying Final Reactor Licensing Decisions

The Petitioners have also provided no arguments to justify a stay under 10 C.F.R. § 2.342(e). In effect, the Petition seeks a stay of the Commission's decision in CLI-14-08 lifting the suspension of final reactor licensing decisions. Under 10 C.F.R. § 2.342(e), the factors used to analyze whether a stay is appropriate are (1) whether the moving party has made a strong showing that it is likely to prevail on the merits, (2) whether the party would be irreparably injured absent the stay, (3) whether the granting of the stay would harm other parties, and (4) where the public interest lies. The most important factor is irreparable harm,<sup>31</sup> and a party urging a stay must show that any irreparable harm is imminent, certain, and great.<sup>32</sup> The Commission has stated that non-specific claims such as "raising the specter of a nuclear accident' does not demonstrate irreparable harm."<sup>33</sup> Absent any showing of irreparable harm, the moving party must make an overwhelming showing of the likelihood of success on the merits.<sup>34</sup>

<sup>33</sup> Id.

<sup>&</sup>lt;sup>31</sup> Sequoyah Fuels Corp. & General Atomics (Gore, Oklahoma Site), CLI-94-9, 40 NRC 1, 6 (1994).

<sup>&</sup>lt;sup>32</sup> Entergy Nuclear Vermont Yankee LLC & Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), CLI-06-8, 63 NRC 235, 237-38 (2006) (quoting Massachusetts Coalition of Citizens with Disabilities v. Civil Defense Agency, 649 F.2d 71, 75 (1st Cir. 1981)).

<sup>&</sup>lt;sup>34</sup> Sequoyah, CLI-94-9, 40 NRC at 6.

Petitioners have not even addressed any of the four stay factors and have also not demonstrated that they are entitled to a stay. With respect to the irreparable harm standard, Petitioners have not shown any harm, much less irreparable harm, in the absence of a stay in any particular proceeding. Refusing to grant the stay here will not harm Petitioners because for most pending new reactor applications the operation of the proposed reactors (let alone the end of licensed operation and the need for permanent disposal) is still years in the future, while operating plants that seek license renewal are safely storing spent nuclear fuel onsite, and both new and operating reactor licensees must also show that SNF will be safely stored onsite during the period of licensed operation.<sup>35</sup> The need for disposal for new facilities and currently operating reactors is, therefore, distant in time and the NRC's comprehensive regulatory framework, as discussed infra at 27-29, demonstrates the NRC's ability to make whatever findings are required under the AEA or other statutes regarding spent fuel disposal, at the appropriate time. Petitioners will not be harmed by having their concerns adjudicated through the NRC's standard hearing procedures, without an extraordinary stay on the effectiveness of licensing decisions put in place, because there is no likelihood that any harm will occur during the adjudication of their claims. In the extremely unlikely event that a health or safety threat related to the disposal of SNF arises—during the pendency of resolving Petitioners' New Contention or any subsequent period—the Commission has sufficient means in place to appropriately respond to ensure adequate protection of public health and safety.<sup>36</sup>

Petitioners also have not shown that they are likely to prevail on the merits in any particular case because they merely raise a series of legal assertions, ones which are contrary to applicable regulatory history and case law and the Commission's recent determination that

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<sup>&</sup>lt;sup>35</sup> *Cf. Vermont Yankee*, CLI-06-8, 63 NRC at 237-38 (showing irreparable harm is the most important factor).

<sup>&</sup>lt;sup>36</sup> See, e.g., 10 C.F.R. § 2.202.

the Continued Storage Rule and GEIS are sufficient to lift the suspension on final licensing decisions. Given the absence of any showing of imminent irreparable harm if the Petition is not granted, the public interest is not served by creating greater expense and uncertainty by delaying final reactor licensing decisions where no countervailing benefit exists. For these reasons, Petitioners have not shown that they are entitled to a stay of final licensing decisions.

### II. Petitioners' Contention that the NRC Has Failed to Make Required AEA Findings in Connection with Disposal of SNF is Invalid and Inadmissible

#### A. <u>Summary</u>

As explained below, Petitioners have incorrectly characterized the legal and regulatory history relevant to whether the NRC must make findings under the AEA on disposal of spent nuclear fuel.<sup>37</sup> Further, the history cited by Petitioners does not support their assertion that the Commission's recent issuance of the Continued Storage Rule and GEIS left a gap in findings required under the AEA that should bar the NRC from issuing final licenses for reactors.

Significantly, the NRC is not required by the AEA, or any judicial precedent, to make explicit findings regarding spent fuel disposal before issuing a license (or renewed license) for power reactors. Rather, all licensing decisions made under the NRC's regulatory framework already address health and safety of the public in this regard, to the extent the Commission deems necessary. Section 103.d. of the AEA prohibits the Commission from issuing a license

<sup>&</sup>lt;sup>37</sup> The Petitioners do not use consistent terminology to describe the findings they assert are required by the AEA with respect to SNF disposal. For example, they assert that "the Waste Confidence findings ... included both general safety findings and supporting technical analysis." New Contention at 7-8. The Petitioners quote the 1984 Waste Confidence Findings 1 and 2, which they characterize as "address[ing] both the technical feasibility of siting a repository and the sufficiency of repository capacity." New Contention at 6. In addition, they refer to "technical findings of 'reasonable assurance,'" "definitive findings about the safety of repository disposal," "predictive findings regarding the ultimate safety of spent fuel disposal," and "AEA safety findings." New Contention at 7–9. The Petitioners assert these findings are required pursuant to AEA sections 103.d., 161.b., and 182.a. New Contention at 4-5. But as discussed in more detail below, the NRC has previously determined that the AEA does not require findings regarding SNF disposal prior to reactor licensing. *See* Denial of Petition for Rulemaking, 42 Fed. Reg. 34,391 (July 5, 1977) (hereafter PRM Denial). However, for consistency in responding to the diverse terms employed in the Petitioners' pleadings, the Staff's Response will generally refer to findings under the AEA regarding disposal.

"if, in the opinion of the Commission, the issuance of a license ... would be inimical to the common defense and security or to the health and safety of the public."<sup>38</sup> Petitioners assert that the NRC has "interpreted the AEA to require Waste Confidence safety findings" since 1977.<sup>39</sup> That assertion is incorrect. To the contrary, the Commission has previously determined that the NRC is **not** required under the AEA to make findings regarding disposal before licensing nuclear reactors.<sup>40</sup> If the Commission had determined that such findings were necessary as a condition for reactor licensing, it would have instructed the Staff to commence a rulemaking to address those findings in the relevant regulatory provisions when it approved the NRC's departure from prior Waste Confidence Decisions in the GEIS and final Continued Storage Rule.<sup>41</sup>

While not required by the AEA, the Commission historically expressed a policy that it would not license reactors unless it believed wastes generated by the reactor could be disposed of safely when necessary.<sup>42</sup> The Waste Confidence Decision historically embodied that policy,<sup>43</sup> but the Commission has not changed that policy. Although a departure from the Waste Confidence Decisions of the past, the Continued Storage GEIS and rule expands on those prior Waste Confidence efforts using the NEPA process to provide the public with the most complete picture to date of the environmental impacts of post-reactor-operation safe spent fuel management. While the Continued Storage GEIS fulfills the NRC's NEPA obligations to examine the environmental impacts of continued storage, nothing in the revised rule or GEIS is

- <sup>40</sup> See PRM Denial at 34,391-92 (emphasis added).
- <sup>41</sup> 79 Fed. Reg. at 56,263; 79 Fed. Reg. at 56,238.
- <sup>42</sup> See PRM Denial at 34,393.
- <sup>43</sup> See, e.g., 49 Fed. Reg. at 34,658.

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<sup>&</sup>lt;sup>38</sup> The Atomic Energy Act of 1954, as amended, § 103d., 42 U.S.C. § 2133 (2005).

<sup>&</sup>lt;sup>39</sup> New Contention at 7.

inconsistent with the Commission's longstanding policy of only licensing reactors if wastes generated by the reactor can be disposed of safely when necessary.

Finally, over the last thirty years, the NRC has developed a comprehensive regulatory framework for the storage and disposal of spent nuclear fuel, and the framework undergirds that longstanding policy. These developments in the NRC's regulatory framework, reinforced by the Commission's consistent position that explicit findings regarding spent fuel disposal are unnecessary prior to reactor licensing, are fatal to the Petitioners' claims.

Because the NRC is not required to make the findings that the Petitioners claim are needed, their New Contention is inadmissible under the NRC's rules of practice: The Petitioners' claim does not relate to any findings the NRC must make in granting, denying, or renewing a reactor license and, as a result, is also outside the scope of these adjudicatory proceedings.<sup>44</sup> The New Contention also does not raise a genuine dispute with the particular applications in the many proceedings that it was filed, as it does not specify any allegedly deficient content in—or omission from—any particular application as 10 C.F.R. §2.309(f)(1)(vi) requires.<sup>45</sup> For these reasons, the New Contention should be dismissed.

