

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )  
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 )  
STP NUCLEAR OPERATING COMPANY ) Docket Nos. 52-012 & 52-013  
 )  
 )  
(South Texas Project, Units 3 & 4) )

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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, and South Texas Association for Responsible Energy, (Petitioners) have presented information sufficient to support their standing in this proceeding. The Staff further agrees that proposed contention 2 is admissible. The remainder of the proposed contentions are inadmissible, and should be dismissed.

BACKGROUND

On September 20, 2007, STP Nuclear Operating Company (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 Advanced Boiling Water Reactors (ABWR) to be located adjacent to the existing South Texas Project, Units 1 and 2 near Bay City, Texas (Application). The Application references the issued standard design certification, including a design control document (DCD), issued to General Electric (GE) Nuclear Energy. The proposed units will be known as South Texas Project, Units 3 & 4.

On October 16, 2007, the Staff published a notice of the receipt and availability of the COL application in the *Federal Register*. 72 Fed. Reg. 60,394 (Oct. 24, 2007). The Application was accepted for docketing on November 29, 2007. 72 Fed. Reg. 68,597 (Dec. 5, 2007). On February 13, 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. 7934 (Feb. 20, 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 South Texas Association for Responsible Energy assert that they have standing to intervene on behalf of their members located within 50 miles of the proposed facility. The Petitioners assert twenty-eight contentions, which are addressed by the Staff below. The Staff agrees that proposed contention 2 is admissible in part. The remainder of the contentions are inadmissible, and should be dismissed.

#### I. LEGAL STANDARDS

##### A. Standing to Intervene

In accordance with the Commission's Rules of Practice:<sup>1</sup>

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

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<sup>1</sup> See Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders. 10 C.F.R. Part 2.

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).<sup>2</sup> 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. 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, 68 NRC 294, 304 (2008).

An organization may establish its standing to intervene based upon a theory of organizational standing (showing that its own organizational interests could be adversely affected by the proceeding), or representational standing (based upon the standing of its members).

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

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)).<sup>3</sup>

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).<sup>4</sup>

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<sup>3</sup> 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.

<sup>4</sup> 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 emphasized that the rules on contention admissibility are "strict by design." *Dominion Nuclear*

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- (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.

*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. EACH OF THE PETITIONERS HAS ESTABLISHED REPRESENTATIONAL STANDING.

A. SEED'S STANDING

SEED claims to have representational standing to intervene in this proceeding by a demonstrated injury-in-fact to one of its members, Susan Dancer, who has authorized it to represent her in this matter. Petition at 2; Dancer Declaration (Apr. 17, 2009).

In order to establish representational standing, an organization must demonstrate, among other things, that its members would otherwise have standing to participate in their own right and that at least one of its members has authorized it to represent the member's interests. See *Palisades*, CLI-07-18, 65 NRC at 409. SEED satisfies the representational standing requirement through Susan Dancer. Susan Dancer's declaration asserts that she is a member of SEED, lives within fifty miles of the STP site, and authorizes SEED to represent her in this proceeding. See Dancer Declaration.

SEED must also show that the interests that the organization seeks to protect are germane to its own purpose, and that neither its claim, nor the requested relief requires an individual member to participate in the action. *Palisades*, CLI-07-18, 65 NRC at 409. SEED describes itself as "a statewide nonprofit working for clean air and clean energy in Texas." Petition at 2. This interest is germane to the interests of Susan Dancer, where her declaration stated that:

Based on the history of nuclear reactors to date, I believe that nuclear reactors are inherently dangerous. Thus, the construction of one or more new nuclear reactors close to my home could pose a grave risk to my health and safety. I am concerned about the risk of accidental releases of radioactive material and the potential harm to groundwater and surface waters. I am concerned that if

an accident involving atmospheric release of radiological material were to occur, I could be killed or become very ill.

Dancer Declaration. Because Susan Dancer has established standing to intervene in her own right, and has authorized SEED, whose organizational interests are germane to those whom it would represent, to represent her interests in this proceeding SEED has satisfied the standards for representational standing set forth in *Palisades*, CLI-07-18, 65 NRC at 409. Therefore, the Staff does not object to SEED's representational standing to petition to intervene on behalf of its member, Susan Dancer.

B. PUBLIC CITIZEN'S STANDING

Public Citizen claims to have representational standing to intervene in this proceeding by a demonstrated injury-in-fact to one of its members, Bill Wagner, who has authorized it to represent him in this matter. Petition at 2; Wagner Declaration (Apr. 17, 2009).

In order to establish representational standing, an organization must demonstrate, among other things, that its members would otherwise have standing to participate in their own right and that at least one of its members has authorized it to represent the member's interests. See *Palisades*, CLI-07-18, 65 NRC at 409. Public Citizen satisfies the representational standing requirement through Bill Wagner. Bill Wagner's declaration, asserts that he is a member of Public Citizen, lives within fifty miles of the STP site, and authorizes Public Citizen to represent him or her in this proceeding. Wagner Declaration.

Public Citizen must also show that the interests that the organization seeks to protect are germane to its own purpose, and that neither its claim, nor the requested relief requires an individual member to participate in the action. *Palisades*, CLI-07-18, 65 NRC at 409. Public Citizen describes itself as an organization that "advocates for safe, clean energy alternatives and opposes the development of nuclear power." Petition at 2. This interest is germane to the interests of Bill Wagner, stated in his declaration:

Based on the history of nuclear reactors to date, I believe that nuclear reactors are inherently dangerous. Thus, the construction

of one or more new nuclear reactors close to my home could pose a grave risk to my health and safety. I am concerned about the risk of accidental releases of radioactive material and the potential harm to groundwater and surface waters. I am concerned that if an accident involving atmospheric release of radiological material were to occur, I could be killed or become very ill.

Wagner Declaration. Because Bill Wagner has established standing to intervene in his own right, and has authorized Public Citizen, whose organizational interests are germane to those whom it would represent, to represent his interests in this proceeding Public Citizen has satisfied the standards for representational standing set forth in *Palisades*, CLI-07-18, 65 NRC at 409. Therefore, the Staff does not object to Public Citizen's representational standing to petition to intervene on behalf of its member, Bill Wagner.

C. SOUTH TEXAS ASSOCIATION FOR RESPONSIBLE ENERGY'S STANDING

South Texas Association for Responsible Energy claims to have representational standing to intervene in this proceeding by a demonstrated injury-in-fact to one of its members, Daniel A. Hickl, who has authorized it to represent him in this matter. Petition at 3; Hickl Declaration (Apr. 17, 2009).

In order to establish representational standing, an organization must demonstrate, among other things, that its members would otherwise have standing to participate in their own right and that at least one of its members has authorized it to represent the member's interests. See *Palisades*, CLI-07-18, 65 NRC at 409. South Texas Association for Responsible Energy satisfies the representational standing requirement through Daniel A. Hickl. Daniel A. Hickl's declaration asserts that he is a member of South Texas Association for Responsible Energy, lives within fifty miles of the STP site, and authorizes South Texas Association for Responsible Energy to represent him or her in this proceeding. Hickl Declaration.

