

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD PANEL

In the Matter of)
)
)
LUMINANT GENERATION CO. LLC) Docket Nos. 52-034 & 52-035
)
)
(Comanche Peak Nuclear Power Plant,)
Units 3 & 4))

NRC STAFF'S ANSWER TO PETITION FOR INTERVENTION
AND REQUEST FOR HEARING

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INTRODUCTION

Pursuant to 10 C.F.R. § 2.309(h)(1), the staff of the U.S. Nuclear Regulatory Commission (NRC) hereby answers the "Petition for Intervention and Request for Hearing" (Petition). The NRC Staff (Staff) agrees that Sustainable Energy and Economic Development (SEED) Coalition, Public Citizen, True Cost of Nukes, and Mr. Lon Burnam, individually, (Petitioners) have presented information sufficient to support their standing in this proceeding. The Staff further agrees that the Petitioners have provided information sufficient for the admission of at least one contention, Contention 7, in this proceeding, and should therefore be admitted as parties to this proceeding pursuant to 10 C.F.R. § 2.309(a).

BACKGROUND

On September 19, 2008, Luminant Generation Company LLC, Nuclear Energy Future Holdings Company LLC, and Nuclear Project Company LLC (collectively "Applicant"), pursuant to the Atomic Energy Act of 1954, as amended (AEA) and the Commission's regulations, submitted an application for a combined license (COL) for two US-Advanced Pressurized Water Reactors (US-APWR) to be located adjacent to the existing Comanche Peak Nuclear Power Plant, Units 1 and 2 near Glen Rose in Somervell County, Texas (Application). The Application

references the standard design certification application including a design control document (DCD) submitted by Mitsubishi Heavy Industries, Ltd. The proposed units will be known as Comanche Peak Nuclear Power Plant, Units 3 & 4.

On November 7, 2008, the Staff published a notice of the receipt and availability of the COL application in the *Federal Register*. 73 Fed. Reg. 66,276 (Nov. 7, 2008). The application was accepted for docketing on December 2, 2008. 73 Fed. Reg. 75,141 (Dec. 10, 2008). On February 5, 2009, the NRC published a Notice of Hearing on the Application, which provided members of the public sixty days from the date of publication to file a petition for leave to intervene in this proceeding. 74 Fed. Reg. 6177 (Feb. 5, 2009). In response to the Notice of Hearing, the Petitioners submitted their Petition, through which they seek to intervene in this proceeding.

DISCUSSION

In their Petition, the SEED Coalition, Public Citizen, and True Cost of Nukes assert that they have standing to intervene on behalf of their members located within 50 miles of the proposed facility. Mr. Lon Burnam, individually, asserts that he has standing to intervene. The Petitioners assert nineteen contentions addressed by the Staff below. Contention 7 is admissible in part as explained below.

I. LEGAL STANDARDS

A. Standing to Intervene

In accordance with the Commission's Rules of Practice:¹

[a]ny person whose interest may be affected by a proceeding and who desires to participate as a party must file a written request for

¹ See "Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders." 10 C.F.R. Part 2.

hearing or petition for leave to intervene and a specification of the contentions that the person seeks to have litigated in the hearing.

10 C.F.R. § 2.309(a). The regulations further provide that the Licensing Board:

will grant the [petition] if it determines that the [petitioner] has standing under the provisions of [10 C.F.R. § 2.309(d)] and has proposed at least one admissible contention that meets the requirements of [10 C.F.R. § 2.309(f)].

Id.

Under the general standing requirements set forth in 10 C.F.R. § 2.309(d)(1), a request for hearing or petition for leave to intervene must state:

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

10 C.F.R. § 2.309(d)(1).

As the Commission has observed:

[a]t the heart of the standing inquiry is whether the petitioner has "alleged such a personal stake in the outcome of the controversy" as to demonstrate that a concrete adverseness exists which will sharpen the presentation of issues.

Sequoyah Fuels Corp. and Gen. Atomics (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 71 (1994) (citing *Duke Power Co. v. Carolina Env'tl. Study Group, Inc.*, 438 U.S. 59, 72 (1978), and quoting *Baker v. Carr*, 369 U.S. 186, 204 (1962)).

To demonstrate such a "personal stake," the Commission applies contemporaneous judicial concepts of standing. Accordingly, petitioner must (1) allege an "injury in fact" that is (2) "fairly traceable to the challenged action" and (3) is "likely" to be "redressed by a favorable decision."

Sequoyah Fuels, 40 NRC at 71-72 (quoting *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992) (citations and internal quotations omitted) and citing *Cleveland Elec. Illuminating Co.*

(Perry Nuclear Power Plant, Unit 1), CLI-93-21, 38 NRC 87, 92 (1993)). See also *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 323 (1999).

In reactor licensing proceedings, licensing boards have typically applied a “proximity” presumption to persons “who reside in or frequent the area within a 50-mile radius” of the proposed plant. See, e.g., *Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 NRC 138, 148 (2001).² The Commission noted this practice with approval, stating that:

We have held that living within a specific distance from the plant is enough to confer standing on an individual or group in proceedings for construction permits, operating licenses, or significant amendments thereto[.] See, e.g. *Virginia Electric and Power Co.* (North Anna Power Station, Units 1 and 2), ALAB-522, 9 NRC 54 (1979). . . . [T]hose cases involved the construction or operation of the reactor itself, with clear implications for the offsite environment[.] See, e.g., *Gulf States Utilities Co.* (River Bend Station, Units 1 and 2), ALAB-183, 8 [sic, 7] AEC 222, 226 (1974).

Fla. Power & Light Co. (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989). The proximity presumption establishes standing without the need to establish the elements of injury, causation, or redress. *Turkey Point*, LBP-01-6, 53 NRC at 150. The Staff submits that because a COL application is an application for a construction permit combined with an operating license (see 10 C.F.R. § 52.1(a)), the proximity presumption would appear, in general, to apply to such applications. See e.g. *Virginia Elec. & Power Co., d/b/a/ Dominion Virginia Power and Old Dominion Elec. Coop.* (COL for North Anna Unit 3), LBP-08-15, slip op. at 8.

An organization may establish its standing to intervene based upon a theory of organizational standing (showing that its own organizational interests could be adversely

² The *Turkey Point* decision summarizes the development of this doctrine. See *Turkey Point*, LBP-01-6, 53 NRC at 147-48.

affected by the proceeding), or representational standing (based upon the standing of its members).

To demonstrate organizational standing, an organization must be able to intervene in its own right. "Organizations seeking to intervene in their own right must satisfy the same standing requirements as individuals seeking to intervene . . . because an organization, like an individual, is considered a 'person' as we have defined that word in 10 C.F.R. § 2.4 and as we have used it in 10 C.F.R. § 2.309 regarding standing." *Consumers Energy Co. (Palisades Nuclear Power Plant)*, CLI-07-18, 65 NRC 399, 411 (2007). Thus, to establish organizational standing, an organization "must demonstrate a palpable injury in fact to its organizational interests that is within the zone of interests protected by the AEA or NEPA." *Crow Butte Resources, Inc. (License Amendment for the North Trend Expansion Project)*, LBP-08-6, 67 NRC 241, 271 (2008).

Where an organization seeks to establish representational standing, it must show that at least one of its members may be affected by the proceeding, it must identify that member by name and address and it must show that the member "has authorized the organization to represent him or her and to request a hearing on his or her behalf." See, e.g., *Palisades*, CLI-07-18, 65 NRC at 409; *Amergen Energy Co., LLC (Oyster Creek Nuclear Generating Station)*, LBP-06-07, 63 NRC 188, 195 (2006) (citing *GPU Nuclear Inc. (Oyster Creek Nuclear Generating Station)*, CLI-00-6, 51 NRC 193, 202 (2000)). Further, for the organization to establish representational standing, the member seeking representation must qualify for standing in his or her own right, the interests that the organization seeks to protect must be germane to its own purpose, and neither the asserted claim nor the requested relief may require an individual member to participate in the organization's legal action. *Palisades*, CLI-07-18, 65 NRC at 409; *Private Fuel Storage*, CLI-99-10, 49 NRC at 323 (citing *Hunt v. Wash. State Apple Advertising Comm'n*, 432 U.S. 333, 343 (1977)).

B. Legal Requirements for Contentions

The legal requirements governing the admissibility of contentions are well established and are currently set forth in 10 C.F.R. § 2.309(f) of the Commission's Rules of Practice (formerly 10 C.F.R. § 2.714(b)).³

The standards in 10 C.F.R. § 2.309(f)(1) may be summarized as follows: an admissible contention must: (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 action that is involved in 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 at the hearing; and (6) provide sufficient information to show that a genuine dispute with the applicant exists with regard to a material issue of law or fact, including references to specific portions of the application that the petitioner disputes, or in the case when the application is alleged to be deficient, the identification of such deficiencies and supporting reasons for this belief. See 10 C.F.R. § 2.309(f).⁴

³ In 2004, the Commission codified the requirements of former § 2.714, together with rules regarding contentions set forth in Commission cases, in 10 C.F.R. § 2.309. See "Changes to Adjudicatory Process" (Final Rule), 69 Fed. Reg. 2182 (Jan. 14, 2004), *as corrected*, 69 Fed. Reg. 25,997 (May 11, 2004). In the Statements of Consideration for the final rule, the Commission cited several Commission and Atomic Safety and Licensing Appeal Board decisions applying former § 2.714 in support of the codified provisions of § 2.309. See 69 Fed. Reg. at 2202. Accordingly, Commission and Atomic Licensing Appeal Board decisions on former § 2.714 retain their vitality, except to the extent the Commission changed the provisions of § 2.309 as compared to former § 2.714.

⁴ Section 2.309(f) provides:

(f) Contentions.

(1) A request for hearing or petition for leave to intervene must set forth with particularity the contentions sought to be raised. For each contention, the request or petition must:

(continued. . .)

Sound legal and policy considerations underlie the Commission's contention requirements. The purpose of the contention rule is to "focus litigation on concrete issues and result in a clearer and more focused record for decision." 69 Fed. Reg. at 2202; *see also Vermont Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 553-54 (1978); *BPI v. AEC*, 502 F.2d 424, 428 (D.C. Cir. 1974); *Phila. Elec. Co. (Peach Bottom Atomic Power Station, Units 2 and 3)*, ALAB-216, 8 AEC 13, 20 (1974). The Commission has stated that it "should not have to expend resources to support the hearing process unless there is an issue that is appropriate for, and susceptible to, resolution in an NRC hearing." 69 Fed. Reg. at 2202. The Commission has

(. . .continued)

(i) Provide a specific statement of the issue of law or fact to be raised or controverted;

(ii) Provide a brief explanation of the basis for the contention;

(iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;

(iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;

(v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue; and

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

(vii) [omitted]

(2) Contentions must be based on documents or other information available at the time the petition is to be filed, such as the application, supporting safety analysis report, environmental report or other supporting document filed by an applicant or licensee, or otherwise available to a petitioner. On issues arising under the National Environmental Policy Act, the petitioner shall file contentions based on the applicant's environmental report.

emphasized that the rules on contention admissibility are “strict by design.” *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001), *pet. for reconsideration denied*, CLI-02-01, 55 NRC 1 (2002). Failure to comply with any of these requirements is grounds for the dismissal of a contention. 69 Fed. Reg. at 2221; see also, *Private Fuel Storage, L.L.C.*, CLI-99-10, 49 NRC at 325; *Ariz. Pub. Serv. Co. et al.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155-56 (1991). “Mere ‘notice pleading’ does not suffice.” *Amergen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 119 (2006).

Finally, it is well established that the purpose for requiring a would-be intervener to establish the basis of each proposed contention is: (1) to assure that the contention raises a matter appropriate for adjudication in a particular proceeding; (2) to establish a sufficient foundation for the contention to warrant further inquiry into the assertion; and (3) to put other parties sufficiently on notice of the issues so that they will know generally what they will have to defend against or oppose. *Peach Bottom*, ALAB-216, 8 AEC at 20-21; *Ariz. Pub. Serv. Co., et al.* (Palo Verde Nuclear Generating Station, Units 1, 2 and 3), LBP-91-19, 33 NRC 397, 400 (1991). The *Peach Bottom* decision requires that a contention be rejected if:

- (1) it constitutes an attack on applicable statutory requirements;
- (2) it challenges the basic structure of the Commission’s regulatory process or is an attack on the regulations;
- (3) it is nothing more than a generalization regarding the petitioner’s view of what applicable policies ought to be;
- (4) it seeks to raise an issue which is not proper for adjudication in the proceeding or does not apply to the facility in question; or
- (5) it seeks to raise an issue which is not concrete or litigable.

Peach Bottom, 8 AEC at 20-21.

These rules focus the hearing process on real disputes susceptible to resolution in an adjudication. See *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334 (1999). For example, “a petitioner may not demand an adjudicatory hearing to attack generic NRC requirements or regulations or to express generalized grievances about

NRC policies.” *Id.* Specifically, NRC regulations do not allow a contention to attack a regulation unless the proponent requests a waiver from the Commission. See 10 C.F.R. § 2.335; *Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-07-3, 65 NRC 13, 17-18 and n.15 (2007) (citing *Millstone*, CLI-01-24, 54 NRC at 364).

II. STANDING

Lon Burnam, Nita O’Neal, Don Young, and J. Nile Fischer each reside within 50 miles of the proposed plant, and therefore would each qualify for standing to intervene in this proceeding in her or his own right according to the Commission’s proximity presumption. Petition 2-5. Each of these individuals, except for Mr. Burnam, has authorized an organization to represent her or his respective interests in this proceeding. Each individual except for Mr. Burnam has provided an affidavit meeting the requirements to establish representational standing by identifying the organization of which each is a member, describing the interests each wishes to protect, and authorizing her or his respective organization to represent her or him in this proceeding and request a hearing.⁵ The Petition sets forth that: the SEED Coalition’s interests align with the interests Ms. O’Neal wishes to protect, and that it will represent her; Public Citizen’s interests align with the interests that Mr. Young wishes to protect, and that it will represent him; and, True Cost of Nukes’ interests align with the interests Mr. Fischer seeks to protect, and it will represent him. Thus, the Petition, along with the declarations, set forth the information necessary to establish that Mr. Burnam, individually, has standing to intervene in this case, and the SEED

⁵ See Declarations of Nita O’Neal, Don Young, and J. Nile Fischer.

Coalition, Public Citizen, and True Cost of Nukes have representational standing to intervene in this proceeding.⁶

III. PETITIONERS HAVE SUBMITTED AN ADMISSIBLE CONTENTION

The Petitioners proposed 19 contentions in their Petition. Contention 7 is admissible in part, and the remaining contentions are inadmissible pursuant to 10 C.F.R. §§ 2.309(f)(1) and 2.335.

A. Proposed Contention 1:

The COLA adjudication should be stayed and COLA proceedings held in abeyance until the completion of the reactor design certification rulemaking process.

The Petitioners filed two Petitions on April 6, 2009. Contention 1 incorporates the “Petition for Order to Stay Comanche Peak Nuclear Power Units 3 and 4 Combined Construction and Operating Licensing Application Proceedings and Hold the Combined Operating License Application in Abeyance Pending Completion of the US-APWR Application Rulemaking” (Petition for Stay). The Office of the Secretary referred the Petition for Stay to the Commission for its consideration. The Petitioners do not raise any claims in this contention that are not already raised in the Petition for Stay. On April 27, 2009, the Commission, through the Secretary, issued an Order denying the Petition for Stay. Therefore, the Staff believes that this issue has been decided by the Commission and is inadmissible pursuant to 10 C.F.R. §§ 2.309(f)(1)(i) - (vi) and 2.335. This contention is an impermissible attack on the Commission’s regulations. As stated by the Commission, 10 C.F.R. § 52.55(c) allows an applicant for a combined license (COL) to submit an application that references a design which is not yet certified.

⁶ The Petition states that, “As set forth below, the Petitioners have standing, both individually and organizational/representational, to make this request.” Petition at 3. However, the Petition does not contain any discussion to establish that the organizational petitioners could establish standing in their own right. Therefore, the SEED Coalition, Public Citizen, and True Cost of Nukes have not established organizational standing.

B. Proposed Contention 2:

The Comanche Peak Environmental Report erroneously assumes that there will be high-level waste/spent nuclear fuel disposal capacity available at a federal site, presumably Yucca Mountain, Nevada. But even if Yucca Mountain is available as a federal repository for spent nuclear fuel and high-level nuclear waste, its capacity would be reached by waste from the current generation of operating reactors. Therefore, the spent nuclear fuel and high-level waste generated by Comanche Peak Units 3 and 4 would have to be dispositioned to a subsequent repository that has been neither sited nor authorized.

In this contention, the Petitioners challenge the Applicant's statement in Environmental Report (ER) Section 5.7.1.6 that a federal repository at Yucca Mountain, Nevada, will be available for spent fuel and high-level waste (HLW). Petition 14-15. Citing Section 10134(d) of the Nuclear Waste Policy Act, 42 U.S.C. § 10101 *et seq*, several Department of Energy (DOE) documents, and a statement by Secretary of Energy, Steven Chu, that Yucca Mountain is "no longer an option," the Petitioners assert that it is unlikely that a geologic repository will be available "even by 2025," and that, even if a repository is available, it will not have sufficient capacity to receive waste from Comanche Peak Units 3 and 4. Petition 15-17. Therefore, the Petitioners claim that the ER must include "an analysis of how the management of spent nuclear fuel and high-level radioactive wastes generated by Comanche [P]eak [U]nits 3 and 4 will be handled" assuming that a federal repository for disposal of such wastes will not be available. Petition at 17.