### B. The AEA Does Not Require Findings Regarding Disposal Prior to Issuance of <u>Reactor Operating Licenses</u>

In 1976, the Natural Resources Defense Council (NRDC) petitioned the Commission to determine, through rulemaking, whether spent fuel can be disposed of without "undue risk to the public health and safety" and to cease granting operating licenses until that definitive finding is

<sup>&</sup>lt;sup>44</sup> 10 C.F.R. § 2.309(f)(1)(iii) and (iv).

<sup>&</sup>lt;sup>45</sup> See Seabrook, CLI-12-5, 75 NRC at 323 (When large portions of a contention are taken from one or more other NRC proceedings it is especially important to "ensure the existence of a genuine material dispute with [the] *particular* application".) (emphasis in original). The Amended and Supplemented contention filed in the Fermi 2 license renewal proceeding is also inadmissible because it is not based on new and materially different information from information previously available. See 10 C.F.R. § 2.309(c)(1)(i)-(iii). Instead, the initial contention cited to the same cases (*NRDC v. NRC*, *NewYork v. NRC*, and *Minnesota v. NRC*) and made the same substantive claim that the NRC must make waste confidence safety findings in the Fermi 2 relicensing proceeding.

made.<sup>46</sup> Similar to Petitioners' position here, NRDC argued that the AEA and NRC regulations

require such a determination. In 1977, the Commission denied that petition and set forth its

interpretation of the AEA as it relates to the production, storage, and disposal of spent fuel:

[T]he Atomic Energy Act clearly requires that some kind of safety finding be made prior to issuance of an operating license for a nuclear power reactor. ... It seems clear, however, that the statutory findings required by section 103 [of the Act] apply specifically to the "proposed activities" and "activities under such licenses." These activities include some interim storage activities for spent fuel. They do not include the permanent disposal of highlevel wastes though wastes are, in fact, generated by operation of the reactor.

...

The emphasis [in section 182] on information pertaining to the facility and applicant to be licensed is especially-significant. No such information is required regarding high-level waste disposal facilities. Such information would be necessary were the Commission to make the detailed safety finding regarding high-level waste disposal activities requested by petitioner.<sup>47</sup>

Thus, the scope of the NRC's regulatory authority for licenses issued under the AEA is limited to

the proposed activities that would be authorized by the requested license.

Nevertheless, the Commission assured the petitioner, NRDC, and the public that

[t]he Commission would not continue to license reactors if it did not have reasonable confidence that the wastes can and will in due course be disposed of safely. The accumulating evidence ... continues to support the Commission's implicit finding of reasonable assurance that methods of safe permanent disposal of high-level wastes can be available when they are needed.<sup>48</sup>

Thus, as matter of policy, the NRC will not license a reactor if it did not believe that the wastes

<sup>&</sup>lt;sup>46</sup> See PRM Denial.

<sup>&</sup>lt;sup>47</sup> PRM Denial at 34,391–92 (internal citations omitted).

<sup>&</sup>lt;sup>48</sup> *Id.* at 34,392. The Staff notes that the analysis in Appendix B of the Continued Storage GEIS documents the current status of the scientific consensus on spent fuel disposal in a geologic repository; it explains that such disposal remains technically feasible. *See* NUREG-2157, Vol. 1, Final Report, *Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel*, at Appendix B (Sept. 30, 2014) (ADAMS Accession No. ML14196A105) (GEIS) (NUREG-2157 Vol. 1).

can safely be disposed of when necessary.

The Petitioners here assert that this discussion of Commission policy constitutes an agency interpretation that the AEA requires a finding regarding the spent fuel disposal prior to reactor licensing.<sup>49</sup> The Petitioners are mistaken. The Commission explicitly interpreted the AEA **not** to require such findings, but assured the public that the Commission, as a matter of policy,<sup>50</sup> would not issue licenses if it believed spent fuel could not be disposed of in due course.

NRDC appealed the Commission's denial to the Second Circuit. Rejecting NRDC's claims of an AEA-based obligation to make such explicit findings, that court held that the petitioners "simply read[] too much into the AEA."<sup>51</sup> Noting that the Atomic Energy Commission found no such requirement in the AEA, and being unable to find "any doubt over the intent of Congress (1) not to require NRC to make the definitive determination requested by NRDC and (2) not to require a moratorium on nuclear power reactor licensing pending an affirmative determination,"<sup>52</sup> the court held that:

[The] NRC is **not** required ... to withhold action on pending or future applications for nuclear power reactor operating licenses until it makes a determination that high-level radioactive wastes can be permanently disposed of safely.<sup>53</sup>

The Petitioners suggest that the Second Circuit conditioned its decision on the Commission's

<sup>49</sup> New Contention at 6.

<sup>50</sup> See Consideration of Environmental Impacts of Temporary Storage of Spent Fuel After Cessation of Reactor Operation, 75 Fed. Reg. 81,032, 81,032-33 (Dec. 23, 2010) (Final Rule).

<sup>51</sup> NRDC v. NRC, 582 F.2d 166, 171 (2nd Cir. 1978).

<sup>52</sup> *Id.* at 174.

<sup>53</sup> Id. at 175 (emphasis added). Addressing the possibility of doubt, the NRDC court said "if there were any doubt ... we are persuaded that the matter was laid to rest by enactment of the Energy Reorganization Act of 1974." Id. at 174 (citations omitted). See also Minnesota v. NRC, 602 F.2d 412, 417 (D.C. Cir. 1979) ("The NRC's decision [in the PRM Denial] was one of statutory interpretation, concluding that Congress did not intend in enacting the Atomic Energy Act to require a demonstration that nuclear wastes could be safely disposed of before licensing of nuclear plants was permitted. The Second Circuit affirmed on this basis.")

implicit finding of reasonable assurance. In support of that assertion, the Petitioners misquote a portion of the Second Circuit's opinion,<sup>54</sup> which says "NRC maintains that ... its long-continued regulatory practice ... is in accord with the intent of Congress underlying the AEA and [Energy Reorganization Act].<sup>55</sup> The Petitioners incorrectly characterize that discussion, describing it as the Second Circuit's conclusion, and omit the crucial words "NRC maintains" from the quote.<sup>56</sup> Contrary to the Petitioners' claims, although *NRDC* upheld NRC's practices, it did not conclude that the NRC's practices were "in accordance with" or required under the AEA. Rather "Congress expressly recognized and impliedly approved NRC's regulatory scheme and practice under which the safety of interim storage of high-level wastes at commercial nuclear power reactor sites has been determined separately from the safety of Government-owned permanent storage facilities which have not, as yet, been established.<sup>67</sup> Further, even if the AEA did require the practices upheld in *NRDC*, those practices **did not** include the explicit findings under the AEA, which the Petitioners argue the NRC must make before licensing reactors.

However, even if the Petitioner's understanding were correct, it would not support the Petitioners' contention, because the Commission has not abandoned the policy asserted in the 1977 denial of NRDC's petition for rulemaking regarding SNF disposal findings, as discussed in section II.C. below, nor has that policy been invalidated by the courts.

### 1. *Minnesota v. NRC* Did Not Overrule the Commission's Interpretation of the AEA

In 1976, the same year NRDC submitted its petition for rulemaking, two power reactor licensees applied for license amendments to increase the amount of fuel stored in their spent fuel pools. Before the Atomic Safety and Licensing Appeal Board, the intervenors argued that

<sup>&</sup>lt;sup>54</sup> New Contention at 8.

<sup>&</sup>lt;sup>55</sup> *NRDC*, 582 F.2d at 170.

<sup>&</sup>lt;sup>56</sup> New Contention at 8.

<sup>&</sup>lt;sup>57</sup> NRDC, 582 F.2d at 174.

increasing uncertainty as to the feasibility of spent fuel disposal raised the prospect that spent fuel would be stored onsite indefinitely.<sup>58</sup> Therefore, the intervenors argued, the Commission is required to consider the environmental and safety implications of continuing to store spent fuel onsite after decommissioning of the reactor before it may grant a license amendment authorizing expanded onsite storage capacity.<sup>59</sup>

The Appeal Board held that under NEPA's "rule of reason" "an analysis was required only where it was 'reasonably probable' that a solution would not be reached."<sup>60</sup> However, the Appeal Board found that question foreclosed by the PRM Denial, which it described as "a policy declaration that, for the purposes of licensing actions, it both can and should be presumed that there will be spent fuel repositories available 'when needed.'<sup>61</sup> The Commission denied an appeal,<sup>62</sup> and intervenors appealed to the U.S. Court of Appeals for the District of Columbia Circuit in *Minnesota v. NRC*.<sup>63</sup>

The Appeal Board's holding that NEPA's "rule of reason" controls whether an analysis of disposal is required was not challenged on appeal to the D.C. Circuit.<sup>64</sup> Rather, the *Minnesota* petitioners argued that the NRC was required to decide that issue through adjudication.<sup>65</sup> *Minnesota* held that the NRC is entitled to answer that question generically, but that the PRM

- <sup>61</sup> See Prairie Island, 7 NRC at 50-51.
- <sup>62</sup> *Minnesota*, 602 F.2d at 416.
- <sup>63</sup> *Id.* at 418-419.
- <sup>64</sup> *Id.* at 415–416.
- <sup>65</sup> *Id.* at 416.

