UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:	)	
	)	January 15, 2009
U.S. Department of Energy	)	
	)	
(License Application for Geologic Repository at Yucca Mountain)	)	Docket No. 63-001

ANSWER OF THE U.S. DEPARTMENT OF ENERGY TO NEVADA COUNTIES OF CHURCHILL, ESMERALDA, LANDER AND MINERAL PETITION TO INTERVENE

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I. INTRODUCTION

In accordance with 10 C.F.R. § 2.309 and 10 C.F.R. Part 63, and the Advisory Pre-Application Presiding Officer (PAPO) Board Order of June 17, 2008, the U.S. Department of Energy (DOE or the Department) hereby files its Answer to "Nevada Counties of Churchill, Esmeralda, Lander and Mineral (Nevada Counties) Petition to Intervene" (Petition), filed on December 19, 2008.[1] The Petition responds to the U.S. Nuclear Regulatory Commission's (NRC or Commission) Notice of Hearing and Opportunity to Petition for Leave to Intervene on an Application for Authority To Construct a Geologic Repository at a Geologic Repository Operations Area at Yucca Mountain, published in the *Federal Register* on October 22, 2008 (73 ed. Reg. 63,029) (Hearing Notice). The Hearing Notice concerns DOE's License Application (Application or LA) for authorization to construct a geologic repository at Yucca

[1] DOE is filing this Answer in advance of the deadline set by the Commission in its Hearing Notice. DOE recognizes, however, that Petitioners have the full time allotted by the Hearing Notice to file their replies. DOE's early filing does not affect the deadlines set by the Commission.

Mountain, Nevada for the disposal of spent nuclear fuel (SNF) and high-level radioactive waste (HLW).

To be admitted as a party to this proceeding, under 10 C.F.R. § 2.309, the Nevada Counties must: (1) be in substantial and timely compliance with the Licensing Support Network (LSN) requirements imposed by 10 C.F.R. § 2.1003 at the time of its request for participation in the proceeding as provided in 10 C.F.R. § 2.1012(b)(1), and be in compliance with all orders of the Pre-License Application Presiding Officer (PAPO) regarding electronic availability of documents; (2) have legal standing to intervene in the proceeding pursuant to 10 C.F.R. § 2.309; and (3) submit at least one admissible contention in accordance with 10 C.F.R. § 2.309(f)(1). In addition to the NRC's contention admissibility requirements in 10 C.F.R. § 2.309(f), environmental contentions must also meet the requirements of 10 C.F.R. § 51.109 and 10 C.F.R. § 2.326.

As discussed below, DOE has no reason to believe that the Nevada Counties are not in substantial and timely compliance with their LSN obligations at this time, and does not object to their legal standing as Affected Units of Local Government under the Nuclear Waste Policy Act. However, DOE does not believe that the Nevada Counties have proffered any admissible contentions.[2] Accordingly, this Petition should be denied.

II. COMPLIANCE WITH LSN REQUIREMENTS

DOE has no reason to believe that the Nevada Counties are not in substantial and timely compliance with their LSN obligations at this time, and therefore this Answer does not address the detailed requirements for LSN compliance.

[2] DOE's Answer to Nevada's Petition contains a "Background" section summarizing the Yucca Mountain site, proposed repository operation, the applicable NRC regulatory framework, and the NRC Staff's technical review and the hearing process. DOE has omitted that section from this Answer in the interest of brevity.

III. LEGAL STANDING

Because the Commission has stated that "[a]ny AULG (affected unit of local government) seeking party status shall be considered a party to this proceeding, provided that it files at least one admissible contention" Hearing Notice, (73 Fed. Reg. at 63,031), DOE has no objection to the Nevada Counties' legal standing.

IV. ADMISSIBILITY OF CONTENTIONS

A. Applicable Legal Standards and Relevant NRC Precedent

1. Petitioner Must Submit at Least One Admissible Contention to be Admitted as a Party

To be admitted as a party in the Yucca Mountain licensing proceeding, a petitioner must proffer at least one admissible contention. *See* 10 C.F.R. §§ 2.309(a), 2.309 (d)(2)(iii). The NRC will deny a petition to intervene from a petitioner who has complied with the LSN requirements and has demonstrated standing to intervene, but who has not proffered at least one admissible contention. *See generally Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 5 (2001). As the Commission has observed, "[i]t is the responsibility of the Petitioner to provide the necessary information to satisfy the basis requirement for the admission of its contentions and demonstrate that a genuine dispute exists within the scope of this proceeding." *Balt. Gas & Elec. Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-14, 48 NRC 39, 41 (1998). "A contention's proponent, not the licensing board, is responsible for formulating the contention and providing the necessary information to satisfy the basis requirement for the admission of contentions." *Statement of Policy on Conduct of Adjudicatory Proceedings*, CLI-98-12, 48 NRC 18, 22 (1998). Finally, "government entities seeking to litigate their own contentions are held to the same pleading rules

as everyone else." *Dominion Nuclear Conn., Inc*. (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 568 (2005).

2. Petitioner in this Proceeding Has a Heightened Obligation to Proffer Well Pled and Adequately Supported Contentions Given the Availability of the LSN

As the Commission has noted, this proceeding involves a number of "unique facts and circumstances"—one of those being the development of the LSN as a substitute for traditional document discovery. In developing this system, the NRC sought both to streamline the discovery process *and* to facilitate submittal of well-pled contentions:

> Another efficiency the [LSN] provides is reducing the effort consumed in carrying out document discovery and allowing more effort to be spent in case preparation. Because access to these documents is provided *before* the application is docketed, each party can focus on formulating meaningful contentions before the licensing hearing begins. *There should be no excuse for poorly crafted contentions, and the licensing board can reduce hearing delays by readily rejecting or otherwise disposing of unfocused or unsupported contentions.* Likewise, the [LSN] rule places tighter restrictions on amending or adding contentions late in the hearing processes because the [LSN] affords the parties an opportunity to raise and resolve issues earlier than what traditionally has been possible.

SECY-95-153, Memorandum from James M. Taylor, Executive Director of Operations, to the Commissioners, "Licensing Support System Senior Management Team Recommendations on Direction of the Licensing Support System," June 14, 1995, *available at* LEGACY ADAMS Accession No. 9506280652 (emphasis added).

In issuing the final LSN rule nearly a decade later, the Commission noted that "the history of the LSN and its predecessor . . . makes it apparent it was the Commission's expectation that the LSN, among other things, would provide potential participants with the opportunity to frame focused and meaningful contentions" and avoid potential discovery-related delays. Final Rule, LSN, Submissions to the Electronic Docket, 69 Fed. Reg. at 32,843. The

Commission added that "[t]hese objectives are still operational." *Id*. In fact, in a recent adjudicatory order related to this proceeding, the Commission reaffirmed these objectives:

> The use of the LSN was intended, among other things, to "enabl[e] the comprehensive and early review of the millions of pages of relevant licensing material by the potential parties to the proceeding, so as to permit the earlier submission of better focused contentions resulting in a substantial saving of time during the proceeding."

U.S. Dep't of Energy (High-Level Waste Repository: Pre-Application Matters), CLI-08-12, 67 NRC __ (slip op. at 8) (June 17, 2008).

And in fact, DOE's production of documentary material on the LSN fulfilled those objectives. DOE first made documentary material available on the LSN in 2004, when it publicly released approximately 1.3 million documents. Transcript of Record at 540, *U.S. Dep't of Energy* (High-Level Waste Repository: Pre-Application Matters), ASLBP No. 04-8239-01-PAPO (July 12, 2005). DOE made another 2.1 million documents publicly available on the LSN in April, 2007—more than a year before it submitted the LA. Policy Issue Information Memorandum, SECY-07-0130, August 7, 2007, *available at* ADAMS No. ML071930440 at 5. DOE regularly added documents to the LSN each month thereafter, and in October, 2007, DOE certified that all its extant documentary material was available on the LSN. The Department of Energy submitted its Certification of Compliance on October 19, 2007. DOE has since then updated its LSN production each month with new documentary material that it has generated, received, or identified. *See, e.g.*, The Department of Energy's Certification of Licensing Support Network Supplementation (November 1, 2007); *see also* Revised Second Case Management Order, ASLBP No. 04-829-01-PAPO (July 6, 2007) at 21 (requiring monthly supplemental production on LSN of documentary material created or discovered after party's initial LSN certification).

Altogether, DOE has made more than 3.5 million documents available on the LSN. *U.S. Dep't of Energy* (High-Level Waste Repository: Pre-Application Matters), LBP-08-01, 67 NRC __ (slip op. at 11) (January 4, 2008) (stating that "it is not disputed that DOE has made available a massive amount of documentary material—3.5 million documents, amounting to over 30 million pages, including redacted versions of some privileged documents and privilege logs for hundreds of others."). That production includes documents that DOE cites and relies upon in the LA. It includes extensive underlying calculations, data, and other material on which those documents are based. Further, as required by regulation, it also includes documents with information that does not support the information DOE intends to cite or rely upon in the licensing proceeding. 10 C.F.R. § 2.1001 (definition of "documentary material").

DOE's extensive production substantially heightens the Nevada Counties' ability—*and their corresponding obligation*—to proffer focused and adequately supported contentions in this proceeding. As the Commission observed in rejecting a challenge to DOE's initial LSN certification, "potential parties had access to millions of DOE documents upon which to begin formulating meaningful contentions" during the period following that certification, as contemplated by the Commission's regulations. *U.S. Dep't of Energy*, CLI-08-12, 67 NRC __ (slip op. at 9). Indeed, because of DOE's early production of documentary material on the LSN starting 4 years before LA submittal, every potential party has had an even greater opportunity than the regulations contemplate to use those materials to develop contentions. Based on the above circumstances, the Nevada Counties must be held to a particularly heightened burden to proffer well-pled and adequately supported contentions.

3. Proffered Contentions Must Meet All of the Contention Admissibility Requirements of 10 C.F.R. § 2.309(f)(1) as Well as the Requirements of the Applicable June 20, 2008 and September 29, 2008 Case Management Orders

Section 2.309(f)(1) requires a petitioner to "set forth with particularity the contentions sought to be raised," and to satisfy the following six criteria: (1) provide a specific statement of the legal or factual issue sought to be raised; (2) provide a brief explanation of the basis for the contention; (3) demonstrate that the issue raised is within the scope of the proceeding; (4) demonstrate that the issue raised is material to the findings the NRC must make to support the licensing action that is the subject of the proceeding; (5) 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; and (6) provide sufficient information to show that a genuine dispute exists with regard to a material issue of law or fact. *See* 10 C.F.R. § 2.309(f)(1)(i)-(vi). *A failure to comply with any one of the six admissibility criteria is grounds for rejecting a proffered contention*. *See* Final Rule, Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2221 (Jan. 14, 2004) (emphasis added); *see also Private Fuel Storage L.L.C.*, (Independent Spent Fuel Storage Installation) CLI-99-10, 49 NRC 318, 325 (1999).

The purpose of these six criteria is to "focus litigation on concrete issues and result in a clearer and more focused record for decision." Final Rule, Changes to Adjudicatory Process, 69 Fed. Reg. at 2202. The current contention admissibility standards are "strict by design," *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001), *recons. denied*, CLI-02-1, 55 NRC 1 (2002), and were intended to "raise the threshold for the admission of contentions." Rules of Practice for Domestic Licensing Proceedings—Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168 (Aug. 11, 1989); *see also Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC

328, 334 (1999). As explained above, the availability of the LSN further raises this threshold for the admission of a contention in this proceeding. In revising its Part 2 rules in 2004, the Commission reiterated that the standards are "necessary to ensure that hearings cover only genuine and pertinent issues of concern and that the issues are framed and supported concisely enough at the outset to ensure that the proceedings are effective and focused on real, concrete issues." Final Rule, Changes to Adjudicatory Process, 69 Fed. Reg. at 2189-90 (stating that the NRC "should not have to expend resources to support the hearing process unless there is an issue that is appropriate for, and susceptible to, resolution in an NRC hearing"); *see also id*. at 2202.

Strict application of these contention admissibility criteria in this proceeding is critically important. The vast number of contentions submitted and the "rigorous schedule" imposed by the NWPA and Appendix D to Part 2 present unprecedented challenges to the conduct of a timely, effective, and focused adjudication. Recognizing these challenges, the Advisory PAPO Board, with the Commission's express approval, issued its Case Management Order "to help both potential parties and licensing boards address the admissibility of contentions in any HLW proceeding effectively and efficiently." *U.S. Dep't of Energy* (High-Level Waste Repository: Pre-Application Matters, Advisory PAPO Board), LBP-08-10, 67 NRC __ (slip op. at 3) (June 20, 2008) (Case Management Order).[3] That Order imposes numerous format requirements for proffered contentions. Failure to adhere to these format requirements may provide an additional basis for rejection of proffered contentions should a potential party significantly and in bad faith ignore these requirements. *Id.* at 3, 5-9.

The six contention admissibility criteria set forth in § 2.309(f)(1), and the related pleading requirements contained in the Case Management Order, are discussed further below.

[3] A second case management order was issued. *See U.S. Dep't of Energy* (Regarding Contention Formatting and Tables of Contents), LBP-08-10, 67 NRC __ (September 29, 2008).

a. Petitioner Must Specifically State the Issue of Law or Fact to Be Raised

Section 2.309(f)(1)(i), the first admissibility criterion, requires that a petitioner "provide a specific statement of the issue of law or fact to be raised or controverted," by "articulat[ing] at the outset the specific issues [it] wish[es] to litigate as a prerequisite to gaining formal admission as [a party]." *Duke Energy Corp*., CLI-99-11, 49 NRC at 338. To be admissible, a contention "must explain, with specificity, particular safety or legal reasons requiring rejection of the contested [application]." *Dominion Nuclear Conn., Inc.*, CLI-01-24, 54 NRC at 359-60. Section 2.309(f)(1)(i) "bar[s] contentions where petitioners have only 'what amounts to generalized suspicions, hoping to substantiate them later.'" *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-03-17, 58 NRC 419, 424 (2003) (quoting *Duke Energy Corp*., CLI-99-11, 49 NRC at 337-39). Elaborating further on this requirement, the June 20, 2008, Case Management Order for this proceeding requires "narrow, *single-issue* contentions" that are "sufficiently specific as to define the relevant issues for eventual rulings on the merits, and not require" extensive narrowing or clarification by the parties or boards. *U.S. Dep't of Energy*, LBP-08-10, 67 NRC __ (slip op. at 6) (emphasis added).

b. Petitioner Must Briefly Explain the Basis for the Contention

Section 2.309(f)(1)(ii) requires that a petitioner provide "a brief explanation of the basis for the contention." *See also* Rules of Practice for Domestic Licensing Proceedings—Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,170. This includes "sufficient foundation" to "warrant further exploration." *Pub. Serv. Co. of N.H.* (Seabrook Station, Units 1 and 2), ALAB-942, 32 NRC 395, 428 (1990) (footnote omitted). A petitioner's explanation serves to define the scope of a contention, as "[t]he reach of a contention necessarily hinges upon its terms coupled with its stated bases." *Pub. Serv. Co. of N.H.* (Seabrook Station, Units 1 and 2), ALAB-899,

28 NRC 93, 97 (1988), *petitions denied in part, granted in part, Mass. v. Nuclear Regulatory Comm'n*, 924 F.2d 311 (D.C. Cir. 1991), *cert. denied*, 502 U.S. 899 (1991). The Board, however, must determine the admissibility of the contention itself, not the admissibility of individual "bases." *Duke Energy Corp*. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 379 n.45 (2002).

c. Petitioner Must Demonstrate that the Issue Raised in the Contention is Within the Scope of the Proceeding

Section 2.309(f)(1)(iii) requires that a petitioner demonstrate "that the issue raised in the contention is within the scope of the proceeding." The scope of the proceeding is defined by the Commission's Notice of Hearing and the NRC regulations governing review and approval of the Application. *See, e.g.*, *Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), ALAB-825, 22 NRC 785, 790-91 (1985). Contentions are necessarily limited to issues that are germane to the specific application pending before the Board. *Yankee Atomic Elec. Co.* (Yankee Nuclear Power Station), CLI-98-21, 48 NRC 185, 204 n.7 (1998). Any contention that falls outside the specified scope of this proceeding—as discussed further below—must be rejected. *See, e.g.*, *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-04-36, 60 NRC 631, 639 (2004).