South Texas Association for Responsible Energy must also show that the interests that the organization seeks to protect are germane to its own purpose, and that neither its claim, nor the requested relief requires an individual member to participate in the action. *Palisades*, CLI-

07-18, 65 NRC at 409. South Texas Association for Responsible Energy describes itself as “a citizen organization that opposes the COL for STP units 3 and 4.” Petition at 3. This interest is germane to the interests of Daniel A. Hickl, where his declaration stated that:

Based on the history of nuclear reactors to date, I believe that nuclear reactors are inherently dangerous. Thus, the construction of one or more new nuclear reactors close to my home could pose a grave risk to my health and safety. I am concerned about the risk of accidental releases of radioactive material and the potential harm to groundwater and surface waters. I am concerned that if an accident involving atmospheric release of radiological material were to occur, I could be killed or become very ill.

Hickl Declaration. Because Daniel A. Hickl has established standing to intervene in his own right, and has authorized South Texas Association for Responsible Energy, whose organizational interests are germane to those whom it would represent, to represent his interests in this proceeding South Texas Association for Responsible Energy has satisfied the standards for representational standing set forth in *Palisades*, CLI-07-18, 65 NRC at 409. Therefore, the Staff does not object to South Texas Association for Responsible Energy’s representational standing to petition to intervene on behalf of its member, Daniel A. Hickl.

### III. CONTENTIONS

#### A. PROPOSED CONTENTION 1:

The number and significance of authorizations and permits required for the combined license that have yet to be obtained by the Applicant preclude issuance of the COL. Further, the outstanding items preclude Petitioners from raising all material issues in this adjudication and they should be given appropriate leave to supplement their contentions as information related to the outstanding items is obtained.

Petition at 10. In this contention Petitioners quote from the Environmental Report, Table 1.2-1 and note the number of authorizations and permits to be obtained by the Applicant in connection with the proposed action. *Id.* at 11-12. Petitioners then assert that “to the extent that the operation of Units 3 and 4 depends on a significant increased use of groundwater, failure to obtain the permits required for such may preclude granting the COL.” *Id.* at 12. They further assert that “because the Applicant will likely be required to store high level waste/spent nuclear

fuel on-site, a permit under 10 CFR Pt. 72 is a predicate to operation. Failure to obtain such a permit may bar issuance of the COL.” *Id.*

Staff Response: Proposed Contention 1 is inadmissible since it does not comply with 10 C.F.R. § 2.309(f)(1)(iii)-(vi).

1. The Contention does not demonstrate a genuine dispute with the Applicant.

In this contention, Petitioners simply quote from the application. As required by 10 C.F.R. § 51.45(d), the Applicant’s Environmental Report includes a list of other permits, licenses, or approvals that may be needed in connection with the proposed action. See ER at Table 1.2-4 (ML082831350). Petitioners have not provided any factual evidence or supporting documents that produce some doubt about the adequacy of the ER’s listing of potential permits or other approvals that may be required. See Florida Power and Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-90-16, 31 NRC 509, 515, 521 & n.12 (1990). Indeed, Petitioners do not appear to disagree with the listing of potential permits that may be required. Thus, they do not provide sufficient information to demonstrate that a genuine dispute exists with the Applicant on a material issue of law or fact, and therefore, this contention is inadmissible. See 10 C.F.R. § 2.309(f)(1)(vi).

2. The contention fails to provide a concise statement of the alleged facts or expert opinions which support the Petitioners’ position.

In the instant contention, Petitioners assert, without any support, that failure to obtain certain permits may bar issuance of the COL. See Petition at 12. Petitioners have not alleged a single fact that supports the proposition that all permits that may ever be needed in connection with the construction or operation of the proposed units must be obtained prior to issuance of the COL. Petitioners have not cited any regulation that would bar the issuance of the COL without all other permits being issued.

Petitioners similarly assert, without any support, that failure to obtain a permit under 10 C.F.R. Part 72 may bar issuance of the COL. See Petition at 12. Petitioners fail to point to

any legal requirement that requires a license under Part 72 in order to issue a COL. A contention is inadmissible when, as in the instant case, a Petitioner has failed to provide any tangible information, any experts, or any substantive affidavits, but instead has offered only bare assertions and speculation. See *Fansteel Inc.* (Muskogee, Oklahoma, Site), CLI-03-13, 58 NRC 195, 203 (2003). Petitioners' assertion that all permits that may be needed for the construction and operation of STP 3 & 4 must be obtained prior to issuance of the COL does not create an admissible contention since Petitioners have failed to support their position with facts or expert opinions. See 10 C.F.R. § 2.309(f)(1)(v).

3. The contention raises issues that are outside the scope of the proceeding and are not material to the findings the NRC must make to support the issuance of the COL.

To the extent Petitioners are attempting to assert that all permits, authorizations and approvals that may eventually be needed in connection with the operation of the proposed nuclear units at the South Texas site must be obtained prior to issuance of the COL, this raises issues that are outside the scope of the proceeding and are not material to the findings the NRC must make. As the Commission has repeatedly held, the fact that other permits may be required from other agencies is outside the scope of NRC proceedings, and those concerns are properly raised before those respective permitting authorities. See, e.g., *PPL Susquehanna LLC* (Susquehanna Steam Electric Station, Units 1 and 2), CLI-07-25, 66 NRC 101, 107 (2007) ("He only claims that NRC ought to concern itself with water use matters within the jurisdiction of other state and Federal agencies. Mr. Epstein's water use complaints simply do not articulate any issue material to this proceeding, and he has shown no reason for us to otherwise overturn the Board's ruling."); *Hydro Resources, Inc.* (2929 Coors Road Suite 101, Albuquerque, NM 87120), CLI-98-16, 48 NRC 119, 121 (1998) ("Congress granted us authority merely to regulate radiological and related environmental concerns. It gave our agency no roving mandate to determine other agencies' permit authority.").

Petitioners also call out the Applicant's observation that it may need a license under 10 C.F.R. Part 72 to establish an independent spent fuel storage installation, and assert that the Applicant will likely be required to store high level waste/spent nuclear fuel on-site. See Petition at 12. A Part 72 license is not currently part of the COL application. Contentions that are based on projected changes to a license, not currently before the NRC in any proceeding or application, are not sufficient to support admission of a contention. *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 & 2, and Catawba Nuclear Station, Units 1 & 2), CLI-02-14, 55 NRC 278, 294 (2002).

Since the proposed contention raises issues that are outside the scope of the proceeding, raises issues that are not material to the COL issuance, is not supported with either alleged facts or expert opinion, and does not demonstrate a genuine dispute with the Applicant, the contention is inadmissible for failure to comply with 10 C.F.R. § 2.309(f)(1).

B. PROPOSED CONTENTION 2:

The Applicant's COLA is incomplete because it fails to include the requirements of 10 CFR 52.80(b) under which the Applicant must 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 assuming the large loss of areas of the plant due to large-scale explosions/ fires as required by 10 CFR 50.54(hh)(2).

Petition at 13. The Petitioners state the requirements of the newly enacted Power Reactor Security Requirements Rule which added 10 C.F.R. §§ 50.54(hh) and 52.80(d).<sup>5</sup> Citing the new rule, the Petitioners state that, "the design basis in the Applicant's environmental Report, Final Safety Analysis Report, and the Design Control Document for anticipated explosions/fires at a nuclear plant are no longer adequate to address the regulatory requirement under the assumption that large areas of the plant and equipment will be lost due to explosions/fires."<sup>6</sup>

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<sup>5</sup> Power Reactor Security Requirements (Final Rule), 74 Fed. Reg. 13,296 (Mar. 27, 2009).

(Continued...)