<sup>&</sup>lt;sup>58</sup> Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), ALAB-455, 7 NRC 41, 45-46 (1978).

<sup>&</sup>lt;sup>59</sup> *Id.* at 44-46.

<sup>&</sup>lt;sup>60</sup> *Minnesota*, 602 F.2d at 415.

Denial was insufficient for that purpose because it "was not the product of a rulemaking record devoted to expressly answering the questions."<sup>66</sup> Nevertheless, *Minnesota* held that NRC may chose the appropriate procedures to answer the question required under NEPA's "rule of reason."<sup>67</sup> Therefore, "[t]he court confine[d] its action … to rejection of certain contentions by petitioners, notably the claim of need for an adjudicatory proceeding," and "remand[ed] the balance of these cases, and issues raised, for further consideration by the Commission with such procedure as it may deem appropriate."<sup>68</sup>

The Petitioners assert that the court in *Minnesota v. NRC* "affirmed the NRC's reliance for reactor licensing on duly promulgated technical findings of 'reasonable confidence.'"<sup>69</sup> The Petitioners further assert that *Minnesota* required the NRC to "issue[] the findings and their supporting technical analyses in draft form for public comment.<sup>70</sup> However, no such "duly

<sup>67</sup> See Minnesota, 602 F.2d at 419, *citing Vermont Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519 (1978) (holding that a court cannot impose rulemaking procedures on a federal agency, though a court may find the administrative record insufficient to support an agency action).

<sup>68</sup> *Id.* at 419. *Minnesota* also declined to "vacate or stay the license amendments, which would effectively shut down the plants." Id. at 418.

<sup>70</sup> *Id.* at 6.

<sup>&</sup>lt;sup>66</sup> *Id.* at 417. It is worth noting that Appeals Court judges have twice written separately to assert that this result is mandated by both NEPA and the AEA. In Minnesota, Judge Tamm wrote a concurring opinion "to emphasize [his] belief" that NEPA and "section 103(d) [sic] of the Atomic Energy Act of 1954 mandate" "that prior to approval of a license ... there must be a determination whether it is reasonably probable that an offsite fuel repository will be available when the operating license ... expires." *Minnesota*, 602 F.2d at 419 (Tamm concurring). In a later per curiam opinion, Potomac Alliance v. NRC, 682 F.2d 1030 (D.C. Cir. 1982), the D.C. Circuit noted that *Minnesota*, despite an "apparent NEPA violation" had "declined to vacate or stay the license amendment in question" in 1979. Potomac Alliance, 682 F.2d at 1031. The Potomac Alliance court, on the same basis, likewise declined to vacate or stay the challenged license amendments at issue in 1982. Judge Bazelon, concurring in *Potomac Alliance*, argued that "the fact that the court [in Minnesota] remanded the case to the Commission indicates that the court found an underlying violation of the law. Otherwise, there would be no grounds for the remand." Id. at 1038 n.44 (Bazelon concurring). Judge Bazelon also noted that the underlying violation found by Minnesota is "implicit" in the opinion, but agreed with Judge Tamm that both NEPA and the AEA required that result. Id. at 1038. In light of these concurrences, the fact that neither majority opinion cited the AEA as a basis for its decision reinforces the understanding of *Minnesota* as based on NEPA rather than AEA considerations.

<sup>&</sup>lt;sup>69</sup> New Contention at 8, *citing Minnesota v. NRC*, 602 F.2d 412, 417 (D.C. Cir. 1979).

promulgated" findings<sup>71</sup> existed in 1979 for *Minnesota* to have affirmed, and *Minnesota* did not specify what procedure the NRC should use to address the remand. The Petitioners are correct that *Minnesota* found the PRM Denial insufficient to deny consideration of disposal on a generic basis.<sup>72</sup> However, Petitioners appear to be inferring from *Minnesota*'s use of the phrase "reasonable assurance" that the D.C. Circuit had found such a requirement in the AEA.<sup>73</sup> The Petitioners are mistaken for two reasons. First, *Minnesota* relied upon NEPA in reaching its conclusions. Second, *Minnesota* did not cite the AEA as a basis for its holding.

First, as described above, the *Minnesota* petitioners did not challenge the Appeal Board's conclusion that disposal is relevant to operating licenses only if, per NEPA's "rule of reason," it is reasonably probable that no disposal solution will be available by the end of the reactors' licenses.<sup>74</sup> Therefore, *Minnesota*'s opinion was restricted to deciding what procedures would be necessary for the NRC to answer that question generically.<sup>75</sup> Given that procedural posture, *Minnesota*'s holding can logically be understood as based solely on NEPA grounds.<sup>76</sup>

Second, contrary to the Petitioners' inference, the *Minnesota* court's use of the phrase "reasonable assurance" does not indicate that the court had concluded that the NRC had violated the AEA. The court in *Minnesota* did use the phrase "reasonable assurance" in describing its remand:

the court contemplates consideration on remand of the specific problem isolated by petitioners determining whether there is reasonable assurance that an off-site storage solution will be available by the years 2007-09, the expiration of the plants'

- <sup>73</sup> See New Contention at 8.
- <sup>74</sup> *Minnesota*, 602 F.2d at 415–416.

<sup>75</sup> *Id.* at 419.

<sup>76</sup> See also Potomac Alliance (reaching the same result, but expressly limited to NEPA grounds).

<sup>&</sup>lt;sup>71</sup> *Id.* at 8.

<sup>&</sup>lt;sup>72</sup> See Minnesota, 602 F.2d at 415–416.

operating licenses, and if not, whether there is reasonable assurance that the fuel can be stored safely at the sites beyond those dates.<sup>77</sup>

However, at the time *Minnesota* was decided, "reasonable assurance" was a regulatory standard developed by the Atomic Energy Commission, not a statutory standard included in the language of the AEA, making it even less plausible that the *Minnesota* court, without citation or emphasis, was invoking the AEA as a basis for its holding.<sup>78</sup> *Minnesota* also explicitly linked "assurance" to a substantive NEPA requirement: "NEPA requires the Commission fully to **assure** itself that safe and adequate storage methods are technologically and economically feasible."<sup>79</sup> Therefore, the court's use of the phrase "reasonable assurance" fails by itself to demonstrate that *Minnesota*'s remand was based on an AEA requirement rather than on the readily ascertainable NEPA grounds.

<sup>78</sup> The requirement that the Commission have reasonable assurance in reactor licensing was not added to the AEA until 1992, as part of an amendment adding provisions for combined licenses (COL). *See, e.g.*, AEA § 185b. The phrase "reasonable assurance" has been a part of the NRC's regulations since Part 50 was first promulgated in 1956. Part 50–Licensing of Production and Utilization Facilities, 21 Fed. Reg. 355 (Jan. 19, 1956). Section 1502 of the AEA provided that "the Commission may implement the privatization plan if … privatization will … provide *reasonable assurance* that adequate enrichment capacity will remain available to meet the domestic electric utility industry." (emphasis added).

<sup>79</sup> *Minnesota*, 602 F.2d at 417 n.6. (quoting *NRDC v. NRC*, 547 F. 2d at 658 D.C. Cir. (Tamm, J., concurring)) (emphasis added).

<sup>&</sup>lt;sup>77</sup> *Minnesota,* 602 F.2d at 418. Compare that specific remand without citation to the AEA or the NRC's regulations with Judge Leventhal's opinion, issued just months after *Minnesota*, in *Porter County Chapter of the Izaak Walton League of America v. NRC*, 606 F.2d 1363, 1369 (D.C. Cir. 1979) (emphasis added):

In Power Reactor Development Co. v. International Union, 367 U.S. 396, 407 (1961), the Supreme Court rejected the proposition that the Atomic Energy Act required the Commission to make "the same definitive finding of safety of operation as it admittedly will have to make before it licenses actual operation of the facility." Thus, while a utility must demonstrate "reasonable assurances" that a proposed plant can be operated safely before it may obtain an operating license, 10 C.F.R. § 50.57(a)(3) (1979), the unresolved safety questions do not require denial of a construction permit.

That opinion makes the absence of citation to the AEA or NRC regulations in *Minnesota* conspicuous, and belies Petitioners' assertion that the D.C. Circuit found a requirement in the AEA for the NRC to make findings regarding disposal prior to reactor licensing.