A contention that challenges an NRC rule is outside the scope of this proceeding because, absent a waiver, "no rule or regulation of the Commission . . . is subject to attack . . . in any adjudicatory proceeding…." 10 C.F.R. § 2.335(a). This includes contentions that advocate stricter requirements than agency rules impose or that otherwise seek to litigate a generic determination established by a Commission rulemaking. *See Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 NRC 138, 159 (2001), *aff'd on other grounds*, CLI-01-17, 54 NRC 3. For instance, any direct or indirect challenge to the

current EPA standard or NRC implementing rule is a collateral attack and is outside the scope of the proceeding. Moreover, Nevada challenged the EPA rule in federal court and thus this proceeding is the wrong forum to once again raise such a challenge.

In addition, any contention that collaterally attacks applicable statutory requirements or the basic structure of the NRC regulatory process must also be rejected by the Board as outside the scope of the proceeding. *Carolina Power & Light* (Shearon Harris Nuclear Power Plant Units 1), LBP-07-11, 65 NRC 41, 57-58 (citing *Philadelphia Elec. Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20 (1974)). Accordingly, a contention that simply states the petitioner's views about what the regulatory policy should be does not present a litigable issue. *See Philadelphia Elec. Co.*, ALAB-216, 8 AEC at 20-21, 21 n.33. Similarly, challenges to the adequacy of the NRC Staff's safety review process, including the contents of its SER, are outside the scope of this proceeding. "The NRC has not, and will not, litigate claims about the adequacy of the Staff's safety review in licensing adjudications." *AmerGen Energy Co., LLC* (License Renewal for Oyster Creek Nuclear Generating Station), CLI-08-28, 68 NRC __ (slip op. at 13-14) (Nov. 6, 2008).

Furthermore, asserting that generalized "uncertainties" exist in postclosure models or data, without showing in any way, how or why those uncertainties call into question the conclusions reached by DOE, or findings the NRC must make in its review of the LA, is not a sufficient basis for an admissible contention. To merely assert the existence of such uncertainties, without specifying their impact on a finding NRC must make in its issuance of the construction authorization, amounts to an improper challenge to Part 63, which explicitly recognizes that such uncertainties exist and cannot be eliminated. The Commission, in the Statements of Consideration accompanying Part 63, expressly rejected requests made by several

commenters to define an acceptable level of uncertainty in Part 63, finding it "neither practical nor appropriate." Final Rule, Disposal of High-Level Radioactive Wastes in a Proposed Geologic Repository at Yucca Mountain, NV, 66 Fed. Reg. 55,732, 55,747-48 (Nov. 2, 2001). The Commission "decided to adopt EPA's preferred criterion of 'reasonable expectation' for purposes of judging compliance with the postclosure performance objectives [since] . . . a standard of 'reasonable expectation' allows it the necessary flexibility to account for the inherently greater uncertainties in making long-term projections of a repository's performance." *Id*. at 55,740. This flexibility encompasses consideration of the use, as appropriate, of cautious but reasonable approaches consistent with present knowledge in lieu of bounding or more conservative approaches. *See, e.g.*, 10 C.F.R. § 63.305(c).

The following examples from 10 C.F.R. § 63.101 are illustrative of the reasonable expectation standard:

- "Proof that the geologic repository will conform with the objectives for postclosure performance is not to be had in the ordinary sense of the word because of the uncertainties inherent in the understanding of the evolution…."
- "[W]hat is required is reasonable expectation, making allowance for the …uncertainties involved, that the outcome will conform with the objectives for postclosure…."
- "[D]emonstration of compliance must take uncertainties and gaps in knowledge into account so that the Commission can make the specified finding…."

10 C.F.R. § 63.304 describes the characteristics of reasonable expectation by stating that reasonable expectation:

- Requires less than absolute proof because absolute proof is impossible to attain for disposal due to the uncertainty of projecting long-term performance;
- Accounts for the inherently greater uncertainties in making long-term projections of the performance of the Yucca Mountain disposal system;
- Does not exclude important parameters from assessments and analyses simply because they are difficult to precisely quantify to a high degree of confidence; and

- Focuses performance assessments and analyses on the full range of defensible and reasonable parameter distributions rather than only upon extreme physical situations and parameter values.

Given the obligation of the Commission under section 801(b) of the Energy Policy Act of 1992 (EPACT) to modify its technical requirements and criteria under section 121(b) of the NWPA to be consistent with the radiological protection standards promulgated by the Environmental Protection Agency (EPA) under section 801(a) of EPACT, the proper application of the reasonable expectation standard must take into account the statements by EPA in promulgating the standards required by EPACT.[4] These statements make clear that, while reasonable assurance and reasonable expectation are similar concepts, the evaluation of the Yucca Mountain repository requires a different level and type of technical proof than required for reactors and other situations licensed by NRC in the past.[5] Reasonable expectation recognizes that, in the context of the Yucca Mountain repository, "unequivocal numerical proof of compliance is neither necessary nor likely to be obtained,"[6] and while some "sources of uncertainty can be addressed, or at least accounted for while in other [data or model] areas our knowledge may be too limited to even characterize the uncertainty, much less explicitly account

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4 *See* Final Rule, Public Health and Environmental Radiation Protection Standards for Yucca Mountain, NV, 66 ed. Reg. 32,074, 32,101-03 (June 13, 2001) (section III.B.2.c titled "What Level of Expectation Will Meet Our Standards?"); *see also* Proposed Rule, Public Health and Environmental Radiation Protection Standards for Yucca Mountain, NV, 70 Fed. Reg. 49,014, 49,020-21 (Aug. 22, 2005) (section I.A.1.c titled "What is "Reasonable Expectation?"); Final Rule, Public Health and Environmental Radiation Protection Standards for Yucca Mountain, NV, 73 Fed. Reg. 61,256, 61,271-73 (Oct. 15, 2008) (section III.A.4 titled "How Did We Consider Uncertainty and Reasonable Expectation?").

5 *See* Final Rule, Public Health and Environmental Radiation Protection Standards for Yucca Mountain, NV, 66 ed. Reg. at 32,101.

6 Proposed Rule, Public Health and Environmental Radiation Protection Standards for Yucca Mountain, NV, 70 ed. Reg. at 49,021.

for it."[7] Identifying postclosure uncertainties, without specifying their impact on whether the reasonable expectation standard is met, does not provide an adequate basis to admit a contention.

Therefore, in formulating its contentions, the initial burden is on the petitioner to explain the implications of alleged uncertainties and show why, if true, they exceed the range of acceptable (and unavoidable) uncertainties clearly reflected in the regulations, particularly the reasonable expectation standard set forth in 10 C.F.R. § 63.101. Any contention attempting to shift that burden to the applicant is an improper challenge to 10 C.F.R. § 2.309. *See Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Power Station), LBP-06-23, 64 NRC 257, 358-59 (2006). DOE's responses to specific contentions identify where these pleading requirements have been violated.

d. Petitioner Must Demonstrate That Each Contention Raises a Material Issue

Section 2.309(f)(1)(iv) requires that a petitioner "[d]emonstrate that the issue raised in the contention is *material* to the *findings the NRC must make to support the action* that is involved in the proceeding." Emphasis added. As the Commission has observed, "[t]he dispute at issue is 'material' if its resolution would 'make a difference in the outcome of the licensing proceeding.'" *Duke Energy Corp*., CLI-99-11, 49 NRC at 333-34; *see also* Rules of Practice for Domestic Licensing Proceedings–Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,172. Thus, each contention must be one that, if proven, would entitle the petitioner to relief. *Yankee Atomic Elec. Co.* (Yankee Power Station), CLI-96-7, 43 NRC 235, 244 (1996). The Case Management Order states that this criterion "requires citation to a statute or regulation that,

[7] Final Rule, Public Health and Environmental Radiation Protection Standards for Yucca Mountain, NV, 73 Fed. Reg. at 61,271, n.22.

explicitly or implicitly, has not been satisfied by reason of the issue raised in the contention." *U.S. Dep't of Energy*, LBP-08-10, 67 NRC __ (slip op. at 7).

The "findings the NRC must make to support" the issuance of a construction authorization for a geologic repository are set forth in 10 C.F.R. § 63.31. To authorize construction of the repository, the NRC must determine that:

- there is reasonable assurance that the types and amounts of radioactive materials described in the application can be received and possessed in a geologic repository operations area of the design proposed without unreasonable risk to the health and safety of the public;
- there is reasonable expectation that the materials can be disposed of without unreasonable risk to the health and safety of the public; and
- there is reasonable assurance that the activities proposed in the application will not be inimical to the common defense and security.

In short, the NRC must determine the validity of DOE's conclusions concerning the ability of the repository design to limit exposure to radioactivity, both during the construction and operation phase of the repository (*i.e.*, preclosure phase) and during the phase after the repository has been filled, closed, and sealed (*i.e.*, postclosure phase).

In making these determinations, the NRC must evaluate DOE's compliance with the applicable provisions of Part 63, including, among other things, whether DOE has described the proposed geologic repository as specified in § 63.21, and whether the site and design comply with the Part 63 performance objectives and requirements. Proposed safety contentions that fail to raise issues that are material to these findings are inadmissible. For example, Part 63 permits DOE to use probabilistic analyses to calculate potential postclosure radiation doses, 10 C.F.R. § 63.102(j), and to report those doses as *mean* doses. *See* 10 C.F.R. § 63.303. Therefore, contentions that either independently or cumulatively, fail to demonstrate an increase in the mean dose *above regulatory limits* are immaterial and inadmissible because they would not "make a

difference in the outcome of the licensing proceeding." *Duke Energy Corp*., CLI-99-11, 49 NRC at 333-34.

e. Petitioner Must Demonstrate that Each Contention is Supported by Adequate Factual Information and/or Expert Opinion

Section 2.309(f)(1)(v) requires a petitioner to present the factual information or expert opinions necessary to support its contention adequately, and failure to do so requires the Board to reject the contention. *See also Yankee Atomic Elec. Co.*, CLI-96-7, 43 NRC at 262 (in referencing 10 C.F.R. § 2.714, the predecessor to 10 C.F.R. § 2.309, the Commission stated that petitioners must present "claims rooted in fact, documents, or expert opinions"). A petitioner is "obligated to put forward and support contentions when seeking intervention, based on the application and information available" by examining the application and publicly available information. *Consumers Energy Co*. (Palisades Nuclear Power Plant) CLI-07-18, 65 NRC 399, 414 n.46 (2007).

As explained above, the LSN heightens a petitioner's already "ironclad" obligation to furnish adequate support because "early access to . . . documents in an electronically searchable form [has] allow[ed] for a thorough and comprehensive technical review of the license application by all parties and potential parties to the HLW licensing proceeding." Final Rule, LSN, Submissions to the Electronic Docket, 69 Fed. Reg. at 32,837. Thus, where a petitioner neglects to provide the requisite support for its contentions, the Board may not—and in this case absolutely should not—make assumptions of fact that favor the petitioner or supply information that is lacking. *See Ariz. Pub. Serv. Co.* (Palo Verde Nuclear Generating Station, Unit Nos. 1, 2, and 3), CLI-91-12, 34 NRC 149, 155 (1991).

Vague references to documents are not permissible. A petitioner must identify specific portions of the documents on which it relies. *See Pub. Serv. Co. of N.H.* (Seabrook Station,

Units 1 and 2), CLI-89-03, 29 NRC 234, 240-41 (1989). Moreover, the mere incorporation of massive documents by reference is unacceptable. *See Tenn. Valley Auth.* (Browns Ferry Nuclear Plant, Units 1 and 2), LBP-76-10, 3 NRC 209, 216 (1976). Consistent with these requirements, the Case Management Order directs petitioners to ensure that documentary references "be as specific as reasonably possible." *U.S. Dep't of Energy*, LBP-08-10, 67 NRC __ (slip op. at 7). Additionally, it requires that supporting documents (with the exception of readily available legal authorities, copyright-restricted material, and LSN documentary material), be electronically attached to the petition. In citing LSN documents, petitioners must include the LSN accession number as well as the title, date, and relevant pages of the document.

A petitioner also must explain the significance of any factual information upon which it relies. *See Fansteel, Inc.* (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 204-05 (2003). With respect to factual information or expert opinion proffered in support of a contention, "the Board is not to accept uncritically the assertion that a document or other factual information or an expert opinion supplies the basis for a contention." *Private Fuel Storage* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 181 (1998), *aff'd on other grounds*, CLI-98-13, 48 NRC 26. Any supporting material provided by a petitioner, including those portions thereof not relied upon, is subject to Board scrutiny, "both for what it does and does not show." *See Yankee Atomic Elec. Co.*, LBP-96-2, 43 NRC 61, 90 (1996), *rev'd in part on other grounds and remanded*, CLI-96-7, 43 NRC 235 (1996). The Board should examine documents to confirm that they support the proposed contention(s). *See Vt. Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29, 48 (1989), *vacated in part on other grounds and remanded*, CLI-90-04, 31 NRC 333 (1990). A petitioner's imprecise

reading of a document cannot be the basis for a litigable contention. *See Ga. Inst. of Tech.* (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 300 (1995).

Furthermore, "an expert opinion that merely states a conclusion (*e.g.*, the application is 'deficient,' 'inadequate,' or 'wrong') without providing *a reasoned basis or explanation* for that conclusion is inadequate because it deprives the Board of the ability to make the necessary, reflective assessment of the opinion" alleged to provide a basis for the contention. *See USEC, Inc.* (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 472 (2006) (emphasis added) (quoting *Private Fuel Storage*, LBP-98-7, 47 NRC at 181). Conclusory statements cannot provide "sufficient" support for a contention, simply because they are proffered by an alleged expert. *See USEC*, CLI-06-10, 63 NRC at 472. In summary, a contention "will be ruled inadmissible if the petitioner 'has offered no tangible information, no experts, no substantive affidavits', but instead only 'bare assertions and speculation.'" *Fansteel*, CLI-03-13, 58 NRC at 203 (quoting *Gen. Pub. Utils. Nuclear, Inc*. (Oyster Creek Nuclear Generating Station), CLI-00-06, 51 NRC 193, 208 (2000)).

f. Petitioner Must Demonstrate that the Contention Raises a Genuine Dispute With Respect to a Material Issue of Law or Fact

With regard to the final requirement, that a petitioner "provide sufficient information to show . . . a genuine dispute . . . with the applicant . . . on a material issue of law or fact," 10 C.F.R. § 2.309(f)(1)(vi), the Commission has stated that the petitioner must "read the pertinent portions of the license application, . . . state the applicant's position and the petitioner's opposing view," and explain why it disagrees with the applicant. Rules of Practice for Domestic Licensing Proceedings—Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,170; *Dominion Nuclear Conn., Inc.*, CLI-01-24, 54 NRC at 358.

In claiming that the Application fails to address adequately a material issue, a petitioner must "explain why the application is deficient." Rules of Practice for Domestic Licensing Proceedings—Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,170; *Ariz. Pub. Serv. Co.*, CLI-91-12, 34 NRC at 156. An allegation that some aspect of a license application is "inadequate" or unacceptable does not give rise to a genuine dispute unless it is supported by facts and a reasoned statement of why the application is unacceptable in some material respect. *See Fla. Power & Light Co.* (Turkey Point Plant, Unit Nos. 3 and 4), LBP-90-16, 31 NRC 509, 521, 521 n.12 (1990). Put another way, a contention that does not *directly controvert a position taken by the applicant in the application* is subject to dismissal. *See Tex. Utils. Elec. Co.* (Comanche Peak Steam Electric Station, Unit 2), LBP-92-37, 36 NRC 370, 384 (1992) (emphasis added). For example, if a petitioner submits a contention of omission, but the allegedly missing information is, in fact, contained in the license application, then the contention does not raise a genuine dispute.