As discussed more fully below, the Staff opposes admission of this contention because it impermissibly challenges 10 C.F.R. § 51.23, the Waste Confidence Rule, and it seeks to address issues that are the subject of ongoing rulemaking. 10 C.F.R. § 2.335(a); *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 345 (1999). As a result, the contention is outside the scope of this proceeding, is not material to a decision the NRC must make, and fails to demonstrate a genuine dispute with the Applicant on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(iii), (iv), and (vi).

The Petitioners' assertions do not address any deficiency in the COLA, but instead take issue with the NRC's Waste Confidence Decision ("WCD") and the Waste Confidence Rule.⁷ As such, this contention is similar to contentions that licensing boards in recent COL proceedings have uniformly rejected as impermissible attacks on the WCD and the Waste Confidence Rule. See, e.g., *Duke Energy Carolinas, LLC* (Combined License Application for William States Lee III Nuclear Station, Units 1 and 2), LBP-08-17, 68 NRC __ (Sept. 22, 2008) (slip op. at 29).⁸ The regulations prohibit challenges to NRC rules in adjudicatory proceedings unless a waiver is obtained. See 10 C.F.R. § 2.335(a). Because the Petitioners have not sought a waiver, and have not demonstrated the special circumstances that would justify the granting of a waiver, the contention should be rejected. See *id.* at § 2.335(b).

⁷ The Waste Confidence Decision contains the Commission's generic findings regarding the availability of a geologic repository for high level waste disposal and the safety and environmental impacts of storing spent fuel onsite beyond the licensed operating life of a reactor. Waste Confidence Decision Review, 55 Fed. Reg. 38,474 (Sept. 18, 1990). These findings are codified in the Waste Confidence Rule, 10 C.F.R. § 51.23(a), which states as follows:

The Commission has made a generic determination that, if necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 30 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of that reactor at its spent fuel storage basin or at either onsite or offsite independent spent fuel storage installations. Further, the Commission believes there is reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century, and sufficient repository capacity will be available within 30 years beyond the licensed life for operation of any reactor to dispose of the commercial high-level waste and spent fuel originating in such reactor and generated up to that time.

⁸ Other decisions rejecting such contentions include *Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 and 3), LBP-08-21, 68 NRC __ (Oct. 30, 2008) (slip op. at 38-40); *Tennessee Valley Authority* (Bellefonte Nuclear Power Plant, Units 3 and 4), LBP-08-16, 68 NRC __ (Sept. 12, 2008) (slip op. at 61-62); *Virginia Elec. & Power Co.* (Combined License Application for North Anna, Unit 3), LBP-08-15, 68 NRC __ (Aug. 15, 2008) (slip op. at 52-54); *Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-07-3, 65 NRC 237, 267-68 (2007); *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), LBP-04-17, 60 NRC 229, 246-47 (2004); *Dominion Nuclear North Anna, LLC* (Early Site Permit for North Anna ESP Site), LBP-04-18, 60 NRC 253, 268-69 (2004); *System Energy Resources, Inc.* (Early Site Permit for Grand Gulf ESP Site), LBP-04-19, 60 NRC 277, 296-97 (2004).

The Petitioners, recognizing that the Applicant has relied on the Waste Confidence Rule, argue that such reliance is misplaced because the Waste Confidence Rule applies only to currently operating reactors, not new reactors. Petition at 15. However, as several licensing boards have recognized, the Waste Confidence Rule clearly applies in COL proceedings. See, e.g., *Lee*, LBP-08-17, 68 NRC at ____ (slip op. at 29) (concluding that “[i]n light of the plain language of the rule and its regulatory history, the Waste Confidence Rule applies” to COL proceedings). Therefore, as discussed above, the contention should be rejected as a challenge to Commission regulations.

The contention is also inadmissible because the issues raised are the subject of an ongoing rulemaking. In October, 2008, the Commission published proposed revisions to the WCD and the Waste Confidence Rule. Waste Confidence Decision Update, 73 Fed. Reg. 59,551 (Oct. 9, 2008); Consideration of Environmental Impacts of Temporary Storage of Spent Fuel After Cessation of Reactor Operation, 73 Fed. Reg. 59,547 (proposed Oct. 9, 2008) (to be codified at 10 C.F.R. Part 51). The proposed revisions do not alter the Commission’s findings of reasonable assurance regarding future repository availability and ability to store spent fuel after cessation of reactor operations. 73 Fed. Reg. at 59,551. The Commission has stated that “[i]t has long been agency policy that Licensing Boards should not accept in individual license proceedings contentions which are (or are about to become) the subject of general rulemaking by the Commission.” *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 345 (1999). Therefore, the contention should be rejected on this basis as well. See *Shearon Harris*, LBP-08-21, 67 NRC at ____ (slip op. at 40 n.36).

Finally, Contention 2 is inadmissible because it fails to meet several of the requirements set forth in 10 C.F.R. § 2.309(f)(1). As noted above, the Petitioners’ assertions regarding the unavailability of a geologic repository and lack of sufficient capacity in a geologic repository challenge the regulations, but do not address any deficiency in the COLA. The Commission has emphasized that “[t]he purpose and scope of a licensing proceeding is to allow interested

persons the right to challenge the sufficiency of the *application*.” *Amergen Energy Co., LLC* (Oyster Creek Nuclear Generating Station) et al., CLI-08-23, 68 NRC __ (Oct. 6, 2008) (slip op. at 18) (emphasis added). Therefore, because it does not assert deficiencies or omissions in the Application, this contention is outside the scope of the proceeding and is not material to a decision the NRC must make. 10 C.F.R. § 2.309(f)(1)(iii) and (iv).

Furthermore, although the Petitioners refer to a statement in section 5.7.1.6 of the ER, this statement reflects the Commission’s generic determinations regarding management of radioactive waste. The Petitioners have not disputed any other portion of the Application, nor have they identified an omission of information required by law. Thus, the Petitioners have not demonstrated the existence of a genuine dispute with the Applicant on a material issue of law or fact as required by 10 C.F.R. § 2.309(f)(1)(vi).

C. Proposed Contention 3:

Because no spent nuclear fuel and high-level radioactive waste repository site is now available and future availability of such site is problematic, the COLA adjudication should consider the environmental consequences and public health impacts from long-term storage of high-level waste and spent fuel on site at Comanche Peak.

In this contention, the Petitioners assert that, because a geologic repository is not presently available and may not be available in the future, the Applicant must analyze the environmental and public health impacts of long-term storage of high-level waste and spent fuel at Comanche Peak.⁹ Petition 17-18. The Petitioners assert that the Applicant does not “consider the long-term environmental and public health consequences of spent fuel remaining on-site . . . indefinitely” and does not identify another facility that would have sufficient capacity to store these wastes. Petition at 18. The Petitioners also assert that the risks of terrorist

⁹ The Petitioners have not identified any type of high level waste other than spent fuel that would be stored at Comanche Peak, and the focus of this contention appears to be storage of spent fuel. Therefore, for simplicity, the Staff will subsequently use the term “spent fuel” in responding to this contention.

attacks and “significant long-term” radiation exposures with respect to dry cask storage must be considered in the ER. Petition at 19. The Staff opposes admission of this contention because it is an impermissible attack on the Commission’s regulations and, to the extent that it asserts that public health consequences must be analyzed, it lacks specificity, is inadequately supported, and fails to raise a genuine dispute with the applicant. 10 C.F.R. § 2.335(a); 10 C.F.R. § 2.309(f)(1)(i), (v), and (vi).

First, like Contention 2, this contention impermissibly attacks 10 C.F.R. § 51.23, the Waste Confidence Rule. The Petitioners repeatedly emphasize that their issue is with *long-term* storage of spent fuel, and that the underlying reason for their concern is “the absence of a permanent disposal repository for high-level waste and spent nuclear fuel.” Petition at 18. However, the Waste Confidence Rule states that the Commission has determined that there is reasonable assurance that a geologic repository will be available by 2025 and that sufficient repository capacity will be available within 30 years to dispose of HLW and spent fuel generated by any reactor up to that time. 10 C.F.R. § 51.23(a). Furthermore, the Commission has also determined that, “if necessary, spent fuel generated in any reactor can be stored *safely and without significant environmental impacts* for *at least 30 years*” in an onsite spent fuel pool or an on-site or off-site independent spent fuel storage installation (ISFSI). *Id.* (emphasis added). Based on the Commission’s generic findings, the regulations expressly state that no discussion of environmental impacts of long-term spent fuel storage is required in an ER. *Id.* at 51.23(b). The Petitioners have not sought a waiver of 10 C.F.R. § 51.23, nor have they demonstrated, or even attempted to demonstrate, the special circumstances that would justify a waiver. 10 C.F.R. § 2.335(b). Accordingly, because it impermissibly challenges the Waste Confidence Rule, the Petitioners’ contention that the ER is flawed because it does not consider long-term environmental impacts should be rejected. 10 C.F.R. § 2.335(a).

The Petitioners’ assertions regarding the risks of dry cask storage are also impermissible challenges to the regulations. Petition 18-19. The Petitioners’ assertion that dry

cask storage is a “serious risk” because it provides an attractive target for terrorists, Petition at 18, attacks the Commission’s determination in 10 C.F.R. § 51.23(a) that spent fuel can be stored safely for at least 30 years in an on-site ISFSI, which would employ dry cask storage. The Petitioners’ assertions that the ER should include calculations of the projected radiation exposures that would result from dry cask storage, Petition at 19, should be rejected for the same reason.¹⁰ Furthermore, the Petitioners have provided no factual or expert support indicating that dry cask storage would result in significant radiation releases or exposures. And, in any event, the Petitioners’ concerns regarding dry cask storage are premature and speculative at this point, because long-term post-operational storage, if it is needed at all, will not be needed for 40 to 60 years after the COL is granted, and the Applicant may not need to use dry cask storage as a long-term storage solution.¹¹

Finally, the Petitioners’ assertion that the ER must consider “public health consequences of spent fuel remaining on-site . . . indefinitely” should be rejected because it lacks specificity, is inadequately supported, and fails to demonstrate a genuine dispute with the Applicant. The Petitioners have not identified any requirements in the AEA or the NRC’s regulations for a COL

¹⁰ As support for this assertion, the Petitioners cite the Thompson Declaration, Petition at 19, but they do not explain how the cited pages support their claim. Merely attaching a document without explaining how it supports a contention does not provide adequate support for the contention. *USEC, Inc. (American Centrifuge Plant)*, LBP-05-28, 62 NRC 585, 597 (2005), *aff’d* CLI-06-10, 63 NRC 451 (2006). Furthermore, the Thompson Declaration and the two attachments it references (also submitted by Petitioners) challenge the WCD, not the COLA. Although the Thompson Declaration identifies six issues that “should be included in the Comanche Peak ER,” see Thompson Declaration at 9-13, the issues are clearly generic, not specific to Comanche Peak Units 3 and 4. and there is no citation to a regulation or statute that requires discussion of those issues in the Comanche Peak COLA. Therefore, the Thompson Declaration and its attachments do not support this contention.

¹¹ The contention refers to a portion of the ER which states that on-site storage of spent fuel at commercial nuclear reactors is currently accomplished using either a spent fuel pool or dry cask storage. ER at 5.7-3. However, this statement is part of a general description of the uranium fuel cycle, not a specific discussion of the Applicant’s plans for Comanche Peak Units 3 and 4.

applicant to analyze health impacts of *long-term* (i.e., post-operational) on-site storage.¹² Furthermore, because the Petitioners speak only of vague “public health implications,” they have failed to state the issue with the required specificity. 10 C.F.R. § 2.309(f)(1)(i). The Petitioners also do not provide any facts or expert opinion, or even any further discussion, in support of this claim. As noted above, the Waste Confidence Rule states that the Commission has determined that spent fuel can be stored “safely and without significant environmental impacts” for *at least* 30 years after operations have ceased. 10 C.F.R. § 51.23(a). The Petitioners do not explain how insignificant environmental impacts will lead to significant public health impacts. Therefore, this aspect of the contention is inadmissible because it lacks adequate support. 10 C.F.R. § 2.309(f)(1)(v).

In addition, Section 5.9 of the ER provides an “initial projection” of environmental impacts that would be expected at the decommissioning phase. See ER at 5.9-1 to 5.9-3. Specifically, the Applicant notes that in NUREG-0586, Supplement 1¹³ the NRC Staff has made a generic determination that the radiological impacts of decommissioning activities resulting in occupational dose to workers or doses to the public are expected to be “small.” ER at 5.9-3. The Petitioners have not disputed this information, nor have they provided any factual or expert support to refute it. Therefore, the Petitioners’ assertion regarding assessment of public health impacts is inadmissible because the Petitioners fail to demonstrate a genuine dispute with the Applicant on this issue. 10 C.F.R. § 2.309(f)(1)(vi).

D. Proposed Contention 4:

The Comanche Peak Environmental Report assumes that there will be no release to the environment from management of spent nuclear fuel and high-level wastes. This is a false assumption that is contradicted by the

¹² The Petitioners do not specify precisely what they mean by “long-term” storage; however, the bases they provide for this contention indicate that they are concerned with post-operational storage and, therefore, post-operational health effects.

¹³ Final Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities, Supplement 1 (Nov. 2002).

Environmental Protection Agency's Final Yucca Mountain radiation release regulations and the Department of Energy's findings that significant radioactivity releases from Yucca Mountain would occur over time.

In this contention, the Petitioners take issue with a statement in the Applicant's discussion of environmental impacts of the uranium fuel cycle which states that "the NRC notes that [high-level] wastes are expected to be buried at a repository and . . . no release to the environment is expected to be associated with such disposal." ER at 5.7-8. The Petitioners assert that "analyses by the Department of Energy and the EPA" contradict this statement, and cite a DOE document and the EPA's final Yucca Mountain radiation release regulations as support for their position. Petition at 19-20. The Staff objects to the admission of this contention because it impermissibly challenges 10 C.F.R. § 51.51(b), and because it is outside the scope of the proceeding, lacks adequate support, and fails to demonstrate that a genuine dispute exists with the Applicant on a material issue of fact or law. 10 C.F.R. §§ 2.335(a), 2.309(f)(1)(iii), (v), and (vi).

Although this contention purports to challenge the Application, the Petitioners' real disagreement is with the NRC's generic determination, codified in Table S-3, 10 C.F.R. § 51.51(b), that there will be no releases from a geologic repository. In promulgating Table S-3, the Commission assumed that there would be no radioactive releases to the environment from high-level waste buried at a geologic repository once the repository was sealed. See Licensing and Regulatory Policy and Procedures for Environmental Protection; Uranium Fuel Cycle Impacts from Spent Fuel Reprocessing and Radioactive Waste Management, 44 Fed. Reg. 45,362, 45,368 (Aug. 2, 1979) ("Fuel Cycle Rule"). Pursuant to the NRC's regulations, an environmental report prepared in support of a COL application for a light-water-cooled power reactor "shall take Table S-3 . . . as the basis for evaluating the contribution of . . . management of . . . high-level wastes related to uranium fuel cycle activities to the environmental costs of licensing the nuclear power reactor." 10 C.F.R. § 51.51(a). The Petitioners have not disputed

the Applicant's analysis of environmental effects based on Table S-3. Thus, because the Petitioners' issue is with the NRC's generic determination, not with the Application, and because the Petitioners have not sought a waiver, the contention should be rejected as an impermissible attack on the regulations. 10 C.F.R. § 2.335(a).

Furthermore, this contention fails to meet several of the admissibility requirements set forth in 10 C.F.R. § 2.309(f)(1). First, because the Petitioners' dispute is with the Commission's generic determination, not with the COLA, the contention is outside the scope of an individual licensing proceeding. 10 C.F.R. § 2.309(f)(1)(iii); *see also Amergen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-08-23, 68 NRC __ (Oct. 6, 2008) (slip op. at 18) (stating that "[t]he purpose and scope of a licensing proceeding is to allow interested persons the right to challenge the sufficiency of the *application*."). For similar reasons, the contention fails to raise a genuine dispute with the Applicant. 10 C.F.R. § 2.309(f)(1)(vi).

Finally, the Petitioners have not provided adequate support for their assertion that environmental releases would be significant. The Petitioners refer to a DOE Document, "NWTRB Repository Panel Meeting: Postclosure Defense and Design Selection Process," but fail to provide the document or explain how it supports their contention. Mere mention of a document without providing its contents or an explanation of its significance cannot support admissibility of the contention. *See USEC, Inc.* (American Centrifuge Plant), LBP-05-28, 62 NRC 585, 597 (2005), *aff'd* CLI-06-10, 63 NRC 451 (2006). The Petitioners also cite the EPA's final radiation release regulations for Yucca Mountain, which the Petitioners argue "are premised on the assumption that there will be significant releases of radiation from a federal repository." Petition at 20. The Petitioners note that the EPA's proposed dose limit from 10,000 years to 1,000,000 years after burial (100 mrem per year) is approximately 7 times higher than the limit for the period from burial to 10,000 years (15 mrem per year). However, the mere fact that EPA set the later limits higher than the earlier limits, or that the EPA set limits at all, does not support the Petitioners' assertion that there will be *significant* releases of radiation from

Yucca Mountain.¹⁴ The Petitioners have provided no factual or expert support for this claim. Therefore, the contention is not adequately supported and should therefore be rejected.