2. The Commission Did Not Interpret *Minnesota v. NRC* to Require Findings Regarding Disposal of Spent Nuclear Fuel Prior to Licensing Reactors Under the <u>AEA</u>

Petitioners are also incorrect in sugesting that the NRC has interpreted Minnesota to

require explicit findings under the AEA regarding disposal of spent nuclear fuel prior to licensing

reactors.<sup>80</sup> In 1979, the Commission approved a letter denying a Motion for Reconsideration in

light of *Minnesota*, stating that:

Judge Leventhal was quite careful not to "make law" in [*Minnesota*]. His opinion for the court was consciously limited to a remand to the Commission for further consideration in light of new information and did not accept petitioners' contentions that the Commission had erred both procedurally and substantively in declining to consider the possibility of long-term on-site storage.<sup>81</sup>

Because a holding by the D.C. Circuit in *Minnesota* that the NRC is required to publish a waste

confidence safety finding prior to licensing nuclear power reactors would have been a marked

departure from the 2nd Circuit's decision in NRDC, the Commission's recognition that the D.C.

Circuit "was quite careful not to 'make law"<sup>82</sup> shows that it did not interpret the court's decision

to include such a holding. Nevertheless, the Commission's response to the Minnesota remand

was consciously broader than the court had contemplated:

The Commission recognized that **the scope of this generic proceeding would be broader than the Court's instruction**, which required the Commission to address the questions of whether off-site storage for spent fuel would be available by the expiration of reactor operating licenses and if not, whether spent fuel could continue to be safely stored on-site. [citation omitted]

However, the Commission believed that **the primary public concern** was whether nuclear waste could be disposed of safely rather than with an off-site solution to the storage problem per se.<sup>83</sup>

<sup>&</sup>lt;sup>80</sup> New Contention at 6.

<sup>&</sup>lt;sup>81</sup> Letter from Samuel J. Chilk, Secretary of the Commission, to Karin P. Sheldon, representing Christa-Maria, at 1 (Jan 2, 1980) (ADAMS Accession No. 8001140161).

Since then, the NRC has updated the Waste Confidence Decision as the Commission has deemed appropriate in light of new information.<sup>84</sup>

3. New York v. NRC Did Not Address the AEA, Nor Did it Hold That Minnesota Required Explicit Findings Regarding Disposal of Spent Nuclear Fuel Prior to Licensing Reactors

Petitioners assert that *New York v. NRC*,<sup>85</sup> which vacated and remanded the 2010 waste confidence rule,<sup>86</sup> supports Petitioners' assertion that the NRC is obligated under the AEA to make explicit findings regarding the disposal of spent nuclear fuel prior to licensing reactors.<sup>87</sup> In the Petitioners' view, this conclusion is necessary because *New York* considered the Waste Confidence Decision rulemaking to be a "licensing decision."<sup>68</sup> Petitioners are mistaken and read too much into that decision. The court in *New York* found that if the NRC is going to base its licensing decisions, in part, on preclusive findings in a rulemaking, then that "rulemaking is a major federal action requiring either a FONSI or an EIS," because the preclusive findings are, in effect, a "predetermined 'stage' of each licensing decision."<sup>69</sup> But contrary to the Petitioners' suggestion that this has AEA implications, that aspect of the holding is simply a prerequisite to the court's finding that the NRC's environmental assessment did not satisfy the requirements of NEPA for the evaluation of the environmental impacts of continued storage. *New York* simply means that the NRC's 2010 Waste Confidence Decision did not meet the NRC's NEPA

<sup>83</sup> Waste Confidence Decision, 49 Fed. Reg. 34,658 (Aug. 31, 1984) (citation omitted) (emphasis added).

<sup>&</sup>lt;sup>84</sup> See Consideration of Environmental Impacts of Temporary Storage of Spent Fuel After Cessation of Reactor Operation, 75 Fed. Reg. 81,032, 81,038 (Dec. 23, 2010) (Final Rule).

<sup>&</sup>lt;sup>85</sup> New York, 681 F.3d at 471.

<sup>&</sup>lt;sup>86</sup> The previous rule could be found at 10 C.F.R. § 51.23(a) (2010).

<sup>&</sup>lt;sup>87</sup> See New Contention at 8-9.

<sup>&</sup>lt;sup>88</sup> See id. (citing New York v. NRC, 681 F.3d at 476–77).

<sup>&</sup>lt;sup>89</sup> New York, 681 F.3d at 476.

obligations with respect to continued storage in a manner sufficient to preclude those NEPA issues from further consideration in licensing proceedings.

Indeed, *New York* reinforces the NRC's position that explicit findings regarding disposal of spent nuclear fuel are not required under the AEA prior to licensing reactors. The Waste Confidence Decision was developed in the context established by *Minnesota*, and was addressed by the court in *New York* entirely on NEPA grounds. The *New York* court discussed *Minnesota* in two places, neither of which supports the Petitioners' claims. In the first instance, the court characterized its prior opinion in *Minnesota* as:

direct[ing]the Commission to consider "whether there is reasonable assurance that an off-site storage solution [for spent fuel] will be available by ... the expiration of the plants' operating licenses, and if not, whether there is reasonable assurance that the fuel can be stored safely at the sites beyond those dates."<sup>90</sup>

The second reference in *New York* to the decision in *Minnesota* appears where the court summarizes the Commission's argument that the waste confidence decision was not a major federal action because it did not authorize any reactor or storage facility license, stating that "[t]o the Commission, the [Waste Confidence Decision] is simply an answer to this court's mandate in *Minnesota* to ensure that plants are only licensed while the NRC has reasonable assurance that permanent disposal of the resulting waste will be available."<sup>91</sup> Petitioners omit the crucial words "[t]o the Commission" from this quote;<sup>92</sup> this is the D.C. Circuit interpreting the NRC's briefs, not the D.C. Circuit interpreting *Minnesota*.

The *Minnesota* court used the term "reasonable assurance" without explanation.

However, the New York court's discussion of Minnesota places that decision squarely within the

<sup>&</sup>lt;sup>90</sup> *New York*, 681 F.3d at 474-475 (quoting *Minnesota v. NRC*, 602 F.2d 412, 418 (D.C. Cir. 1979)) (emphasis added).

<sup>&</sup>lt;sup>91</sup> *Id.* 

<sup>&</sup>lt;sup>92</sup> New Contention at 8.

D.C. Circuit's NEPA jurisprudence. Nowhere does the *New York* opinion discuss, cite, or mention the AEA.<sup>93</sup> Therefore, this decision likewise fails to support the Petitioners' assertion of an AEA requirement that the NRC make explicit findings regarding disposal of spent nuclear fuel prior to licensing power reactors.

#### C. The Commission Policy On Safe Disposal of Waste Remains Unchanged

Although the Commission has discarded the format of the Waste Confidence Decision where the five findings essentially embodied the historic Commission policy expressed in the 1977 PRM denial<sup>94</sup>—the crux of that policy continues to remain in place to this day. As demonstrated in the 2010 waste confidence rulemaking the Commission chose to reinforce that policy in the face of anticipated combined license proceedings:

> Prior to NRC's original Waste Confidence proceeding, the Commission stated that, **as a matter of policy**, it 'would not continue to license reactors if it did not have reasonable confidence that the wastes can and will in due course be disposed of safely.<sup>95</sup>

This reiteration reinforces a conclusion that the Commission was making a finding of confidence in the availability of a repository, grounded in policy, rather than satisfying any AEA obligation to publish such a finding. Neither the Continued Storage GEIS, nor the rule which codifies it, abandons or in any way alters the Commission policy expressed in the PRM Denial that the Commission would not license reactors unless it believed that wastes generated by those reactors could be disposed of safely

<sup>&</sup>lt;sup>93</sup> It is also notable that New York did not address the AEA, because the petitioners in *New York* had also argued that the NRC's schedule for revisiting waste confidence violated the AEA. See Opening Brief for Petitioners at 28 (available at http://harmoncurran.com/library/Petitioners Opening Brief in NY v NRC 9-15-11.pdf). However, the court agreed with the petitioners' NEPA arguments and did not address the AEA claim. *New York*, 681 F.3d at 471.

<sup>&</sup>lt;sup>94</sup> See PRM Denial at 34,393.

<sup>&</sup>lt;sup>95</sup> 75 Fed. Reg. at 81,032-33 (citation omitted) (emphasis added).

when necessary.<sup>96</sup> Instead, the Continued Storage rule and GEIS are consistent with that historic Commission policy. The robust analysis in the GEIS supports the conclusion contained in Appendix B to the GEIS that disposal in a geologic repository is technically feasible.