4. Environmental Contentions Addressing DOE's Final Environmental Impact Statement and its Supplements Must Also Meet the Requirements of 10 C.F.R. § 51.109 and 10 C.F.R. § 2.326

In its Hearing Notice, the Commission reaffirmed that proposed environmental contentions are subject to substantially heightened admissibility standards.[8] In addition to the

[8] In February of 2002, DOE issued the *Final Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada* (DOE/EIS-0250F, February 2002) (2002 FEIS). On April 8, 2004, DOE announced in a Record of Decision (2004 ROD) the selection of the mostly rail alternative analyzed in the 2002 FEIS for transporting spent nuclear fuel and high-level radioactive waste nationally and within Nevada. 69 Fed. Reg. 18,557. DOE also announced in the 2004 ROD that it had selected the Caliente rail corridor in which to examine possible alignments for construction of a rail line in Nevada. In July 2008, DOE issued the *Final Supplemental Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada* (DOE/EIS-0250F-S1) (Repository SEIS), the *Final Supplemental Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada – Nevada Rail Transportation Corridor* (DOE/EIS-0250F-S2) (Nevada Rail Corridor SEIS), and the *Final Environmental Impact Statement for a Rail Alignment for the Construction and Operation of a Railroad in Nevada to a Geologic Repository at Yucca Mountain, Nye County, Nevada* (DOE/EIS-0369) (Rail Alignment EIS). On

NRC's contention admissibility requirements in 10 C.F.R. § 2.309(f), environmental contentions must also meet the requirements of 10 C.F.R. § 51.109 and the requirements of 10 C.F.R. § 2.326. These two sections impose the following admissibility standards on environmental contentions:

1. Contentions must allege that it is not practicable to adopt the DOE EIS for one of two reasons:

   "(1)(i) The action proposed to be taken by the Commission differs from the action proposed in the license application submitted by [DOE]; and (ii) the difference may significantly affect the quality of the human environment;[9] or

   (2) Significant and substantial new information or new considerations render such [EIS] inadequate." 10 C.F.R. § 51.109(c).

2. The contention must address a "significant" environmental issue. 10 C.F.R. § 2.326(a)(2).

3. The contention must demonstrate that, if true, "a materially different result would be or would have been likely . . . ." 10 C.F.R. § 2.326(a)(3).

4. The contention must be supported by affidavits that set forth the factual and/or technical basis for the movant's claims and must be given by competent individuals with knowledge of the facts or by experts in the appropriate disciplines. 10 C.F.R. § 2.326(b).[10]

These additional admissibility standards are discussed in greater detail below.

a. The 10 C.F.R. § 51.109 Criteria

Given the *sui generis* nature of this proceeding, neither the Commission nor its boards have applied § 51.109 in the context of an adjudication. Nevertheless, existing Commission

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October 10, 2008, DOE issued a Record of Decision (2008 ROD) announcing its decision to construct and operate a railroad along a rail alignment within the Caliente corridor. 73 Fed. Reg. 60,247.

[9] Because the action proposed to be taken by the NRC does not differ from the action proposed in DOE's application, this first factor has no relevance to this proceeding and will not be discussed further.

[10] In addition, evidence in the affidavits must meet NRC admissibility standards and each criteria in 10 C.F.R. § 2.326 must be addressed separately.

decisions and federal caselaw under NEPA provide guidance with respect to how the criteria under § 51.109 should be applied in this proceeding.

First, the Commission has made clear that its adjudicatory boards should not "automatically assume" that a proffered environmental contention—though cognizable as a "new consideration" under the D.C. Circuit's decision in *NEI*—contains "significant and substantial information" that, if true, would render the DOE EIS and its supplements "inadequate" under NEPA. Letter from Bradley W. Jones, Esq., Assistant Gen. Counsel, U.S. Nuclear Regulatory Comm'n, to Martin G. Malsch, Esq., "Request By Nevada For Reconsideration and Clarification of Notice of Denial," March 20, 2008, *available at* ADAMS Accession No. ML080810175 (Jones Letter). This approach is consistent with well-established NEPA principles, as applied by the federal courts, under which reviewing courts have held that the identification of a deficiency in an EIS does not necessarily render that EIS "inadequate." For example, the D.C. Circuit so held in denying Nevada's challenge to the transportation-related portions of DOE's 2002 FEIS. *Nevada v. Dep't of Energy*, 457 F.3d 78, 93 (D.C. Cir. 2006) (rejecting alleged inadequacies in the FEIS relating to environmental impacts on cultural resources, floodplains and archaeological and historic impacts and stating "we do not think that the inadequacies to which Nevada points make the FEIS inadequate" or render DOE's selection of the Caliente Corridor "arbitrary and capricious."). The D.C. Circuit in this prior proceeding emphasized that courts "will not 'flyspeck' an agency's environmental analysis, looking for any deficiency no matter how minor." *Id.* (citing *Fuel Safe Wash. v. Fed. Energy Regulatory Comm'n*, 389 F.3d 1313, 1323 (10th Cir. 2004); *Half Moon Bay Fishermans' Mktg. Ass'n v. Carlucci*, 857 F.2d 505, 508 (9th Cir. 1988)).

The Commission, for its part, has indicated that this same standard applies in its licensing proceedings. As the Commission explained:

> NEPA's twin goals are to inform the agency and the public about the environmental effects of a project. At NRC licensing hearings, petitioners may raise contentions seeking correction of *significant inaccuracies and omissions* in the [applicant's environmental report ("ER") or agency's EIS]. Our boards do not sit to 'flyspeck" environmental documents or to add details or nuances. If the ER (or EIS) on its face "comes to grips with all important considerations" nothing more need be done.[11]

Sys. Energy Res., Inc. (Early Site Permit for Grand Gulf ESP Site), CLI-05-4, 61 NRC 10, 13 (2005) (quoting *Hydro Res., Inc*. (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 71 (2001) (emphasis added)). A petitioner's claim must "suggest *significant environmental oversights* that warrant further inquiry at an evidentiary hearing." *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 811 (2005) (emphasis added). Thus, as the D.C. Circuit recognized in *Nuclear Energy Inst., Inc. v. Envtl. Protection Agency*, there must be significant "substantive defects" in the FEIS. 373 F.3d 1251, 1314 (D.C. Cir. 2004) (*NEI*).

Under NEPA, an EIS is not inadequate merely because a reviewing court or other adjudicatory tribunal might have reached a different conclusion. As the U.S. Supreme Court has explained, "[n]either the statute nor its legislative history contemplates that a court should substitute its judgment for that of the agency as to the environmental consequences of its actions." *Kleppe v. Sierra Club,* 427 U.S. 390, 410 n.21 (1976). The NRC has indicated that it would adhere to this same tenet in deciding whether to adopt DOE's EIS. Specifically, in promulgating 10 C.F.R. § 51.109, the NRC stated that "the adoption of the [DOE] statement does

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[11] *See also Duke Energy Corp.*, CLI-03-17, 58 NRC at 431 ("NRC adjudicatory hearings are not EIS editing sessions. Our busy boards do not sit to parse and fine-tune EISs."). The Commission's admonition against the "flyspecking" and "fine-tuning" of EISs is particularly apt here, given that DOE has "primary responsibility" for consideration of environmental matters under the NWPA. Final Rule, NEPA Review Procedures for Geologic Repositories for High-Level Waste, 54 Fed. Reg. 27,864, 27,865 (July 3, 1989) (codified at 10 C.F.R. § 51.109). In contrast, under the NWPA, the NRC's NEPA-related responsibility in this proceeding is limited to determining whether adoption of DOE's EIS, as supplemented, is "practicable." *Id.*

not necessarily mean that NRC would independently have arrived at the same conclusions on matters of fact or policy." Proposed Rule, NEPA Review Procedures for Geologic Repositories for High-Level Waste, 53 Fed. Reg. 16,131, 16,142 (May 5, 1988). Thus, in accordance with 10 C.F.R. § 51.109(d), insofar as the presiding officer determines that NRC adoption of DOE's EIS is "practicable" under § 51.109(c), "such adoption shall be deemed to satisfy all responsibilities of the Commission under NEPA and no further consideration under NEPA or this subpart shall be required."

In this proceeding, DOE submits that Boards should apply § 51.109 consistent with the above referenced well established NEPA caselaw and decisions of the Commission.

b. The 10 C.F.R. § 2.326 Criteria and Procedures

Section 51.109(a)(2) directs the presiding officer, "to the extent possible," to use the "criteria and procedures that are followed in ruling on motions to reopen under § 2.326." In its Hearing Notice, the Commission reiterated that a presiding officer should, to the extent possible, apply the reopening procedures and standards set forth in § 2.326. *See* Hearing Notice, 73 Fed. Reg. at 63,031.

By explicitly directing presiding officers to use the criteria and procedures contained in § 2.326, the Commission reaffirmed its longstanding intent to avoid, in accordance with the NWPA, "the wide-ranging independent examination of environmental concerns that is customary in NRC licensing proceedings." NEPA Review Procedures for Geologic Repositories for High-Level Waste, 53 Fed. Reg. at 16,136; *see also* Final Rule, NEPA Review Procedures for Geologic Repositories for High-Level Waste, 54 Fed. Reg. 27,864, 27,865 (July 3, 1999) (codified at 10 C.F.R. § 51.109) ("[W]e believe it to be a fair reading of Congressional intent that NRC can adequately exercise its NEPA responsibility with respect to a repository by relying upon DOE's environmental impact statement."). Specifically, the Commission has noted that the

test for reopening a closed record—the same test to be applied by the Board in ruling on the admissibility of environmental contentions in this proceeding—is a "stiff test" that imposes a "strict" burden. *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-06-3, 63 NRC 19, 22, 25 (2006); *see also Fla. Power & Light Co.* (Turkey Point Plant, Units 3 and 4), LBP-87-21, 25 NRC 958, 963-64 (1987) (stating that "a party seeking to reopen the record has a 'heavy burden' to bear") (quoting *Kan. Gas and Elec. Co.* (Wolf Creek Station, Unit No. 1), ALAB-462, 7 NRC 320, 338 (1978)). Parties seeking to reopen a closed record must raise a "significant" safety or environmental issue and demonstrate that "a materially different result [is] 'likely' as a result of the new evidence." *Private Fuel Storage*, CLI-06-3, 63 NRC at 25. In applying this test, the Commission has further noted that "[n]ew information is not enough, *ipso facto*, to reopen a closed hearing record," and that "the information must be significant and plausible enough to require reasonable minds to inquire further." *Private Fuel Storage* (Independent Spent Fuel Storage Installation), CLI-05-12, 61 NRC 345, 350 (2005).

The Commission has further noted that the supporting material required by § 2.326(b) "must be set forth with a degree of particularity *in excess of* the basis and specificity requirements contained in 10 C.F.R. [§ 2.309] for admissible contentions. Such supporting information must be more than mere allegations; it must be tantamount to evidence." *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-89-1, 29 NRC 89, 93 (1989) (quoting *Pacific Gas and Elec. Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-775, 19 NRC 1361, 1366 (1984), *aff'd sub nom. San Luis Obispo Mothers for Peace v. Nuclear Regulatory Comm'n*, 751 F.2d 1287 (D.C. Cir. 1984), *aff'd on reh'g en banc*, 789 F.2d 26 (1986), *cert. denied*, 479 U.S. 923 (1986)). An intervenor's mere "belief" is insufficient to satisfy § 2.326(b). *Fla. Power & Light Co.*, LBP-87-21, 25 NRC at 963.

In short, "the Commission expects its adjudicatory boards to enforce the [§ 2.326] requirements rigorously—*i.e.*, to reject out-of-hand [] motions that do not meet those requirements within their four corners." *Pub. Serv. Co. of N.H.* (Seabrook Station, Units 1 and 2), ALAB-915, 29 NRC 427, 432 (1989) (citing *La. Power & Light Co.* (Waterford Steam Electric, Unit 3), CLI-86-1, 23 NRC 1 (1986); *Cleveland Elec. Illuminating Co.* (Perry Nuclear Power Plant, Units 1 and 2), CLI-86-7, 23 NRC 233 (1986), *aff'd sub nom. Ohio v. U.S. Nuclear Regulatory Comm'n*, 814 F.2d 258 (6th Cir. 1987)).

In the *Private Fuel Storage* decision (CLI-06-3) discussed above, the Commission applied the § 2.326 standard in ruling on a motion to reopen the record (after the Commission had rendered its final adjudicatory decision and authorized license issuance) to litigate a proposed environmental contention. The Commission's ruling is illustrative and underscores the heavy burden imposed by § 2.326.[12] For example, the Commission emphasized "a high threshold" for reopening a record as established by "longstanding NRC regulations and precedent." *Private Fuel Storage*, CLI-06-3, 63 NRC at 22. *See also id.* at 25 (stating that the NRC does "not lightly reopen [its] adjudicatory proceedings"). The Commission found that the intervenor had failed to meet substantive and evidentiary requirements of § 2.326, stating that "we cannot say on the current record that a materially different result in our licensing proceeding is so 'likely' that we must reopen the adjudicatory proceeding for additional hearings and findings." *Id.* at 26-27. Consequently, the Commission rejected the intervenor's request that the entire project be placed on hold.

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[12] In recently denying a motion to reopen the record, the Commission emphasized the "deliberately heavy" burden associated with § 2.326. *See AmerGen Energy Co., LLC* (License Renewal for Oyster Creek Nuclear Generating Station), CLI-08-28, 68 NRC __ (slip op. at 13-14) (Nov. 6, 2008) ("The 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.") (internal quotation marks and citations omitted).

In the context of the Yucca Mountain proceeding, the requirement that the petitioner must demonstrate that a materially different outcome would likely result means that the contention, if true, would significantly impact the EIS such that it could not be adopted unless formally supplemented by NRC or DOE.

In summary, given the considerably heightened admissibility standards applicable here, DOE submits that in this proceeding a presiding officer should admit *environmental* contentions in this proceeding only under very limited circumstances. Under 10 C.F.R. §§ 51.109(c) and 2.326, an environmental contention must present *evidence* concerning a "significant" environmental issue. Under those same provisions, that information must be so "substantial" as to demonstrate that the alleged inadequacy in the DOE EISs is "likely" to dictate a "materially different result." As the Commission explained in *Private Fuel Storage*, this means that any "new information" proffered by a petitioner must present a "*seriously* different picture of the environmental landscape," such that it would "be likely to change the outcome of the proceeding or affect the licensing decision in a material way." CLI-06-3, 63 NRC at 19, 28.

5. Contention Subjects That Are Outside the Scope of, or Immaterial to the NRC's Required Findings in, the Yucca Mountain Licensing Proceeding

As discussed above, a petitioner seeking admission of a proposed contention must, among meeting other requirements, demonstrate that the issue raised in the contention is within the scope of the proceeding and material to the findings that the NRC must make to support issuance of a repository construction authorization to DOE. A non-exclusive discussion of certain categories of contentions that clearly fall outside the proper scope of this proceeding and/or lack a material nexus to the Staff's required findings is provided below.

a. Contentions Relating to Transportation of Spent Nuclear Fuel (SNF) and High Level Radioactive Waste (HLW) Are Beyond The Scope of This Proceeding

(1) The NRC has no regulatory authority over transportation of SNF or HLW.

Under the AEA and the Energy Reorganization Act (ERA), NRC does not have regulatory authority over DOE's facilities and activities except as specifically provided by statute. 42 U.S.C. § 5851. Section 202 of the ERA provides the NRC with licensing and related regulatory authority over certain specific facilities of the DOE, including facilities for the disposal of SNF and HLW. 42 U.S.C. § 5842. However, neither section 202 of the ERA, nor the NWPA, nor any other statute provides NRC with authority over the transportation by DOE of SNF and HLW.

DOE's transportation of SNF or HLW therefore is not subject to NRC regulation and the NRC has recognized the limited scope of its regulatory authority. For example, in its discussion of proposed amendments to its regulations regarding GROA Security and Material Control and Accounting Requirements, the NRC explained that the rulemaking did not cover transportation of HLW to the GROA because "the NRC's regulatory authority is limited to the operations at a GROA." GROA Security and Material Control and Accounting Requirements, 72 Fed. Reg. 72,522, 72,527 (Dec. 20, 2007).[13] DOE is required by the NWPA to use NRC certified casks for

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[13] Similarly, in a May 10, 2002, response to a March 22, 2002, letter from Senator Richard Durbin, asking what role the NRC would play regarding transportation of spent fuel to Yucca Mountain, NRC Chairman Richard Meserve stated:

> If DOE takes custody of the spent fuel at the licensee's site, *DOE regulations would control the actual spent fuel shipment*. Under such circumstances, the NRC's primary role in transportation of spent fuel to a repository would be certification of the packages used for transport.
>
> * * *
>
> As stated previously, if DOE takes custody to the spent fuel at the reactor site the only involvement NRC will have in the transport will be the certification of the transport cask.

shipment of SNF or HLW to the repository. 42 U.S.C. § 10175. That certification, however, is separate and distinct from the repository licensing action being undertaken by the NRC under Part 63. The requirements for such a certification are set forth not in Part 63, but instead in 10 C.F.R. Part 71.