10 C.F.R. § 2.309(f)(1)(v).

E. Proposed Contention 5:

The COLA should consider environmental impacts and public health consequences of accidents and releases related to off-site radioactive waste disposal.

This contention challenges the Applicant's statements in Section 5.7.1.6 of the ER that discuss waste disposal in the context of the uranium fuel cycle. The Petitioners assert that, instead of adopting the "assumption" that there will be no significant releases to the environment related to off-site disposal of "the radioactive waste streams that originate at Units 3 and 4," the Applicant "should fully consider the public health and environment[a] consequences of major releases to the environment of radioactive materials as a result of off-site disposal activities." Petition at 20-21. The Petitioners claim that such off-site releases "could originate from on-site processing, transportation accidents, off-site processing, and long-term releases from the disposal site" *Id.* at 21.

The Staff objects to the admission of this contention because it attacks the Commission's regulations, lacks specificity, lacks adequate support, and fails to demonstrate a genuine dispute with the Applicant on a material issue of fact or law. 10 C.F.R. § 2.335(a); 2.309(f)(1)(i), (v)-(vi). As discussed in the Staff's Response to Contention 4, the Commission has generically determined numerical values representing the environmental effects of the uranium fuel cycle, including off-site disposal of both low-level and high-level wastes. 10 C.F.R. § 51.51(b); 44 Fed. Reg. at 45,362. The Commission has also decided that these values shall be the basis for an applicant's environmental cost-benefit analysis under NEPA.

¹⁴ The Staff notes that the higher EPA limit, 100 mrem per year, is equivalent to the current dose limit for a member of the public in the NRC's regulations. See 10 C.F.R. § 20.1301(a)(1).

10 C.F.R. § 51.51(a); 44 Fed. Reg. at 45,362. Pursuant to the regulations, the Applicant has considered the environmental impacts of off-site disposal by incorporating Table S-3 into the ER. ER at 5.7-42. To the extent that the Petitioners assert that further consideration of environmental impacts of off-site waste disposal is necessary, such an assertion should be rejected as an impermissible attack on Table S-3. 10 C.F.R. § 2.335(a).

With regard to the Petitioners' assertion regarding the need to consider public health consequences related to off-site disposal, the contention should be rejected because it fails to meet several of the contention admissibility requirements in 10 C.F.R. § 2.309(f)(1). First, the contention fails to "provide a specific statement of the issue of law or fact to be raised or controverted." 10 C.F.R. § 2.309(f)(1)(i). Section 5.7.1.6 of the ER contains two statements that there will be no significant impact from waste disposal – one for low-level waste, and one for high-level waste. ER at 5.7-8. The Petitioners do not specify which statement they are challenging. In addition, the Petitioners do not identify any specific public health consequences, nor do they explain how "on-site processing, transportation accidents, off-site processing, and long-term releases from the disposal site . . ." could lead to such consequences. The suggestion that public health consequences must be considered, without further elaboration, is not sufficiently specific to identify a concrete issue for litigation and thus does not provide the basis for an admissible contention. *See Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station)*, LBP-93-23, 38 NRC 200, 246 (1993) ("A contention that simply alleges that some general, nonspecific matter ought to be considered does not provide the basis for an admissible contention.").

Furthermore, the Petitioners have provided no factual or expert support for their assertions, and, because the Petitioners are challenging the Commission's generic determination rather than the Application, the Petitioners have failed to demonstrate a genuine dispute with the Applicant on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(v) - (vi). Accordingly, the contention is inadmissible.

F. Proposed Contention 6:

The COLA adjudication should consider the public health impacts and environmental consequences of requiring governmental units to become the custodian of high-level waste and spent nuclear fuel at the Comanche Peak site after the operating license has lapsed and post-closure activities have been completed.

In this contention, “[b]ased on the assumption that a federal repository will not be available for spent fuel management,” the Petitioners assert that “after the operating license has lapsed and post-closure activities have been completed,”¹⁵ either the state of Texas or the federal government will be required to become custodian of HLW or spent fuel at the Comanche Peak site. Petition at 21. Therefore, the Petitioners assert that the COLA should consider public health impacts and environmental consequences of this situation. Petition at 21. Specifically, the Petitioners claim that the COLA should include “calculations for employee exposures and public exposures,” along with “other public health environmental consequences and [sic] reasonably associated with indefinite governmental management of spent fuel on site.” Petition at 21. The Petitioners also contend that the ER should “consider specifically what governmental entity will actually have legal ownership of the spent fuel and high-level waste after the operating license has lapsed and post-closure activities have ceased,” and should consider the costs related to such “long-term custody.” Petition 21-22.

The Staff opposes this contention because it constitutes an impermissible challenge to the NRC regulations, is outside the scope of the proceeding, is not adequately supported, and fails to demonstrate a genuine dispute with the applicant. 10 C.F.R. § 2.335(a); Section 2.309(f)(1)(iii), (v), and (vi).

First, the Petitioners have not identified any regulatory requirement for analysis of environmental or health impacts of on-site spent fuel storage in the time frame “after . . . post-

¹⁵ The Staff assumes that by “post-closure activities” the Petitioners are referring to decommissioning. Therefore, the timeframe the Petitioners refer to is after decommissioning is complete and the operating license has been terminated.

closure activities of the licensee have been completed;” that is, after decommissioning is complete.¹⁶ Pursuant to the Commission’s regulations in 10 C.F.R. § 52.110, decommissioning is not complete, and a license will not be terminated, until the facility is completely dismantled and residual radiation at the site meets the limits established in 10 C.F.R. Part 20, Subpart E. See 10 C.F.R. § 52.110(k). These requirements cannot be met while spent fuel or HLW remains on the site. Therefore, the situation the Petitioners envision cannot occur, and any assertion to the contrary should be rejected as an impermissible challenge to the regulations. 10 C.F.R. § 2.335(a).

Furthermore, under the current regulatory framework for decommissioning and license termination, it is impossible that any governmental entity will be “required” to take possession of spent fuel or HLW at the Comanche Peak site.¹⁷ See *generally* 10 C.F.R. § 52.110. As the

¹⁶ By its language, this contention specifically addresses issues related to the timeframe after decommissioning is complete. However, even if the Petitioners’ claims were viewed as concerns arising during decommissioning, such issues would be properly raised at the license termination phase, not during the COL proceeding. See 10 C.F.R. § 52.110, The Applicant has provided an initial projection of expected impacts from decommissioning based on NUREG-0586, Supplement 1, which the Petitioners have not disputed. See ER at 5.9-1 to 5.9-3. Pursuant to 10 C.F.R. § 52.110, the Applicant is not required to assess decommissioning impacts until after it permanently ceases operations. See 10 C.F.R. §§ 52.110(d)(1), 10 C.F.R. § 52.110(i)(2). Thus, to the extent that the Petitioners’ claims are viewed as addressing issues arising during decommissioning, they are outside the scope of this COL proceeding and are not material to a decision that the NRC must make in the COL proceeding. 10 C.F.R. § 2.309(f)(1)(iii) and (iv).

¹⁷ Under the Nuclear Waste Policy Act (NWPA), 42 U.S.C. § 10101 *et seq.*, the Department of Energy will take title to high-level waste sent to a repository *upon delivery* of the waste to the repository. 42 U.S.C. § 10143. Thus, ownership of the waste remains with the licensee until delivery to an off-site repository. The NWPA also includes a provision requiring the Secretary of Energy to provide “not more than 1,900 metric tons of capacity for the storage of spent nuclear fuel from civilian nuclear power reactors” if such storage is needed to assure continued operation of the reactors. 42 U.S.C. § 10155(a)(1); see also *id.* at § 10151(a)(3). The options for interim storage under Section 10155(a)(1) include provision of modular or mobile spent fuel storage equipment, including dry storage casks, to “any person generating or holding title to spent nuclear fuel at the site of a civilian power reactor operated by that person,” or construction of storage capacity at the site of a civilian power reactor. *Id.* at § 10155(a)(1)(B)-(C). However, these provisions are designed to provide additional storage while the reactor is still operating. See § 10151(a)(3). Also, control and ownership of spent fuel remaining at a reactor site under these provisions would remain with the reactor operator, subject to the NRC operating license or a license for an on-site ISFSI under 10 C.F.R. Part 72. See *id.* at § 10155(a)(4). In no case would the Federal Government take title to the spent fuel at the site of the reactor.

NRC regulations make clear, an NRC license does not “lapse.” Rather, when a licensee has permanently ceased operations and has permanently removed fuel from the reactor, the licensee is no longer authorized to *operate* the reactor, but is still authorized, *even beyond the expiration date of the license*, to own and possess the facility. 10 C.F.R. §§ 52.110(b), 52.109. Additionally, a licensee must submit an application for license termination, 10 C.F.R. § 52.110(i), and, as stated above, the Commission will not terminate a license until it determines that the licensee has dismantled the facility in accordance with the approved license termination plan and that the licensee has demonstrated that the facility and site meet the decommissioning criteria of 10 C.F.R. Part 20, Subpart E.¹⁸ 10 C.F.R. § 52.110(k). Thus, the licensee continues to own and possess the facility under its Part 52 license until the Commission terminates the license, at which point there will be no spent fuel or HLW stored at the site. Accordingly, the Petitioners’ assertion that a governmental entity will have to take ownership of on-site spent fuel should be rejected as an impermissible challenge to the regulations. 10 C.F.R. § 2.335. The Petitioners’ assertions that the ER must “consider specifically what governmental entity will actually have legal ownership of the spent fuel and high level waste after the operating license has lapsed and post-closure activities have ceased,” Petition at 21, and that the ER must assess the costs associated with a government entity taking custody of spent fuel or HLW at the Comanche Peak site, Petition at 22, should be rejected for the same reasons.

Contention 6 is also inadmissible because it fails to meet several of the contention admissibility requirements in 10 C.F.R. § 2.309(f)(1). First, because Contention 6 addresses the time frame after decommissioning is over, the contention is not within the scope of the COL

¹⁸ Furthermore, until the Commission terminates a license, the licensee must “continue to maintain the facility, including, where applicable, the storage, control and maintenance of the spent fuel, in a safe condition” and must continue to abide by NRC regulations and the provisions of its license. 10 C.F.R. § 52.109(2).

proceeding, which involves a license to construct and operate a facility. 10 C.F.R.

§ 2.309(f)(1)(iii). Likewise, the contention is not material to a decision the NRC must make in a COL proceeding. *Id.* at § 2.309(f)(1)(iv). Furthermore, the Petitioners have not provided any facts or expert opinion demonstrating that the omissions they assert are required under the regulations. *Id.* at § 2.309(f)(1)(v). Finally, because the issue the Petitioners raise cannot occur within the regulatory framework, and because the Petitioners have not identified any omissions of information required by law, the Petitioners have not demonstrated a genuine dispute with the Applicant on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi).

G. Proposed Contention 7:

The Applicant's COLA is incomplete because it fails to include the requirements of 10 C.F.R. § 52.80(d) that require the applicant to submit a description and plans for implementation of the guidance strategies intended to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities with the loss of large areas of the plant due to explosions and/or fires as required by 10 C.F.R. § 50.54(hh)(2).

The Petitioners, citing the new requirement of 10 C.F.R. § 52.80(d), identify that a COL applicant must submit a description and plans for implementation of the guidance and strategies intended to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities under the circumstances associated with the loss of large areas of the plant due to explosions or fire. Petition at 23. This contention is admissible in part and inadmissible in part.¹⁹ The portion of the contention and its supporting basis that argues that the COLA omits information required by 10 C.F.R. § 52.80(d) is admissible. The contention is partially inadmissible because it challenges ongoing, general rulemakings and existing rules, is outside

¹⁹ Although the Petitioners claim that the application is deficient for not including the information required by the new rules promulgated as part of the NRC's "Power Reactor Security Requirements" final rule (74 FR 13296, March 27, 2009), they fail to recognize that the rule is not yet in effect. The rule is scheduled to take effect May 26, 2009. Although the Contention is not admissible at the time of the filing of this Answer, the Staff recognizes that the Board will likely rule on contention admissibility after the rule has become effective. If the rule does not become effective before the Board issues its ruling on the admissibility of this proposed contention, then the Staff believes this contention is wholly inadmissible.

the scope of this proceeding, and does not show that a genuine dispute exists with respect to the Application on a material issue of law or fact. 10 C.F.R. §§ 2.309(f)(1)(i)-(vi) and 2.335.

The Commission has stated that “[i]t has long been agency policy that Licensing Boards ‘should not accept in individual license proceedings contentions which are (or are about to become) the subject of general rulemaking by the Commission.’” *Duke Energy Corp. (Oconee)* 49 NRC at 345. In *Oconee*, the Commission also stated that “a petitioner may not demand an adjudicatory hearing to attack generic NRC requirements or regulations or to express generalized grievances about NRC policies.” *Id.* at 334. Here, Petitioners make an argument challenging ongoing, general rulemaking proceedings.

As recently reaffirmed by the First Circuit, the NRC may determine generic issues in rulemaking rather than through litigation in individual cases. See *Massachusetts v. U.S.*, 522 F.3d 115, 119 (1st Cir. 2008). The NRC certifies generic nuclear reactor designs through rulemaking. Pursuant to the Commission Policy Statement on New Reactor Licensing Proceedings, a contention that raises an issue on a design matter addressed in the design certification application should be resolved in the design certification rulemaking proceeding, and not the COL proceeding. See Policy Statement at 20,972. Accordingly, in a COL proceeding in which the application references a docketed design certification application, the licensing board should refer such a contention to the Staff for consideration in the design certification rulemaking, and if it is otherwise admissible, admit the contention and hold it in abeyance. Upon adoption of a final design certification rule, such a contention should be dismissed.

In support of this proposed contention, the Petitioners cite several sections of the US-APWR Design Control Document that they believe are deficient:

Additionally, the DCD Probabilistic Risk Assessment and Severe Accident Evaluation generally understates the effects of a major fire. -- Further, the DCD does not consider a multiple compartment fire scenario inside the containment vessel. -- These are serious and fundamental omissions even without the

requirements now imposed by 10 CFR 52.80. -- That the DCD would assume a fire in the containment vessel would be limited to a single compartment and not reach the temperature to damage thermoplastic cable is unreasonable.

Petition at 24. To the extent that the Petitioners attack the DCD, the contention is inadmissible as an attack on a rulemaking proceeding. 10 C.F.R. § 2.335. The Petitioners are in fact citing sections of the DCD which analyze design basis fires, and therefore are not meant to meet the requirements of the new rule which focuses on beyond design basis fires.²⁰ Further, the Petitioners have not cited the information submitted by the DCD Applicant on November 14, 2008, which is intended to provide information required by the new rule.²¹ As such, the Petitioners do not demonstrate that their challenge to the DCD application raises an otherwise admissible contention, pursuant to 10 C.F.R. § 2.309(f)(1)(i) - (vi), regarding the Application.

Neither do the Petitioners meet the requirements of 10 C.F.R. § 2.335. See *Vermont Yankee and Pilgrim*, CLI-07-3, 65 NRC at 17-18 and n.15; *Millstone*, CLI-01-24, 54 NRC at 364. The Commission has provided litigants in an adjudicatory proceeding subject to 10 C.F.R. Part 2 the opportunity to request that a Commission rule or regulation “be waived or an exception made for the particular proceeding.” 10 C.F.R. § 2.335(b). The Commission has specified that “[t]he sole ground for petition of waiver or exception is that special circumstances with respect to the subject matter of the particular proceeding are such that the application of the rule or

²⁰ “Section 50.54(hh)(2) requires licensees to develop guidance and strategies for addressing the loss of large areas of the plant due to explosions or fires from a beyond-design basis event through the use of readily available resources and by identifying potential practicable areas for the use of beyond readily-available resources.” Power Reactor Security Requirements; Final Rule, 74 Fed. Reg. at 13,957.

²¹ The Mitsubishi Heavy Industries, LTD. submittal is considered SUNSI and is not publicly available. The submittal cover letter is available in the NRC Agencywide Documents Access and Management System (ADAMS) under accession number ML091100585. On April 24, 2009, Luminant submitted a letter incorporating by reference the Mitigative Measures Evaluation for the US-APWR, and stating that, “Luminant is currently developing a site-specific description and plan for implementation in accordance with 10 CFR 52.80(d) requirements and will submit an update by May 26, 2009 or soon thereafter.” (ML091190258). The Staff still considers this contention partially admissible based on the current Application, but recognizes that such a submission may render this contention moot before the Licensing Board issues its ruling on contention admissibility.

regulation . . . would not serve the purposes for which the rule or regulation was adopted.” *Id.* The Commission requires that any request for such waiver or exception “be accompanied by an affidavit that identifies . . . the subject matter of the proceeding as to which application of the rule or regulation . . . would not serve the purposes for which the rule or regulation was adopted.” *Id.* Additionally, “[t]he affidavit must state with particularity the special circumstances alleged to justify the waiver or exception requested.” *Id.* The Petitioners have failed to establish that they meet any of the requirements imposed by the Commission on litigants wishing that a rule be waived or an exception granted. See Petition 22-26. The Petitioners have failed to establish that the design certification rulemaking in this particular proceeding would not serve the purpose for which the rule would be adopted, and have not sought a waiver.