Further, the NRC continues to have in place a comprehensive regulatory structure that substantiates this policy. The regulatory framework is designed to assure adequate protection of the health and safety of the public, as well as maintaining the common defense and security, when licensing power reactors and storage facilities—and licenses issued under the NRC's regulatory framework inherently address the health and safety of the public with respect to the spent fuel generated by NRC-licensed reactors. The Commission's regulations address both management of spent fuel (in 10 C.F.R. Parts 72, 50 and 52) as well as disposal of spent fuel (in 10 C.F.R. Parts 60 and 63).<sup>97</sup> These regulations include rigorous safety requirements, and the licensee's obligations to safely control spent fuel continue pursuant to these requirements even after the licensed facility ceases to operate.<sup>98</sup> Further, an integral part of any regulatory agency's jurisdiction is the ability to enforce compliance with its regulations; the NRC's enforcement authority stems from the AEA<sup>99</sup> and gives the NRC continued authority to assure the safe storage of spent fuel pursuant to its regulations after the cessation of operation.

In particular, the NRC has developed regulations that specifically address both storage and geologic disposal of spent nuclear fuel, including provisions designed to assure the safety of such facilities. Safe management of spent fuel storage in both dry cask and pools is

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<sup>&</sup>lt;sup>96</sup> See PRM Denial at 34,393.

<sup>&</sup>lt;sup>97</sup> These are separate from regulations focused on safety of other power plant components, such as those safety requirements in Part 54 dealing with aging management issues for license renewal.

<sup>&</sup>lt;sup>98</sup> See, e.g., 10 C.F.R. § 50.82, "Termination of license."

<sup>&</sup>lt;sup>99</sup> For instance, the Atomic Energy Act of 1954, as amended, § 81a., 42 U.S.C. § 2111 (2005), regarding domestic distribution of byproduct material, states in part, "The Commission shall not permit the distribution of any byproduct material to any licensee, and shall recall or order the recall of any distributed material from any licensee, who is not equipped to observe or who fails to observe such safety standards to protect health as may be established by the Commission . . .".

addressed by provisions in Parts 72, 50 and 52.<sup>100</sup> In addition, Part 60 establishes general and prescriptive requirements for the construction and operation of geologic repositories, and Part 63 lays out the requirements pertinent to construction and operation of a geologic repository at Yucca Mountain.<sup>101</sup> Of particular significance, several regulatory provisions directly address safe storage of fuel after the licensed life of a reactor. For instance, 10 C.F.R. § 50.54(bb) requires licensees to submit to the NRC for approval a program for the management, including funding, of all spent nuclear fuel after the licensed life of the reactor ceases and until the Department of Energy takes title and possession of the fuel.<sup>102</sup> Criterion 61 of Appendix A to 10 C.F.R. Part 50 requires that the systems which contain radioactivity, including fuel storage and waste systems, be designed to assure adequate safety under normal and postulated accident conditions under a variety of different criteria.<sup>103</sup>

Since the first waste confidence proceeding, the experience and knowledge of the

<sup>&</sup>lt;sup>100</sup> For example, 10 C.F.R. § 50.34 sets out the required contents of an application, and § 50.34(i), in particular, requires the applicant to include a description and plans for strategies to maintain or restore spent fuel cooling capabilities after a loss of areas of the plant due to explosions or fire. Similarly, 10 C.F.R. Part 72— a regulatory section that was not in place in 1984 when the first Waste Confidence proceeding was completed—addresses the safety standards for ISFSIs.

<sup>&</sup>lt;sup>101</sup> These requirements for disposal in geologic repositories implicitly provide the technical foundation for the assurance necessary to meet the standard of adequate protection in the AEA, and any application submitted to the NRC pursuant to these regulations would have to demonstrate the capability to meet these requirements before a license to construct and operate a geologic repository could be issued.

<sup>&</sup>lt;sup>102</sup> 10 C.F.R. § 50.54(bb) was published in 1984 as part of the first Waste Confidence rulemaking. Note that this provision was published in Part 50, "Domestic Licensing of Production and Utilization Facilities," while 10 C.F.R. § 51.23, then the "Temporary Storage Rule," now the "Continued Storage Rule," was published in Subpart A of Part 51, "National Environmental Policy Act—Regulations Implementing Section 102(2)." Requirements for Licensee Actions Regarding the Disposition of Spent Fuel Upon Expiration of Reactor Operating License, 49 Fed. Reg. 34,688, 34,694-95 (Aug. 31, 1984) (Final Rule) The program must be filed with the NRC "within 2 years following permanent cessation of operation of the reactor or 5 years before expiration of the reactor operating license, whichever comes first." 10 C.F.R. § 50.54(bb).

<sup>&</sup>lt;sup>103</sup> These criteria include, but are not limited to: shielding for radiation protection; the ability to allow inspections; and appropriate containment, confinement and filtering systems. 10 C.F.R. Part 50, Appendix A, Criterion 61.

agency has evolved considerably.<sup>104</sup> As discussed in the analysis in Appendix B of the Continued Storage GEIS, the NRC has a strong scientific and technical foundation of knowledge upon which to base its conclusions of technical feasibility regarding storage and ultimate disposal of spent nuclear fuel.<sup>105</sup> In addition to these extensive technical studies and the stringent regulatory standards, the NRC has developed numerous guidance documents to assist in assuring that spent fuel is managed safely.<sup>106</sup>

In its entirety, the NRC regulatory framework establishes a broad foundation upon which the NRC continues to ensure the safety of both continued management and disposal of spent fuel. Licenses issued by the NRC under this framework intrinsically include a finding that the applicant has demonstrated the ability to meet the safety requirements for the license. Finally, continued NRC oversight and regulation of the licensee, its activities, and licensed materials even after operation ceases, provides further assurance of the safe management and eventual disposal of the licensee's spent fuel. Accordingly, this comprehensive framework buttresses the Commission's policy that reactor licensing would not occur absent a belief that safe disposal can occur when necessary.

<sup>&</sup>lt;sup>104</sup> Waste Confidence Decision, 49 Fed. Reg. 34,658 (Aug. 31, 1984).

<sup>&</sup>lt;sup>105</sup> See, e.g., NUREG-2157, Vol. 1, Appendix B, at B-3-B-4 (*Scientific and Technical Basis for the Geologic Disposal of Radioactive Wastes Technical Reports Series No. 413 [IAEA 2003a], Geological Repository Systems for Safe Disposal of Spent Nuclear Fuels and Radioactive Wastes [Ahn and Apted 2010], Lessons Learnt from Ten Performance Assessment Studies [NEA 1997], Radioactive Waste Management Studies and Trends, IAEA/WMDB/ST/4 [IAEA 2005], The Use of Scientific and Technical Results from Underground Research Laboratory Investigations for the Geologic Disposal of Radioactive Waste [IAEA 2001], Joint Convention on Safety of Spent Fuel Management and on Safety of Radioactive Waste Management, INFCIRC/546 [IAEA 1997], Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste [DOE2014]* 

<sup>&</sup>lt;sup>106</sup> See, e.g., NUREG-1536, Rev. 1, Final Report, *Standard Review Plan* [(SRP)] *for Spent Fuel Dry Storage Systems at a General License Facility* (July 2010) (ADAMS Accession No. ML091060180); Letter from E. William Brach, Director, NMSS, to Lynnette Hendricks, Director of Plant Support, Nuclear Energy Institute, Interim Staff Guidance-5, Confinement Evaluation" (Nov. 30, 1999) (ADAMS Accession No. ML993370589); Interim Staff Guidance-2, Rev.1, "Fuel Retrievability" (Feb. 22, 2010) (ADAMS Accession No. ML100550861).

# D. The Continued Storage GEIS and Rule Do Not Attempt to Substitute for Any Findings Required Under the AEA

In their submittals, the Petitioners assert "[t]he NRC's rationale for eliminating Waste Confidence findings ignores the separate and independent roles of the AEA and NEPA." In doing so, the Petitioners have misunderstood why the NRC concluded that the Waste Confidence Decision is "no longer necessary."<sup>107</sup> Contrary to the Petitioners' claims, the NRC did not state that the "assumptions" in the Continued Storage GEIS substitute for the Waste Confidence Decision.<sup>108</sup> The Waste Confidence findings once provided a regulatory basis for the temporary storage rule. Today, similar assumptions for the sake of analysis provide a reasonable framework in which to analyze the environmental impacts of continued storage. However, the regulatory basis for the continued Storage GEIS, which goes beyond the analysis supporting the historic temporary storage rule. For example, a finding that a repository for spent fuel will be available by a particular time is no longer necessary because the GEIS analyzes the environmental impacts of failing to secure a repository for an indefinite period into the future.