(2) Contentions challenging DOE's Records of Decision concerning transportation of materials to Yucca Mountain are outside the scope of this proceeding and are within the original and exclusive jurisdiction of the Courts of Appeals.

In addition to the NRC's lack of regulatory authority over transportation of SNF and HLW, under the NWPA, any challenges to DOE transportation decisions, to the extent reviewable, are within the original and exclusive jurisdiction of the federal courts of appeals. In particular, section 119 of the NWPA expressly provides that the United States Courts of Appeals shall have original and exclusive jurisdiction over any civil action for review of any final decision or action of the Secretary of Energy as well as of any civil action alleging the failure of the Secretary "to make any decision, or take any action, required under this subtitle." 42 U.S.C. § 10139(a)(1)(C). Any such action must be initiated through a petition for review filed with a court of appeals within 180 days of the decision or action or failure to act involved. 42 U.S.C. § 10139(c).

Relevant to this proceeding, on October 10, 2008, DOE issued a Record of Decision (ROD) documenting DOE's decision to construct a railroad in the State of Nevada in an alignment within the Caliente corridor along various segments together with various support facilities as detailed in the ROD. As discussed below, any challenge to the ROD accordingly

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Letter from Richard Meserve, former Chairman of the NRC, to Sen. Richard Durbin at 2 (May 10, 2002), *available at* ADAMS Accession No. ML 21060662 (emphasis added). DOE's plan is to take custody of the spent fuel at the reactor site.

must be initiated through a petition for review to a court of appeals—not through the NRC contention process.

In *Nevada v. DOE* and *NEI v. EPA*, the D.C. Circuit anticipated that DOE would in the future be issuing transportation related decisions. For example, in *NEI*, 373 F.3d at 1312, the Court stated:

> Section 114(f)(4) of the NWPA provides, in relevant part, that the DOE's FEIS "shall, to the extent practicable, be adopted by [NRC] in connection with the issuance by [NRC] of a construction authorization and license for such repository." 42 U.S.C. § 10134(f)(4). To the extent NRC adopts the FEIS, NRC's responsibilities under the National Environmental Policy Act shall be deemed satisfied and "no further consideration shall be required." *Id*. *In addition, DOE is expected to use the FEIS to support one or more future decisions related to Yucca Mountain, including the selection of an alternative for transporting waste to the site*.

Emphasis added.

On April 8, 2004, DOE issued a ROD addressing transportation matters. Subsequently, following issuance of DOE's April 8, 2004 ROD, Nevada filed a petition for review with the D.C. Circuit pursuant to section 119 of the NWPA seeking review of the ROD and the transportation-related portions of the 2002 FEIS on which it was based. The ROD announced DOE's selection, both nationally and in Nevada, of the mostly rail scenario analyzed in the 2002 FEIS as the primary means of transporting SNF and HLW to the repository. The ROD also selected the Caliente rail corridor from several corridors considered in the 2002 FEIS as the corridor in which to study possible alignments for a rail line connecting the Yucca Mountain site to an existing rail line in Nevada. *See* ROD on Mode of Transportation and Nevada Rail Corridor for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, NV, 69 Fed. Reg. 18,557 (Apr. 8, 2004). Nevada claimed that "in

selecting a national transportation mode and Nevada rail corridor for the movement of waste to Yucca, DOE violated NEPA and NEPA implementing regulations" and acted in an arbitrary and capricious manner and contrary to law. Petitioner's Final Opening Brief at 2-4, *Nevada v. DOE*, 457 F.3d 78 (D.C. Cir. 2006) (No. 04-1309).

The D.C. Circuit took jurisdiction of the State's petition for review and rejected the State's claims on their merits (with the exception of certain contingency plans which the court held were not ripe for review).[14] The Court held, among other things, that DOE had taken the "requisite hard look" at the potential rail corridor environmental impacts and that "DOE's analysis of the environmental impacts of rail corridor selection in its FEIS is adequate." *Nevada*, 457 F.3d at 89-93. The D.C. Circuit also held that "[w]e summarily deny any claims not specifically addressed in this opinion," which included all the issues raised in the State's briefs. *Id.* at 94 n.10.

This decision is res judicata as to Nevada and the preclusive effect of this decision applies not only to those NEPA claims decided by the court of appeals but also to those which could have been raised. *W. Radio Servs. Co. v. Glickman,* 123 F.3d 1189 (9th Cir. 1997) (concluding that "any cognizable claims should have been raised in *Western Radio I*, and are thus barred by res judicata"). Of course, any person who failed to challenge the ROD would be time barred pursuant to NWPA section 119(c) among other defenses. Further, as the Commission has recognized, a person does not have the option of postponing judicial review under section 119 of the NWPA, by instead trying to raise transportation-related environmental issues before the NRC. In particular, the NRC rejected this approach when it was raised in comments to the proposed 10 C.F.R. § 51.109 in 1989. In their comments to the Commission,

[14] The Court of Appeals noted that "[a]lthough much of the FEIS concentrated on the Yucca site, it also analyzed alternatives for, and the 'potential environmental consequences' of, transporting nuclear waste from the many production sources throughout the country to the repository at Yucca." *Nevada*, 457 F.3d at 82.

certain environmental organizations stated that "affected parties may decide for reasons of litigative strategy" to raise environmental issues "in NRC licensing proceedings rather than by going to court." Final Rule, NEPA Review Procedures for Geologic Repositories for High-Level Radioactive Waste, 54 Fed. Reg. at 27,866. The Commission responded by stating that such a "unilateral decision" would "circumvent the clear policy of the NWPA…." *Id*.

The same path of review followed in 2004 is appropriate with respect to challenges to DOE's transportation decisions set forth in the Department's October 10, 2008 ROD. The fact that the NRC construction authorization proceeding, which is limited to activities at the GROA, now has commenced does not alter the requirement under section 119 of the NWPA that final DOE decisions must be appealed to the courts of appeals whose jurisdiction is "original and exclusive" over such matters. 42 U.S.C. § 10139(a)(1).

In summary, challenges to the April 2004 ROD, and the transportation related portions of the 2002 FEIS on which it was based, are no longer subject to review in any forum, both as a result of the expiration of the 180-day period to challenge that ROD set forth in section 119 of the NWPA and as a result of the D.C. Circuit's 2006 decision. Any challenges to DOE's transportation decisions set forth in the October 10, 2008 ROD also are not appropriately a part of this proceeding; such challenges may be pursued only through a petition for review to a federal court of appeals.

(3) Consideration by NRC of transportation impacts under NEPA is limited.

Under section 114 of the NWPA, the Commission must adopt DOE's FEIS to the extent practicable. In considering the environmental impacts of transportation decisions made by DOE, the role of the NRC here is similar to that adopted by the Commission in *Pub. Serv. Co. of N.H.*, (Seabrook Station, Units 1 and 2), CLI-78-1, 7 NRC 1, 25 (1978), and affirmed by the court of

appeals in *New England Coalition on Nuclear Pollution v. U.S. Nuclear Regulatory Comm'n*, 582 F.2d 87 (1st Cir. 1978). In that case, the petitioners argued that NEPA did not permit the NRC to adopt EPA findings made under the Federal Water Pollution Control Act (FWPCA) without an independent inquiry of the effects a proposed nuclear power plant would have on the aquatic environment. As the Commission noted, Congress had amended the FWPCA to avoid duplicative reviews, and left to the EPA the decision as to the water pollution control criteria to which a nuclear power plant's cooling system would be held. The NRC was not free to ignore considerations of aquatic impact; "it would have to consider them, but only as part of its overall 'balancing judgment' on whether it is in the public interest to grant the requested permit." *Pub. Serv. Co. of N.H.*, CLI-78-1, 7 NRC at 25. The NRC, further, could not "go behind" the EPA's determination. *Id*. at 26.

Similarly, in this proceeding, the NRC should decide whether to issue construction authorization for the repository given the transportation impacts as determined by DOE (and potentially as reviewed by the court of appeals). Accordingly, contentions challenging the accuracy or adequacy of DOE's NEPA analysis of the impacts of transporting SNF or HLW are not proper subjects for contentions in this proceeding.

b. Contentions Relating to the Proposal by DOE to Accept SNF in TADs Are Beyond The Scope of This Proceeding

Certain contentions of the Nevada Counties relate to DOE's proposal to accept a substantial amount of commercial SNF for transportation and disposal in Transportation Aging and Disposal canisters (TADs) rather than dual purpose canisters (DPCs). These contentions would have NRC second-guess DOE's management decision to accept up to as much as 90% of commercial SNF in TADs and, in effect, would require DOE to accept a smaller percentage of commercial SNF in TADs. DOE will make its decisions concerning how to accept commercial

SNF pursuant to contracts mandated by the NWPA, and NRC has no statutory or regulatory authority over those contractual decisions. While NRC can consider the effects of DOE's proposal to accept up to 90% of commercial SNF in TADs, it cannot go behind that proposal and, in effect, specify how much commercial SNF DOE can accept in TADs. Thus, any contention premised on such a change is beyond the scope of this proceeding.

(1) The NRC has no regulatory authority over DOE SNF or HLW management outside the GROA.

Under the AEA and the ERA, NRC does not have regulatory authority over DOE's facilities and activities except as specifically provided by statute. 42 U.S.C. § 5851. Section 202 of the ERA provides the NRC with licensing and related regulatory authority over certain specific facilities of the DOE, including facilities for the disposal of SNF and HLW. 42 U.S.C. § 5842. However, neither section 202 of the ERA, nor the NWPA, nor any other statute provides the NRC with authority over DOE's management of SNF and HLW outside the specified facilities, including the acceptance of SNF and HLW for disposal at the Yucca Mountain site. As noted previously, the NRC has recognized its "regulatory authority is limited to the operations at a GROA." GROA Security and Material Control and Accounting Requirements, 72 Fed. Reg. 72,522, 72,527 (Dec. 20, 2007). While DOE is required by the NWPA to use NRC certified casks for shipment of SNF or HLW to the repository, that requirement is separate and distinct from any contractual decisions that DOE may make in the future as to how much, if any, commercial SNF to accept in TADs.

(2) DOE's decisions in the future on what percentage of commercial SNF to accept in TADs are contract decisions outside the scope of this proceeding.

DOE's decisions on how much commercial SNF to accept in TADs are not subject to review by NRC. Section 302 of the NWPA is explicit that the acceptance by DOE of

commercial SNF and HLW for disposal at the Yucca Mountain site is governed by the contract between DOE and the generator of the SNF and HLW and that DOE is responsible for establishing the terms and conditions of the contract. While section 302 makes such a contract a condition for the issuance or renewal by NRC of a license for a commercial power plant, neither section 302 nor any other statutory provision grants the NRC the authority to approve the terms and conditions of the contract or regulate how the contract is implemented. Any questions concerning the implementation of a contract under section 302 must be resolved by DOE and the contractholder or by an appropriate court.

In addition, DOE's 2002 FEIS analyzed the impacts of the proposed action – the construction and operation of a geologic repository at Yucca Mountain for the disposal of SNF and HLW, including the transportation of commercial SNF to the repository. As part of the transportation analysis, DOE assessed the impacts of fuel packaging and loading activities at the commercial utility sites. DOE subsequently issued a ROD addressing transportation matters, including the selection of mostly rail as the national mode of transportation. In the Repository SEIS, DOE updated the FEIS to reflect changes in the design and operational details, including the use of TADs to accept, transport and dispose of up to 90 percent of the commercial SNF. The SEIS also reflected DOE's transportation-related decisions made following the completion of the FEIS. DOE concluded in the final Repository SEIS that the potential impacts associated with the updated repository design and operational plans are similar in scale to the impacts analyzed in the 2002 FEIS. DOE did not modify the April 2004 ROD decision on the transportation mode.

(3) Consideration by NRC of environmental impacts of DOE's decision to accept up to as much as 90 percent of commercial SNF in TADs is limited.

For the same reasons discussed in sections 5.a.(2) and (3), challenges to DOE's proposal to accept up to as much as 90 percent of commercial SNF in TADs and DOE's analysis of the environmental impacts of that proposal are not appropriately a part of this proceeding. Put simply, NRC must take DOE's proposal to accept up to as much as 90 percent of commercial SNF in TADs and DOE's analysis of the environmental impacts of that proposal as a given in deciding whether to issue a construction authorization for the repository. *See Pub Serv. Co. of N.H.*, CLI-78-1, 7 NRC at 25-26.

B. Co-Sponsorship of Contentions and Incorporation by Reference

Pursuant to 10 C.F.R. § 2.309(f)(3), contentions may be sponsored by two or more petitioners. Specifically, 10 C.F.R. § 2.309(f)(3) states:

> If two or more requestors/petitioners seek to co-sponsor a contention, the requestors/petitioners shall jointly designate a representative who shall have the authority to act for the requestors/petitioners with respect to that contention. If a requestor/petitioner seeks to adopt the contention of another sponsoring requestor/petitioner, the requestor/petitioner who seeks to adopt the contention must either agree that the sponsoring requestor/petitioner shall act as the representative with respect to that contention, or jointly designate with the sponsoring requestor/petitioner a representative who shall have the authority to act for the requestors/petitioners with respect to that contention.

While the regulation acknowledges that two or more petitioners may co-sponsor a contention, it does not address whether a petitioner who seeks co-sponsorship may be granted party status merely by incorporating contentions only by reference to another party's pleading.

The Commission, however, has addressed this issue. In a license transfer proceeding involving Indian Point, Units 1 and 2, two intervenors (Town of Cortland and Citizens Awareness Network) sought to adopt each other's contentions. *See Consol. Edison Co.* (Indian

Point, Units 1 and 2), CLI-01-19, 54 NRC 109, 131-33 (2001). The Commission held that where both petitioners have independently met the requirements to participate in the proceeding, the Board may provisionally allow petitioners to adopt each other's issues early in the proceeding. *Id*. at 132. If the primary sponsor of a contention withdraws from the proceeding, then the remaining petitioner must demonstrate that it has the "independent ability to litigate [the] issue." *Id*. If the petitioner cannot make such a showing, then the issue must be dismissed prior to hearing. *Id.*

Incorporation by reference should be denied to parties who merely establish standing and then attempt to incorporate issues of other petitioners. *Id*. at 133. Incorporation by reference also would be improper in cases where a petitioner has not independently established compliance with requirements for admission in its own pleadings by submitting at least one admissible contention of its own. *Id*. As the Commission indicated "[o]ur contention-pleading rules are designed, in part, 'to ensure that full adjudicatory hearings are triggered only by those able to proffer at least some minimal factual and legal foundation in support of their contentions.'" *Id*. (citing *Duke Energy Corp.*, CLI-99-11, 49 NRC at 334).

C. DOE's Answer Regarding the Admissibility of Petitioners' Proposed Contentions

1. 4NC-NEPA-l—Insufficient Analysis In The Environmental Impact Statement Of Significant And Substantial Considerations Of The Environmental Impacts Of Transportation By Truck Through The Four Nevada Counties

Applicant failed to effectively address key issues in the Final Supplemental Environmental Impact Statements regarding the transportation by truck of Spent Nuclear Fuel (SNF) and High Level Radioactive Waste (HLW), as required by the National Environmental Policy Act (NEPA), as applied in the Nuclear Waste Policy Act. 42 U.S.C. § 4321 et seq. (2006) (setting out the requirements of NEPA); 42 U.S.C. § 10247 (2006) (applying NEPA to the NRC process). Because transportation by truck has the potential for significant and substantial effects on the human environment, DOE must provide an analysis of the proposed action and means to mitigate harmful impacts in the EIS. *See* 40 C.F.R. § 1502.1 (2008). In addition, the Nuclear Regulatory Commission may adopt the EIS only if the document is complete, meaning significant and substantial new considerations do not render the EIS inadequate. 10 C.F.R. § 51.109(c)(2) (2008). Because the Final SEIS, as submitted by DOE, is inadequate with respect to the transportation of SNF and HLW by truck, NRC erred in adopting the Final SEIS.

RESPONSE

In this contention, the Nevada Counties make numerous assertions regarding DOE's transportation analysis, including that DOE: 1) failed to properly estimate the number of truck shipments through the Nevada Counties; 2) improperly estimated the number of total truck shipments; 3) inadequately analyzed the impacts of truck shipments; 4) inadequately analyzed the impact of shipments by overweight truck; 5) improperly analyzed alternative transportation scenarios; and 6) failed to adequately propose measures to mitigate harm from truck shipments.