Therefore, proposed Contention 7 is admissible only to the extent that it raises a contention claiming that the COLA does not contain the information required by the new rule, and is inadmissible in part because it is an impermissible attack on a rulemaking proceeding pursuant to 10 C.F.R. §§ 2.309(f)(1) and 2.335.

H. Proposed Contention 8:

The COLA is inadequate because it fails to fully analyze the radiological hazards that will occur from operation of the Comanche Peak nuclear plants based on discharge of water that contains radioactive particulates and tritium to Squaw Creek Reservoir.

In this contention, the Petitioners raise several issues associated with radioactive particulates and tritium that will be released to the Squaw Creek Reservoir (SCR) in liquid effluents from Comanche Peak Units 3 and 4. The Staff opposes admission of this contention because it lacks adequate factual or expert support and fails to demonstrate the existence of a genuine dispute with the applicant on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(v) and (vi).

The Petitioners first take issue with the Applicant’s statement that radioactive particulates in liquid effluents will settle to the bottom of the SCR and remain there. Petition at 26 (citing ER at 5.11-3). The Petitioners claim that this practice would make the SCR an

“unlicensed radioactive waste disposal facility,” and that allowing such radioactive discharges would violate the “permanent isolation” requirements of 42 U.S.C. § 2021b²² because the Applicant has no plan to remove radioactive contamination other than to allow it to decay. Petition 26-27. The Petitioners’ reference to 42 U.S.C. § 2021b is inapposite, however, because the LLRWPA addresses disposal of low-level radioactive wastes, not control of liquid effluent releases.²³ Consequently, the definition of “disposal” in 42 U.S.C. § 2021b, which requires permanent isolation of low-level radioactive waste materials, pertains only to low-level waste disposal facilities. The SCR is not such a facility. The Petitioners have not provided any other facts or expert opinion to support the claim that releasing radioactive particulates into SCR, pursuant to applicable state and federal regulations, would be unlawful. Furthermore, the Applicant concluded that the expected radiological impact to SCR would be small, despite the fact that radioactive particulates would remain at the bottom of the reservoir. ER at 5.11-3. The Petitioners have not disputed this conclusion or the analysis that led to this conclusion, nor have they identified any regulatory requirement indicating that additional mitigation would be necessary. Thus, the Petitioners’ assertion that SCR will be an unlicensed low-level waste facility lacks support and should be rejected. 10 C.F.R. § 2.309(f)(1)(v).

The Petitioners also assert that the ER fails to discuss two possible consequences of allowing radioactive particulates to remain at the bottom of the SCR. First, the Petitioners allege that the ER fails to discuss the environmental and public health consequences that would result

²² Low Level Radioactive Waste Policy Amendments Act of 1985, 42 U.S.C. § 2021b *et seq.* (“LLRWPA”).

²³ The LLRWPA describes the responsibilities of states and the Federal Government for disposal of low-level radioactive waste, and provides procedures for implementing compacts between states to establish and operate regional LLW disposal facilities. The definition of disposal that the Petitioners cite refers to permanent isolation of “low level radioactive waste materials.” 42 U.S.C. at § 2021b(7). The Petitioners do not explain how this statute is relevant to the issue of discharge of liquid effluents into the SCR, which is governed by the National Pollutant Discharge Elimination System (NPDES) program established under Section 402 of the Federal Water Pollution Control Act (Clean Water Act), 33 U.S.C. § 1342.

from transport of sediment containing radioactive materials downstream if the dam impounding the SCR were to fail. Petition at 27. Second, the Petitioners claim that the ER fails to discuss the consequences of protracted drought and global warming that could lead to dewatering of the SCR and possible airborne transport of exposed radioactive sediments downwind. Petition at 27-28. These assertions are not adequately supported by facts or expert opinion. 10 C.F.R. § 2.309(f)(1)(v). The Petitioners have not provided any evidence indicating that there is a substantial risk of dam failure, or that radioactive materials would settle in areas of the reservoir from which bottom sediment would be mobilized in the event of a dam failure. Likewise, the Petitioners have not provided any support, scientific or otherwise, for their claim that the effects of drought or global warming would be severe enough to lead to dewatering of the SCR. Furthermore, the Petitioners have not disputed information in the Application related to drought and water use, particularly the information in the ER concerning plant water use and the arrangements that the Applicant has made with the Brazos River Authority to ensure that sufficient water will be available for plant operations. See ER at 2.3-42 to 2.3-43, 2.3-44 to 2.3-48. These plans are based on the historical record of water availability as well as water availability modeling. ER at 2.3-44 to 2.3-46. Also, as noted above, the Petitioners have not disputed the Applicant's conclusion that environmental effects of radioactive particulates remaining in the SCR would be small. Therefore, the Petitioners' assertions regarding dam failure and potential dewatering should be dismissed because they are conclusory assertions lacking adequate support. 10 C.F.R. § 2.309(f)(1)(v); *Fansteel, Inc.* (Muskogee, Oklahoma, Site), CLI-03-13, 58 NRC 295, 303 (2003).

The Petitioners also take issue with the Applicant's statement, in FSAR Section 11.2, that allowable tritium levels in the SCR could be exceeded if all four units at Comanche Peak were operating. FSAR at 11.2-2. First, the Petitioners assert that the Applicant "fails to provide any plan for regular monitoring [of the] SCR to determine whether tritium levels are exceeded." Petition at 28. Contrary to the Petitioners' claim, however, the Applicant does identify a tritium

monitoring plan. Section 11.5.2.10 of the US-APWR DCD, which is incorporated by reference into the Comanche Peak COL, states that the Applicant is to follow guidance outlined in NUREG-1301 and NUREG-0133 when developing the radiological effluent monitoring program (REMP) for Comanche Peak Units 3 and 4. Table 3.12-1 of NUREG-1301 states that surface water sampling for tritium analysis will occur quarterly at locations downstream of the effluent release location. Section 11.5.2.10 of the FSAR also states that the Offsite Dose Calculation Manual (ODCM) for existing Units 1 and 2 will be updated to reflect the new reactor units, and Table 6.2-3 of the ER indicates that, pursuant to Table 3.12-1 of the ODCM, monthly tritium sampling has been occurring at two locations in the SCR. See ER at Figure 6.2-10. According to Table 13.4-201 of the FSAR, this monitoring is performed in accordance with 10 C.F.R. Part 50, Appendix I, sections II and IV. FSAR at 13.4-3. Table 13.4-201 also identifies several process and effluent sampling and monitoring programs that will be implemented as license conditions to comply with Part 50, Appendix I, and Part 20. *Id.* The Petitioners have not asserted any deficiencies with the monitoring programs described in the Application. Therefore, because the Petitioners have incorrectly asserted that the Application does not provide a monitoring plan, this claim should be rejected because it fails to demonstrate a genuine dispute with the Applicant on this issue. 10 C.F.R. § 2.309(f)(1)(vi); *see also PPL Susquehanna, LLC* (Susquehanna Steam Electric Station, Units 1 and 2), LBP-07-10, 66 NRC 1, 24 (2007) (citing *Sacramento Municipal Utility District* (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 247-48 (1993), *review declined*, CLI-94-2, 39 NRC 91 (1994)) (“Any contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed.”).

Second, the Petitioners question the Applicant’s reliance on inflow to the SCR and rainfall to dilute tritium levels, claiming that the Applicant “fails to make any allowance for protracted drought or the effects of global warming.” *Id.* This assertion should be rejected because it is not adequately supported and fails to demonstrate a genuine dispute with the

Applicant. 10 C.F.R. § 2.309(f)(1)(v)-(vi). The Petitioners have provided no information supporting their claim that the Applicant's reliance on inflow to the SCR and rainfall to provide dilution is misplaced. Nor have the Petitioners shown how "protracted drought or the effects of global warming" would significantly affect the ability of inflow and rainfall to adequately dilute tritium levels. Thus, because the Petitioners have provided nothing beyond conclusory assertions, they have not provided adequate support for the contention. *Fansteel, Inc.* (Muskogee, Oklahoma, Site), CLI-03-13, 58 NRC 298, 303 (2003). Similarly, because the Petitioners have not provided supporting reasons for their assertion, there is insufficient information to demonstrate a genuine dispute with the Applicant. 10 C.F.R. § 2.309(f)(1)(vi).

Finally, the Petitioners assert that the COLA fails to analyze the potential for radioactive groundwater contamination from plant operations. Petition at 28. In support of this assertion, the Petitioners cite a report by George Rice ("Rice Report").²⁴ Specifically, the Rice Report asserts that Section 5.2.3.5 of the ER fails to identify "contaminants that migrate to [SCR]" as a potential source of groundwater contamination, and that "the *failure to assess the potential for groundwater contamination from SCR* is an omission in the [ER]." Rice Report at 1 (emphasis added). However, neither the Petition nor the Rice Report supports this *specific* contention with facts sufficient to indicate that such an analysis is required at Comanche Peak. As support for this assertion, Mr. Rice refers to his 2004 report on possible groundwater contamination at Los Alamos National Laboratory (LANL), claiming that this report evinces the need for a similar study at Comanche Peak. Rice Report at 1. Mr. Rice does not, however, explain how the LANL study is relevant to Comanche Peak or to the specific issue of possible groundwater

²⁴ The Petitioners cite to the "Declaration of George Rice," Petition at 28, but no such declaration was submitted with the Petition. The Staff therefore assumes that the Petitioners are referring to Mr. Rice's report entitled "Potential for Groundwater Contamination at the Comanche Peak Nuclear Power Plant," which was submitted with the Petition. The report is not a formal declaration, as it is unsigned and does not attest to known facts under penalty of perjury.

contamination through the SCR.²⁵ Nor has Mr. Rice provided his LANL report for the Board to assess its significance. Thus, the LANL report does not provide an adequate basis for this contention. See *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 181 (1998) (stating that a board “is not to accept uncritically the assertion that a document . . . supplies the basis for a contention.”).

Also, Mr. Rice admits that he did not thoroughly review the groundwater system at Comanche Peak or assess the potential for groundwater contamination from the SCR and operation of Comanche Peak Units 3 and 4. Rice Report at 2. Instead, he merely offers the conclusory statement that, because some radionuclides that may be used or produced at Comanche Peak are known to be mobile in groundwater, these radionuclides, if released, “may contaminate the local groundwater system and any lakes or streams to which the groundwater discharges.” Rice Report at 1. An expert opinion that states a conclusion without providing a reasoned basis or explanation for the conclusion is inadequate. *USEC, Inc.* (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 472 (2006). Furthermore, the Rice Report does not provide sufficient “supporting reasons” to demonstrate a genuine dispute with the Applicant on the issue of whether radioactive material could contaminate groundwater via the SCR.

10 C.F.R. § 2.309(f)(1)(vi).

I. Proposed Contention 9:

The Applicant’s calculations of radiation doses to the general public as a result of consuming radioactively contaminated fish and invertebrates are incorrect. The calculations are done using the LADTAP II model which is obsolete and systematically underestimates doses to the public.

In this contention, the Petitioners assert that the Applicant’s calculated radiation doses from consumption of fish and invertebrates, reported in Table 5.4-8 of the ER, are incorrect

²⁵ Mr. Rice merely states that the LANL study concluded that “contaminants from LANL have entered the groundwater . . . that groundwater from LANL flows toward the Rio Grande . . . [and] that it is possible for groundwater, and at least some of the contaminants it transports, to travel from contaminated areas at LANL to the Rio Grande” Rice Report at 1.

because the Applicant used the LADTAP II computer program to calculate them. Petition at 29. The Petitioners claim that the LADTAP II program “grossly underestimates the actual maximum individual doses from liquid effluents” and that correctly calculated doses would be “significantly higher.” Petition at 29. The Petitioners argue that LADTAP XL, which they describe as an “updated version” of LADTAP II,²⁶ should be used instead of LADTAP II to determine doses from liquid effluents. *Id.*

As support for this contention, the Petitioners have submitted a declaration by Dr. Arjun Makhijani.²⁷ LADTAP II Model Declaration of Dr. Arjun Makhijani (“Makhijani LADTAP II Decl.”). Dr. Makhijani states that LADTAP II is obsolete and that it systematically underestimates doses to the public, citing a comparison of the results of LADTAP II with results of LADTAP XL performed for the Savannah River site that indicated that LADTAP II underestimated doses from commercial fish by a factor of 8 and doses from saltwater invertebrates by a factor of 700. *Id.* Dr. Makhijani also asserts that, although dose conversion factors for children are “considerably higher” and often lead to higher doses for children than for adults, both LADTAP II and LADTAP XL use adult dose conversion factors for children and thereby fail to account for higher doses to children. *Id.*

The Staff opposes admission of this contention because it lacks adequate support and fails to demonstrate a genuine dispute with the applicant on a material issue of law or fact.

10 C.F.R. § 2.309(f)(1)(v), and (vi). The Petitioners’ first claim, that LADTAP II underestimates

²⁶ LADTAP II is not, as the Petitioners assert, a generally applicable “updated version” of the LADTAP II computer program. In fact, LADTAP XL is an electronic spreadsheet version of LADTAP II that was developed specifically to estimate doses from liquid releases at the Department of Energy’s Savannah River Site, using site-specific parameters and assumptions. See D.M. Hamby, “LADTAP XL: An Improved Electronic Spreadsheet Version of LADTAP II,” WSRC-RP-91-975, at 4, 6-9, 11-15 (Nov. 18, 1991), available at <http://www.osti.gov/bridge/servlets/purl/10104532-ii9x4I/10104532.pdf>.

²⁷ The Petitioners’ discussion of this contention largely echoes Dr. Makhijani’s declaration, which is the sole support provided for this contention. *Compare* Petition at 29-30 *with* Makhijani LADTAP II Decl.

doses for commercial fish and invertebrates, is not adequately supported. Initially, the Staff notes that Dr. Makhijani takes issue only with the ability of LADTAP II to estimate doses from *commercial fish and saltwater invertebrates*. Makhijani LADTAP II Decl.; Petition at 29. However, as indicated in the ER, these two dose pathways were not evaluated for Comanche Peak Units 3 and 4 because neither commercial fishing nor commercial harvest of invertebrates occurs in Squaw Creek, the Brazos River below the Paluxy River, or the Whitney Reservoir. ER at 5.4-4. The Petitioners do not dispute this information. Therefore, because there are no estimates of doses from fish or saltwater invertebrates in the LADTAP II calculations for Comanche Peak, Dr. Makhijani's statements challenging LADTAP II are irrelevant to this proceeding and do not support the admissibility of Contention 9.

Even if commercial fish and invertebrate doses had been calculated for Comanche Peak, Dr. Makhijani's statements would still fail to provide adequate support for the Petitioners' assertion. Dr. Makhijani's conclusion that LADTAP II underestimates doses for fish and invertebrates is based on a comparison of LADTAP II and LADTAP XL conducted *for the Savannah River Site*. Makhijani LADTAP Decl. However, Dr. Makhijani does not identify the source of the information he relies on or provide the document for the Board to review. See Makhijani LADTAP Decl. Licensing boards are expected to "examine cited materials to verify that they do, in fact, support a contention." *USEC, Inc. (American Centrifuge Plant)*, CLI-06-10, 63 NRC 451, 457 (2006); *see also Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation)*, LBP-98-7, 47 NRC 142, 181 (1998) (a 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."). In this case, because the source of the information is not provided, or even identified, it is impossible for the licensing board to verify that the information on which Dr. Makhijani's opinion is based actually supports his opinion. Dr. Makhijani provides no other explanation or basis for his conclusion. An expert opinion that states a conclusion without providing a reasoned basis or explanation for the conclusion is inadequate. *USEC*, CLI-06-10,

63 NRC at 472. The Petitioners have not provided any additional facts or expert opinion to support their claims that the assumption employed by LADTAP II is inappropriate, that the dose calculations for Comanche Peak Units 3 and 4 have been underestimated, or that the LADTAP II program is unreliable. Therefore, for the reasons stated above, the claim that LADTAP II underestimates doses from commercial fish and invertebrates at Comanche Peak should be rejected because it lacks adequate support. 10 C.F.R. § 2.309(f)(1)(v).