In addition, the Petitioners assert that the NRC has somehow conflated its obligations under the AEA and NEPA.<sup>109</sup> To the contrary, the NRC specifically clarified that the role of 10 C.F.R. § 51.23 in licensing is strictly limited to satisfying the NRC's NEPA obligation with respect to continued storage. As the Commission explained, this change was motivated by the desire to eliminate confusion regarding the Waste Confidence Decision's role with respect to the AEA and NEPA—confusion which the NRC had observed in the response to the 2010 Waste Confidence Decision.<sup>110</sup> The *Federal Register* notice for the Continued Storage Rule makes clear that it was

<sup>108</sup> *Id.* 

<sup>109</sup> *Id*.

<sup>&</sup>lt;sup>107</sup> New Contention at 9.

promulgated solely to satisfy the agency's NEPA obligations.<sup>111</sup> The NRC is able to continue licensing in the absence of the Waste Confidence findings because it is now satisfying its NEPA obligations through a comprehensive generic environmental impact statement. For the reasons described above, the NRC does not need the Waste Confidence findings regarding disposal to satisfy any other legal obligations prior to licensing.

# E. Petitioners' Contention Does Not Meet Admissibility Requirements Under 10 <u>C.F.R. § 2.309(f)(1)</u><sup>112</sup>

It is well established that contentions must comply with the contention admissibility

requirements set forth in 10 C.F.R. § 2.309(f)(1). In accordance with 10 C.F.R. § 2.309(f)(1), an

admissible contention must:

- provide a specific statement of the legal or factual issue sought to be raised;
- (ii) provide a brief explanation of the basis for the contention;
- (iii) demonstrate that the issue raised is within the scope of the proceeding;
- demonstrate that the issue raised is material to the findings the NRC must make to support the action that is involved in the proceeding;

<sup>110</sup> See, e.g., Continued Storage GEIS at D-28–D-31.

<sup>111</sup> See GEIS Appendix D at D-33–34 and D-64; 79 Fed. Reg. 56238, 56242 ("As a result of preparing its environmental analysis of continuing storage impacts in the GEIS, the NRC found it no longer necessary to have a separate Waste Confidence Decision with findings...."); *see also* Waste Confidence—Continued Storage of Spent Nuclear Fuel, 78 Fed. Reg. 56,776, 56,780–82 (Sept. 13, 2013).

<sup>111</sup> See, e.g., Continued Storage GEIS at, D-10–D-11 & D-71–D-74.

<sup>111</sup> See, e.g., 79 Fed. Reg. 56,238, 56,254 ("The [Continued Storage] GEIS fulfills the NRC's NEPA obligations and provides a regulatory basis for the rule rather than addressing the agency's responsibilities to protect public health and safety under the Atomic Energy Act (AEA), of 1954 as amended.")

<sup>112</sup> The NRC Staff does not contest the timeliness of the New Contention under 10 C.F.R. § 2.309(c). However, Amended and Supplemented contention filed in the Fermi 2 license renewal proceeding is also inadmissible because it is not based on new and materially different information than information previously available. See 10 C.F.R. § 2.309(c)(1)(i)-(iii). Instead, the initial contention cited to the same cases (*NRDC v. NRC, New York v. NRC*, and *Minnesota v. NRC*) and made the same substantive claim that the NRC must make waste confidence safety findings in the Fermi 2 relicensing proceeding.

- (v) provide a concise statement of the alleged facts or expert opinions, including references to specific sources and documents, that support the petitioner's position and upon which the petitioner intends to rely at the hearing;
- (vi) ... provide sufficient information to show that a genuine dispute with the Applicant exists with regard to a material issue of law or fact, including references to specific portions of the application that the petitioner disputes, or in the case when the application is alleged to be deficient, the identification of such deficiencies and supporting reasons for this belief ....

10 C.F.R. § 2.309(f)(1). The Commission has emphasized that the rules on contention admissibility are "strict by design."<sup>113</sup> "Mere 'notice pleading' does not suffice."<sup>114</sup> "Failure to comply with any of these requirements is grounds for [the dismissal of a] contention."<sup>115</sup>

1. Petitioners' New Contention Does Not Raise Issues Material to the NRC's Licensing Decisions and Therefore Is Not Within the Scope of the <u>Proceeding</u>

For the reasons described in detail in Section II, supra, the New Contention's principal

claim that the NRC has not made findings required by the AEA regarding SNF management

does not raise a material issue relating to findings that the NRC must make to support reactor

licensing as required by 10 C.F.R. § 2.309(f)(1)(iv). Because the NRC need not make the

findings that Petitioners claim it must, the New Contention is not within the scope of the

captioned licensing proceedings as required by 10 C.F.R. § 2.309(f)(1)(iii).

Similarly, while the Petitioners claim that issues raised in their New Contention are

material to findings that the NRC must make under the AEA in order to support reactor licensing

and license renewal decisions,<sup>116</sup> the AEA does not require the NRC to make explicit findings on

<sup>116</sup> New Contention at 15-18.

<sup>&</sup>lt;sup>113</sup> Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001), pet. for reconsideration denied, CLI-02-01, 55 NRC 1 (2002).

<sup>&</sup>lt;sup>114</sup> Amergen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 119 (2006) (internal quotation omitted).

<sup>&</sup>lt;sup>115</sup> *PFS*, CLI-99-10, 49 NRC at 325.

post-licensing disposal of spent nuclear fuel.<sup>117</sup> Rather, the NRC has a comprehensive regulatory framework that addresses the management of SNF.<sup>118</sup> When the Commission makes a specific reactor licensing decision, it determines that all applicable standards and requirements of the regulations have been met to support the action.<sup>119</sup> In addition, in taking the reactor licensing action, the NRC implicitly recognizes that it has in place a <u>separate</u> regulatory framework governing the disposal of spent fuel, which will apply to any application for disposal and which will assure the safety of such disposal. This implicit finding that SNF can be disposed of when necessary is supported by an extensive framework of regulatory and technical material,<sup>120</sup> including NRC regulations and guidance documents.<sup>121</sup> It is also supported by the longstanding policy<sup>122</sup> that the Commission would not issue licenses if spent fuel could not be safely managed.<sup>123</sup>

Contrary to Petitioners' assertions, the NRC has consistently interpreted its legal obligations in the Waste Confidence area as derived from NEPA.<sup>124</sup> This interpretation has remained undisturbed by Federal court rulings for over thirty years, including by the D.C. Circuit

- <sup>119</sup> See, e.g., 10 C.F.R. § 52.97(a)(1)(i).
- <sup>120</sup> See supra at 27-29.

<sup>121</sup> See, e.g., 10 C.F.R. Parts 60 and 63; NUREG-1536, Rev. 1, Final Report, *Standard Review Plan for Spent Fuel Dry Storage Systems at a General License Facility*; Letter from E. William Brach, Director, NMSS, to Lynnette Hendricks, Director of Plant Support, Nuclear Energy Institute, Interim Staff Guidance-5, Confinement Evaluation" (Nov. 30, 1999) (ADAMS Accession No. ML993370589); Interim Staff Guidance-2, Rev.1, "Fuel Retrievability" (Feb. 22, 2010) (ADAMS Accession No. ML100550861). The technical feasibility analysis in Appendix B of the Continued Storage GEIS also summarizes the present scientific consensus on the technical feasibility of spent fuel disposal in a geologic repository, explaining that such disposal remains technically feasible.

- <sup>122</sup> See, e.g., 75 Fed. Reg. at 81,032-33.
- <sup>123</sup> Supra at 26-27.

<sup>124</sup> *Id.* at 24-26.

<sup>&</sup>lt;sup>117</sup> See supra at 15-18.

<sup>&</sup>lt;sup>118</sup> See supra at 27-29.

in *New York v. NRC*.<sup>125</sup> Therefore, the New Contention's central premise is unsupported, and there is simply no AEA requirement pertaining to SNF disposal that is material to the NRC's reactor licensing decisions in any of the captioned proceedings. Because there is no requirement for such a finding as a condition precedent to reactor licensing, Petitioners' proposed Contention must be rejected as not within the scope of the proceeding.

# 2. Petitioners' New Contention Raises No Genuine Dispute with Any Specific Application

The Petitioners claim that their New Contention raises a genuine dispute with the applicant regarding whether a license should be granted in the proceedings in which it was filed.<sup>126</sup> They make no attempt, however, to identify relevant sections in any application to allege an insufficiency or omission. Rather, Petitioners purport to generically challenge the legal basis of reactor licensing decisions that the NRC has not yet made. It is well established that an admissible contention "must raise a genuine dispute with the license application" to demonstrate that a material issue for hearing exists.<sup>127</sup> Assuming that the NRC was required to make explicit findings under the AEA on disposal of SNF to support reactor licensing decisions, it could do so based either on generic determinations or specific material presented in a license application. Petitioners make no reference, however, to any specific application as 10 C.F.R.

§ 2.309(f)(1)(vi) fundamentally requires.