Petition at 14. The Petitioners add that in the ER “there is no discussion of an accident that would cause a large loss of the plant area due to a fire or explosion.” *Id.* at 15. Next, the Petitioners acknowledge how the Applicant’s FSAR incorporates by reference the U.S. ABWR DCD Nuclear Safety Operational Analysis (NSOA) for design basis accidents. *Id.* at 15-21. The Petitioners argue that “none of the accident scenarios address an explosion/fire that causes a sudden loss of spent fuel pool integrity or loss of coolant.” *Id.* at 21.

The Petitioners pose that “[i]n effect, there is now a beyond design basis requirement built into 10 CFR 50.54 (hh)” and, “[t]he new design basis for Applicants is one that assumes there will be a large loss of plant due to explosions/fires and that there must be an *affirmative showing* that the Applicant’s design basis can accommodate such losses and maintain containment integrity, core cooling and spent fuel pool integrity and cooling.” Petition at 21 (emphasis added).

**Staff Response:** Contention 2 is admissible in part and inadmissible in part. To the extent that Contention 2 raises a challenge to the Application in that it does not contain the

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<sup>6</sup> The Petitioners reference the Commission’s “72 Fed. Reg. 56287, Consideration of Aircraft Impacts for New Nuclear Power Reactor Designs; Proposed Rule” (Aircraft Impact Rule) in the basis for their proposed contention. However, this rule is not in effect and is separate from the Power Reactor Security Requirements final rule. In the Federal Register notice, the Commission explained the relationship between the two rulemakings:

The Commission regards the two rulemakings to be complementary in scope and objectives. The aircraft impact rule will focus on enhancing the design of future nuclear power plants to withstand large commercial aircraft impacts, with reduced reliance on human activities (including operator actions). [The Power Reactor Security Regulations rulemaking section 50.54(hh)(2) focuses on ensuring that the nuclear power plant’s licensees will be able to implement effective mitigative measures for large fires and explosions including (but not explicitly limited to) those caused by the impacts of large commercial aircraft.

74 Fed. Reg. 13,926, 13,958 (Mar. 27, 2009). Although the Petitioners reference it, they do not appear to rely on the Aircraft Impact Rule as a basis for this contention. To the extent that they are relying on it, the contention is inadmissible.

information required by 10 C.F.R. 52.80(d), Contention 2 is admissible.<sup>7</sup> The remaining issues raised in this contention are inadmissible because they do not comply with 10 C.F.R.

§§ 2.309(f)(1)(iii), (iv), and (vi) and 2.335.

1. The Petitioners do not demonstrate that the issues raised are within the scope of this proceeding and impermissibly attack a Commission rule.

In this contention, the Petitioners examine the NSOA for design basis accidents. The NSOA is part of the DCD for the U.S. ABWR. Here, the Petitioners make an argument challenging the design certification rule for the U.S. ABWR. 10 C.F.R. Pt. 52 App. A. The NRC certifies generic nuclear reactor designs through rulemaking. Appendix A to Part 52 Section VI specifically precludes challenges to the ABWR in a COL proceeding. See 10 CFR Part 52 App. A Section VI. Moreover, 10 CFR § 52.63(a)(5) states that, except as provided in 10 CFR 2.335 the Commission shall treat as resolved those matters resolved in connection with the issuance of a design certification rule. See 10 CFR § 52.63(a)(5).

The Petitioners do not 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

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<sup>7</sup> The Petitioners do not recognize that the Power Reactor Security Rule is not effective until 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. Further, the Applicant has indicated by letter that it intends to submit the information required by the new rule some time around the effective date of the rule. See Letter from STP to NRC (Apr. 27, 2009) (ML091190123). It is possible that the Applicant’s information may render the admissible portion of this contention moot.

the rule or 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 at 13-23. The Petitioners have failed to establish that the design certification rule in this particular proceeding would not serve the purpose for which the rule was adopted, and have not sought a waiver. Therefore, proposed Contention 2 is inadmissible in part because it is an impermissible attack on a Commission rule and is outside the scope of this proceeding pursuant to 10 C.F.R. §§ 2.309(f)(1)(iii) and 2.335.

2. The Contention does not demonstrate that the issue raised is material to the findings the NRC must make and does not show that a genuine dispute exists with the applicant on a material issue of law or fact.

The Petitioners pose that “[i]n effect, there is now a beyond design basis requirement built into 10 CFR 50.54 (hh)” and, “[t]he new design basis for applicants is one that assumes there will be a large loss of plant due to explosions/fires and that there must be an *affirmative showing that the applicant’s design basis can accommodate such losses and maintain containment integrity, core cooling and spent fuel pool integrity and cooling.*” Petition at 21 (emphasis added). The Petitioners misstate the requirements of the new regulations which require a COL application to contain:

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 as required by Sec. 50.54(hh)(2) of this chapter.

10 C.F.R. 52.80(d). 10 C.F.R. 50.54(hh)(2) provides:

Each licensee shall *develop and implement guidance and strategies intended to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities* under the circumstances associated with loss of large areas of the plant due to explosions or fire, to include strategies in the following areas:

- (i) Fire fighting;
- (ii) Operations to mitigate fuel damage; and
- (iii) Actions to minimize radiological release.

(emphasis added). The regulations do not require the “affirmative showing” that the Petitioners suggest. Rather, the regulations are intended to mitigate circumstances associated with loss of large areas of the plant due to explosions or fire. 74 Fed. Reg. at 13,957. When adopting the new rule, the Commission did not intend to expand the design basis of proposed plants and the Commission stated, “[t]hese strategies are to address a licensee’s responses to events that are beyond the design basis of the facility.” *Id.* Therefore, the Petitioner’s argument that the Applicant must meet a new design basis is not material to the findings the staff must make, nor does it raise a genuine dispute with the Applicant on a material issue of law or fact. 10 C.F.R. §§ 2.309(f)(1)(iv) and (vi).

C. PROPOSED CONTENTION 3:

The STP 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 STP Units 3 and 4 would have to be dispositioned to a subsequent repository that has been neither sited nor authorized.

Petition at 23. In this contention, the Petitioners challenge the Applicant’s statement in ER Section 5.7.6 that a federal repository at Yucca Mountain, Nevada, will be available for spent fuel and high-level waste (HLW). *Id.* at 23-26. 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 STP Units 3 and 4. *Id.* at 24-25. Therefore, the Petitioners claim that the ER “is seriously flawed and incomplete regarding the question of future management of spent nuclear fuel and other [HLW].” *Id.* at 26.

*Staff Response:* 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).

1. The Contention is an impermissible attack on a Commission rule.

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.<sup>8</sup> As such, this contention is similar to contentions that licensing boards in recent COL proceedings

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<sup>8</sup> 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:

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.

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).<sup>9</sup> 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* 10 C.F.R. § 2.335(b).

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.

2. The Contention is an impermissible attack on a Commission rulemaking.

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

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<sup>9</sup> 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 294, 336-337 (2008); *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).

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).

3. The Contention is outside the scope of this proceeding; is not material to a finding the NRC must make; and does not demonstrate the existence of a genuine dispute with the Applicant on a material issue of law or fact.

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 COL application. 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).

D. PROPOSED CONTENTION 4:

The STP Environmental Report assumes that there will be no significant releases to the environment from management of spent nuclear fuel and high-level wastes. This is a false assumption that is contradicted, among other sources, by the Department of Energy' Final Environmental Impact Statement on Yucca Mountain that significant radioactivity releases from Yucca Mountain would occur over time. Even DOE's License Application estimates non-zero releases.