All NEPA contentions must demonstrate that they meet the criteria of 10 C.F.R § 51.109 and 10 C.F.R. § 2.326, as well as the standards for contentions of 10 C.F.R. § 2.309. The Nevada Counties fail to meet the express requirements of 10 C.F.R. §§ 2.326 and 51.109 in requesting that their contention be admitted in this proceeding. Specifically, as set forth in Section IV.A.4, the Nevada Counties must (1) raise a significant environmental issue; and (2) demonstrate that their contention, if proven to be true, would or would likely result in a materially different outcome in this proceeding.

Moreover, their environmental contention must be supported by the affidavit of a qualified witness that sets forth the factual and/or technical basis supporting the claim that these two criteria have been met, including a "specific explanation of why it has been met." 10 C.F.R. § 2.326(b). As noted in Section IV.A.4 above, "the Commission expects its adjudicatory boards to enforce the [§ 2.326] requirements rigorously—*i.e.*, to reject out-of-hand motions that do not meet those requirements within their four corners." *Pub. Serv. Co. of N.H.* (Seabrook Station, Units 1 and 2) ALAB-915, 29 NRC 427, 432 (1989).

The Nevada Counties fail to address the mandatory requirements of §§ 51.109 and 2.326. With regard to the most important and difficult showing, a demonstration that a "materially different result would be or would have been likely" if the contention were proven to be true, the Nevada Counties' Petition and the affidavit of their three experts—Mr. Engelbrecht von Tiesenhausen, Mr. Rex Massey, and Mr. Roger Patton—are silent. Equally important, the Nevada Counties' experts never provide the analysis that is explicitly called for by the terms of § 2.326(b). This regulation requires the Nevada Counties' experts to "set forth the factual and/or technical bases for the movant's claim that the criteria of paragraph (a) of this section have been satisfied." Section 2.326(b) goes on to state that "[e]ach of the criteria must be separately

addressed, with a specific explanation of why it has been met." Here, the affidavits of the Nevada Counties have failed to meet these requirements.

There are a number of additional flaws in the affidavits of the Nevada Counties' experts. Mr. von Tiesenhausen asserts that the rail lines may not be completed in a timely manner, but offers no support for this assertion. von Tiesenhausen Affidavit at 2. Further, he offers no explanation or support for why the delay of a rail line would lead to an increase in the number of truck shipments, as opposed to simply a delay in the start of rail shipments to the repository, which in fact, appears to be the more likely outcome given that the "mostly rail" scenario was selected by DOE in its April 8, 2004 Record of Decision (ROD) as the preferred mode of transportation both on a national basis and in the State of Nevada. ROD: Mode of Transportation and Nevada Rail Corridor for the Disposal of Spent Nuclear Fuel and High-Level Waste at Yucca Mountain, Nye County, NV, 69 Fed. Reg. 18,557 (Apr. 8, 2004). Mr. von Tiesenhausen asserts that it would be "equally valid" to assume that the rail line may not be completed at the time assumed by DOE, von Tiesenhausen Affidavit at 2, but this falls far short of the standard to demonstrate that a materially different result (*e.g.*, number of truck shipments) would be likely.

Mr. Massey asserts in his affidavit that the Las Vegas Valley is likely to be avoided in the final selection of highway routes, Massey Affidavit at 3, and Mr. Patton makes the same argument, Patton Affidavit at 5-6. But both simply engage in guesswork in presuming that, even if true, this will lead to increased truck shipments through the Nevada Counties. Further, Mr. Patton acknowledges that DOE has only selected representative routes at this stage and that final routes will not be selected for years. Patton Affidavit at 4. Because all three affidavits fail to meet the standards of §§ 51.109 and 2.326, this contention should be rejected.

a. Statement of Issue of Law or Fact to be Controverted

This Petition does not comply with the direction of the June 20, 2008, Case Management Order for this proceeding that contentions be "narrow, single-issue contentions" that are "sufficiently specific as to define the relevant issues for eventual rulings on the merits, and do not require" extensive narrowing or clarification by the parties or boards. *U.S. Dep't of Energy*, LBP-08-10, 67 NRC __ (slip op. at 6) (June 20, 2008). This contention raises at least six unique legal issues, and is therefore not a narrow, single-issue contention and should be dismissed.

b. Brief Explanation of Basis

Without prejudice to other positions taken by DOE, DOE expresses no legal objection based upon this requirement.

c. Whether the Issue is Within the Scope of the Proceeding

Contentions challenging DOE's transportation decisions, and the environmental impact statements upon which those decisions are based, are beyond the scope of this proceeding and may also be barred on res judicata and finality grounds. The Nevada Counties' multiple contentions regarding DOE's transportation analysis are objectionable because the NRC lacks jurisdiction and because of finality.

First, as addressed in Section IV.A.5(a)(1) above, under the Atomic Energy Act and the Energy Reorganization Act (ERA), NRC does not have regulatory authority over DOE's transportation facilities and activities and thus has no direct NEPA responsibilities with respect to those facilities and activities. To the extent such facilities and activities may contribute to the cumulative impacts of the proposed Yucca Mountain repository, NRC must take DOE's decisions concerning transportation facilities and activities as a given in considering the cumulative impacts of the proposed repository. *See, e.g., Dep't of Transp. v. Public Citizen*, 541 U.S. 752 (2004).

Second, in addition to the NRC's lack of regulatory authority over transportation of SNF and HLW, as addressed in Section IV.A.5(a)(2) above, any challenges to the analysis of environmental impacts arising from DOE transportation decisions, to the extent reviewable, are within the original and exclusive jurisdiction of the federal courts of appeals. In particular, challenges to the April 2004 ROD and the transportation related portions of the 2002 FEIS on which it was based, are no longer subject to review in any forum, as a result of the expiration of the 180-day period to challenge that ROD set forth in Section 119 of the NWPA. In the April 2004 ROD, for example, DOE selected the mostly rail scenario as the transportation mode on a national basis and in the State of Nevada. ROD: Mode of Transportation and Nevada Rail Corridor for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, NV, 69 Fed. Reg. at 18,557, 18,561 (Apr. 8, 2004). Any challenges to DOE's transportation decisions set forth in the October 10, 2008 ROD and the Rail Alignment EIS on which it was based, are also not appropriately a part of this proceeding; such challenges may be pursued only through a petition for review to a federal court of appeals. The Nevada Counties have failed to identify any issue relating to this contention for which the approach specified in Section 119 was or is not available.

Contrary to the Nevada Counties' argument, DOE did not "open the door" to transportation becoming a part of the NRC proceeding simply by discussing transportation in its EIS documents. Petition at 5. As the Nevada Counties themselves acknowledge, DOE has a separate statutory obligation to complete a NEPA analysis. *Id*. (citing 42 U.S.C. § 4331 et seq. (2006)). By discussing transportation impacts in its NEPA documents, DOE has in no way altered NRC's lack of regulatory authority over transportation of SNF and HLW.

In summary, challenges to the April 2004 ROD, and the transportation related portions of the 2002 FEIS on which it was based, including DOE's selection of the mostly rail option, are no longer subject to review in any forum, as a result of the expiration of the 180 day period to challenge that ROD set forth in Section 119 of the NWPA. Any challenges to DOE's transportation decisions set forth in the October 10, 2008 ROD also are not appropriately a part of this proceeding, and may only be challenged through a petition for review to a federal court of appeals.

d. Whether the Issue is Material to the Findings that the NRC Must Make

For the reasons discussed in section c. above, this issue is not material to the findings NRC must make because the Nevada Counties' challenges to DOE's transportation decisions are outside the scope of this proceeding and are barred on finality grounds. Additionally, this contention fails to raise a material issue because DOE has taken a "hard look" at the multiple issues raised in the Petition.

Under NEPA, a potential intervenor must demonstrate that DOE has failed to take a "hard look" at environmental consequences. *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976). This is a far different burden than the Nevada Counties propose in alleging that DOE must provide a "complete" or "comprehensive" analysis. Petition at 5-6. An EIS is adequate under the "hard look" standard so long as it "contains a reasonably thorough discussion of the significant aspects of the probable environmental consequences." *Churchill County v. Norton*, 276 F.3d 1060, 1071 (9th Cir. 2001); *Idaho Conservation League v. Mumma*, 956 F.2d 1508, 1519 (9th Cir. 1992).

DOE has taken a "hard look" at the environmental impacts from the use of trucks to transport SNF and HLW to Yucca Mountain. The Nevada Counties' allegation that DOE has not

considered "impacts on roads, impacts on communities, traffic impacts, and road infrastructure improvements necessary for safe transportation," Petition at 8, is not accurate. DOE in fact has addressed each of these issues in the 2002 FEIS and the Repository SEIS. DOE has discussed the impacts of truck transportation extensively. *See* Repository SEIS, Vol. I at 3-97 to -97, 6-20 to -32, 6-50 to -52, 6-60; 2002 FEIS, Vol. I at 6-39 to -232. DOE has satisfied the need for a "hard look" at environmental impacts of truck transportation.

The Nevada Counties challenge DOE's discussion of overweight trucks, arguing that the discussions of legal-weight and heavy-haul trucks in the 2002 FEIS was insufficient to account for these impacts. Petition at 10-11. DOE addressed this issue in the Repository SEIS, stating that DOE has "previously studied a marginally overweight truck operating scenario" on two occasions. Repository SEIS, Vol. I at 6-5. In one study, DOE concluded that overweight shipments "would be more complex because states independently set policy and regulations for such shipments." *Id*. The two studies differed on their finding of radiation exposure to workers, with one finding a 13% decrease compared to legal-weight trucks and the other finding a 12% increase. *Id*. at 6-8. Based on these studies, DOE concluded that "it is likely that the radiation doses from overweight truck shipments would be similar to the radiation doses for legal-weight trucks." *Id*. DOE has thus satisfied its obligation to take a "hard look" at the consequences of overweight truck shipments.

The Nevada Counties also challenge DOE's failure to take into account the alleged "likelihood" that DOE will agree with Clark County not to ship SNF or HLW through the Las Vegas Valley, purportedly resulting in more truck shipments through the Nevada Counties, and a resulting increase in environmental impacts. Petition at 10. This argument is purely speculative. As stated in the Repository SEIS, "[a]t this time, many years before shipments could begin, it is

premature to predict the highway routes or rail lines DOE might use." Repository SEIS, Vol. III at CR-185.

DOE reasonably decided to use representative routes that reflect typical industry practices. Repository SEIS, App. G, at G-5; App. A, at A-5 to -8. To identify these representative routes DOE used the TRAGIS computer model, which is a regularly updated information system containing thousands of miles of rail lines and highways and allowing users to calculate routes by simulating historical rail and freight routing practices. Repository SEIS App. G, at G-5 – G-13. DOE assumed routes for rail shipments that would provide expeditious travel, use of high quality track, and the minimum number of interchanges between railroads. *Id.* at G-5 – G-6; 2002 FEIS, Vol. I at 3-120. The highway routes were selected in accordance with Department of Transportation highway routing regulations (49 C.F.R. § 397.101). Repository SEIS App. G, at G-13. This methodology is entirely reasonable at this early stage of the process and identifies routes that could be used in the shipment of SNF and HLW to Yucca Mountain.

The policies and procedures of DOE and the CEQ that implement the requirements of NEPA call for agencies to "integrate the NEPA process with other planning at the earliest possible time" in the development of a proposed federal project. 40 C.F.R. § 1501.2. In particular, CEQ regulations 40 C.F.R. §§ 1500.5, 1501.2, 1502.5 and 1508.23 all stress the need to prepare an EIS early in the process. NEPA analysis of environmental consequences must be made "as soon as it can reasonably be done." *Kern v. U.S. Bureau of Land Mgmt*., 284 F.3d 1062, 1072 (9th Cir. 2002) (citing *Save Our Ecosystems v. Clark*, 747 F.2d 1240, 1246 n.9 (9th Cir. 1984)). The Nevada Counties do not cite a single case in which an environmental impact statement was found invalid because it was prepared too early in the process. It is simply too

soon to require DOE to evaluate the specific routes it will use, many years before a possible first shipment.

This rationale also supports DOE's decision to focus its traffic analysis on the Yucca Mountain region. Repository SEIS, Vol. I at 3-96 to -97, 6-60; 2002 FEIS, Vol. I at 6-159. All truck shipments will have to use the highways immediately approaching Yucca Mountain, regardless of what highway routes are otherwise used elsewhere. This is a perfectly reasonable rationale for analyzing traffic impacts in the Yucca Mountain region.

In addition, there are processes for determining if there is a need for further NEPA analyses after an EIS is finalized if an agency proposes substantial changes to a proposed action that are relevant to environmental concerns, or if there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts. 40 C.F.R. § 1502.9(c); 10 C.F.R. § 1021.314(a). DOE would conduct supplemental NEPA review if DOE makes substantial changes in the proposed action relevant to environmental concerns or there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.

The Nevada Counties also challenge a number of reasonable assumptions made by DOE. An agency is entitled to rely on reasonable assumptions in its environmental analyses. *Inland Empire Pub. Lands Council v. U.S. Forest Serv.*, 88 F.3d 754, 762 (9th Cir. 1996), *citing Sierra Club v. Marita*, 845 F. Supp. 1317, 1331 (E.D. Wis. 1994), *aff'd*, 46 F.3d 606 (7th Cir. 1995); *Greenpeace Action v. Franklin*, 14 F.3d 1324, 1335-36 (9th Cir. 1992). As in the case of a reviewing court, it is not the role of the NRC "to decide what assumptions … we would make were we in the Secretary's position, but rather to scrutinize the record to ensure that the Secretary has provided a reasoned explanation for his policy assumptions …." *Wyo. Lodging*

and Rest. Ass'n v. Dep't of the Interior, 398 F. Supp. 2d 1197, 1214 (D. Wyo. 2005) (*citing Am. Iron & Steel Inst. v. Occupational Safety and Health Admin*., 939 F.2d 975, 982 (D.C. Cir. 1991); *S.F. Baykeeper v. U.S. Army Corps of Eng'rs*, 219 F. Supp. 2d 1001, 1015 (N.D. Cal. 2002) (holding that an agency's reasonable assumptions were entitled to deference). The NRC has already made clear that the decision to adopt DOE's environmental analyses "does not necessarily mean that NRC would independently have arrived at the same conclusions on matters of fact or policy." NEPA Review Procedures for Geologic Repositories for High-Level Waste, 53 Fed Reg. 16,131, 16,142 (May 5, 1988).

The Nevada Counties challenge DOE's assumption that there will be 2,700 truck shipments. They argue that this underestimates the number of truck shipments because it relies on outdated information and on the assumption that a rail line can be completed and will be completed in a timely manner. Petition at 9-10. The Repository SEIS anlayzes the shipment of 2,700 truck casks. *See* Repository SEIS, Vol. 1 at 2-45, 6-8. DOE has updated its assumptions since the 2002 FEIS, which had assumed shipment of 1,100 truck casks under the mostly rail scenario. *Id*. This updated estimate of shipments incorporates the use of TADs and revised information on handling capabilities at U.S. nuclear facilities. *Id*. DOE has updated its assumptions of the number of truck shipments and has provided a reasoned basis for doing so.

It is also reasonable for DOE to assume that a rail line will be completed. The completion of the rail line is an official part of the project proposal, as the mostly rail scenario has already been selected by DOE for transport of SNF and HLW to Yucca Mountain. ROD on Mode of Transportation and Nevada Rail Corridor for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, NV, 69 Fed. Reg. at 18,557, 18,651 (Apr. 8, 2004). *See* Repository SEIS, Vol. I at 2-1 ("Under the Proposed Action, the

Department would transport most spent nuclear fuel and high-level radioactive waste from 72 commercial and 4 DOE sites to the repository in NRC-certified transportation casks on trains dedicated only to those shipments."). DOE has decided to construct and operate a railroad along a specific alignment in the Caliente Corridor. *See* 73 Fed. Reg. 60,248. It is entirely reasonable, and not arbitrary and capricious as the Nevada Counties assert, to assume that the proposed action and DOE's decision will be implemented.