In sum, the New Contention incorrectly states the legal obligations of the NRC and fails to identify a genuine and material dispute with any license application within the scope of the proceeding. For the foregoing reasons, it should be rejected.

<sup>&</sup>lt;sup>125</sup> *Id*.

<sup>&</sup>lt;sup>126</sup> New Contention at 12.

<sup>&</sup>lt;sup>127</sup> Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), CLI-12-15, 75 NRC 704, 709 (2012).

#### III. Petitioners Do Not Meet the Reopening Standards

On September 29, 2014, Petitioners submitted motions to reopen the record in several closed proceedings for the purpose of admitting the proposed contention challenging the purported failure of the NRC to make findings under the AEA regarding the disposal of nuclear waste in these reactor licensing proceedings.<sup>128</sup> In their motion, Petitioners contend that reopening the record and admitting the new contention is necessary to ensure that the NRC "fulfills its statutory obligation under the Atomic Energy Act [] to protect public health and safety from the risks posed by irradiated reactor fuel generated during the reactor's license term."<sup>129</sup>

The Commission has stated that a petitioner seeking to introduce a new contention after the record has been closed should "address the reopening standards contemporaneously with a late-filed intervention petition, which must satisfy the standards for both contention admissibility and late filing."<sup>130</sup> Section 2.326(a) of the Commission's regulations sets forth the reopening standards, which requires that the motion to reopen must be timely, must address a significant safety or environmental issue, and must demonstrate that a materially different result would have been likely had the newly proffered evidence been considered in the first instance.<sup>131</sup> To demonstrate a significant safety issue, petitioners "must establish either that uncorrected ... errors endanger safe plant operation, or that there has been a breakdown of the quality assurance program sufficient to raise legitimate doubt as to the plant's capability of being operated safely."<sup>132</sup> Thus, a motion to reopen the record to address a safety issue must

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<sup>&</sup>lt;sup>128</sup> Motions to reopen were filed in the following proceedings: *Comanche Peak* COL, *North Anna* COL, *William States Lee III* COL, *Callaway* LR, *Sequoyah* LR, *South Texas Project* LR, and *Watts Bar* OL. *See, e.g.*, Motion to Reopen the Record for South Texas Project Units 1 & 2 Nuclear Power Plant, at 1-2 (Sept. 29, 2014) (ADAMS Accession No. ML14272A609) (Motion to Reopen).

<sup>&</sup>lt;sup>129</sup> *Id.* at 2.

<sup>&</sup>lt;sup>130</sup> *Millstone*, CLI-09-5, 69 NRC at 124.

<sup>&</sup>lt;sup>131</sup> 10 C.F.R. § 2.326(a)(1)-(3); *Oyster Creek*, CLI-08-28, 68 NRC at 668.

essentially challenge a plant's capacity to operate safely.<sup>133</sup>

Additionally, one or more affidavits showing that the motion to reopen meets the above criteria must accompany the motion under 10 C.F.R. § 2.326(b). Each affidavit must contain statements from competent individuals with knowledge of the facts alleged or experts in disciplines appropriate to the issues raised.<sup>134</sup> Moreover, the motion and its supporting documentation must be strong enough, in the light of any opposing filings, to avoid summary disposition.<sup>135</sup> The Commission has previously held that "[t]he burden of satisfying the reopening requirements is a heavy one, and proponents of a reopening motion bear the burden of meeting all of [these] requirements."<sup>136</sup> Thus, "[b]are assertions and speculation . . . do not supply the requisite support," and a "mere showing of a possible violation is not enough."<sup>137</sup>

Under section 2.326(d), a motion to reopen that relates to a contention not previously in controversy among the parties must also satisfy the section 2.309(c) requirements for contentions filed after the deadline. However, even though a matter is timely raised and involves significant safety considerations, no reopening of the evidentiary hearing will be required if the affidavits submitted in response to the motion demonstrate that there is no genuine unresolved issue of fact, i.e., if the undisputed facts establish that the apparently significant safety issue does not exist, has been resolved, or for some other reason will have no

<sup>133</sup> Seabrook, ALAB-940, 32 NRC at 243.

<sup>134</sup> 10 C.F.R. § 2.326(b). See also Oyster Creek, CLI-09-7, 69 NRC at 291-93.

<sup>136</sup> Oyster Creek, CLI-09-7, 69 NRC at 287 (citations omitted, alteration in original).

<sup>137</sup> *Id.* (citations omitted, first alteration in original).

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<sup>&</sup>lt;sup>132</sup> *Pub. Serv. Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-940, 32 NRC 225, 243 (1990).

<sup>&</sup>lt;sup>135</sup> *Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), CLI-05-12, 61 NRC 345, 350 (2005).

effect upon the outcome of the licensing proceeding.<sup>138</sup>

Insofar as the New Contention is based upon the Commission's issuance of the Continued Storage Rule, the Staff does not dispute the Petitioners' claim that their motion to reopen is timely and meets the § 2.309(c) requirements for contentions filed after the deadline to intervene. However, Petitioners do not meet the reopening standards outlined in § 2.326(a)(2)-(3) because their proffered contention does not address a significant safety issue, nor does it demonstrate that a materially different result would be likely if the new contention had been raised at the beginning of the proceeding. Moreover, as explained in Section II.E, *supra*, the Petitioners do not meet the Commission's contention admissibility standards under § 2.309(f)(1). Accordingly, the Petitioners' motions to reopen the record in these closed proceedings should be denied.

#### A. <u>Petitioners Do Not Address a Significant Safety Issue</u>

Petitioners assert that they address "the significant safety issue that the NRC has made no currently valid findings of confidence or reasonable assurance that the hundreds of tons of radioactive spent fuel that will be generated during any reactor's 40-year licensing term or subsequent relicensing term can be disposed of safely in a repository."<sup>139</sup> However, Petitioners' claims are without merit because, as discussed above, the NRC is not required by the AEA, or any judicial precedent, to make explicit findings regarding the disposal of spent nuclear fuel before issuing a license for power reactors.<sup>140</sup> Additionally, the Commission has previously determined that the NRC is not required under the AEA to determine whether spent fuel will be

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<sup>&</sup>lt;sup>138</sup> Commonwealth Edison Co. (Byron Nuclear Power Station, Units 1 and 2), LBP-83-41, 18 NRC 104, 108-109 (1983) (citing Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), ALAB-138, 6 A.E.C. 520, 523 (1973)).

<sup>&</sup>lt;sup>139</sup> Motion to Reopen at 3.

<sup>&</sup>lt;sup>140</sup> See *supra* at 13.

disposed of before issuing a license for a nuclear reactor.<sup>141</sup>

Further, NUREG-2157 specifically addresses and refutes Petitioners' claim that the NRC must make such findings under the AEA regarding the disposal of nuclear waste.<sup>142</sup> During the public comment period on the draft Waste Confidence GEIS, the Commission received and considered comments that the holdings in *New York*, *NRDC v. NRC*, and *Minnesota v. NRC* required the NRC to make certain safety and environmental findings before issuing a license.<sup>143</sup> In response to these comments, the Staff explained that NUREG-2157 was prepared to satisfy the Commission's NEPA obligations with respect to continued storage. The Staff further stated that the Commission's AEA obligations, including safety determinations, are separate from its NEPA obligations and will continue to be governed under the license and regulatory controls after the expiration of a facility's current license, relying on the experience gained over the past 30 years and the current regulatory framework to ensure adequate protection of public health and safety.<sup>144</sup>

The Commission's extensive regulatory framework ensures the safety of both continued management and disposal of spent fuel.<sup>145</sup> These regulations include rigorous safety requirements for SNF management that apply to all licenses issued by the NRC, which continue

<sup>144</sup> See *id.* at D-30. See also *id.* at D-29. (noting that the decision to issue a license must be predicated on a Commission determination that the licensed activity can be performed in a manner adequate to protect public health and safety).

<sup>&</sup>lt;sup>141</sup> See supra at 14.

<sup>&</sup>lt;sup>142</sup> See Motion to Reopen at 1-2, 3 (citing *New York v. NRC*, 681 F.3d 471, at 478; (D.C. Circuit 2012); *NRDC v. NRC*, 582 F.2d 166, 169 (2nd Cir. 1978); *Minnesota v. NRC*, 602 F.2d 412, 416 (D.C. Cir. 1979)).

<sup>&</sup>lt;sup>143</sup> See, e.g., NUREG-2157, Vol. 2, at Section D.2.4 "Comments Concerning Miscellaneous Issues," Pages D-28 - D-37.