Petition at 26. 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 to be disposed at a repository . . . [and] [n]o release to the environment is expected to be associated with such disposal." ER at 5.7-6 (ML082831316). 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 26-27.

Staff Response: 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).

1. The Petitioners impermissibly attack a Commission rule.

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. See 10 C.F.R. § 2.335(a).

2. The Petitioners do not demonstrate that the issues raised are within the scope of this proceeding.

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).

3. The Contention does not provide a concise statement of the alleged facts or expert opinion necessary to support the Petitioners’ position.

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 could be significant releases of radiation from a federal repository." Petition at 26. 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.<sup>10</sup> The Petitioners cite the "Waste Confidence report" by Dr. Makhijani which contains "quotes, analysis, and citations," but the Petitioners do not describe how this report provides support for its contention. Petition at 27. The report is no more than a direct attack on the NRC WCD and WCR, and it does not specifically mention the Application or show how it relates to STP. The Petitioners have provided no factual or expert support for this claim. Therefore, the contention is not adequately supported and should be rejected. 10 C.F.R. § 2.309(f)(1)(v).

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<sup>10</sup> 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).

E. PROPOSED CONTENTION 5:

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 STP Units 3 and 4.

Petition at 28. 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 consequences of long-term storage of high-level waste and spent fuel at STP.<sup>11</sup> Petition 28-30. The Petitioners assert that the Applicant does not “consider the long-term environmental and public health consequences of high-level waste and spent fuel remaining on-site indefinitely” and does not identify another facility that would have sufficient capacity to store these wastes. Petition at 28. The Petitioners also assert that the risks of terrorist attacks and “significant long-term” radiation exposures with respect to dry cask storage must be considered in the ER. Petition at 29.

Staff Response: 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).

1. The Contention is an impermissible attack on a Commission Rule

First, like Contention 3, 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

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<sup>11</sup> The Petitioners have not identified any type of high level waste other than spent fuel that would be stored at South Texas, 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.

permanent disposal repository for high-level waste and spent nuclear fuel.” Petition at 28. 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. 10 C.F.R. § 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. See 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 28-29. The Petitioners’ assertion that dry cask storage is a “serious risk” because it provides an attractive target for terrorists, Petition at 29, 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 29, should be rejected for the same reason.<sup>12</sup>

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<sup>12</sup> As support for this assertion, the Petitioners cite the Thompson Declaration, Petition at 29, 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.* (Continued...)

2. The Contention does not provide a concise statement of the alleged facts or expert opinions which support the Petitioners' position on the issue, together with references to the specific sources and documents on which the Petitioners intend to rely.

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, does not raise an issue regarding storage during operation of the proposed plants, and the Applicant may not need to use dry cask storage as a long-term storage solution.

The contention refers to a portion of the ER which discusses the possibility of an application for a 10 C.F.R. Pt. 72 license for an ISFSI. ER at 1.2-15 to 1.2-16 (ML082831275). However, this statement does not indicate that such an application for a Part 72 license is part of this COL application, nor that there are definite plans to build an ISFSI. The Contention also refers to "uncertainty associated with the high-level waste and spent fuel disposal component of the fuel cycle." Petition at 28 (quoting Application at 5.7-6). However, the uncertainty referenced in the Application is regarding the dose limit subsequently set by the EPA rather than uncertainty about the environmental impacts of waste disposal in a geologic repository, as suggested by the Contention. See ER at 5.7-6 (ML082831316) ("There is some uncertainty associated with the high-level waste and spent fuel disposal component of the fuel cycle. The regulatory limits for offsite releases of radionuclides for the current candidate repository site have not been finalized."). The Contention does not provide a concise statement of the alleged

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(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 COL application. Although the Thompson Declaration identifies six issues that "should be included in the STP ER," see Thompson Declaration at 10-12, the issues are clearly generic, not specific to STP Units 3 and 4, and there is no citation to a regulation or statute that requires discussion of those issues in the STP COL application. Therefore, the Thompson Declaration and its attachments do not support this contention.

facts or expert opinions which support the Petitioners' opinions regarding either the need for an ISFSI or that dry cask storage would result in significant radiation releases or exposures.

Therefore, the contention does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(v).

3. The Contention does not provide a specific statement of an issue or law to be raised or controverted, and does not provide a concise statement of the alleged facts or expert opinions which support the Petitioners' position on the issue.

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 and is inadequately supported. See Petition at 28. The Petitioners have not identified any requirements in the AEA or the NRC's regulations for a COL applicant to analyze health impacts of *long-term* (i.e., post-operational) on-site storage.<sup>13</sup> 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). Therefore, this aspect of the contention is inadmissible because it lacks adequate support. 10 C.F.R. § 2.309(f)(1)(v).

4. The Contention fails to demonstrate a genuine dispute with the Applicant on a material issue of law or fact.

In addition, Section 5.9 of the ER provides an initial analysis of environmental impacts that would be expected at the decommissioning phase. See ER at 5.9-1 to 5.9-6 (ML082831318). Specifically, the Applicant notes that "[t]he NRC has indicated that licensees

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<sup>13</sup> 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.

for existing reactors can rely on the information in the Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities (GEIS) on the environmental impacts of decommissioning for the existing fleet of domestic nuclear power reactors as documented in Supplement 1 to NUREG-0586.” ER at 5.9-1 (ML082831318).<sup>14</sup> In NUREG-0586, Supplement 1 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.” NUREG-0586 Supp. 1 at 4-38. The Applicant notes “Experience with decommissioned power plants has shown that the occupational exposures during the decommissioning period are comparable to those associated with refueling and plant maintenance when a plant is operational.” ER at 5.9-3 (ML082831318). 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).

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 STP site after the operating license has terminated and post-closure activities have been completed.

Petition at 30. 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 terminated and post-closure activities of the licensee have been completed,”<sup>15</sup> either the state of

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<sup>14</sup> Final Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities, Supplement 1 (Nov. 2002).

<sup>15</sup> 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.

Texas or the federal government will be required to become custodian of HLW or spent fuel at the STP site. *Id.* Therefore, the Petitioners assert that the COLA should consider public health impacts and environmental consequences of this situation. *Id.* Specifically, the Petitioners claim that the COLA should include “calculations for employee exposures and public exposures,” along with “other public health and environmental consequences reasonably associated with indefinite governmental management of spent fuel on site.” *Id.* 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 terminated and post-closure activities have ceased,” and should consider the costs related to such “long-term custody.” *Id.* at 30-31.

Staff Response: 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), 2.309(f)(1)(iii), (v), and (vi).

1. The Contention is an impermissible attack on a Commission Rule.

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-closure activities of the licensee have been completed” (see Petition at 30); that is, after decommissioning is complete.<sup>16</sup> Pursuant to the Commission’s regulations in 10 C.F.R.

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<sup>16</sup> 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 analysis of expected impacts from decommissioning based on NUREG-0586, Supplement 1, which the Petitioners have not disputed. See ER at 5.9-1 to 5.9-6. 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 (Continued...)

§ 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. See 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 STP site.<sup>17</sup> See generally 10 C.F.R. § 52.110. 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

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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).

<sup>17</sup> 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 § 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. § 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 § 10155(a)(4).

site meet the decommissioning criteria of 10 C.F.R. Part 20, Subpart E.<sup>18</sup> 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 30, and that the ER must assess the costs associated with a government entity taking custody of spent fuel or HLW at the STP site, Petition at 31, should be rejected for the same reasons.