Moreover, neither the Nevada Counties nor the affidavits of its experts provide any factual basis for their assertion that the rail line will not be completed, or that DOE would switch to truck shipments if the rail line were delayed. They assert only that DOE "has absolutely no way of knowing" whether the rail line will be completed in a timely manner. Petition at 10. It is not "premature," however, to make this assumption. "Reasonable forecasting and speculation is . . . implicit in NEPA." *Save Our Ecosystems*, 747 F.2d at 1246 n.9. Mr. von Tiesenhausen argues that it is "equally valid" to assume that the rail lines may not be completed. von Tiesenhausen Affidavit at 2. This, again, is not the legal standard. When DOE has made reasonable assumptions, as it has here, it is not the Commission's duty to "second guess" those assumptions. *Wyo. Lodging and Rest. Ass'n*, 398 F. Supp. 2d at 1214.

The Nevada Counties are also incorrect in their claim that DOE must study additional alternatives to the mostly rail scenario, including a "limited rail line scenario or a higher than predicted use of truck transportation" scenario. Petition at 6. Under CEQ NEPA regulations, government agencies need only evaluate "reasonable alternatives" to a proposed action. 40 C.F.R. § 1502.14(a). The "rule of reason" governs which alternatives the agency needs to discuss as well as the extent to which it needs to evaluate them. *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 195 (D.C. Cir. 1991). As the Supreme Court has held, "the concept of

alternatives must be bounded by some notion of feasibility." *Vt. Yankee Nuclear Power Corp. v. Natural Res. Def. Council, Inc.*, 435 U.S. 519, 551 (1978). "An agency is required to examine only those alternatives necessary to permit a reasoned choice." *Ass'n of Pub. Agency Customers, Inc. v. Bonneville Power Admin.*, 126 F.3d 1158, 1185 (9th Cir. 1997).

DOE has considered an appropriate range of alternatives. In the 2002 FEIS, DOE analyzed two national transportation scenarios—mostly rail and mostly legal-weight truck—as well as a no-action alternative. 2002 FEIS, Vol. I at 2-1 to -7, 2-40 to -47. DOE also considered a mostly heavy-haul truck option in Nevada, as well as five implementing alternatives for the mostly rail scenario, and five route and three intermodal transfer alternatives for the heavy-haul truck scenario. 2002 FEIS, Vol. I at 2-48 to -61, 6-54 to -55. DOE "need not examine an infinite number of alternatives in infinite detail." *Allison v. DOT*, 908 F.2d 1024, 1031 (D.C. Cir. 1990). It has considered an adequate number of alternatives "to permit a reasoned choice." *Ass'n of Pub. Agency Customers*, 126 F.3d at 1185. Moreover, DOE has already selected the mostly rail scenario and therefore the issue of considering further alternatives was appropriately excluded from consideration in the Repository SEIS. ROD: Mode of Transportation and Nevada Rail Corridor for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, NV, 69 Fed. Reg. at 18,557 (Apr. 8, 2004); Repository SEIS, Vol. III at CR-217.

Finally, the Nevada Counties argue that DOE has improperly mitigated the effects of truck transportation. Petition at 12. The Nevada Counties correctly acknowledge that DOE "is not required, by law, to formulate and adopt a complete mitigation plan" and that an EIS need only contain a "reasonably complete discussion of possible mitigation measures." Petition at 7 (citing *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 352 (1989)). However, the

Nevada Counties are incorrect in asserting that DOE has not even considered mitigation for truck transportation. Petition at 10, 12. DOE has addressed possible mitigation measures that may be required for truck transit. *See, e.g.*, Repository SEIS, Vol. I at 9-12 to -13. DOE's discussion of mitigation of truck transportation impacts is adequate to satisfy NEPA's procedural requirements.

The Nevada Counties complain that DOE does not specifically discuss mitigation for overweight trucks, but the transportation mitigation measures discussed in the NEPA documents can be generalized to many types of truck transportation. Further, it is not yet known what the precise mix of transportation methods will be. In *Okanogan Highlands Alliance v. Williams*, 236 F.3d 468, 477 (9th Cir. 2000), the Ninth Circuit found that, where "[t]he exact environmental problems that will have to be mitigated are not yet known," general consideration of "*potential* effects and mitigation processes" is sufficient to satisfy NEPA's requirements. In the early stages of a project's development, an EIS containing even "merely conceptual" mitigation plans satisfies NEPA. *Robertson*, 490 U.S. at 339, 352-53. DOE has clearly met this burden.

e. Statement of Alleged Facts or Expert Opinion Supporting Petitioner's Position and Supporting References

For the reasons discussed above with respect to the requirements of 10 C.F.R. §§ 51.109 and 2.326, and as addressed in Section IV.A.3 regarding the legal standards under 10 C.F.R § 2.309(f)(1)(v), the Nevada Counties have failed to provide the requisite supporting facts, expert opinion and references.

f. Existence of a Genuine Dispute on a Material Issue of Law or Fact, With Supporting References to the License Application

For the reasons discussed in sections c. and d. above, there is no genuine dispute on any material issue of law or fact because challenges to DOE's transportation decisions and

supporting NEPA analyses are outside the scope of this proceeding, because the contention is barred on finality grounds, and because the contention fails to demonstrate any inadequacy in DOE's NEPA analyses. The contention therefore should be rejected.

2. 4NC-NEPA-2—Insufficient Analysis In Environmental Impact Statement Of Significant And Substantial New Considerations Related To Emergency Response Capacity Within The Four Nevada Counties

Applicant failed to adequately address significant and substantial considerations in the Final Supplemental Environmental Impact Statement (Final SEIS) regarding assessing local emergency response capacity related to the transportation of Spent Nuclear Fuel (SNF) and High Level Radioactive Waste (HLW), by truck, through the Nevada Counties of Churchill, Esmeralda, Lander and Mineral, as required by the National Environmental Policy Act (NEPA), as applied in the Nuclear Waste Policy Act (NWPA). 42 U.S.C. §4321 et seq. (2006) (setting out the requirements of NEPA); 42 U.S.C. §10247 (2006) (applying NEPA to the NRC process). A transportation incident involving SNF/HLW has the potential for significant and substantial effects on the human environment; DOE must provide an analysis of this proposed action and means to mitigate harmful impacts to the human environment in the EIS. *See* 40 C.F.R. § 1502.1 (2008). In addition, the Nuclear Regulatory Commission may adopt the EIS only if the document is complete and in compliance with NEPA and implementing regulations. 10 C.F.R. §51.109(a)(l)(2008). Because the Final SEIS, as submitted by DOE, is not complete with respect to the analysis of emergency response training, NRC erred in adopting these sections of the Final SEIS.

RESPONSE

In this contention, the Nevada Counties allege that DOE has failed to adequately address transportation impacts on local emergency response services.

All NEPA contentions must demonstrate that they meet the criteria of 10 C.F.R. § 51.109 and 10 C.F.R. § 2.326, as well as the standards for contentions of 10 C.F.R. § 2.309. The Nevada Counties fail to meet the express requirements of 10 C.F.R. §§ 2.326 and 51.109 in requesting that their contention be admitted in this proceeding. Specifically, as set forth in

Section IV.A.4, the Nevada Counties must (1) raise a significant environmental issue; and (2) demonstrate that their contention, if proven to be true, would or would likely result in a materially different outcome in this proceeding. The Nevada Counties' environmental contention must also be supported by the affidavit of a qualified witness that sets forth the factual and/or technical basis supporting the claim that these two criteria have been met, including a "specific explanation of why it has been met." 10 C.F.R. § 2.326(b). As noted in Section IV.A.4 above, "the Commission expects its adjudicatory boards to enforce the [§ 2.326] requirements rigorously – *i.e.*, to reject out-of-hand reopening motions that do not meet those requirements within their four corners." *Pub. Serv. Co. of N.H.* (Seabrook Station, Units 1 and 2), ALAB-915, 29 NRC 427, 432 (1989).

The Nevada Counties fail to meet any of the mandatory requirements of §§ 51.109 and 2.326 in their contention or supporting expert affidavits. With regard to the most difficult and important showing—a demonstration that a "materially different result would be or would have been likely" if the contention were proven to be true—the Nevada Counties and the affidavits of their experts are silent. Equally important, the Nevada Counties' experts do not provide the analysis that is explicitly called for by the terms of §§ 51.109 and 2.326. The experts do not set forth sufficient factual and/or technical bases in support of the contention, nor do they provide a specific explanation of why the requirements of § 2.326 have been met. They have not met the requirements of §§ 51.109 and 2.326 and their contention must therefore be rejected.

There are a number of additional flaws in the affidavits of the Nevada Counties' experts. The affidavit of Mr. Patton, which is the only affidavit that discusses at any length the issue of local emergency management raised in this contention, merely lists a series of alleged omissions in DOE's NEPA documents. Mr. Patton speculates as to the possibility that shipments might

occur on alternative routes through the Nevada Counties, and further speculates as to the potential effects. Patton Affidavit at 4-7. Mr. Patton provides no evidence to support his assertion that there could be "substantially increased accident rates, increased radiological [e]ffects, increased air pollution and increased costs to state and local jurisdictions, *id*. at 7, beyond the effects that DOE has already analyzed in the NEPA documentation. *See, e.g*., Repository SEIS, Vol. II, App. G at G-35 to -68, App. H at H-16 to -19. Mr. Patton's affidavit also fails to provide any evidence to support his assertion that "the costs of training local government representatives in the Four Counties should also be included as a project expense," Patton Affidavit at 9, or to suggest that such costs or training needs would differ from the funding and training for state and local emergency response officials that has already been addressed by DOE. *See, e.g.*, 2002 FEIS, Vol. I at 6-46; *id*. at Vol. II, App. M at M-19 to -21; Repository SEIS, Vol. II, App. H at H-18 to -20, H-33 to -35. The impact of the alleged omissions is never discussed. This contention should, therefore, be rejected.

a. Statement of Issue of Law or Fact to be Controverted

Without prejudice to the other positions taken by DOE, DOE expresses no legal objection based on this requirement.

b. Brief Explanation of Basis

Without prejudice to the other positions taken by DOE, DOE expresses no legal objection based on this requirement.

c. Whether the Issue is Within the Scope of the Proceeding

Contentions challenging DOE's transportation decisions, and the environmental impact statements upon which those decisions are based, are beyond the scope of this proceeding and may also be barred on finality grounds. The Nevada Counties' contention regarding impacts on

local emergency management from transportation-related incidents is objectionable on both grounds.

First, as addressed in Section IV.A.5(a)(1) above, under the Atomic Energy Act and the Energy Reorganization Act (ERA), NRC does not have regulatory authority over DOE's transportation facilities and activities and thus has no direct NEPA responsibilities with respect to those facilities and activities. To the extent such facilities and activities may contribute to the cumulative impacts of the proposed Yucca Mountain repository, NRC must take DOE's decisions concerning transportation facilities and activities as a given in considering the cumulative impacts of the proposed repository. *See, e.g., Dep't of Transp. v. Public Citizen*, 541 U.S. 752 (2004).

Second, in addition to the NRC's lack of regulatory authority over transportation of SNF and HLW, as addressed in Section IV.A.5(a)(2) above, any challenges to the analysis of environmental impacts arising from DOE transportation decisions, to the extent reviewable, are within the original and exclusive jurisdiction of the federal courts of appeals. In particular, challenges to the April 2004 ROD and the transportation related portions of the 2002 FEIS on which it was based, are no longer subject to review in any forum, as a result of the expiration of the 180 day period to challenge that ROD set forth in Section 119 of the NWPA. Any challenges to DOE's transportation decisions set forth in the October 10, 2008 ROD and the Rail Alignment EIS on which it was based, are also not appropriately a part of this proceeding; such challenges may be pursued only through a petition for review to a federal court of appeals. The Nevada Counties have failed to identify any issue relating to impacts on local emergency management responsibilities for which the approach specified in Section 119 was or is not available.

In summary, challenges to the April 2004 ROD, and the transportation related portions of the 2002 FEIS on which it was based, are no longer subject to review in any forum as a result of the expiration of the 180-day period to challenge that ROD set forth in Section 119 of the NWPA. Any challenges to DOE's transportation decisions set forth in the October 10, 2008 ROD are also not appropriately a part of this proceeding, and may only be challenged through a petition for review to a federal court of appeals.

d. Whether the Issue is Material to the Findings that the NRC Must Make

For the reasons discussed in section c. above, this issue is not material to the findings NRC must make because challenges to DOE's transportation decisions are outside the scope of this proceeding and the contention is barred on finality grounds. In addition, this contention does not present a material issue because DOE's NEPA documents adequately address issues of local emergency management.

The Nevada Counties allege that DOE failed to satisfy NEPA's requirements because DOE did not specifically address impacts associated with the provision of local emergency management services within the Nevada Counties. Under NEPA, DOE is required to take a "hard look" at potential environmental consequences. *See Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976). In its NEPA documentation, DOE analyzed the potential impacts of transporting spent nuclear fuel and high-level radioactive waste along representative routes in Nevada, including the potential impacts of transportation accidents, DOE support for state and local officials in the event of an accident, and the provision of funding and training for state and local emergency response services. *See* 2002 FEIS, Vol. I at 6-32 to -52; *id*. at Vol. II, App. M at M-19 to -21; Repository SEIS, Vol. II, App. H at H-18 to -20, H-33 to -35.

DOE analyzed the coordination and assistance of local officials in the event of an emergency, including the provision of technical support and response management in cooperation with federal, state, and local officials. *See, e.g*., Repository SEIS, Vol. II, App. H at H-16 to -19. DOE maintains eight Regional Coordinating Offices staffed 24 hours a day, 365 days a year with "teams of nuclear engineers, health physicists, public affairs specialists, and other professionals" to provide support to local officials in the event of an emergency." *Id.* at H-16. In addition, DOE would "support[] the Department of Homeland Security as the coordinating agency for incidents that involve the transportation of radioactive materials by or for DOE," and would otherwise be "responsible for the radioactive material, facility, or activity in the incident," including coordination of "federal radiological response activities as appropriate." *Id*. at H-17. DOE would support the Department of Homeland Security in coordinating "security activities for federal response operations," and would maintain national and regional offices to manage emergency responses with state and local officials." *Id*. at H-17 to -18.

In addition, DOE discussed its obligations under Section 180(c) of the NWPA, which would require DOE to provide funding and training for state, tribal, and local emergency response services in the jurisdictions through which DOE would transport spent nuclear fuel and high-level radioactive waste to Yucca Mountain. *See, e.g*., 2002 FEIS, Vol. I at 6-46; *id*. at Vol. II, App. M at M-19 to -21; Repository SEIS, Vol. II, App. H at H-18 to -20, H-33 to -35. Pursuant to DOE's proposed policy for implementing Section 180(c), "DOE would work with states and tribes to evaluate current preparedness for safe routine transportation and emergency response capability and would provide funding as appropriate to ensure that state, tribal, and local officials are prepared for such shipments." Repository SEIS, Vol. II, App. H at H-19.

DOE anticipates that an initial grant for preparation and training in specific jurisdictions through which shipments would occur "would be available approximately 4 years prior to the commencement of shipments through a state or tribe's jurisdiction." *Id*. DOE anticipates subsequent "training grants in each of the 3 years prior to a scheduled shipment through a state or tribe's jurisdiction and every year that shipments are scheduled." *Id*. At this early stage, many years before shipments begin, it would therefore be premature to predict which jurisdictions would be affected or attempt to provide a specific plan for any particular jurisdiction.

The Nevada Counties' allegation that DOE's analysis is insufficient because it does not provide actual "means to mitigate harmful impacts" is also unavailing. Petition at 4. NEPA does not require "a fully developed plan that will mitigate environmental harm before an agency can act," *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 353 (1989); it requires only that possible mitigation measures "be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated," *City of Carmel-by-the-Sea v. U.S. Dep't of Transp*., 123 F.3d 1142, 1150 (9th Cir. 1997). The Nevada Counties also do not present a genuine issue that "DOE must explain in greater, clearer detail how it plans to implement its emergency response assistance programs" under Section 180(c), *see* Petition at 21, because NEPA does not demand a "detailed explanation of specific measures which *will* be employed to mitigate adverse environmental effects." *Duke Energy Corp*. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-03-17, 58 NRC 419, 431 (2003) (emphasis added) (quotations omitted). DOE adequately describes the mitigation measures that it would implement should the project be approved, including measures to support and coordinate emergency response services and to provide funding and training for state and local officials.

See 2002 FEIS, Vol. I at 6-32 to -52; *id*. at Vol. II, App. M at M-19 to -21; Repository SEIS, Vol. II, App. H at H-18 to -20, H-33 to -35. NEPA does not require that an agency take unreasonable steps to finalize a mitigation plan that is reasonably complete. *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 205-06 (D.C. Cir. 1991); *see also Laguna Greenbelt, Inc. v. U.S. Dep't of Transp*., 42 F.3d 517, 528 (9th Cir. 1994). The Nevada Counties' demand for fully developed county-specific mitigation plans and additional funding to support such plans is not required by NEPA, nor could such plans be practically completed at this early stage.