<sup>&</sup>lt;sup>145</sup> See *id.* at D-31 (noting that some of the provisions for reactor safety bear directly upon the safe storage of spent fuel after licensed life for operation including 10 C.F.R. § 50.54(bb) and 10 C.F.R. Part 50, Appendix A, Criterion 51).

to apply, as appropriate, after the licensed reactor ceases operations.<sup>146</sup> As discussed above, in taking a reactor licensing action, the NRC implicitly recognizes that it has in place a <u>separate</u> regulatory framework governing the disposal of spent fuel, which will apply to any application for disposal and which will assure the safety of such disposal.<sup>147</sup>

Moreover, Petitioners do not present a significant safety issue because they have not presented an issue challenging a plant's capacity to operate safely in conformance with applicable NRC regulations.<sup>148</sup> Indeed, Petitioners do not identify any specific safety issue that the Commission deems necessary to consider as a condition for issuance of an initial or renewed license in any of these closed proceedings. Instead, Petitioners challenge findings related to the disposal of spent fuel after the end of the license terms for initial and renewed licenses. However, the licensing decisions in these closed proceedings will not include an explicit finding for spent fuel disposal subsequent to the term of the initial or renewed licenses. Findings required under the AEA for the disposal of nuclear waste subsequent to the end of the initial renewed license term will be addressed in other licensing decisions or regulatory approvals.<sup>149</sup>

In sum, Petitioners have not addressed a significant safety issue because they have not presented a safety issue challenging a plant's capacity to operate safely in any of these closed proceedings. For the reasons discussed above, Petitioners have not addressed a significant

<sup>&</sup>lt;sup>146</sup> See *id.* at D-31 ("The source of the NRC's determination that the licensed activity, once the license is granted, will not endanger public health is the fact that these facilities will remain under license after the end of the facility's period of operation, and therefore will still need to meet these safety standards, which are found in 10 CFR Part 50 or 52 for reactors and their spent fuel pools and 10 CFR Part 72 for ISFSIs...").

<sup>&</sup>lt;sup>147</sup> See supra at 33. This implicit finding that SNF can be disposed of when necessary is supported by an extensive framework of regulatory and technical material, and a statement of policy that the Commission would not issue licenses if spent fuel could not be safely managed. See supra notes 122-125, at 33.

<sup>&</sup>lt;sup>148</sup> See Seabrook, ALAB-940, 32 NRC at 243.

<sup>&</sup>lt;sup>149</sup> See NUREG 2157, Vol. 2, at D-371; see also infra at 41.

safety issue for reopening, as required under 10 C.F.R. § 2.326(a)(2). Therefore, Petitioners' motions to reopen should be denied.

#### B. <u>Petitioners Have Not Shown that a Materially Different Result Would Be Likely</u>

Petitioners also assert that a materially different result would be likely if they prevail on the contention, because the NRC would be required to either, "conduct a new safety analysis of the feasibility of spent fuel disposal and the capacity of future spent fuel repositories . . ." or "deny the license."<sup>150</sup> However, these assertions are without merit because Appendix B of NUREG-2157 specifically analyzes the technical feasibility of a geologic repository and the availability of sufficient repository capacity and concludes that a geologic repository is technically feasible.<sup>151</sup> As demonstrated in Appendix B, the NRC has a strong scientific and technical foundation of knowledge upon which to base conclusions of technical feasibility regarding storage and ultimate disposal of spent nuclear fuel.<sup>152</sup> Petitioners have not demonstrated that any reanalysis of the feasibility of spent fuel disposal and the availability of sufficient repository capacity would result in something different from the analysis in Appendix B. Therefore, Petitioners have failed to demonstrate that a materially different result would be likely.

Petitioners also assert that the NRC would also be required to prepare an environmental impact statement or environmental assessment addressing the environmental impacts of spent fuel disposal and reasonable alternatives for avoiding those impacts.<sup>153</sup> Further, Petitioners assert that if the NRC fully assesses the safety risks and associated costs of spent fuel storage

<sup>&</sup>lt;sup>150</sup> Motion to Reopen at 4.

<sup>&</sup>lt;sup>151</sup> See generally, NUREG-2157, Vol. 1, at Appendix B. Appendix B also states that the timeframe needed to develop a repository is approximately 25 to 35 years and that a repository is likely to become available by the end of the short-term timeframe. *Id.* at Section B.2.2, B-5. *See generally,* NUREG-2157 Vol. 1, at Appendix B.

<sup>&</sup>lt;sup>152</sup>. See supra note 105, at 29; note 121, at 33.

<sup>&</sup>lt;sup>153</sup> Motion to Reopen at 4.

and disposal, its cost-benefit analysis may lead the NRC to decide not to issue licenses in these closed proceedings.<sup>154</sup> These assertions are also without merit and would not lead to a materially different result.

During the public comment period on the draft GEIS, the Commission received and considered comments that an updated analysis of the environmental impacts of spent fuel disposal is necessary to support the NRC's feasibility determination.<sup>155</sup> In response to these comments, the Staff explained that specific impacts of final disposal of fuel would be addressed in a separate site-specific repository EIS and that the safety and environmental impact of any site that is chosen as a repository would be reviewed during that licensing process.<sup>156</sup> Moreover, any cost-benefit analysis regarding spent fuel disposal would be addressed in these site-specific analyses. Therefore, Petitioners have failed to demonstrate that a materially different result would be likely because a new environmental analysis of the environmental impacts of disposal, including a cost-benefit analysis, would be conducted in a separate proceeding on an application for disposal, not as part of an individual reactor licensing proceeding.

Finally, Petitioners have not shown that a materially different result would be likely because, as explained above, they have failed to proffer an admissible contention under 10 C.F.R. § 2.309(f)(1). Petitioners argue that the NRC must make explicit findings concerning spent nuclear fuel disposal, but this is not material to the findings the NRC must make in order to issue a reactor license, and, as such, this claim is also not within the scope of these licensing

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<sup>&</sup>lt;sup>154</sup> *Id.* 

<sup>&</sup>lt;sup>155</sup> See, e.g., NUREG-2157 Vol. 2, at Section D.2.37 "Comments Concerning the Feasibility of Geologic Disposal," D-370 – D-385.

<sup>&</sup>lt;sup>156</sup> See *id.* at D-371-72 (noting that "Any repository application must be approved by the NRC. The NRC review would address the safety and environmental aspects of disposal in a repository during the licensing review. As part of that licensing review, the NRC would address how the repository meets applicable regulations.").

proceedings.<sup>157</sup> In addition, Petitioners raise no genuine dispute with any specific application as required by 10 C.F.R. § 2.309(f)(1)(vi).

As explained above, Petitioners have not raised a significant safety issue warranting reopening of the record in these closed proceedings because, contrary to the Petitioners' assertions, the NRC is not required to make findings under the AEA regarding the disposal of nuclear waste before issuing a license in this proceeding. Additionally, Petitioners have not presented a safety issue challenging a plant's capacity to operate safely in any of these closed proceedings, and have not shown that a materially different result would have been likely had the newly proffered evidence been considered in the first instance. Petitioners have thus failed to meet the reopening standards in 10 C.F.R. § 2.326. Accordingly, Petitioners' motions to reopen the record in these closed proceedings should be denied.

#### **CONCLUSION**

Each of the Petitioners' submissions—their Petition, New Contention, and Motion to Reopen in certain proceedings—are legally deficient for the reasons explained above. As such, each should be dismissed.

# /Signed (electronically) by/

L. Sheldon Clark Counsel for NRC Staff U.S. Nuclear Regulatory Commission Mail Stop O-15 D21 Washington, DC 20555-0001 Telephone: (301) 415-2189 E-mail: Sheldon.Clark@nrc.gov

Dated at Rockville, Maryland this 31<sup>st</sup> day of October, 2014

<sup>&</sup>lt;sup>157</sup> 10 C.F.R. § 2.309(f)(1)(iii) and (iv).

### UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

#### **BEFORE THE COMMISSION**

In the Matter of	)
VIRGINIA ELECTRIC AND POWER CO. d/b/a DOMINION VIRGINIA POWER and OLD DOMINION ELECTRIC COOPERATIVE (North Anna Power Station, Unit 3)	))))

Docket No. 52-017-COL

# CERTIFICATE OF SERVICE

Pursuant to 10 C.F.R. § 2.305 (revised), I hereby certify that copies of the foregoing "NRC STAFF CONSOLIDATED ANSWER TO PETITIONS TO SUSPEND FINAL REACTOR LICENSING DECISIONS, MOTIONS TO ADMIT A NEW CONTENTION, AND MOTIONS TO REOPEN THE RECORD" dated October 31, 2014, have been served upon the Electronic Information Exchange, the NRC's E-Filing System, in the above captioned proceeding, this 31st day of October, 2014.

#### /Signed (electronically) by/

L. Sheldon Clark Counsel for NRC Staff U.S. Nuclear Regulatory Commission Office of the General Counsel Mail Stop O-15-D21 Washington, DC 20555 Telephone: (301) 415-2189 E-mail: Sheldon.Clark@nrc.gov

Dated at Rockville, Maryland this 31th day of October, 2014