2. The Contention is not within the scope of this proceeding; does not demonstrate that the issue raised is material to the findings the NRC must make; Petitioners do not provide a concise statement of the alleged facts or expert opinions which support the Petitioners' position; and the Contention does not raise a genuine dispute with the Applicant on a material issue of law or fact.

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 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. 10 C.F.R. § 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

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<sup>18</sup> 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).

regulations. 10 C.F.R. § 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 COLA should consider environmental impacts and public health consequences of accidents and releases related to off-site radioactive waste disposal.

Petition at 31. This contention challenges the Applicant's statements in Section 5.7.6 of the ER that discuss waste disposal in the context of the uranium fuel cycle. ER at 5.7-6 (ML082831316). 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[al] consequences of major releases to the environment of radioactive materials as a result of off-site disposal activities." *Id.* 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.*

Staff Response: 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), and (vi).

1. The Contention raises an impermissible attack on a Commission Rule.

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. 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 5.7-1, Table 5.7-1 (ML082831316). Likewise, the Applicant has incorporated 10 C.F.R. § 51.52 Table S-4 in it's analysis of the impacts from transportation in ER Section 7.4. ER Page 7.4-1 to 7.4-6 (ML082831334). 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 and Table S-4. See 10 C.F.R. § 2.335(a).

2. The Contention does not contain a specific statement of law or fact to be raised or controverted; provide the basis for the contention; demonstrate that the issue raised is material to the findings the NRC must make; provide a concise statement of the alleged facts or expert opinion which support the Petitioners' position; and does not show that a genuine dispute exists with the Applicant on a material issue of law or fact.

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 5.7.6 of the ER contains an analysis that there will be "no significant radioactive releases to the environment" from low-level waste disposal, and "[n]o release to the environment" is expected to be associated with high-level and transuranic wastes. ER at 5.7-6 (ML082831316). The Petitioners do not specify which part of the analysis they disagree with, and they actually cite ER "Sec. 5.7-8" which is not a citation to this Application.<sup>19</sup> Petition at 31. In addition, the Petitioners do not identify any specific public health consequences, nor do they explain how "on-site processing, transportation accidents, off-

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<sup>19</sup> ER Page 5.7-8 is the last page of ER Subsection "5.7.10 References" which merely contains a reference found in ER Section 5.7.

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.

H. PROPOSED CONTENTION 8:

The COLA is inadequate because it fails to fully analyze the radiological hazards that will occur from operation of the STP Units 3 and 4 nuclear plants based on discharge of water that contains radioactive particulates to the Main Cooling Reservoir (MCR).

Petition at 32. Petitioners assert that Figure 6-9 of the STP Radiological Environmental Operating Report indicates that most years the tritium radioactivity in surface water exceeds 10,000 pCi/KG. *Id.* Petitioners allege that the MCR is and will continue to be an unlicensed radioactive waste disposal facility for STP operations. *Id.* at 33. Petitioners further assert that there is an assumption in the application that the embankment that forms the MCR will remain intact, but that the possibility of embankment failure should be discussed. *Id.* at 34. Petitioners also allege that, due to the potential for the MCR to become a dry lakebed, the application should consider the potential for radioactive particles to be subject to airborne transport. *Id.* at 34.

Staff Response: 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).

1. The Contention fails to establish a genuine dispute with the applicant.

To the extent that this contention is intended as a contention of omission regarding the potential for radiological contamination from the MCR, the petition fails to point to any reason why this type of analysis is required by law, and thus does not establish a dispute on a material issue of law or fact. See 10 C.F.R. § 2.309(f)(vi).

The Petitioners first allege that the tritium radioactivity in surface water exceeds 10,000 pCi/KG. Petition at 32. Petitioners then assert that “Tritium contaminated groundwater could also migrate with off-site radiological consequences.” *Id.* at 33. Petitioners sole support for this statement is a reference to a Report of George Rice. *Id.* The Rice report appears to be focused on the idea that the potential for groundwater contamination from the MCR was not considered. See Rice Report. However, Petitioners have not disputed the applicant’s compliance with regulatory dose limits found in 10 C.F.R. §§ 20.1301 and 20.1302.<sup>20</sup> Petitioners have therefore failed to establish a genuine dispute with the Applicant, and thus, the contention is inadmissible.

2. The contention is not supported by alleged facts or expert opinions.

Petitioners allege that the MCR is and will continue to be an “unlicensed radioactive waste disposal facility,” and that discharging radioactive tritium would violate the “permanent

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<sup>20</sup> The Staff notes that the concentration of tritium alleged by the Petitioners to be present in the MCR is well below the regulatory limits found in 10 C.F.R. §§ 20.1301 and 20.1302. To the extent Petitioners are advocating for a different regulatory limit, this is an attack on NRC regulations and Petitioners have not complied with the provisions of 10 C.F.R. § 2.335 regarding challenging regulations in an adjudicatory proceeding.

isolation” requirements of 42 U.S.C. § 2021b<sup>21</sup> because the Applicant has no plan to remove radioactive contamination other than to allow it to decay. Petition 33. 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. 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.<sup>22</sup> The MCR is not such a facility. The Petitioners have not provided any other facts or expert opinion to support the claim that releasing radioactive material into the MCR, pursuant to applicable state and federal regulations, would be unlawful.

The Petitioners also assert that the ER fails to discuss two possible consequences of allowing radioactive material to remain in the MCR. First, the Petitioners allege that the ER fails to discuss the environmental and public health consequences that would result from transport of sediment containing radioactive materials downstream if the embankment that forms the MCR were to fail. Petition at 34. 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 MCR and possible airborne transport of exposed radioactive sediments downwind. Petition at 34-35. The likelihood and consequences posed by Petitioners 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 embankment failure, or that radioactive

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<sup>21</sup>Low Level Radioactive Waste Policy Amendments Act of 1985, 42 U.S.C. § 2021b *et seq.* (“LLRWPA”).

<sup>22</sup> 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. NRC Regulations on land disposal of low level waste are found in 10 CFR Part 61. The definition of disposal that the Petitioners cite refers to permanent isolation of “low level radioactive waste materials.” 42 U.S.C. § 2021b(7). The Petitioners do not explain how this statute is relevant to the issue of discharge of liquid effluents into the MCR, 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.

materials would settle in areas of the MCR from which sediment would be mobilized in the event of an embankment 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 MCR.

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). Since the Petitioners have failed to support their contention with alleged facts or expert opinion it is not admissible.

I. PROPOSED CONTENTION 9:

Increasing Levels of Groundwater Tritium. The Environmental Report fails to predict or evaluate the effects of increasing groundwater tritium concentrations.

Petition at 35. The sole support provided in the Petition for Proposed Contention 9 is a reference to the Ross report at page 5. The Ross report quotes from the ER regarding the detection of tritium. Ross report at 5. The report then states

With the addition of two proposed nuclear power generating stations, tritium concentrations in MCR and in the wastewater that is leaking through its unlined bottom are likely to increase. The Environmental Report fails to consider this increase, evaluate its magnitude, or propose any measures to mitigate potential damage to adjacent water and its users.

Ross report at 6.

Staff Response: Proposed contention 9 is inadmissible for failure to provide a concise statement of the alleged facts or expert opinions which support the petitioner's position, and failure to demonstrate a genuine dispute with the applicant on a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(v) & (vi).