In addition, the allegation that DOE's NEPA documents are inadequate because of unavailability of completed emergency mitigation plans is inconsistent with CEQ regulations and NEPA caselaw and thus does not raise a material issue. The policies and procedures of DOE and the CEQ that implement the requirements of NEPA call for agencies to "integrate the NEPA process with other planning at the earliest possible time" in the development of a proposed federal project. 40 C.F.R. § 1501.2. In particular, CEQ regulations 40 C.F.R. §§ 1500.5, 1501.2, 1502.5 and 1508.23 all stress the need to prepare an EIS early in the process. NEPA analysis of environmental consequences must be made "as soon as it can reasonably be done." *Kern v. U.S. Bureau of Land Mgmt*., 284 F.3d 1062, 1072 (9th Cir. 2002) (citing *Save Our Ecosystems v. Clark*, 747 F.2d 1240, 1246 n.9 (9th Cir. 1984) ("Reasonable forecasting and speculation is . . . implicit in NEPA.") (internal citation omitted)). The Nevada Counties have not cited a single case in which an environmental impact statement was found invalid because it was prepared too early in the process. Therefore, the fact that DOE provided a reasonably thorough analysis of transportation issues associated with the project, including a discussion of emergency management issues, is sufficient to satisfy NEPA's requirements.

In sum, DOE has provided a "reasonably complete" analysis of possible measures to satisfy NEPA's procedural requirements with respect to mitigation and potential transportation effects. *Robertson*, 490 U.S. at 352. The allegation that DOE failed to meet NEPA's requirements by not providing completed county-specific mitigation plans and additional emergency management funding is entirely unsupported by the facts and relevant caselaw.

Accordingly, this contention does not present a material issue and should therefore be rejected.

e. Statement of Alleged Facts or Expert Opinion Supporting Petitioner's Position and Supporting References

For the reasons discussed above with respect to the requirements of 10 C.F.R. §§ 51.109 and 2.326, and as addressed in Section IV.A.3 regarding the legal standards under 10 C.F.R § 2.309(f)(1)(v), the Nevada Counties have failed to provide the requisite supporting facts, expert opinion and references.

f. Existence of a Genuine Dispute on a Material Issue of Law or Fact, With Supporting References to the License Application

For the reasons discussed in sections c. and d. above, there is no genuine dispute on any material issue of law or fact because challenges to DOE's transportation decisions and supporting NEPA analyses are outside the scope of this proceeding, because the contention is barred on finality grounds, and because the contention fails to demonstrate inadequacy in DOE's NEPA analyses. The contention therefore should be rejected.

3. 4NC-NEPA-3— Insufficient Analysis In Environmental Impact Statement Of Significant & Substantial New Considerations Related To Selection Of SNF Transportation Container, Which Renders Environmental Impact Statement Inadequate

Applicant failed to effectively address significant and substantial new considerations in the Final Supplemental Environmental Impact Statement (Final SEIS) related to the differing impacts of alternative types of transportation canisters used upon worker safety estimates at the Yucca Mountain Repository as required by the National Environmental Policy Act (NEPA), as applied in the Nuclear Waste Policy Act. 42 U.S.C. § 4321 et seq. (2006) (setting out the requirements of NEPA); 42 U.S.C. §10247 (2006) (applying NEPA to the NRC process). Because the type of shipping canisters selected by commercial generators affects whether fuel must be repackaged before emplacement and repackaging can increase exposure to radiation, the varying effects of the alternative containers on the human environment must be considered. DOE must provide an analysis of this variable and means to mitigate harmful impacts to the human environment in the EIS. *See* 40 C.F.R. § 1502.1 (2008). Furthermore, the Nuclear Regulatory Commission may adopt the EIS only if the document is complete and in compliance with NEPA and its implementing regulations. 10 C.F.R. § 51.109(a)(1) (2008). Because the Final SEIS, as submitted by DOE, is not complete with respect to the impacts of differing Spent Nuclear Fuel (SNF) canister utilization estimates and correlating impacts on worker safety, NRC erred in adopting these sections of the Final SEIS.

RESPONSE

In this contention, the Nevada Counties claim that DOE's environmental analyses are invalid on the ground that DOE's analysis of transportation containers was insufficient, "[s]pecifically [that] the quantities of DPCs are substantially under-estimated in DOE's

evaluation, which will result in higher worker radiation risks as a consequence of the necessary additional handling related to repackaging." Petition at 23.

All NEPA contentions must demonstrate that they meet the criteria of 10 C.F.R § 51.109 and 10 C.F.R. § 2.326, as well as the standards for contentions of 10 C.F.R. § 2.309. The Nevada Counties fail to meet the express requirements of 10 C.F.R. §§ 2.326 and 51.109 in requesting that their contention be admitted in this proceeding. Specifically, as set forth in Section IV.A.4, the Nevada Counties must (1) raise a significant environmental issue; and (2) demonstrate that their contention, if proven to be true, would or would likely result in a materially different outcome in this proceeding. Moreover, their environmental contention must be supported by the affidavit of a qualified witness that sets forth the factual and/or technical basis supporting the claim that these two criteria have been met, including a "specific explanation of why it has been met." 10 C.F.R. § 2.326(b). As noted in Section IV.A.4 above, "the Commission expects its adjudicatory boards to enforce the [§ 2.326] requirements rigorously—*i.e*., to reject out-of-hand motions that do not meet those requirements within their four corners." *Pub. Serv. Co. of N.H*. (Seabrook Station, Units 1 and 2) ALAB-915, 29 NRC 427, 432 (1989).

The Nevada Counties fail to address any of the mandatory requirements of §§ 51.109 and 2.326 in their contention or supporting expert affidavit. With regard to the most important and difficult showing—a demonstration that a "materially different result would be or would have been likely" if the contention were proven to be true, the Petition and the affidavit of its expert are silent other than the unsupported statement that worker doses "would differ significantly when processing DPCs as compared to when processing TADs." von Tiesenhausen Affidavit at ¶ 10. Equally important, the Nevada Counties' expert, Mr. von Tiesenhausen, never provides

the analysis that is explicitly called for by the terms of § 2.326(b). This regulation requires the Nevada Counties' expert to "set forth the factual and/or technical bases for the movant's claim that the criteria of paragraph (a) of this section have been satisfied." Section 2.326(b) goes on to state that "[e]ach of the criteria must be separately addressed, with a specific explanation of why it has been met." Here, the Nevada Counties failed to meet these requirements and their contention should be rejected.

According to his affidavit, Mr. von Tiesenhausen holds a bachelors degree in Applied Sciences from the University of British Columbia and a Masters in Business Administration from Pepperdine University. He worked for Clark County as a "technical advisor to Clark County on the Yucca Mountain Program," for 18 years. However, there is nothing in his academic background or this one-line statement of his experience that demonstrates that he is qualified to render opinions regarding the subject matter of this contention. His affidavit is no more valid or reliable than the rejected testimony of a mathematician who tried to provide expert opinions on engineering matters, *Fla. Power & Light Co*. (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-86-23, 24 NRC 108 (1986), or the environmental health expert who tried to provide expert evidence on physical security matters. *Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), LBP 98-13, 47 NRC 360 (1998).

Mr. von Tiesenhausen asserts in his affidavit that DOE's NEPA analyses "potentially underestimate the number of shipments of SNF and HLW to be made to the repository." von Tiesenhausen Affidavit at ¶ 7. A "potential" underestimate does not meet the 10 C.F.R. §§ 51.109 and 2.327 standards. He also asserts that "absent agreement enabling the use of TADs, DPCs (dual purpose canisters) would be more likely to be utilized than TADs." *Id*. Mr. von Tiesenhausen provides no support for this statement. Moreover, he ignores the fact that it is

DOE's position that DPCs are "not currently acceptable under the provisions of 10 C.F.R. Part 961," SAR Subsection 1.5.1.1.1.2.1.2. at 1.5.1-12; Repository SEIS, Vol. III at CR-288 (SNF "currently in dry storage system canisters is not an acceptable waste form and DOE would not accept it" absent mutually acceptable contract amendments).

Mr. von Tiesenhausen attempts to support his argument that DOE underestimates the number of DPCs that may be received at the repository based on statements by NEI representatives. von Tiesenhausen Affidavit at ¶ 8. However, he ignores the fact that NEI stated in its comments on the draft SEIS that "we find DOE's decision to consider, in this SEIS, the possibility that it might in reality, receive up to 25 percent of the commercial inventory in non-TAD canisters (DSEIS Section 2.1.1) to be both reasonable and prudent." Repository SEIS, Vol. III at CR-291.

DOE did a sensitivity analysis, examining the impacts of a scenario in which utilities shipped only 75%, rather than 90% of SNF in TADs. Repository SEIS, Vol. II, App. A at A-3. This sensitivity analysis was recognized by NEI to be "reasonable." In that sensitivity analysis, DOE looked at the impacts of repackaging non-TAD shipments at the repository and concluded that "a deviation in the percentage of implementation of TAD canisters at the reactor site would not measurably affect the transportation impacts." *Id*. The Repository SEIS concluded that "[i]n summary, this analysis illustrated that the deviations in the percentage implementation of TAD canisters would have little effect on transportation or repository-related estimated impacts." *Id*., Vol. II, App. A at A-5. Thus DOE has examined the impacts on workers at the repository of the "additional handling related to repackaging." Petition at 23. Accordingly, there is no factual basis for the contention that DOE has underestimated worker impacts.

a. Statement of Issue of Law or Fact to be Controverted

Without prejudice to other positions taken by DOE, DOE expresses no legal objection based upon this requirement.

b. Brief Explanation of Basis

Without prejudice to other positions taken by DOE, DOE expresses no legal objection based upon this requirement.

c. Whether the Issue is Within the Scope of the Proceeding

Contentions relating to the proposal by DOE to accept up to 90% of commercial SNF in TADs is not within the scope of this proceeding. As discussed in section IV.A.5.b, contentions relating to DOE's proposal to accept a substantial amount of commercial SNF for transportation and disposal in TADs are outside the scope of this proceeding. NRC has no statutory or regulatory authority over how DOE will accept commercial SNF pursuant to the contract between DOE and the generator of the SNF. While NRC can consider the effects of using TADs to accept commercial SNF, it cannot go behind those decisions and, in effect, dictate how much commercial SNF DOE can accept in TADs. Thus, any contention premised on such action is beyond the scope of this proceeding. Put simply, NRC must take DOE's proposal to accept up to as much as 90% of commercial SNF in TADs as a given in deciding whether to issue construction authorization for the repository.

Moreover, contentions challenging DOE's transportation decisions, and the environmental impact statements upon which those decisions are based, are beyond the scope of this proceeding. To the extent the Nevada Counties' contention challenges DOE's transportation analysis, it is objectionable on that jurisdictional ground as well.

First, as addressed in Section IV.A.5(a)(1) above, under the Atomic Energy Act and the Energy Reorganization Act (ERA), NRC does not have regulatory authority over DOE's

transportation facilities and activities and thus has no direct NEPA responsibilities with respect to those facilities and activities. To the extent such facilities and activities may contribute to the cumulative impacts of the proposed Yucca Mountain repository, NRC must take DOE's decisions concerning transportation facilities and activities as a given in considering the cumulative impacts of the proposed repository. *See, e.g., Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752 (2004).

Second, in addition to the NRC's lack of regulatory authority over transportation of SNF and HLW, as addressed in Section IV.A.5(a)(2) above, any challenges to the analysis of environmental impacts arising from DOE transportation decisions, to the extent reviewable, are within the original and exclusive jurisdiction of the federal courts of appeals. Any challenges to DOE's transportation decisions set forth in the October 10, 2008 ROD and the Rail Alignment EIS on which it was based are also not appropriately a part of this proceeding; such challenges may be pursued only through a petition for review to a federal court of appeals. The Nevada Counties have failed to identify any issue relating to DOE's transportation analysis for which the approach specified in Section 119 is not available.

d. Whether the Issue is Material to the Findings that the NRC Must Make

For the reasons discussed in section c. above, this issue is not material to the findings NRC must make because challenges to DOE's proposal to accept up to 90% of commercial SNF in TADs and to DOE's transportation decisions are outside the scope of this proceeding. In addition, this contention does not present a material issue because the Nevada Counties fail to demonstrate that DOE's analysis does not satisfy NEPA's procedural requirements.

As discussed above, the contention and the Nevada Counties' expert, Mr. von Tiesenhausen are simply wrong in asserting that DOE did not evaluate in its environmental

analyses the situation where additional handling related to repackaging would be performed at the repository. The Nevada Counties claim that NEI supports their position given NEI's statement in its comments on the draft Repository SEIS that DOE was "reasonable and prudent" in conducting a sensitivity analysis in which only 75% of SNF would be shipped to the repository in TADs. Repository SEIS, Vol. III at CR-291. DOE analyzed that scenario, and as discussed above, concluded that "deviation[s] in the percentage implementation of TAD canisters would have little effect on transportation or repository-related estimated impacts." Repository SEIS, Vol II, App. A at A-3. Under these circumstances, DOE's assumption that 90% of the SNF would be shipped in TADs while also considering the possibility of a smaller amount shipped in TADs was a reasonable one and should not be second-guessed. *Inland Empire Pub. Lands Council v. U.S. Forest Serv.*, 88 F.3d 754, 762 (9th Cir. 1996), *citing Sierra Club v. Marita*, 845 F. Supp. 1317, 1331 (E.D. Wis. 1994) (finding it permissible to assume that population trends affecting one species in a particular habitat will similarly affect other species in the same habitat), *aff'd*, 46 F.3d 606 (7th Cir. 1995); *Greenpeace Action v. Franklin*, 14 F.3d 1324, 1335-36 (9th Cir. 1992) (finding it permissible for Service to assume that declines in the Stellar sea lion population would be the same for the harbor seal population, given their similarities). As in the case of a reviewing court, it is not the role of the NRC "to decide what assumptions … we would make were we in the Secretary's position, but rather to scrutinize the record to ensure that the Secretary has provided a reasoned explanation for his policy assumptions …." *Wyo. Lodging and Rest. Ass'n v. Dep't of Interior*, 398 F. Supp. 2d 1197, 1214 (D. Wyo. 2005), *citing Am. Iron & Steel Inst. v. Occupational Safety and Health Admin.*, 939 F.2d 975, 982 (D.C. Cir. 1991); *San Francisco Baykeeper v. U.S. Army Corps of Engineers*, 219

F. Supp. 2d 1001, 1015 (N.D. Cal. 2002) (agency's reasonable assumptions entitled to deference).

The NRC has already made clear that the decision to adopt DOE's environmental analyses "does not necessarily mean that NRC would independently have arrived at the same conclusions on matters of fact or policy." NEPA Review Procedures for Geologic Repositories for High-Level Waste, 53 Fed Reg. 16,131, 16,142 (May 5, 1988). DOE has provided reasonable explanations for the assumptions it has made in its NEPA analyses and it is not the Commission's duty to "second guess" those assumptions. *Wyo. Lodging and Rest. Ass'n v. Dep't of Interior*, 398 F. Supp. 2d at 1214.

Even if the Board were to conclude that this contention involved disputed expert opinion, notwithstanding Mr. von Tiesenhausen's apparent lack of relevant expertise, the well-settled law that a petitioner does not raise a material issue under NEPA simply by presenting a battle of experts still applies. *In Price Road Neighborhood Ass'n, Inc. v. Dep't of Transp.*, 113 F.3d 1505 (9th Cir. 1997), the Court of Appeals affirmed a district court's grant of summary judgment to the agency. The Ninth Circuit stated that the appellant had:

> sought to engage in a battle of the experts with regard to several impacts, including air quality and noise, offering their own studies to contradict those of the agencies. We have consistently rejected such attempts, noting that "when specialists express conflicting views, an agency must have discretion to rely on the reasonable opinions of its own qualified experts."

Id. at 1511, *citing Greenpeace Action v. Franklin*, 14 F.3d 1324, 1332 (*quoting Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 378 (1989). *Accord Havasupai Tribe v. Robertson*, 943 F.2d 32, 34 (9th Cir. 1991) (affirming district court decision based on the administrative record that no supplementation of an EIS was required because "disagreement among experts does not invalidate an EIS").