The Petitioners also claim that LADTAP II improperly uses adult dose conversion factors to calculate doses to children. Petition at 29. This claim also lacks adequate support. First, Dr. Makhijani provides only a conclusory statement without any explanation. An expert opinion that merely states a conclusion without providing a reasoned basis or explanation for that conclusion is inadequate. *USEC, Inc.*, 63 NRC at 472. Moreover, the assertion is incorrect. According to the FSAR, any input parameters used in the Applicant's LADTAP II analysis, other than those listed Table 11.2-14R, are "in accordance with Regulatory Guide (RG) 1.109." FSAR at 11.2-14 to 11.2-15. Dose factors are not listed in Table 11.2-14R. *Id.* Regulatory Guide 1.109 prescribes different dose factors for infants, children, teens, and adults, RG 1.109 at 1.109-56 to 1.109-57, and states that the dose factors for each age group take into account the physiological and metabolic characteristics of that age group. *Id.* at 1.109-1 to 1.109-2. Table 11.2-15R in the FSAR contains estimated doses from liquid effluents for all four age groups. FSAR at 11.2-16. The Petitioners have not disputed the information in Table 11.2-14R, nor have they claimed or provided facts or expert support to indicate that the Applicant did not use the dose factors provided in RG 1.109, or that those dose factors are inappropriate. Thus, because the opinion on which this claim is based is not correct, the claim is not adequately supported. 10 C.F.R. § 2.309(f)(1)(v). Moreover, because the Applicant did use different dose factors for adults and children, the Petitioners have failed to demonstrate a genuine dispute with the Applicant. 10 C.F.R. § 2.309(f)(1)(vi). Accordingly, the Petitioners' claim that adult dose factors were used to calculate doses to children should be rejected.

- J. Proposed Contention 10:
Comanche Peak Units 3 and 4 will utilize MOX fuel but the COLA fails to account for the radiological and public health impacts associated with MOX fuel.

The Petitioners contend that Comanche Peak Units 3 and 4 will utilize mixed-oxide or "MOX" fuel, and that the Applicant's Environmental Report omits a full analysis of the risks and potential economic, environmental, and public health impacts of utilization of MOX. Petition 30-31. The Petitioners cite page 5.7-4 of the ER as support for the contention that the Applicant will utilize MOX fuel. Petition at 30. The Petitioners also cite page 5.7-4 of the ER to support their argument that the Applicant has assumed that there are no adverse consequences from the use of MOX fuel and has improperly omitted information the Application must contain. Petition at 30.

This contention is inadmissible because the Petitioners have failed to demonstrate that the issues pertaining to the use of MOX fuel are within the scope of this proceeding, that findings regarding MOX are material to the findings the NRC must make to support the action involved in this proceeding; and that there is a genuine dispute of law or fact with the Applicant. 10 C.F.R. § 2.309(f)(1)(iii), (iv), and (vi). The contention is also inadmissible because the Petitioners have failed to provide facts or expert opinions, or references to specific sources or documents which support their position on this contention. 10 C.F.R. § 2.309(f)(1)(v).

The Applicant has not expressed any intention to use MOX fuel in the proposed reactors at Comanche Peak Units 3 and 4, and neither the ER nor the FSAR contains any information from which it may reasonably be concluded that the Applicant intends to use MOX fuel at Comanche Peak Units 3 and 4. In order to show that a genuine dispute exists with the Applicant on a material issue of law or fact, the Petitioners must reference specific portions of the Application that are in dispute, or identify where the Application fails to contain information it is required by law to contain. 10 C.F.R. § 2.309(f)(1)(vi). The Petitioners cite page 5.7-4 of the ER as support for this contention, but the ER does not contain an assertion that MOX fuel will

be used at Comanche Peak Units 3 and 4. As the Petitioners have not provided any other information sufficient to supply an adequate basis for this contention, they do not present a genuine dispute regarding a material issue of law or fact in accordance with 10 C.F.R.

§ 2.309(f)(1)(vi).

The COLA contains the design characteristics of the proposed reactors for the site in the FSAR, Part 2, Section 4.0, which incorporates, by reference and without modification, the companion section in the DCD for the US-APWR. The fuel system of the reactor and the fuel it utilizes are necessary components of the DCD, and if the Applicant intended to use MOX fuel, that fact would have to be clearly stated in the FSAR. The fuel handling systems of the reactor, including the proposed maximum power level it will generate and the nature and inventory of all radioactive materials to be contained in the proposed reactor constitute necessary technical information which must be included in an application for a combined license or a standard design approval. 10 C.F.R. §§ 52.47(a)(2)(i), 52.79(a)(2)(i).

The DCD for the US-APWR, as incorporated by reference and without modification in the COLA, states that “[t]he initial core uses three different uranium fuel rod enrichments to obtain a favorable radial power distribution throughout the cycle lifetime.” DCD Chapter 4.3, Section 4.3.2.1; COLA Part 2, FSAR, Chapter 4, §§ 4.1 – 4.4. The U.S. APWR utilizes sintered uranium oxide (UO₂) fuel and gadolinia-uranium oxide ((Gd,U)O₂) fuel. DCD Sections 4.1-1, 4.2.1.2.1, Table 4.1-1 and Figure 4.2-3. The characteristics of the fuel described in the DCD do not encompass the use of MOX fuel in these proposed reactors. The Applicant has not cited MOX as a source of fuel for either of the proposed reactors at Comanche Peak Units 3 and 4, there is no other information in the COLA FSAR which supports the contention that MOX will be used at Comanche Peak Units 3 and 4, and Petitioners have not demonstrated that MOX meets the criteria of the fuel to be used in these proposed reactors. As a result, the Petitioners have failed to provide facts or expert opinion or analysis required under 10 C.F.R. § 2.309(f)(1)(v) to support the claim that MOX will be used at Comanche Peak Units 3 and 4.

MOX is peripherally discussed in Part 3 of the Environmental Report, where a 1999 NRC white paper providing guidance to the Commission on the use of MOX fuel in commercial reactors is referenced, but the Application does not list MOX as a fuel to be used in this licensing proceeding. ER at § 5.7.1, citing Memorandum from William D. Travers to Chairman Jackson, Mixed-Oxide Fuel Use in Commercial Light Water Reactors (April 14, 1999) (ML993620025). The inclusion of a 1999 study of the prospective use of MOX in unspecified commercial reactors does not provide the basis needed to support the Petitioners' contention that MOX will be used as a fuel source in the U.S. APWR reactors at Comanche Peak Units 3 and 4. The FSAR and the DCD contain the technical specifications and the design characteristics that will form the basis for any license issued in this matter and are "application-specific (rather than generic) in nature." *Tennessee Valley Authority* (Bellefonte Nuclear Power Plant, Units 3 and 4), CLI-09-03, 69 NRC __ (Feb. 17, 2009) (slip op. at 3 n.24).

The Petitioners appear to be speculating that MOX will be used because the 1999 NRC study was cited at page 5.7-4 of the ER. Speculation about the current or future use of MOX is not permissible, and evaluation of the future use of MOX is neither required nor appropriate in this action, because there has been no request by the Applicant to use MOX in the US-APWR reactors proposed for Comanche Peak Units 3 and 4. *Duke Energy Corporation* (Catawba Nuclear Station, Units 1 and 2), LBP-04-4, 59 NRC 129, 171 (2004). "An NRC proceeding considers the application presented to the agency for consideration and not possible future amendments that are a matter of speculation at the time of the ongoing proceeding." *Duke Energy Corporation* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-14, 55 NRC 278, 294 (2002) (citing *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 257, 267 (1996)).

Since the Application does not include MOX as a potential fuel source in the technical specifications for the reactor, and any license that might be issued would be based on the technical specifications that are set out in the Application, a revision to the Application or later, a

license amendment would be necessary before MOX could be used at Comanche Peak Units 3 and 4. The regulations regarding the standardized designs for nuclear reactors that have already been certified provide guidance on this issue. A licensee who references one of the standardized designs that have already been certified for the U.S. Advanced Boiling Water Reactor (U.S. ABWR), the System 80+, the AP 600, and the AP 1000, may not depart from the fuel design evaluation in the design control document without prior NRC approval. 10 C.F.R. Part 52, Appendix A, VIII(B)(6)(b)(2); 10 C.F.R. Part 52 Appendix B, VIII(B)(6)(b)(1) and VIII(B)(6)(c)(6); 10 C.F.R. Part 52 Appendix C, VIII(B)(6)(b)(1) - (3); 10 C.F.R. Part 52 Appendix D, VIII(B)(6)(b)(1) - (3). Such departure would be treated as a request for a license amendment under 10 C.F.R. § 50.90. *Id.* (See e.g. Appendix D, VIII(B)(6)(b)).

The same principles would apply to any license issued in this matter, and NRC approval would be necessary before MOX could be used at Comanche Peak Units 3 and 4. As the Applicant has not requested licensing authority to use MOX at Comanche Peak Units 3 and 4, The Petitioners have failed to demonstrate that the issues they have raised regarding the use of MOX fuel is within the scope of this licensing action, or material to the findings the NRC must make to support the licensing action involved in this proceeding. 10 C.F.R. § 2.309(f)(1)(iii) - (iv). In view of the above, the Petitioners have not provided sufficient information to show that a genuine dispute exists with the Applicant on a material issue of law or fact and have not met the requirements of Section 2.309(f)(1)(iv) with respect to proposed Contention 10.

The Petitioners provide no documentary or other support for the assertion that the Applicant is planning to use MOX, fail to demonstrate that issues regarding MOX are within the scope of this licensing action or material to the findings the NRC must make to support this licensing action, and fail to demonstrate that a genuine material issue of law or fact exists with the Applicant. As the Petitioners have failed to satisfy 10 C.F.R. § 2.309(f)(1)(iii) - (vi), this contention is inadmissible.

K. Proposed Contention 11:

The COLA is inadequate because it assumes there will be an adequate supply of fresh water for purposes of plant operations. This assumption is faulty because of the failure of the Comanche Peak Environmental Report to analyze impacts of global warming on rainfall and the hydrological cycle.

The Petitioners state several claims in the basis for this contention, some of which are unrelated to the stated contention regarding an inadequate water supply due to the impacts of global warming. In response to Contention 11, the claims are divided as follows: 1) Impacts from global warming will include protracted drought that may seriously compromise water resources required for plant operations. The compromised water resources should be considered from a quantitative perspective and a temperature sensitive analysis since plant operations are dependent on a narrow band of water temperatures; 2) Relatively high levels of tritium at this site compared to other nuclear reactors should be examined and compared to other sites in the COLA, and additional anticipated radiological cumulative impacts should be analyzed; 3) The Environmental Report concedes that radioactive particulate matter released to SCR in liquid effluents will be deposited into the sediment layer of the reservoir bottom and remain there indefinitely. In the event of a protracted drought, and inadequate flow into SCR, the sediment layer could become exposed and, if adequately deliquified, would become dust and subject to transport by wind; 4) Part of the analysis should be an assumption that the SCR dam will at some point fail and release the sediment that is burdened by radioactive particulates; 5) It should be assumed that the SCR will require, at a minimum, management and perimeter security for a time that extends far beyond the term of the operation license; 6) Post license ownership and responsibility for the SCR should be addressed and resolved in the COLA; 7) The COLA should also include an analysis of pollution impacts downstream from water contaminated by chemical treatment; 8) The COLA should also consider whether waterways will be impacted in terms of quantity and quality. The Potential to increase salt content of waterways in the region including impacts to the local aquifer and drinking wells should be examined thoroughly in the COLA; and 9) The most prevalent global warming

impacts come from increased heat and humidity in the atmosphere. The COLA should contain an analysis of the production of heat energy emitted into the atmosphere and water in terms of global warming.

Contention 11 is inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(ii) - (vi). Aside from listing nine claims to support this proposed contention, the Petitioners have provided neither facts nor expert opinions to support their argument that due to global warming there will not be enough water for operating the proposed plant. In fact, only Claim 1 is related to the proposed contention. The Staff addresses the proposed contention and each claim in turn.

The Petitioners assert in Contention 11 and Claim 1 that the COLA relies on an assumption that there will be an adequate supply of fresh water for purposes of plant operations. The Petitioners assert that this assumption is faulty because of the ER fails to analyze impacts of global warming on rainfall and the hydrological cycle. Impacts from global warming will include protracted drought that may seriously compromise water resources required for plant operations. The compromised water resources should be considered from a quantitative perspective and a temperature sensitive analysis since plant operations are dependent on a narrow band of water temperatures. Petition at 31. The Petitioners do not provide any factual support or expert opinion that the area around the plant will experience “protracted drought”, that such a drought will indeed affect the supply of water to the plant to affect operations, that the drought will be caused by global warming, or what they mean when they say that plant operations are “dependent on a narrow band of water temperatures.” *Id.* Such bare assertions are insufficient to form an admissible contention. A “bald assertion that a matter ought to be considered or that a factual dispute exists . . . is not sufficient;” rather, “a petitioner must provide documents or other factual information or expert opinion that set forth the necessary technical analysis to show why the proffered bases support its contention.” *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 180 (1998) (*citing Georgia Institute of Technology* (Georgia Tech Research Reactor,

Atlanta, Georgia), LBP-95-6, 41 NRC 281, 305, *vacated in part and remanded on other grounds*, CLI-95-10, 42 NRC 1, *aff'd in part*, CLI-95-12, 42 NRC 111 (1995) (A petitioner is obligated “to provide the [technical] analyses and expert opinion” or other information “showing why its bases support its contention.”)) The Petitioners have provided an expert report from Trungale Engineering & Science. Although the report discusses drought conditions, its discussion focuses on “man made” drought conditions from a decrease in instream flows rather than from global warming,²⁸ and therefore it does not support this contention, and the contention does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi).

Claim 2 provides that relatively high levels of tritium at this site compared to other nuclear reactors should be examined and compared to other sites in the COLA, and additional anticipated radiological cumulative impacts should be analyzed. This claim does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(ii) because it does not provide a basis supporting the statement that the COLA’s assumption of an adequate water supply is wrong, or that the ER is faulty for not analyzing the impacts of global warming on rainfall and the hydrological cycle. The Petitioners state that, “Dr. Arjun Makhijani . . . has noted relatively high levels of tritium at the site compared to other nuclear reactors . . .”, but the Petitioners do not explain what they mean by this, and they do not provide any expert report from Dr. Makhijani. Petition at 32. Rather, an expert report from George Rice is included, which discusses groundwater contamination but indicates that he had “insufficient time to perform a thorough review of the groundwater system and assess the potential for groundwater contamination at the Comanche Peak Nuclear Power

²⁸ The Trungale Report states, “A drought event is defined as the continuous period of time during which flows remain below recommended targets.” Trungale Report at 4. “The operations of the Comanche Peak project would result in a significant increase in the severity, frequency and duration of these ‘man made’ drought conditions.” *Id.* at 1. The Comanche Peak application fails to adequately address the instream flow water needs necessary for the protection the ecological health of the Brazos River. The proposed diversion would result in an increase in the severity, frequency and duration of ‘man made’ drought conditions . . .” *Id.*

Plant.” Rice Report at 1. The Petitioners do not explain how the Rice Report supports their contention. Mere mention of a document without providing its contents or an explanation of its significance cannot support admissibility of the contention. See *USEC, Inc. (American Centrifuge Plant)*, LBP-05-28, 62 NRC 585, 597 (2005), aff’d CLI-06-10, 63 NRC 451 (2006). Therefore this claim does not comply with 10 C.F.R. § 2.309(f)(1)(v).

Claim 3 asserts that the Environmental Report concedes that radioactive particulate matter released to SCR in liquid effluents will be deposited into the sediment layer of the reservoir bottom and remain there indefinitely. In the event of a protracted drought, and inadequate flow into SCR, the sediment layer could become exposed and, if adequately deliquified, would become dust and subject to transport by wind. Petition at 32. For this claim, as with Claim 1, the Petitioners do not provide any factual support or expert opinion that a protracted drought will likely occur at the plant and therefore do not comply with 10 C.F.R. § 2.309(f)(1)(v). The Staff’s response to proposed Contention 8 applies to this claim to the extent it merely repeats the issues raised in Contention 8. Also, this claim does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(ii) because it does not provide a basis supporting the claim that the COLA assumption of an adequate water supply is wrong, or that the ER is faulty for not analyzing the impacts of global warming on rainfall and the hydrological cycle.

Claim 4 asserts that part of the analysis should be an assumption that SCR dam will at some point fail and release the sediment that is burdened by radioactive particulates. This claim does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(ii) because it does not provide a basis supporting the claim that the COLA assumption of an adequate water supply is wrong, or that the ER is faulty for not analyzing the impacts of global warming on rainfall and the hydrological cycle. Claim 4 repeats the issues raised in Contention 8, and the Staff’s response to Contention 8 applies to this claim. The Petitioners do not provide any expert support for the premise that the SCR dam will fail, or that such failure will result in “significant potential for

environmental and public health impacts.” Petition at 32. Therefore Claim 4 does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(v).

Claim 5 states, “it should be assumed that the SCR will require, at a minimum, management and perimeter security for a time that extends far beyond the term of the operation license.” Petition at 33. This claim does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(ii) - (vi). The management and security of the SCR after the term of the COL (ii) does not provide a basis of support for Contention 11 because it is unrelated to Contention 11 (10 C.F.R. § 2.309(f)(1)(ii)); is not within the scope of this proceeding regarding the issuance of the COL, because it raises an issue that would occur after the termination of the COL (10 C.F.R. § 2.309(f)(1)(iii)); does not demonstrate that the management or security of the SCR is material to the findings the NRC Staff must make to support the issuance of a COL for Comanche Peak (10 C.F.R. § 2.309(f)(1)(iv)); does not provide facts or an expert opinion to support the assumptions that management or perimeter security will be needed after termination of the COL (10 C.F.R. § 2.309(f)(1)(v)); and does not show that a material dispute exists with the Applicant or that the Application omits information on a relevant matter as required by law (10 C.F.R. § 2.309(f)(1)(vi)).