1. The contention lacks any alleged facts or expert opinion.

The Ross report asserts, without any explanation, "that with the addition of two proposed nuclear power generating stations, tritium concentrations in the MCR and in the wastewater that

is leaking through its unlined bottom are likely to increase.” Ross Report at 6. But "an expert opinion that merely states a conclusion (e.g., the application is 'deficient,' 'inadequate,' or 'wrong') without providing a reasoned basis or explanation for that conclusion is inadequate because it deprives the Board of the ability to make the necessary, reflective assessment of the opinion." See *USEC Inc. (American Centrifuge Plant)*, CLI-06-10, 63 NRC 451, 472 (2006) (internal citation omitted). Petitioners have failed to offer anything more than the bare assertion that tritium levels would increase. Since Petitioners did not offer any alleged facts or opinion beyond conclusory statements, this contention fails to meet the criteria of 10 C.F.R. § 2.309(f)(1)(v) and is thus, inadmissible.

2. The Petitioners do not demonstrate a genuine dispute with the applicant.

10 C.F.R. § 2.309(f)(vi) requires a petitioner to include references to specific portions of the application that the petitioner disputes and the supporting reasons for each dispute. In the instant contention, Petitioners have simply quoted from the ER regarding tritium concentrations in the wells. See Ross Report at 6. Petitioners then assert that the ER fails to consider how two additional units might alter tritium concentrations. Petitioners do not reference or dispute the tritium concentration in the discharge to the MCR from the two new units in FSAR Table 12.2-22 which reports average annual liquid radwaste releases and concentrations. See FSAR Table 12.2-22 (ML082831154). Similarly, the Petitioners do not reference or dispute the applicant's discussion of the known or potential future impacts on the groundwater system. See RAI Response Letter (July 15, 2008) (ML082040684). Since Petitioners have failed to demonstrate a genuine dispute with the applicant, this contention is inadmissible.

J. PROPOSED CONTENTION 10:

The Main Cooling Reservoir (MCR) will be in a near-state of design basis flood level with operation of all four plants. The reactor buildings, buildings, ultimate heat sink water storage basins, and the residual service water pump houses are below the design basis flood level and vulnerable to flooding.

Petition at 36. Petitioners note that the Applicant intends to increase the Main Cooling Reservoir (MCR) from 47 feet MSL to 49 feet MSL. Petition at 36. They cite the Environmental Report and observe that the design basis flood level is 48.5 feet MSL. *Id.* at 36. Petitioners then conclude that “based on the Applicant’s data, the MCR will be in a near DBF (Design Basis Flood) level the entire time that all four units would be operational. *Id.* at 36.

Staff Response: Petitioners fail to raise a genuine dispute with the applicant on a material issue of law or fact, and fail to support their contention with alleged facts or expert opinions, thus, this contention is inadmissible for failure to comply with 10 C.F.R. § 2.309(f)(1)(v) and (vi).

1. Petitioners fail to support their contention with alleged facts or expert opinions.

In order to proffer an admissible contention, Petitioners must provide a concise statement of alleged facts or expert opinions which support the petitioner’s position on the issue. 10 C.F.R. § 2.309(f)(1)(v). In the instant case, Petitioners have solely proffered statements from the Application. Petitioners make the unsupported statement that “the MCR will be in a near DBF level the entire time that all four units would be operational.” Petition at 36. It appears that Petitioners assume since the DBF flood level is 48.5 feet, that is the level at which the MCR would flood.<sup>23</sup> However, according to the ER, the MCR embankment varies from 65.75 ft MSL to 67 feet MSL. See ER at 3.4.1.1.1 (ML082831295). The design basis flood level is the level

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<sup>23</sup> The Staff notes that in RAI responses dated February 23, 2009, the applicant revised its calculation of the design basis flood to 40 ft MSL. See RAI Response Letter at 3 (July 15, 2008) (ML090710301).

of flooding the site in anticipated to sustain if there was a breach of the embankment, not the level at which the MCR would flood. See FSAR 2.4S.2 (ML082831023). Petitioners' imprecise reading of a reference document cannot serve to generate an issue suitable for litigation. See *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Ga.), LBP-95-6, 41 NRC 281, 300 (1995). Petitioners have not produced any alleged facts or expert opinion to support their view that raising the MCR level to 49 ft MSL would produce a design basis flood.

2. Petitioners fail to demonstrate that a genuine dispute with the applicant exists on a material issue of law or fact.

A Petitioner is required to provide references to specific portions of the application that the Petitioner disputes, and the supporting reasons for each dispute. See 10 C.F.R. § 2.309(f)(1)(vi). In the instant case, Petitioners have provided citations to specific portions of the application, but Petitioners do not appear to disagree with those citations. For example, Petitioners list some of the various flood protection measures from section 2.4S.10 of the FSAR. Petitioners do not, however, dispute any of the flood protection measures. Since Petitioners have failed to demonstrate a genuine dispute with the applicant on a material issue of law or fact, this contention is inadmissible for failure to comply with 10 C.F.R. § 2.309(f)(1)(vi).

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 STP Environmental Report to analyze impacts of global warming on rainfall and the hydrological cycle.

Petition at 37. Petitioners argue that the impacts of global warming must be considered in determining whether adequate water resources will be available for plant operations. *Id.* Petitioners suggest that global warming impacts include protracted droughts, which may compromise available water resources. *Id.* at 38. Petitioners also suggest that the radioactive contaminated sediment layer in the MCR could become exposed and may become subject to transport by wind in the event of a protracted drought and inadequate flow into the MCR. *Id.* Petitioners further suggest that nuclear reactors themselves are global warming agents. *Id.*

at 39. Therefore, Petitioners assert that the Applicant should consider contributions to global warming from heat produced by the plant. *Id.* at 40.

Petitioners claim that the Applicant should consider water resources from a quantifiable perspective and a temperature sensitive analysis. *Id.* at 38. In addition, Petitioners argue that the Application should include a radiological profile of sediment in the MCR and analyze cumulative radiological impacts from operations at Units 3 and 4. *Id.* Petitioners claim that this analysis should include the assumption that the MCR embankment will fail; therefore, impacts on downstream water, quality, use, mortality and morbidity must also be assessed along with MCR structural integrity. *Id.* at 39. With respect to downstream water, Petitioners assert that pollution impacts from water contaminated by chemical treatments should also be considered. *Id.* at 39.

In addition, Petitioners assert that issues concerning post-license ownership and responsibility for the MCR should be addressed and that management and perimeter security should be provided for the MCR beyond the termination of the license. *Id.* at 38-39.

Finally, Petitioners claim that the Applicant should consider whether regional water quality and quantity will be impacted by Units 3 and 4. *Id.* at 39. Petitioners state that this analysis should include biological impacts such as eutrophication, productivity, sediment impacts, and potential contamination. *Id.* (citing Ross Report).

*Staff Response:* The Staff opposes admission of Proposed Contention 11 because it is unsupported by alleged facts or expert opinions and it fails to raise a genuine dispute. See 10 C.F.R. § 2.309(f)(1)(v), (vi).

1. Proposed Contention 11 fails to raise a genuine dispute.

Section 2.309(f)(1)(vi) requires that, “if the petitioner believes that the application fails to contain information on a relevant matter as required by law,” the Petitioner must identify “each failure and the supporting reasons for the petitioner’s belief.” 10 C.F.R. § 2.309(f)(1)(vi).