As the Supreme Court stated in *Marsh*, an agency must have the discretion to rely on the reasonable opinions of its own experts "even if, as an original matter, a court might find contrary views more persuasive." *Marsh*, 490 U.S. at 378. This is because, as the Supreme Court explained in *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976), "[n]either the statute nor its legislative history contemplates that a court should substitute its judgment for that of the agency as to the environmental consequences of its actions." The NRC has indicated that it would adhere to this same tenet in deciding whether to adopt DOE's EIS. Accordingly, this contention, which is premised on a disagreement between an intervenor's expert and DOE's expert analysis in an EIS does not create a triable issue and should therefore not be admitted.

e. Statement of Alleged Facts or Expert Opinion Supporting Petitioner's Position and Supporting References

For the reasons discussed above with respect to the requirements of 10 C.F.R. §§ 51.109 and 2.326, and as addressed in Section IV.A.3 regarding the legal standards under 10 C.F.R § 2.309(f)(1)(v), the Nevada Counties failed to provide the requisite supporting facts, expert opinion and references.

f. Existence of a Genuine Dispute on a Material Issue of Law or Fact, With Supporting References to the License Application

For the reasons discussed in sections c. and d. above, there is no genuine dispute on any material issue of law or fact because challenges to DOE's proposal to accept SNF in TADs and DOE's transportation decisions and supporting NEPA analyses are outside the scope of this proceeding, and because the contention fails to demonstrate inadequacy in DOE's NEPA analyses. The contention therefore should be rejected.

4. 4NC-SAFETY-l—Insufficient Analysis In The License Application And SAR Of Transportation Container Usage And Correlating Impacts On Worker Safety

The Department of Energy (DOE) is required to include, in the Safety Analysis Report (SAR), a description of the "processes" of the site that might affect the design of the geologic repository operations area and performance of the geologic repository. 10 C.F.R. § 63.21(c)(I) (2008). The type of container DOE will receive at the repository and the resulting impact of that shipping container selection on Repository worker safety is one such "process" DOE must analyze in the SAR. The Nuclear Regulatory Commission (NRC) may only authorize construction of the repository at Yucca Mountain if there is "reasonable assurance" that the radioactive material can be "received and possessed in a geologic repository operations area...without unreasonable risk to the health and safety of the public." 10 C.F.R. § 63.31(a)(3)(vi) (2008). In order to make such a conclusion, the Commission shall consider whether "DOE's proposed operating procedures to protect health and to minimize danger to life or property are adequate." 10 C.F.R. § 63.31(a)(3)(vi) (2008). Thus, NRC should consider the impacts on worker safety resulting from an accurate estimate of the type and number of canisters used to ship SNF to the repository.

RESPONSE

In this contention, the Nevada Counties allege that DOE overestimates the amount of SNF that will be shipped to the GROA in TADs and, as a result, fails to adequately analyze impacts on the safety of workers who will be involved in repackaging SNF from DPCs into TADs at the GROA. As explained below, this contention is inadmissible because it is based on speculation and lacks adequate specificity and bases in fact or law, raises issues outside the scope of the proceeding that are not material, and lacks adequate supporting fact or expert opinion.

a. Statement of Issue of Law or Fact to be Controverted

Without prejudice to other positions taken by DOE, DOE expresses no legal objection based upon this requirement.

b. Brief Explanation of Basis

Without prejudice to other positions taken by DOE, DOE expresses no legal objection based upon this requirement.

c. Whether the Issue is Within the Scope of the Proceeding

This contention is outside the scope of this proceeding and must be dismissed. As noted above, the Nevada Counties claim that DOE has overestimated the amount of SNF it will receive in TADs and that workers involved in repackaging SNF from DPCs into TADs at the GROA may consequently experience radiological exposures not analyzed in the LA. While the Nevada Counties allege "significant" but unquantified increases in releases and exposures to onsite workers if less than 90% of SNF arrives on site in containers other than TADs, they do not argue—much less demonstrate—that any such unsupported differences will violate either Part 20 limits or ALARA guidelines. As such, the issue they seek to raise is outside the scope of this proceeding.

Their argument also must be rejected because, at bottom, it is based on speculation about future contract actions by DOE and the utilities. An admissible contention cannot rely on the premise that an applicant will not implement the proposed action that is the subject of the license application. DOE, as the applicant and ultimate licensee, is entitled to a presumption that it will construct and operate the GROA as analyzed in the LA and ultimately authorized by the license. Further, the Nevada Counties' speculation about increases in onsite worker exposures is unsupported by any factual basis.

Turning away from the Nevada Counties' speculation, and to the actual content of the LA, SAR § 1.2.1.1.2 states that approximately 90% of commercial SNF will be received at the GROA in TADs, with the remaining 10% shipped in DPCs or uncanistered. The LA also acknowledges that "the preclosure performance objectives of 10 CFR Part 63 invoke 10 CFR Part 20 for the control of occupational exposure of workers and onsite public for normal operations and Category 1 event sequences." SAR § 1.2.1 at 1.2.1-2.[15]

If the NRC grants DOE's application for construction authorization, then it will incorporate by reference the terms and provisions of the LA into the license authorizing construction, as augmented by any other license conditions it deems appropriate. DOE will thus be bound to construct and operate the GROA as described in the LA as submitted and approved by the NRC in the license. The Nevada Counties have impermissibly tried to base their contention on the premise that DOE, as the applicant and ultimate licensee, will not do so.

The NRC has consistently rejected analogous lines of argument in cases in which petitioners speculate that an applicant may fail to meet a license condition or commitment. For example, in *Private Fuel Storage*, the Commission refused a petitioner's suggestion that it assume that an applicant would violate conditions of its license requiring it to operate with sufficient funding and to train and employ an adequate firefighting force. *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-01-9, 53 NRC 232 (2001). Stating that "the NRC does not presume that a licensee will violate agency regulations wherever the

[15] 10 C.F.R. § 63.21(c)(6) states that the SAR must include "a description of the program for control and monitoring of radioactive effluents and occupational radiological exposures to maintain such effluents and exposures in accordance with the requirements of [10 C.F.R.] § 63.111." 10 C.F.R. § 63.111(a)(1), in turn, states that the GROA must meet that requirements of 10 C.F.R. Part 20. 10 C.F.R. § 20.1101(b) requires DOE to use, "to the extent practical, procedures and engineering controls based upon sound radiation protection principles to achieve occupational doses and doses to members of the public that are as low as reasonably achievable (ALARA)." In addition, 10 C.F.R. § 63.112(e)(2) requires the preclosure safety analysis to include "[m]eans to limit the time required to perform work in the vicinity of radioactive materials."

opportunity arises," the Commission refused to assume that the applicant might not fulfill these license conditions. *Id*. at 235, *citing GPU Nuclear, Inc*. (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 207 (2000).

Similarly, in *Curators of the University of Missouri*, an intervenor alleged that the University licensee would violate a condition of its license amendment that limited use of any actinide in experiments to one gram at any time, because the licensee was licensed to possess more than one gram of actinide. *Curators of the Univ. of Mo*., CLI-95-8, 41 NRC 386 (1995). The Commission rejected the contention, stating that it would not "base [its] findings on the assumption that the University will violate an explicit and unambiguous condition of its license." *Id*. at 400.

Here, the Nevada Counties speculate that DOE will use fewer TADs in shipping SNF to the GROA than provided for in the LA. Because a contention cannot be based on the premise that an applicant will not fulfill its application as submitted, the Board should reject this contention and decline to "rest" its "analysis on that hypothetical possibility" that DOE will not ship SNF to the GROA in the manner described in the LA. *Id.*

This contention is outside the scope of the proceeding for other reasons as well. It rests on assumptions about commercial issues that are beyond the scope of the NRC's purview in this proceeding, which is limited to the criteria of 10 C.F.R. Part 63. For example, the Nevada Counties hypothesize that DOE will be unable to reach contractual agreements with commercial utilities in the future regarding the purchase and use of TADs and that commercial utilities will be economically burdened by the purchase and use of TADs. Petition at 31. Issues surrounding potential commercial agreements between DOE and commercial utilities, in addition to being speculative, are outside the scope of this proceeding. So too is the allegation questioning

whether commercial utilities intend to purchase and use TADs. *Cf. USEC, Inc*. (American Centrifuge Plant), LBP-05-28, 62 NRC 585, 632 (2005), *aff'd,* CLI-06-9, 63 NRC 433 (2006) (finding a contention asserting licensee's failure to clarify how its contractual relationship with DOE was intended to and would function over time to be inadmissible, in part because the licensee's relationship with DOE was beyond the scope of the proceeding). *Cf. Amergen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), LBP-06-07, 63 NRC 188, 210 n.18 (2006) (denying contention based on speculation that a third party would fail to carry out its contractual obligations with licensee for aging management of combustion turbines thereby causing licensee to violates its license, stating that it is "unwilling . . . to assume that [licensee] will fail to comply with its lawful obligations").

Further, the Nevada Counties' speculation about the correlation between a hypothesized increase in the proportion of SNF arriving in non-TAD form and an increase in onsite worker exposures neither alleges a violation of Part 20 limits or ALARA guidelines, nor is supported by any factual basis. Nor does it acknowledge any of the potential adaptive features built into the ALARA program to account for actual fuel handling circumstances encountered in repository operation. *See* SAR § 1.10 (ALARA generally), 1.10.2.1.2, 1.10.2.2.2, 1.10.2.3.2 (ALARA design features generally and in facility layout, and equipment design).

An admissible contention cannot be based, as this one is, on assumptions that an applicant will not fulfill its commitments in an application as submitted. An admissible contention must allege and provide as its basis, as this one does not, a violation of NRC requirements if it were found to be factually supported. Finally, an admissible contention must rest, as this one does not, on determination of matters within the scope of an NRC licensing proceeding. This contention fails on all scores and must be dismissed.

d. Whether the Issue is Material to the Findings that the NRC Must Make

As stated above, because the Nevada Counties have impermissibly requested the Board to presume that DOE will not construct and operate the GROA as proposed by it and analyzed in the LA, this contention is outside the scope of this proceeding and immaterial to the findings the Board must make in this proceeding. Accordingly, this contention must be dismissed.

e. Statement of Alleged Facts or Expert Opinion Supporting Petitioner's Position and Supporting References

This contention also should be dismissed for failure to demonstrate that the contention is supported by adequate factual information and/or expert opinion. As explained below, rather than present claims "rooted in fact, documents, or expert opinions," this contention is grounded on unsupported conclusions and speculation. *See Yankee Atomic Elec. Co*. (Yankee Power Station), CLI-96-7, 43 NRC 235, 262 (1996). The Nevada Counties present the affidavit of Engelbrecht von Tiesenhausen which, for several reasons, cannot support this contention.

First, the affiant's statements contain only unsupported speculation that cannot serve as the basis for a contention. In paragraph 7, the affiant hypothesizes that DOE will not execute TAD shipping agreements with commercial utilities and the utilities will experience a financial burden through the purchase and use of TADs. von Tiesenhausen Aff. (Petition Attach. 16) at 3. In paragraph 8, the affiant states that "the DOE estimate of DPC canisters is significantly and substantially lower than can reasonably be expected to be received at the repository." *Id*. The affiant, however, fails to support his statements through purported expertise attained through relevant experience and training, if any. Instead, he relies solely on documents authored by others in offering such speculation.

Specifically, in opining about commercial utilities' future use of DPCs, the affiant relies on a report published by the Electric Power Research Institute (EPRI) entitled, "Occupational

Risk Consequences of the Department of Energy's Approach to Repository Design, Performance Assessment and Operation in the Yucca Mountain License Application." This document appears to be Attachment 13 to the Petition, although the Affidavit does not mention Attachment 13. Similarly, the affiant purports to quote from an industry spokesman's statements during an April 23, 2008 Western Interstate Energy Board meeting. In paragraph 7(a)(i) (erroneously cited by affiant as paragraph 6(a)(i)), the affiant attributes to that spokesman a summary of that meeting, apparently written by an attendee other than the industry spokesman. Attachment 14 to the Petition, which is not cited by the affiant, is the Summary of the April, 2008 meeting. Attachment 14 demonstrates that the statement that the Nevada Counties rely upon is from this summary. This statement, which is hypothetical and baseless on its face, cannot serve as the basis for the Nevada Counties' allegations. The Board, with respect to factual information or expert opinion offered to support a contention, "is not to accept uncritically the assertion that a document or other factual information or an expert opinion supplies the basis for a contention." *Private Fuel Storage* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 181 (1998), *aff'd on other grounds*, CLI-98-13, 48 NRC 26.

For the reasons above, this contention is not adequately supported by alleged facts or expert opinion, and accordingly must be dismissed.

f. Existence of a Genuine Dispute on a Material Issue of Law or Fact, With Supporting References to the License Application

The Nevada Counties' claims, which fail to provide any evidence countering the LA or demonstrating that it is inaccurate, cannot create a genuine dispute with the LA. As stated above, allegations merely stating that some aspect of the LA is inadequate require support from facts and a reasoned statement to give rise to a genuine dispute. The Nevada Counties, unable to

provide such facts, are left to speculate that DOE will not construct and operate the GROA as described in the LA.

For the reasons set forth above, the contention must be rejected.

5. 4NC-JOINT-SAFETY-5— Failure To Include The Requirements Of The National Incident Management System (NIMS), Dated March 1, 2004, And Related Documentation In Section 5.7 Emergency Planning Of The Yucca Mountain Repository Safety Analysis Report (SAR)

The applicant failed to include key interoperability and standardized procedure and terminology requirements of the National Incident Management System (NIMS), in the Emergency Planning required as part of the Safety Analysis Report [Yucca Mountain Repository License Application, General Information and Safety Analysis Report. DOE/RW-0573 REV 0. 2008 (SAR Section 5.7; SAR pp 5.7-1 to 5.7-55). LSN DEN001592183] to sufficiently ensure the ability of Nye County and other offsite agencies to properly plan and respond to onsite emergency actions. See requirements at 10 CFR 63.161 and 10 CFR 72.32(b).

RESPONSE

This contention is jointly sponsored by Nye, Churchill, Esmeralda, Lander, Mineral, and Inyo County. Nye County has stated that it will be the lead party with respect to these joint contentions. Nye County Petition at 2. DOE has demonstrated why this jointly-sponsored contention is not admissible in its Answer to Nye County's Petition to Intervene. Accordingly, DOE is not repeating its response here, and respectfully refers the Board to its response in the Answer to Nye County's Petition.

6. 4NC - JOINT-SAFETY-6— The LA Lacks Any Justification Or Basis For Excluding Potential Aircraft Crashes As A Category 2 Event Sequence

Contrary to the requirements of 10 CFR 63 to provide the technical basis for the inclusion or exclusion of specific human-induced hazards in the repository preclosure safety analysis, the Department of Energy (DOE) has merely assumed the U.S. Air Force (USAF) will restrict their activities in the repository vicinity. No basis or justification for that assumption is provided by DOE in its repository License Application (LA) or supporting documents.

RESPONSE

This contention is jointly sponsored by Nye, Churchill, Esmeralda, Lander, Mineral, and Inyo County. Nye County has stated that it will be the lead party with respect to these joint contentions. Nye County Petition at 2. DOE has demonstrated why this jointly-sponsored contention is not admissible in its Answer to Nye County's Petition to Intervene. Accordingly, DOE is not repeating its response here, and respectfully refers the Board to its response in the Answer to Nye County's Petition.

V. CONCLUSION

DOE has no reason to believe that the Nevada Counties are not in substantial and timely compliance with their LSN obligations at this time, and does not object to their legal standing as AULGs under the Nuclear Waste Policy Act. However, the Nevada Counties have submitted no admissible contentions. Accordingly, their Petition should be denied.

Respectfully submitted,

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Dated in Washington, D.C.
this 15th day of January 2009.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:	)	
	)	January 15, 2009
U.S. Department of Energy	)	
	)	
(License Application for Geologic Repository at Yucca Mountain)	)	Docket No. 63-001

CERTIFICATE OF SERVICE

I hereby certify that copies of the "**ANSWER OF THE U.S. DEPARTMENT OF ENERGY TO NEVADA COUNTIES OF CHURCHILL, ESMERALDA, LANDER AND MINERAL PETITION TO INTERVENE"** have been served on the following persons this 15th day of January, 2009 by the Nuclear Regulatory Commission's Electronic Information Exchange.

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