Claim 6 states, “post-license ownership and responsibility for the SCR should be addressed and resolved in the COLA.” Petition at 33. This claim does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(ii) - (vi). The ownership and responsibility for the SCR after the term of the COL does not provide a basis of support for Contention 11 because it is unrelated to Contention 11 (10 C.F.R. § 2.309(f)(1)(ii)); is not within the scope of this proceeding regarding the issuance of the COL, because it raises an issue that would occur after the termination of the COL (10 C.F.R. § 2.309(f)(1)(iii)); does not demonstrate that the ownership and responsibility for the SCR is material to the findings the NRC Staff must make to support the issuance of a COL for Comanche Peak (10 C.F.R. § 2.309(f)(1)(iv)); does not provide facts or an expert opinion to support the assumptions that ownership and responsibility for the SCR is

an issue that will need to be determined after termination of the COL (10 C.F.R. § 2.309(f)(1)(v)); and does not show that a material dispute exists with the Applicant or that the Application omits information on a relevant matter as required by law (10 C.F.R. § 2.309(f)(1)(vi)).

Claim 7 provides that the COLA should also include an analysis of pollution impacts downstream from water contaminated by chemical treatment. Petition at 33. This claim does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(ii) because it does not provide a basis supporting the claim that the COLA assumption of an adequate water supply is wrong, or that the ER is faulty for not analyzing the impacts of global warming on rainfall and the hydrological cycle. This claim also does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(v) or (vi). This claim is not supported by facts or an expert opinion to demonstrate that any additional analysis of the effects of discharged effluents is necessary. The ER in Section 3.6 discusses effluents from the proposed plant and how they will meet the regulatory or permitted requirements for effluents. This claim does not show that a genuine dispute exists with the Application on a material issue of law or fact. Claim 7 specifically fails to reference the specific portions of the ER that discuss effluents in Sections 3.6 and 1.2. 10 C.F.R. § 2.309(f)(1)(vi). Further, in Claim 7, Petitioners are challenging the regulatory authority of the Texas Commission on Environmental Quality (TCEQ). The TCEQ imposes limits on the Applicant's effluent discharges through the Texas Pollutant Discharge Elimination System (TPDES) permitting process. A contention challenging another entity's regulatory authority is outside the scope of this proceeding. 10 C.F.R. § 2.309(f)(1)(iii). The Commission has held that a petitioner cannot form a contention based on issues for other regulatory bodies. *See Hydro Resources, Inc.*, CLI-98-16, 48 NRC 119, 121 (1998). Also, "an NRC license does not preempt other environmental agencies' regulatory jurisdiction." *Id.* The FWPCA specifically prohibits Federal agencies from imposing effluent limits in addition to those required by that statute. In particular, Section 511 of the FWPCA states that

Nothing in [NEPA] shall be deemed to –

(A) authorize any Federal agency . . . to review any effluent limitation or other requirement established pursuant to this Act or the adequacy of any certification under section 401 of this Act; or

(B) authorize any such agency to impose as a condition precedent to the issuance of any license or permit, any effluent limitation other than any such limitation established pursuant to this Act.

33 U.S.C. § 1371(c)(2). The NRC must analyze the environmental impacts of a project under NEPA, but it cannot “go behind” the effluent limits imposed by the EPA or relevant state agency under the FWPCA in order to impose effluent limits of its own.²⁹ Therefore, to the extent the Petitioners would have the NRC second-guess allowable pollutant levels established by the TCEQ, this contention is outside the scope of this proceeding. 10 C.F.R. § 2.309(f)(1)(iii); see Petition at 33 (“The differential impact of treatment of 100 percent of the water versus the lesser amount of treatment proposed by the applicant should be considered”).

Claim 8 provides that the COLA should also consider whether waterways will be impacted in terms of quantity and quality. The Potential to increase salt content of waterways in the region including impacts to the local aquifer and drinking wells should be examined thoroughly in the COLA. This claim does not meet the requirements of 10 C.F.R.

§ 2.309(f)(1)(ii) because it does not provide a basis supporting the claim that the COLA assumption of an adequate water supply is wrong, or that the ER is faulty for not analyzing the

²⁹ See *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-366, 5 NRC 39, 52 (1977) (“This Commission still must consider any adverse environmental impact that would accrue from the operation of the facility in compliance with EPA-imposed [FWPCA] standards; but it cannot go behind either those standards or the determination by EPA or the state that the facility would comply with them.”); *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-78- 1, 7 NRC 1, 26 (1978) (“The relationship of EPA and this Commission in the present setting may be summarized thus: EPA determines what cooling system a nuclear power facility may use and NRC factors the impacts resulting from the use of that system into the NEPA cost-benefit analysis.”). The Commission recently reaffirmed this position, noting that the legislative history of the Clean Water Act indicates that Congress “specifically intended to deprive the NRC’s predecessor agency (the Atomic Energy Commission) of [this] authority.” *Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), CLI-07-16, 65 NRC 371, 377 & nn.19-20 (2007) (emphasis in original).

impacts of global warming on rainfall and the hydrological cycle. The Petitioners also do not meet the requirements of 10 C.F.R. § 2.309(f)(1)(v) because they do not provide any facts or expert opinion to support their premise that waterways and drinking water wells' salinity will be impacted by the proposed plants. The Petitioners also do not provide cites to the specific information in the application that address water consumption (quantity) or water effluents (quality) found in chapters 1, 2, 3, 4, and 5 of the ER, and have not challenged that information concerning the proposed water use for the construction or operation of the plant. Therefore, the Petitioners do not show that they have a material dispute with the Application's discussion of water quantity or quality. 10 C.F.R. § 2.309(f)(1)(vi).

Claim 9 states that "[t]he most prevalent global warming impacts come from increased heat and humidity in the atmosphere" and "[t]he COLA should contain an analysis of the production of heat energy emitted into the atmosphere and water . . . in terms of global warming." Petition at 34. This claim does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(v) or (vi) because the Petitioners do not provide any facts or expert opinion to support this claim, or identify the specific information in the application related to evaporative loss of water or thermal output of the plant. Petition 33-34. Nor do the Petitioners provide any facts or expert opinion that the heat dissipation, evaporative water loss, and thermal output of the proposed plants will specifically contribute to global warming or its effects. *Id.*

Eight of the Petitioners nine claims do not provide a basis supporting Contention 11, and none of the claims meet all of the admissibility requirements of Section 2.309(f)(1). Therefore, Contention 11 and its nine accompanying claims are not admissible pursuant to 10 C.F.R. § 2.309(f)(1)(ii) - (vi).

L. Proposed Contention 12:

The uranium fuel cycle has substantial greenhouse gas impacts must be considered in each phase of the uranium fuel cycle.

The Petitioners claim that, "[t]he COLA should carefully consider the greenhouse gas impacts that are unavoidable as a result of mining, processing, fuel fabrication, transportation,

fuel burn up, waste streams management, decommissioning and long-term site maintenance that are an integral part of the uranium fuel cycle.” Petition at 34. The Petitioners also state, “Any benefits derived by operation of a nuclear plant in terms of avoidance of greenhouse gases should be considered in light of greenhouse gas production as it occurs in various stages in the fuel cycle.” *Id.* Petitioners claim that the Application does not contain specific information regarding greenhouse gas emissions. However, Petitioners do not state why the information, which they claim is missing, is a relevant matter required by law. Therefore, this proposed contention is inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi).

The Application discusses gaseous effluents in ER Section 3.6.3.1 and its associated tables. ER Section 4.4.1.6 and 5.5.1.3 address air impacts from construction and operation respectively. ER Section 5.7.1.3 and associated Table 5.7-2 contain an analysis of impacts from the Uranium fuel cycle. The Petitioners neither acknowledge the discussion in the Application of greenhouse gases, nor present a sufficiently specific or supported argument concerning the importance of greenhouse gases for environmental impacts analyses. The Petitioners have not articulated any support for an argument that such an analysis is appropriate or significant with respect to the Application or that any significant impacts have not been disclosed in the ER. Accordingly, this contention fails to meet the requirements of Section 2.309(f)(1)(vi). *See System Energy Resources, Inc.* (Early Site Permit for Grand Gulf ESP Site), CLI-05-4, 61 NRC 10, 13 (2005) (stating, in affirming a licensing board’s rejection of a contention, “At NRC licensing hearings, petitioners may raise contentions seeking correction of significant inaccuracies and omissions in the ER. Our boards do not sit to ‘flyspeck’ environmental documents or to add details or nuances”). *See also* the recent Bellefonte and

Lee decisions where Boards have rejected substantially similar contentions.³⁰ Therefore, Contention 12 is inadmissible.

M. Proposed Contention 13:

Impacts from severe radiological accident scenarios on operation of other units at the Comanche Peak site have not been considered in the Environmental Report.

The Petitioners contend that the co-location of proposed units 3 and 4 with existing units 1 and 2 has “potentially significant implications in the event that a major radiological accident or release occurs at any one of the four operating units.” Petition at 35. “Petitioners contend that the location of the Comanche Peak Units 3 and 4 with Units 1 and 2 should be considered in light of various accident and radiological release scenarios.” *Id.* The Petitioners argue that the absence of “any discussion or analysis [in] this regard that a serious accident or radiological release at one plant would have no adverse affects on the operations of the remaining units” is a “serious analytical flaw in the Environmental Report.” *Id.*

Contention 13 is inadmissible because it does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(iii), (iv), and (vi). The Petitioners state their contention as one of omission in the ER. However, they do not demonstrate why the information must be contained in the ER. The Petitioners do not cite a legal requirement why impacts from severe radiological accident scenarios on the operation of other units are required to be discussed in the ER. Thus, the Petitioners have not met the requirements of Section 2.309(f)(1)(vi). Further, the Application incorporates by reference an analysis of the control room habitability found in the US-APWR DCD section 6.4.4.1. Application at 6.4-1. Further, the Applicant provided a specific analysis of the radiological impact of one proposed unit on the other unit and the radiological impact of an

³⁰ Both the *Bellefonte* Licensing Board and the *Lee* Licensing Board ruled substantially similar contentions inadmissible. However, both Licensing Boards referred their rulings to the Commission, which has not yet considered the matter. See *Tennessee Valley Authority* (Bellefonte Nuclear Power Plant, Units 3 and 4), LBP-08-16, 68 NRC ___ (Sept. 12, 2008) (slip op. at 66); *Duke Energy Carolinas, LLC* (Combined License Application for William States Lee III Nuclear Station, Units 1 and 2), LBP-08-17, 68 NRC ___ (Sept. 22, 2008) (slip op. 13-14).

accident at unit 1 or unit 2 on the proposed units 3 and 4. See *Comanche Peak Nuclear Power Plant, Units 3 and 4 Resolution of Docketing Issues*, Attachment p.3 (Nov. 4, 2008) (ML083250068). The Petitioners do not dispute the information in the application nor provide a legal requirements for why it must be stated in the ER, and therefore do not meet the requirements of Section 2.309(f)(1)(vi).

Although the Petitioners do not clearly raise this issue, Contention 13 and its basis, when read in its broadest sense, could be construed as a claim of omission that radiological impacts from an accident at units 3 or 4 on operations of units 1 and 2 must be considered in the ER. This would be an analysis of the impacts on safe operation of Units 1 and 2 as opposed to only an analysis of the impacts on the safe operation of the proposed Units 3 and 4. The Petitioners state that the ER, “has no discussion or analysis of the impact of a severe radiological accident at any one of the four units as it would impact the other remaining three units.” Petition at 35. Such a contention does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(iii) and (iv). The safe operation of Units 1 and 2 is governed by their current operating licenses and NRC regulations and is not within the scope of this proceeding. Likewise, the Petitioners do not show that the safe operation of Units 1 and 2 is a finding that the NRC must make for the issuance of a COL in this proceeding. Rather, amendments to the existing Units 1 and 2 licenses and updates to their FSAR are governed by 10 C.F.R. Part 50. To the extent that construction and operation of Units 3 and 4 might affect the operation of Units 1 and 2, the licensee of Units 1 and 2 would be expected to address any necessary changes to the operation of Units 1 and 2 in a separate proceeding. Therefore, this contention is inadmissible under 10 C.F.R. § 2.309(f)(1)(iii), (iv), and (vi).

- N. Proposed Contention 14:
Dependence on foreign sources for uranium should be considered for environmental and public health consequences.

The Petitioners contend that the application is deficient because the ER contains no analysis of the environmental or public health impacts of mining and milling uranium in foreign

countries. Petition 35-36, citing the ER at 5.7-4. The Petitioners also argue that the Application is deficient because it does not consider the economic impacts of potential artificial inflations of costs and potential interruption of supplies of uranium from foreign sources. Petition at 36. The Petitioners further argue that the Application is deficient because it does not consider the vulnerability of the uranium fuel cycle to disruption by terrorists or others, or the radiological, environmental and public health consequences related to this vulnerability. Petition at 36.

This contention is inadmissible because while the Petitioners cite information in the ER, they do not dispute that portion or any other portion of the ER, and fail to demonstrate that a genuine dispute exists with the Applicant on a material issue of fact or law. 10 C.F.R.

§ 2.309(f)(1)(vi). While the Petitioners have described the information they believe is missing from the Application, they have not provided how the information is relevant or required by law, and thus have failed to satisfy 10 C.F.R. § 2.309(f)(1)(vi). The Petitioners have also failed to demonstrate that issues pertaining to foreign sources of uranium or terrorism are within the scope of this licensing action or relate to findings the NRC must make to support this licensing action. 10 C.F.R. § 2.309(f)(1)(iii), (iv). The Petitioners have provided no facts, references to specific sources or documents, or expert opinions which support their position on the issues in this contention. 10 C.F.R. § 2.309(f)(1)(v). To the extent the Petitioners challenge the manner in which fuel cycle impacts are regulated, their contention is also inadmissible under 10 C.F.R. § 2.335.

“A petitioner must ‘read the pertinent portions of the license application, including the Safety Analysis Report and the Environmental Report, state the applicant’s position and the petitioner’s opposing view,’ and explain why it disagrees with the applicant.” *Crow Butte Resources, Inc.* (License Amendment for the North Trend Expansion Project), LBP-08-6, 67 NRC 241, 292 (2008). In this proposed contention, the Petitioners raise general concerns about uranium milling in foreign countries, economic impacts from dependence on foreign sources of uranium, and vulnerability to terrorism, but do not provide a specific statement of the

issue of law or fact to be raised, nor do they provide an explanation for the basis for the contention. “A contention must directly controvert a position taken by the applicant in the application,’ and ‘explain why the application is deficient.” *Id.* at 292 (internal citations omitted). While the Petitioners have described the information they believe is missing from the Application, they have not provided the legal basis that requires the omitted information to be included, and thus have failed to satisfy 10 C.F.R. § 2.309(f)(1)(i)-(ii). *Calvert Cliffs 3 Nuclear Project, LLC, and UniStar Nuclear Operating Services, LLC* (Combined License Application for Calvert Cliffs Unit 3), LBP-09-04, 68 NRC __ (March 24, 2009) (slip op. at 22).

The Petitioners argue that the Application is deficient because it omits analysis of the environmental and public health impacts of mining and milling uranium in foreign countries, but they cite no factual or legal basis that requires that the Application contain this information. Given that “NEPA requires that information in the environmental impact statement be sufficiently accurate to inform both the acting agency and the public,” it is unclear why additional analysis is needed regarding the source of mined raw materials such as uranium. *See, e.g., System Energy Resources, Inc.* (Early Site Permit for Grand Gulf Site), CLI-05-04, 61 NRC 10, 27 (2005). Additionally, impacts resulting from fuel fabrication in foreign countries are too attenuated to be addressed in this licensing action. *See Metropolitan Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 772-75 (1983); *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 348-49 (2002).

The Petitioners argue that dependence on foreign sources of uranium is potentially harmful to the environment and public health, but they do not explain how. Petition at 36. The Petitioners do not cite any facts which support their argument, nor have they provided any document or expert opinion which supports their argument and demonstrates that additional analysis is needed in the ER. A “bald assertion that a matter ought to be considered or that a factual dispute exists . . . is not sufficient;” rather, “a petitioner must provide documents or other factual information or expert opinion that set forth the necessary technical analysis to show why

the proffered bases support its contention.” *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 180 (1998) (*citing Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 305, *vacated in part and remanded on other grounds*, CLI-95-10, 42 NRC 1, *aff’d in part*, CLI-95-12, 42 NRC 111 (1995) (A petitioner is obligated “to provide the [technical] analyses and expert opinion” or other information “showing why its bases support its contention.”)). Without the requisite supporting facts, documents, sources or expert opinions, the Petitioners have not met the requirements of 10 C.F.R. §2.309(f)(1)(v).