Further, “[t]o 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.” *Calvert Cliffs Nuclear Project, LLC & Unistar Nuclear Operating Services, LLC* (Combined License Application for Calvert Cliffs Unit 3), LBP-09-04, 69 NRC \_\_\_ (slip op. at 22) (Mar. 24, 2009). If a petitioner fails to identify information he/she believes is missing as a matter of law and provide supporting reasons for this belief, then he/she must reference “specific portions of the application . . . that the petitioner disputes and the supporting reasons for each dispute” in order to satisfy 10 C.F.R. § 2.309(f)(1)(vi).

Here, Petitioners argue that the Application is inadequate because it fails to analyze impacts of global warming on rainfall and the hydrological cycle. Petitioners provide a list of considerations that it claims the Applicant should consider. See Petition at 37-40. However, Petitioners fail to provide any legal basis to demonstrate that these allegedly missing considerations are required by law. Nowhere in Proposed Contention 11 do Petitioners reference any legal or regulatory requirement. Therefore, Proposed Contention 11 cannot be construed as a contention of omission and fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(i), (ii), and (vi). See *Calvert Cliffs*, LBP-09-04, 69 NRC at \_\_\_ (slip op. at 22).

In addition, Proposed Contention 11 fails to raise a genuine dispute because Petitioners do not reference any specific portion of the application and explain their dispute and the supporting reasons for each dispute. See 10 C.F.R. § 2.309(f)(1)(vi). Petitioners only reference two portions of the STP ER, Section 5.2.2.1 and page 2.3.1-2, neither of which they dispute. To the contrary, these referenced portions support Petitioner’s assertions regarding the quantity of water and the fact that this area of Texas is subject to droughts. See Petition at 37 (citing ER Section 5.2.2.1 (ML082831311)), 38 (citing ER page 2.3.1-2 (ML082831279)). Petitioners also reference Comanche Peak ER Section 5.2.1 and state that this section assumes there will be adequate water resources for operations of Units 3 and 4. See Petition at 37-38. Presumably, Petitioners intended to reference STP ER Section 5.2.1 which states that “the STP site is currently permitted to withdraw 102,000 acre-feet per year or a normalized rate of 62,234 gpm.

This permitted withdrawal rate is sufficient to support operation of all four STP units.” ER at 5.2-2 (ML082831311). Petitioners claim that this assumption is faulty because it does not consider the impacts global warming may have on rainfall and the hydrological cycle. See Petition at 37. But, as discussed herein, Petitioners fail to demonstrate that this assertion raises a genuine dispute; Petitioners fail to provide supporting reasons for why it disputes this portion of the Application and Petitioners fail to show that the ER is deficient because it does not include analyses that are required by law. Thus, Proposed Contention 11 does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(vi) and, accordingly, it should be dismissed.

2. Proposed Contention 11 is not supported by alleged facts or expert opinions.

An admissible contention must be supported by a “concise statement of the alleged facts or expert opinions which support the requestor’s/petitioner’s position on the issue . . . together with references to the specific sources and documents on which [it] intends to rely to support its position.” 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, 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.”)).

Here, Petitioners have failed to satisfy the requirements of 10 C.F.R § 2.309(f)(1)(v). The only reference Petitioners cite in the entire contention is the Ross Report. See Petition at 39. This report is, however, only referenced for the limited proposition that “[t]he biological

impacts must be considered in the COLA including the possibility of eutrophication, productivity and sediment impacts and potential contamination.” *Id.* Petitioners do not reference a particular page in the report nor do they explain why this report supports its assertion that the ER must include these additional analyses. A petitioner cannot include a reference as support without showing why the reference provides a basis to support its contention. See *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 & 3), LBP-04-15, 60 NRC 81, 89 (2004) (citing *Palo Verde*, CLI-91-12, 34 NRC at 155-56). Further, the Ross report does not discuss eutrophication, productivity and sediment impacts, or global warming. See Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Ga.), LBP-95-6, 41 NRC 281, 300 (1995), *vacated on other grounds*, CLI-95-10, 42 NRC 1 (1995), (stating that “[a] petitioner’s imprecise reading of a reference document cannot serve to generate an issue suitable for litigation.”). Thus, the sole reference Petitioners cite cannot support admission of this contention. See 10 C.F.R. § 2.309(f)(1)(v).

The remaining assertions in Proposed Contention 11 are also unsupported. For example, Petitioners assert that the COL Application relies on an assumption that there will be an adequate supply of fresh water for purposes of plant operations. Petition at 37. Petitioners claim this assumption is faulty because the ER fails to analyze impacts of global warming on rainfall and the hydrological cycle. *Id.* Petitioners claim that impacts from global warming will include protracted drought that may seriously compromise water resources required for plant operations and that the compromised water resources should be considered from a quantitative perspective and a temperature sensitive analysis. Petition at 38. 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, or that the drought will be caused by global warming. Such bare assertions are insufficient to form the basis for an admissible contention. See *Fansteel, Inc.* (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003).

Likewise, Petitioners speculate that the MCR radioactive containment layer could become exposed and may be subject to transport by wind. Petition at 38. Petitioners also assert, without support, that the Applicant should assume the MCR embankment will fail. Again, Petitioners provide no information to suggest that there is substantial risk of embankment failure, or that radioactive materials would settle in areas of the reservoir from which bottom sediment would be mobilized in the event of an embankment failure or protracted drought. These unsupported, bare assertions cannot support the admission of this contention. See *Muskogee*, CLI-03-13, 58 NRC at 203.

Finally, Petitioners also assert that “nuclear reactors are global warming agents . . . .” and that the Application should include an analysis of this heat emitted into the atmosphere and water. Petition at 39-40. Petitioners provide no information to support this assertion nor do Petitioners identify any impacts that heat released from STP Units 3 and 4 may have on global warming. Absent support or a reasoned expert opinion, this bare assertion claiming that the application is deficient because it fails to assess unidentified impacts cannot support the admission of this contention. See *USEC*, CLI-06-10, 63 NRC at 472.

In sum, the foregoing “bald assertion(s)” claiming that matters “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.” *PFS*, LBP-98-7, 47 NRC at 180 (internal citations omitted). Therefore, because Petitioners have failed to provide sufficient support for their contention, Proposed Contention 11 should be dismissed. See 10 C.F.R. § 2.309(f)(1)(v).

L. PROPOSED CONTENTION 12:

Insufficient TPDES Permit Effluent Limits. The proposed Texas Pollution Discharge Elimination Permit<sup>24</sup> fails to establish necessary effluent limits for the range of toxic and harmful chemicals that have been documented to be present or are possibly present in the power plant effluent.

Petition at 40. As support for this contention Petitioners solely reference the attached Ross report at page 7. *Id.* Page 7 of the Ross report simply states the TPDES permit effluent limits and asserts that “these permit terms fail to capture parameters of significant concern associated with the proposed wastewater discharges.” Ross Report at 7. The Ross report on Page 8 contains general statements regarding what the TPDES requirements are. Ross Report at 8.

Staff Response: Proposed Contention 12 is inadmissible for failure to raise an issue within the scope of the proceeding or demonstrate that the issue raised is material to the findings the NRC must make in contravention of 10 C.F.R. § 2.309(f)(1)(iii) and (iv).