The Petitioners also argue that the Application is deficient because it does not contain analyses of the vulnerability of the uranium fuel cycle to disruption by terrorists or others, the radiological, environmental, public health and economic impacts from such disruption, and the potential disruption of electric generating capacity that could result. Petition at 36. The Petitioners have not cited any document or expert that uranium fuel supplies will be insufficient to support the operation of the proposed Units 3 and 4 during the period of their operation.³¹ The Petitioners provide no legal or factual support for the argument that the uranium fuel cycle is vulnerable to disruption by terrorists or others, or for the assertion that the Application should contain this analysis and is deficient because it does not, and therefore do not meet the requirements of 10 C.F.R. § 2.309(f)(1)(v) or (vi).

The Petitioners have also failed to demonstrate that the alleged vulnerability of the uranium fuel cycle to terrorists is within the scope of this licensing action. The NRC has determined that there is no causal link between an NRC licensing action and any risk of a terrorist attack, which “depends on political, social and economic factors *external* to the NRC

³¹ A similar contention was rejected by the Licensing Boards in the Bellefonte and North Anna cases. See *Tennessee Valley Authority* (Bellefonte Nuclear Power Plant, Units 3 and 4), LBP-08-16, 68 NRC __ (Sept. 12, 2008) (slip op. 31-32); *Virginia Elec. & Power Co.* (Combined License Application for North Anna, Unit 3), LBP-08-15, 68 NRC __ (Aug. 15, 2008) (slip op. at 51).

licensing process.” *New Jersey Department of Environmental Protection v. NRC*, 561 F.3d 132, 143 (3d Cir. 2009) (quoting *Amergen Energy Co.*, CLI-07-8, 65 NRC 124, 130 (2007)). As a result, to the extent the Petitioners raise concerns regarding potential terrorism, this contention is beyond the scope of this proceeding, and not material to the findings the NRC must make to support the action that is involved in the proceedings. 10 C.F.R. § 2.309(f)(1)(iii)-(iv).

To the extent the Petitioners allege deficiencies in the ER analysis of fuel cycle impacts, this contention is inadmissible as an attack on a regulation. 10 C.F.R. § 2.335. Under 10 C.F.R. § 51.51, every environmental report for a combined license must use Table S-3, Table of Uranium Fuel Cycle Environmental Data, as the basis for evaluating the environmental effects of the uranium fuel cycle, including mining, milling, and transporting uranium, together with the environmental costs of licensing the nuclear power reactor. This regulation is not subject to challenge in this adjudicatory proceeding. “Indeed, it is ‘hornbook administrative law that an agency need not – indeed should not – entertain a challenge to a regulation’ in an individual adjudication.” *New Jersey Department of Environmental Protection v. NRC*, 561 F.3d at 143 (quoting *Tribune Co. v. FCC*, 133 F.3d 61, 68 (D.C. Cir. 1998)). The Application discusses the impacts on the environment from the processes and hazards associated with the uranium fuel cycle, based on 10 C.F.R. § 51.51 and Table S-3. ER at 5.7-1 to 5.7-20. The Petitioners do not cite this portion of the ER, nor do they raise any objection to any information contained in the ER. This contention is therefore also inadmissible due to their failure to satisfy 10 C.F.R. § 2.309(f)(1)(vi), which requires the Petitioners to demonstrate that a genuine dispute exists with the Applicant on a material issue of law or fact.

The Petitioners assert that the Application is deficient because it does not analyze the impact that disruption of the availability of uranium will have on Comanche Peak Units 3 and 4’s ability to generate electric output, but have not cited any facts, documents or expert opinions that support their theory that uranium supplies will be insufficient to support the operation of Comanche Peak Units 3 and 4 during their licensed period. Without such information or other

support for their contention, the contention does not satisfy 10 C.F.R. § 2.309(f)(1)(v) and is inadmissible. *Tennessee Valley Authority* (Bellefonte Nuclear Power Plant, Units 3 and 4), LBP-08-16, 68 NRC __ (Sept. 12, 2008) (slip op. at 31-32) (*citing Virginia Electric and Power Co.* (Combined License Application for North Anna Unit 3), LBP-08-15, 68 NRC __ (Aug. 15, 2008) (slip op. at 51-52)).

In conclusion, this contention is inadmissible because the Petitioners do not dispute any portion of the ER; fail to demonstrate that a genuine dispute exists with the Applicant on a material issue of fact or law; and fail to describe the information they believe is missing from the Application, but do not provide the legal basis that requires the omitted information to be included. 10 C.F.R. § 2.309(f)(1)(i), (ii), and (vi). The Petitioners have also failed to demonstrate that issues pertaining to foreign sources of uranium or terrorism are within the scope of this licensing action or relate to findings the NRC must make to support this licensing action, and the Petitioners have failed to provide facts, references to specific sources or documents, or expert opinions which support their position on the issues in this contention. 10 C.F.R. § 2.309(f)(1)(iii), (iv), and (v). For these reasons, and because the Petitioners' challenge to the manner in which fuel cycle impacts are regulated is also inadmissible under 10 C.F.R. § 2.335, this contention is inadmissible and should be denied.

O. Proposed Contention 15:

The COLA should consider all radiological, environmental, public health and cost impacts related to decommissioning of Comanche Peak Units 3 and 4.

The Petitioners contend that the Application is deficient because it contains only an initial projection of expected future environmental impacts related to decommissioning, but no specific information on the methods of decommissioning or the environmental impacts relating to those methods. Petition at 36-37 (citing ER at 5.11-3, 5.9-1). The Petitioners also argue that the Application is deficient because it both assumes that impacts related to decommissioning are negligible or require only a site-specific assessment, and ignores impacts beyond the operational area of the proposed Comanche Peak Units 3 and 4. Petition at 37 (citing ER at

5.9-1). The Petitioners further argue that the Application is deficient because the ER does not contain an analysis of the radiological and public health impacts from the long-term radioactive decay of Comanche Peak Units 3 and 4, or the environmental and public health impacts of decommissioning the units and disposing of highly irradiated materials off-site. Petition at 37-38 (citing Mitsubishi Nuclear Plants promotional brochure at 27, ER at 5.11-3).

This contention is inadmissible because the Petitioners have not demonstrated that specific methods of decommissioning or the environmental impacts relating to such activity is within the scope of this licensing proceeding or material to the findings the NRC must make to support this licensing action. 10 C.F.R. § 2.309(f)(1)(iii) and (iv). The Petitioners have also failed to provide any specific facts, documents or expert opinions that support their contention that there will be “*in situ*, long term radioactive decay of Comanche Peak Units 3 and 4,” or sufficient information to show that a genuine dispute exists with the Applicant on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(v) and (vi); Petition at 37. The Petitioners have also failed to state the legal basis that requires the allegedly omitted information to be included in the Application. 10 C.F.R. § 2.309(f)(1)(i) and (ii).

This contention, which identifies information missing from the Application, is one of omission. “Section 2.309(f)(1)(vi) provides that, ‘if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner’s belief’ must be provided.” *Calvert Cliffs 3 Nuclear Project, LLC, and UniStar Nuclear Operating Services, LLC* (Combined License Application for Calvert Cliffs Unit 3), LBP-09-04 (March 24, 2009) (slip op. at 22). “To satisfy Section 2.309(f)(1)(i)-(ii), the contention of omission must describe the information that should have been included in the ER and provide the legal basis that requires the omitted information to be included.” *Id.* The Petitioners have outlined what they believe should be in the Application but have failed to provide any factual or legal basis to support their argument that the information should be included, and thus have failed to satisfy 10 C.F.R. § 2.309(f)(1)(i) and (ii).

A combined license applicant is not required to identify a specific method of decommissioning a plant at the time of the application. The NRC's regulations require a licensee to notify the NRC in writing within thirty days of permanently ceasing operations, and to submit a post-shutdown decommissioning activities report (PSDAR) to the NRC and the affected state or states, before or within two years following permanent cessation of operations. 10 C.F.R. § 52.110(a)(1) and (d)(1). That PSDAR must include a description of the planned decommissioning activities, a schedule for their accomplishment, an estimate of expected costs, and a discussion of the reasons for concluding that the environmental impacts associated with the decommissioning activities at the site will fit within the parameters of appropriate previously issued environmental impact statements. 10 C.F.R. § 52.110(d)(1). If after public notice and review the NRC approves the decommissioning plan at that time, the licensee has sixty years to complete decommissioning. 10 C.F.R. § 52.110(c). The Petitioners have not demonstrated a legal basis for requiring that the Application include a PSDAR, or that analysis of a decommissioning plan is within the scope of this licensing proceeding or material to the findings the NRC must make to support this action. 10 C.F.R. § 2.309(f)(1)(i) - (iv).

The Petitioners also argue that the Application is deficient because it both assumes that impacts related to decommissioning are negligible or require only a site-specific assessment, and ignores impacts beyond the operational area of the proposed Comanche Peak Units 3 and 4, but the Petitioners have provided no alleged facts, documents, sources or expert opinions to support this contention. Similarly, the Petitioners assume that there will be "long-term radioactive decay of Comanche Peak Units 3 and 4", and environmental and public health impacts of decommissioning the units and disposing of highly irradiated materials off-site that will not be considered, but the Petitioners provide no alleged facts, sources, documents, or expert opinions to support this contention. The Petitioners must support their contentions with a concise statement of the alleged facts or expert opinions which support their position on the

issue, together with references to specific sources and documents on which the Petitioners intend to rely to support their position, but they have not done that. 10 C.F.R. § 2.309(f)(1)(v).

There are well-known methods and technologies for decommissioning nuclear power plants: the NRC has successfully overseen the decommissioning of several nuclear reactors and many others are in various stages of decommissioning. Contrary to the Petitioners' allegations in this contention, environmental impacts of disposal sites are fully considered in the NRC's licensing process for those sites, although not as part of the licensing of the reactor or nuclear plant, itself. The environmental impacts from the activities associated with the decommissioning of any nuclear reactor are evaluated in the *Generic Environmental Impact Statement for Decommissioning of Nuclear Facilities: Supplement 1, Regarding the Decommissioning of Nuclear Power Reactors* (GEIS-DECOM), NUREG-0586, Supplement 1 (NRC 2002). The Petitioners have failed to demonstrate that there is a genuine dispute with the Applicant on an issue of law or fact that is material to this licensing proceeding. 10 C.F.R. § 2.309(f)(1)(vi). The Petitioners have also failed to demonstrate that the issues they raise regarding the decommissioning of Comanche Peak Units 3 and 4, which are not yet licensed, are within the scope of this licensing proceeding, or material to the findings the NRC must make in this licensing action. 10 C.F.R. § 2.309(f)(1)(iii) and (iv).

In conclusion, the Petitioners have not demonstrated that specific methods of decommissioning, or the environmental impacts relating to such activity, are within the scope of this licensing proceeding or material to the findings the NRC must make to support this licensing action, and thus fail to satisfy 10 C.F.R. § 2.309(f)(1)(iii) and (iv). As the Petitioners have failed to provide any specific facts, documents or expert opinions that support their contention, and have not shown that a genuine dispute exists with the Applicant on an issue of law or fact material to this licensing action, they have also failed to satisfy 10 C.F.R. § 2.309(f)(1)(v) and (vi). For these reasons, and because the Petitioners have also failed to state the legal

basis that requires the allegedly omitted information to be included in the Application under 10 C.F.R. § 2.309(f)(1)(i) and (ii), this contention is inadmissible and should be denied.

P. Proposed Contention 16:

The Decommissioning Funding Assurance described in the application is inadequate to assure sufficient funds will be available to fully decontaminate and decommission Comanche Peak Units 3 and 4. Applicant must use the prepayment method of assuring decommissioning funding.

The Petitioners contend that the Application is deficient because it fails to include sufficient information to assure that funds will be available to decontaminate and decommission Comanche Peak Units 3 and 4. Petition at 38. The Petitioners claim that the Application is deficient because it relies, in part, on a Texas state law for decommissioning funding, when that state law could be repealed at some time in the future. Petition at 39-40. Citing a report by Dr. Makhijani, "Nuclear Costs and Alternatives", the Petitioners also claim that the Applicant should be required to use the prepayment method of assuring decommissioning funding. Petition at 40-41.

Contention 16 is inadmissible because it is outside the scope of this licensing action, and it does not raise an issue of law or fact which is material to the findings the NRC must make to support the issuance of a combined license. 10 C.F.R. § 2.309(f)(1)(iii) and (iv). The Petitioners' argument that the Applicant cannot rely on Texas law, and that the law is subject to change, constitutes an attack on a state law and is outside the scope of this proceeding. 10 C.F.R. § 2.309(f)(1)(iii). Further, the Petitioners' position that the Applicant is compelled to use the prepayment method of assuring decommissioning funding is an impermissible challenge to the Commission's regulations. 10 C.F.R. § 2.335.

The Commission's regulations in 10 C.F.R. Part 50 contain requirements to provide decommissioning funding assurance. In preparation for receiving new COL applications, the NRC reviewed its licensing rules, including the rules governing decommissioning funding assurance. The NRC noted that some of the requirements in 10 C.F.R. § 50.75 "are directed at the two phase licensing process in 10 C.F.R. Part 50, in which the NRC issues a construction

permit followed by an operating license.” Licenses, Certifications, and Approvals for Nuclear Power Plants; Final Rule, 72 Fed. Reg. 49,406 (Aug. 28, 2007). The NRC noted that the requirements in 10 C.F.R. § 50.75 which pertain to the two-phase licensing process were “not well suited to the combined license process under Part 52” because requiring an applicant for a combined license to submit a copy of the financial instrument obtained to satisfy the requirements of Section 50.75(e) “would place a more stringent requirement on the combined license applicant” than on an operating license applicant, “inasmuch as that applicant would be required to fund decommissioning assurance at an earlier date as compared with the operating license applicant.” 72 Fed. Reg. at 49,406. In drafting the rules and regulations pertaining to decommissioning funding assurance requirements for combined license applications, the NRC made changes “reflecting the unique considerations of a combined license[.]” *Id.* at 49,397.

The Statement of Considerations which explains the Commission’s basis for, and interpretation of, the regulations’ language provides useful guidance on the proper application of the regulations – guidance that is entitled to “special weight.” *Connecticut Yankee Atomic Power Company* (Haddam Neck Plant) LBP-01-21, 54 NRC 33, 47 (2001) (*citing Long Island Lighting Company* (Shoreham Nuclear Power Station, Unit 1), ALAB-900, 28 NRC 275, 290-91) (1988)). The Statement of Considerations explain the Commission’s intent when it modified the decommissioning funding assurance methods for reactors to be licensed under the 10 C.F.R. Part 52 process. “The Commission’s objective is to have sufficient time to evaluate the projected costs of decommissioning, and any licensee-proposed changes in the financial assurance mechanism for funding before fuel is loaded into the reactor and operation commences. This will allow the Commission to take any necessary regulatory action before fuel loading and commencement of operation.” 72 Fed. Reg. at 49,407. The Commission divided decommissioning funding assurance for COLs so that “reasonable assurance consists of a series of steps” with some requirements applying at the COL applicant stage and some applying at the COL licensee stage. 10 C.F.R. § 50.75(a).

The regulations require a COL applicant to include in its application “information in the form of a report as described in §50.75, indicating how reasonable assurance will be provided that funds will be available to decommission the facility.” 10 C.F.R. § 50.33(k)(1). 10 C.F.R. § 50.75(b) provides that each COL applicant for a shall submit a decommissioning report as required by 10 C.F.R. § 50.33(k), and that the report,

. . . must contain a certification that financial assurance for decommissioning will be provided no later than 30 days after the Commission publishes notice in the FEDERAL REGISTER under §52.103(a) in an amount which may be more, but not less, than the amount stated in the table in paragraph (c)(1) of this section, adjusted using a rate at least equal to that stated in paragraph (c)(2) of this section.

10 C.F.R. 50.75(b)(1). At this step, a COL applicant only needs to provide the “certification that financial assurance for decommissioning will be provided” and the amount determined under Section 50.75(c)(1). *Id.* 10 C.F.R. § 50.75(b)(4) provides:

As part of the certification, a copy of the financial instrument obtained to satisfy the requirements of paragraph (e) of this section must be submitted to NRC; **provided, however, that an applicant for or holder of a combined license need not obtain such financial instrument or submit a copy to the Commission except as provided in paragraph (e)(3) of this section.**

(emphasis added).

The next step is a requirement in paragraph (e)(3) for the COL holder or licensee:

Each **holder** of a combined license under subpart C of 10 CFR part 52 shall, 2 years before and 1 year before the scheduled date for initial loading of fuel, consistent with the schedule required by § 52.99(a), submit a report to the NRC containing a certification updating the information described under paragraph (b)(1) of this section, including a copy of the financial instrument to be used.

10 C.F.R. 50.75(e)(3) (emphasis added). It is only during these steps that a COL holder must provide the additional information including the method of financial assurance along with a draft and then final copy of the financial instrument to be used. These requirements do not apply to COL applicants because they are not triggered until after a license has been issued, and

therefore do not impact the granting or denial of an application for a license.³² The subject matter of the contention must impact the grant or denial of a pending license application. *Virginia Electric and Power Co.* (Combined License Application for North Anna Unit 3), LBP-08-15, 67 NRC __ (Aug. 15, 2008) (slip op. at 23) (citing *Private Fuel Storage*, LBP-98-7, 47 NRC at 179). Because this contention challenges the method of financial assurance for decommissioning which, if the Application is approved, will not be determined until after issuance of the COL, the contention is outside the scope of this licensing action, and it does not raise an issue of law or fact which is material to the findings the NRC must make to support the issuance of a combined license. 10 C.F.R. § 2.309(f)(1)(iii) and (iv).

The Petitioners also contend that the Application is deficient because it relies, in part, on a Texas statute that provides a mechanism for decommissioning funding that could at some point in the future be repealed. Petition at 39. In doing so, the Petitioners are challenging the validity of the current Texas law which is outside the scope of this proceeding and constitutes an impermissible attack on a regulation or statute in an adjudicatory proceeding. *Peach Bottom*,

³² Compare the Licensing Board's initial interpretation in the Calvert Cliffs case:

Funding assurance for decommissioning costs consists of four components. First, it must contain an estimate of decommissioning costs so that the amount of assurance that is required is known. NRC regulations specify that this cost estimate must be contained in the decommissioning report that is part of the COLA. [10 C.F.R. § 50.75(b)(1).] Second, 10 C.F.R. § 50.75(b)(3) requires that the decommissioning report specify the method by which assurance will be provided. The third requirement is the assurance itself, which is finalized in the form of completed and signed financial documents. As noted *supra*, these signed documents are not required until 30 days after the notification in the Federal Register that the licensee has set a date to load fuel. [10 C.F.R. § 52.103(a).] The fourth and final component of the financial assurance, required for only some of the funding methods, is a financial test showing that the method of assurance is financially possible.

Calvert Cliffs 3 Nuclear Project, LLC, and UniStar Nuclear Operating Services, LLC (Combined License Application for Calvert Cliffs Unit 3), LBP-09-04, 69 NRC __ (March 24, 2009) (slip op. at 36). The contention was admitted in part as a purely legal question.

ALAB-216, 8 AEC at 20-21; *see also Hydro Resources, Inc.* (292 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-98-16, 48 NRC 119, 121 (1998) (The Commission has held that a petitioner cannot form a contention based on issues for other regulatory bodies.) Therefore this basis does not support the admissibility of the contention pursuant to 10 C.F.R. § 2.309(f)(1)(iii) and (iv).

The Petitioners final argument is that the Applicant should be required to use the prepayment method of assuring decommissioning funding. This argument constitutes an impermissible attack on a Commission regulation pursuant to 10 C.F.R. § 2.335. This argument raises the issue of which financial assurance method the Applicant will use which is an issue outside the scope of this proceeding and, as previously discussed, is not material to the findings the NRC must make to issue a COL as previously discussed. 10 C.F.R. § 2.309(f)(1)(iii) and (iv). The Applicant may choose any mechanism or combination of mechanisms pursuant to 10 C.F.R. § 50.75(e)(1)(vi) which provides, “[a]ny other mechanism or combination of mechanism that provides, as determined by the NRC upon its evaluation of the specific circumstances of each licensee submittal, assurance of decommissioning funding . . .” The Licensing Board in Calvert Cliffs recently recognized, “[T]here is no provision that requires an applicant or a licensee to choose one form of decommissioning assurance over another.” *Calvert Cliffs 3 Nuclear Project, LLC, and UniStar Nuclear Operating Services, LLC* (Combined License Application for Calvert Cliffs Unit 3), LBP-09-04, 69 NRC __ (March 24, 2009) (slip op. at 35). “Licensees and applicants can demonstrate financial assurance by ‘one or more’ of the funding mechanisms.” *Id.* at 35-36 (*citing* NUREG-1577 at 13).

In conclusion, the Petitioners have not demonstrated that their contention is within the scope of these proceedings or requires the NRC to make findings which are relevant to this licensing proceeding. The Petitioners have also raised impermissible challenges to the NRC regulations and Texas law, and, based on 10 C.F.R. §§ 2.309(f)(iii), (iv), and 2.335, this proposed contention is inadmissible.

- Q. Proposed Contention 17:
The Comanche Peak Environmental Report makes unrealistic assumptions about the efficacy of the emergency evacuation model and plan.

The Petitioners contend that the emergency evacuation plan is faulty because of an assumption of 100 percent evacuation of the affected population. Petition at 41. The Petitioners also point out that the plan “does not adequately account for evacuees that are transported over 25 miles from the Comanche Peak site because they ‘disappear’ from the emergency evacuation analysis.” *Id.*

This contention is inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(v) and (vi).

The Application, in the ER Section 7.2 states:

The emergency evacuation model has been modeled as a single evacuation zone extending out 10 mi from the site. For the purposes of this analysis, an average evacuation speed of 4.0 mi per hour (mph) is used with a 7200-second delay between the alarm and start of evacuation, with no sheltering. Once evacuees are more than 25 mi from the site, they disappear from the analysis. The evacuation scenario is modeled so that 100 percent of the population is evacuated.

ER at 7.2-3. The Petitioners do not explain why the use of 100 percent of the population or why removal of the evacuated population once they exceed a fixed distance are unrealistic or how they would compromise the analysis. The Petitioners do not provide factual or expert support that challenges these assumptions or the evacuation model, and thereby do not meet 10 C.F.R. § 2.309(f)(1)(v). A “bald assertion that a matter ought to be considered or that a factual dispute exists . . . is not sufficient;” rather, “a petitioner must provide documents or other factual information or expert opinion that set forth the necessary technical analysis to show why the proffered bases support its contention.” *Private Fuel Storage*, LBP-98-7, 47 NRC at 180 (*citing Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 305, *vacated in part and remanded on other grounds*, CLI-95-10, 42 NRC 1, *aff’d in part*, CLI-95-12, 42 NRC 111 (1995) (A petitioner is obligated “to provide the [technical] analyses and expert opinion” or other information “showing why its bases support its

contention.”)). Further, the Petitioners do not explain how different factors or assumptions would materially affect the analysis, so they do not meet the requirements of Section 2.309(f)(1)(vi) to show that a genuine dispute exists with the Application.

R. Proposed Contention 18:

The Comanche Peak Environmental Report is inadequate because it fails to make reasonable assumptions about alternatives to the proposed action of constructing and operating Comanche Peak Units 3 and 4.

The Petitioners state in support of Contention 18 that the ER:

assumes that renewable fuels such as wind and solar cannot provide adequate baseload generating capacity. However, recent advances in technology such as compressed air energy storage and improved battery storage capacity cast doubt on some of the [ER's] assumptions concerning problems with intermittency.

Petition at 42. The Petitioners believe that, “[t]he COLA should evaluate the competing technologies in light of current energy policy that places a greater emphasis on renewable fuels than on previous energy policy that favored nuclear power and fossil fuels.” The Petitioners contend that the ER:

excuses the consideration of conservation/energy efficiency because Comanche Peak Units 3 and 4 will be merchant power plants; and as such, conservation and demand side management programs to encourage consumers to modify levels of electricity usage ‘are not within the capability or responsibility of the wholesale baseload merchant generator.’

Petition 42-43. The Petitioners further contend that in the ER there “should be a side-by-side comparison of mortality and morbidity consequences of nuclear power compared to renewable fuels in order to accurately determine the consequences of each.” Petition at 43. The Petitioners conclude that the ER “fails to carefully compare the greenhouse gas effects expected from each of the alternative technologies.” *Id.* Contention 18 is inadmissible because it does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(iii), (iv), and (vi).

The Petitioners raise a series of generalized challenges to the adequacy or sufficiency of the information contained in the ER. The Petitioners first raise the issue that the ER fails to

adequately consider wind and solar alternative sources of energy because “recent advances in technology . . . cast doubt on some of the [ER’s] assumptions.” Petition at 42. As discussed below, the NRC defers to the Applicant’s stated purpose so long as that purpose is not so narrow as to eliminate reasonable alternatives.

According to the Council on Environmental Quality (CEQ), the analysis of alternatives is the heart of the EIS. 40 C.F.R. § 1502.14.³³ NRC regulations also require that the discussion of alternatives in the ER be sufficiently complete to aid the NRC in meeting the mandate of NEPA § 102(2)(e), (42 U.S.C. § 4332(2)(E)), to explore “*appropriate* alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.” 10 C.F.R. § 51.45(b)(3) (quoting NEPA § 102(2)(e)) (emphasis added). As Section 51.45(b)(3) makes clear, NRC environmental reviews are focused on appropriate alternatives rather than every alternative. *See also Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.*, 435 U.S. 519, 551 (1978) (stating that “[t]o make an impact statement something more than an exercise in frivolous boiler-plate the concept of alternatives must be bounded by some notion of feasibility”); *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-03-30, 58 NRC 454, 479 (2003) (stating, “[A]n agency’s consideration of alternatives is sufficient if it considers an appropriate range of alternatives, even if it does not consider every available alternative”) (quoting *Headwaters, Inc. v. BLM*, 914 F.2d 1174, 1181 (9th Cir. 1990), *reh’g and reh’g en banc denied*, 940 F.2d 435 (1991)) (alteration in original). Furthermore, CEQ regulations provide that, while an EIS must “[r]igorously explore and objectively evaluate” alternatives that are “reasonable,” the EIS need only “briefly discuss” the reasons why an alternative was rejected from more detailed study.

³³ Although CEQ regulations are not binding on the NRC, the NRC accords substantial deference to CEQ regulations. *See Dominion Nuclear North Anna, LLC* (Early Site Permit for North Anna ESP Site), CLI-07-27, 66 NRC 215, 222 n.21 (2007) (citing *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 334, 355-56 (1989)).

40 C.F.R. § 1502.14(a); see also *Dominion Nuclear North Anna, LLC* (Early Site Permit for North Anna ESP Site), CLI-07-27, 66 NRC 215, 222 n.21 (2007).

Although an alternative might not be considered reasonable for a variety of reasons, an alternative's failure to meet the purpose and need of the project is a compelling reason to reject it. Consistent with NEPA, the NRC defers to an applicant's stated objectives: "[A]n agency cannot redefine the goals of the proposal that arouses the call for action; it must evaluate the alternative ways of achieving its goals, shaped by the application at issue and by the function that the agency plays in the decisional process." *Exelon Generation Co.* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 806 (2005), *aff'd Environmental Law and Policy Center v. U.S. Nuclear Regulatory Comm'n*, 470 F.3d 676 (7th Cir. 2006) (quoting *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 199 (D.C. Cir. 1991)); see also *Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho NM 87174), CLI-01-4, 53 NRC 31, 55-56 (2001) (stating, "[T]he agency should take into account the needs and goals of the parties involved in the application") (quoting *Citizens Against Burlington*, 938 F.2d at 196). Furthermore, "[w]hen the purpose is to accomplish one thing' . . . 'it makes no sense to consider the alternative ways by which another thing might be achieved.'" *Clinton ESP*, CLI-05-29, 62 NRC at 806 (quoting *Citizens Against Burlington*, 938 F.2d at 195).

The Petitioners' claims that the Applicant has given inadequate consideration or made irresponsible assumptions with regard to renewable energy, in particular wind and solar, are inconsistent with the requirements with which the Applicant must comply in their alternatives discussion. The Petitioners have not taken into consideration the Applicant's goal of baseload power generation when formulating alternatives they would prefer to see discussed in great detail in the ER. While the Petitioners do provide alternative information in the report prepared by Dr. Makhijani and the SEED Coalition that could be used to support a differing opinion on the future use of wind and solar energy as baseload power, they failed to challenge the analysis by the applicant that renewable energy resources are not currently available for baseload power,

and they incorrectly assert that a different or more detailed analysis is required. In this instance, Applicant considered and examined in the ER a number of reasonable alternative ways to generate baseload power and determined that those sources, individually or in combination, cannot meet the identified purpose of the proposed action. See ER 9.2-7 to 9.2-10 and 9.2-41 to 9.2-44. Thus, no omission regarding these alternatives is present, and the Petitioners have not shown that the application fails to contain information on a relevant matter as required by law in accordance with Section 2.309(f)(1)(vi).³⁴

Similarly, the Petitioners' argument that the Applicant should consider demand side management as an alternative does not support an admissible contention. Although the Petitioners appear to disagree with the Commission position that demand side management is not an alternative to the proposal to build new baseload power generation, the Petitioners do not provide any factual or legal rationale to overturn the Commission's position. The Commission in *Clinton* held that "To require consideration of conservation as well [as alternative generating sources] would ignore entirely the purpose of [the applicant's] proposed facility – producing more power." *Clinton ESP*, CLI-05-29, 62 NRC at 807. A similar contention was rejected by the Board in the *Summer* case, where the Board held, "[b]ecause a [demand-side-management] program is not a substitute for the addition of base-load power, which is the accepted project purpose, this challenge raises matters outside the scope of this proceeding, thus failing to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(iii), and raises matters that are not material to the determination the NRC must make, thus failing to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(iv)." *Summer*, LBP-09-2, 69 NRC at __ (slip op. at 23). The same analysis and conclusions apply here.

³⁴ A similar contention was rejected by the Board in the *Summer* case. See *South Carolina Electric & Gas Co. and South Carolina Public Service Authority* (Also Referred to as Santee Cooper) (Virgil C. Summer Nuclear Station, Units 2 and 3), LBP-09-2, 69 NRC __ (Feb. 18, 2009) (slip op. at 18-28).

The remaining arguments from the Petitioners do not support an admissible contention. The Petitioners request that additional comparisons be made in “mortality and morbidity”, “public health impacts”, and “greenhouse gas effects.” As explained above, although an alternative might not be considered reasonable for a variety of reasons, an alternative’s failure to meet the purpose and need of the project is a compelling reason to reject it. While an EIS, and thereby an ER, must rigorously explore and objectively evaluate alternatives that are reasonable, the EIS or ER need only briefly discuss the reasons why an alternative was rejected from more detailed study. In this instance, the alternatives the Petitioners suggest for additional consideration were eliminated by the Applicant as not meeting the purpose and need of the project. Further, a combination of such alternatives was not determined to be environmentally preferable. The Petitioners do not identify why the analysis provided by the Applicant of a combination of the alternatives is insufficient to conclude that they are not environmentally preferable. Petition 43-44. Therefore, Contention 18 does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(iii), (iv), and (vi).

S. Proposed Contention 19:

The Comanche Peak Environmental Report fails to consider methods to prevent an aircraft attack on Comanche Peak Units 3 and 4 and the resulting environmental and public health consequences.

Citing the Ninth Circuit Court of Appeals decision in *San Luis Obispo Mothers for Peace*, the Petitioners argue that the COLA “should include a detailed analysis of the potential threats represented by terrorist attacks.” Petition at 44. The NRC Commission has held “[n]otwithstanding a recent decision by the United States Court of Appeals for the Ninth Circuit, holding that the NRC may not exclude NEPA-terrorism contentions categorically, we reiterate our longstanding view that NEPA demands no terrorism inquiry.” *Amergen Energy Company, LLC* (Oyster Creek Nuclear Generating Station) CLI-07-8, 65 NRC 124, 126 (2007) (footnote omitted). The Commission’s position has been upheld in a recent decision by the United States Court of Appeals for the Third Circuit, which determined in the context of license renewal,

“NRC’s lack of control over airspace supports our holding that a terrorist aircraft attack lengthens the causal chain beyond the ‘reasonably close causal relationship.’” *New Jersey Dept. of Env’t. Prot. v. U.S. Nuclear Reg. Comm’n.*, No. 07-2271, slip. op. at 20 (3d Cir. March 31, 2009) (citing *Metro. Edison Co. v. People against Nuclear Energy*, 460 U.S. 766, 774 (1983)). The Court also reasoned that, “if NEPA required the NRC to analyze the potential consequences of an airborne attack, the NRC would spend time and resources assessing security risks over which it has little control and which would not likely aid its other assigned functions to assure the safety and security of nuclear facilities.” *Id.*, slip op. at 24. As such, Contention 19 is contrary to the stated position of the Commission, is beyond the scope of this proceeding, and is not material to the findings the NRC must make to support the issuance of the COL, pursuant to 10 C.F.R. § 2.309(f)(1)(iii) and (iv).

CONCLUSION

In view of the foregoing, the Petitioners, SEED Coalition, Public Citizen, and True Cost of Nukes have demonstrated representational standing to intervene in this proceeding, and Petitioner Lon Burnam has demonstrated individual standing to intervene. The Petitioners have also submitted one admissible contention. Therefore, pursuant to 10 C.F.R. § 2.309(a), the Petition should be granted and the Petitioners should be admitted as parties to the proceeding.

Respectfully submitted,

/Signed (electronically) by/

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

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Dated at Rockville, Maryland
this 1st day of May, 2009

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD PANEL

In the Matter of)
)
LUMINANT GENERATION CO. LLC) Docket Nos. 52-034 & 52-035
)
(Comanche Peak Nuclear Power Plant,)
Units 3 & 4))

CERTIFICATE OF SERVICE

I hereby certify that copies of the "NRC STAFF'S ANSWER TO PETITION FOR INTERVENTION AND REQUEST FOR HEARING" has been served on the following persons by Electronic Information Exchange on this 1st day of May, 2009:

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Dated at Rockville, Maryland
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