In this contention Petitioners are attempting to litigate the limits in the TPDES permits. When water quality decisions have been made by a State pursuant to the Federal Water Pollution Control Act Amendments of 1972 and these decisions are raised in NRC licensing proceedings, the NRC is bound to take EPA's considered decisions at face value. *Carolina Power & Light Co.* (H.B. Robinson, Unit No. 2), ALAB-569, 10 NRC 557, 561- 62 (1979). See also *Hydro Resources, Inc.* (292 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-98-16, 48 NRC 119, 121 (1998) (“Congress granted us authority merely to regulate radiological and related environmental concerns. It gave our agency no roving mandate to determine other agencies’ permit authority.”). The substantive regulation of water pollution is left to EPA. See *Tennessee Valley Authority* (Yellow Creek Nuclear Plant, Units 1 & 2), ALAB-515, 8 NRC 702, 712-13 (1978).

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<sup>24</sup> The Staff notes that the correct title is the “Texas Pollutant Discharge Elimination System” (TPDES) permit.

Since Petitioners are raising issues regarding the content of the TPDES permit, and the NRC has no authority over the content of the TPDES permit, Petitioners concerns are outside the scope of the proceeding. Furthermore, Petitioners raise issues that are not material to the findings the NRC must make. Thus, this contention is inadmissible pursuant to 10 C.F.R. § 2.309(f)(1).

M. PROPOSED CONTENTION 13:

Reliance on Dilution to Achieve Discharge Standards. The Environmental Report discusses the importance of dilution of nuclear power plant wastewater to meet discharge standards, but neglects to evaluate the relationship between a slightly larger effective Main Cooling Reservoir volume and the additional waste loads from doubling the electrical generation capacity.

Petition at 40. In support of this contention, the Petition solely provides a reference to the Ross Report at page 9. *Id.* The Ross Report quotes from the ER and states that the ER provides “no quantification of the change in waste discharge loads from the proposed addition of two nuclear power plants.” Ross Report at 9. It further notes that the ER “fails to address the consequences of these load increases into a system with only a small change in the dilution factor.” *Id.*

Staff Response: This contention is inadmissible for failure to comply with 10 C.F.R. § 2.309(f)(1). It is somewhat unclear to the Staff what the Petitioners are attempting to litigate in this contention. It appears to be a contention of omission, alleging that the ER has omitted information regarding a “relationship between a slightly larger effective Main Cooling Reservoir volume and the additional waste loads from doubling the electrical generation capacity.” Petition at 40. To the extent that this is a contention of omission, it is inadmissible for failure to explain why such information would be relevant and why it is legally required to be discussed, in contravention of 10 C.F.R. § 2.309(f)(1)(vi).

A Petitioner cannot provide a basis for an admissible contention by simply asserting that some matter ought to be considered. See *Sacramento Municipal Utility District* (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 246 (1993). In the instant case,

Petitioners have failed to demonstrate how the information requested is required by law. See, e.g., *System Energy Resources, Inc.* (Early Site Permit for Grand Gulf ESP Site), CLI-05-04, 61 NRC 10, 13 (2005) (“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. If the ER (or EIS) on its face ‘comes to grips with all important considerations’ nothing more need be done.”) (Internal citations omitted).

To the extent that Petitioners are attempting to litigate what the discharge standard in the TPDES permit should be, as discussed in response to contention 12, this would be inadmissible since it is outside of the NRC’s regulatory authority, and thus outside the scope of the proceeding. See 10 C.F.R. § 2.309(f)(1)(iii).

Since this contention fails to explain why the allegedly omitted information is legally required to be discussed, and raises issues that are outside the scope of the proceeding, it is inadmissible for failure to comply with 10 C.F.R. § 2.309(f)(1).

N. PROPOSED CONTENTION 14:

Unregulated Wastewater Discharge. A regulatory loophole has allowed a primary discharge of wastewater from the existing facility to be unregulated. The proposed expansion would be operated under the same regulatory framework. The harm caused by this regulatory failure will be magnified by the proposed addition of two additional nuclear powered generating plants.

Petition at 40. The sole support for this contention in the Petition is a reference to the Ross Report at page 9. *Id.* The Ross Report states “The TPDES permit authorizes discharges from the reservoir relief wells, reservoir spillway gate leakage, condenser box drainage, groundwater monitoring wells, and process monitoring instrumentation to the Colorado River, the West Branch of the Colorado River, to Little Robbins, Slough, and the East Fork of Little Robbins Slough without any qualifications or restrictions.” Ross Report at 10. The report further states “given that the proposed plant expansion will operate with the same wastewater process system

and within the identical permitting environment as the existing facility, it is reasonable to believe that this failure to regulate discharge will extend to operation of the facility expansion.” *Id.*

Staff Response: This contention is inadmissible for failure to raise an issue that is within the scope of the proceeding, failure to demonstrate that the issue raised is material to the findings the NRC must make, and failure to demonstrate a genuine dispute with the applicant on a material issue of law or fact, in contravention of 10 C.F.R. § 2.309(f)(iii), (iv), and (vi).

1. The issue raised is outside the scope of the proceeding and is not material to the findings the NRC must make.

In this contention, it appears that Petitioners desire to litigate the contents of the existing TPDES permit for STP. Petition at 40. As discussed in response to contention 12, the content of the TPDES permit is outside the scope of this proceeding, and is not material to the findings the NRC must make to issue a COL. When water quality decisions have been made by a State pursuant to the Federal Water Pollution Control Act Amendments of 1972 and these decisions are raised in NRC licensing proceedings, the NRC is bound to take EPA's considered decisions at face value. *Carolina Power and Light Co.* (H.B. Robinson, Unit No. 2), ALAB-569, 10 NRC 557, 561- 62 (1979). *See also, Hydro Resources, Inc* (292 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-98-16, 48 NRC 119, 121 (1998) (“Congress granted us authority merely to regulate radiological and related environmental concerns. It gave our agency no roving mandate to determine other agencies’ permit authority.”). The substantive regulation of water pollution is left to EPA. *See Tennessee Valley Authority* (Yellow Creek Nuclear Plant, Units 1 and 2), ALAB-515, 8 NRC 702, 712-13 (1978).

To the extent Petitioners are raising a dispute with the contents of the permit, this contention is inadmissible for failure to raise an issue within the scope of the proceeding, or an issue that is material to the NRC licensing decision. *See* 10 C.F.R. § 2.309(f)(1)(iii) and (iv).

2. Petitioners have failed to demonstrate a genuine dispute with the Applicant.

NRC regulations require a Petitioner to demonstrate a dispute with the applicant through references to specific portions of the application that the petitioner disputes and the supporting reasons for each dispute. See 10 C.F.R. § 2.309(f)(1)(vi). In the instant case, the Petition solely incorporates by reference the Ross Report to support the contention. See Petition at 40. The Ross Report simply asserts that there has been a failure “to monitor and regulate leakage through the MCR reservoir bottom.” Ross Report at 10. Petitioners do not cite to, or appear to take issue with, the Radiological Environmental Monitoring Program as summarized in the ER at Table 2.3.3-9 or as described in ER Section 6.2. See ER Table 2.3.3-9 (ML082831285); ER Section 6.2 (ML082831324). Similarly, Petitioners do not cite to, or otherwise dispute the evaluation of potential release of radioactive contamination contained in the ER at Section 5.4.4 (ML082831313). Since Petitioners have failed to demonstrate that a genuine dispute exists on a material issue of law or fact, this contention is inadmissible for failure to comply with 10 C.F.R. § 2.309(f)(1)(vi).

O. PROPOSED CONTENTION 15:

Unevaluated Reduction in Surface Water Flow. The Environmental Report fails to evaluate the effect of Colorado River withdrawals of up to 48% of the river flow on the river and estuary resources. The Environmental Report fails to demonstrate the availability of necessary surface water from the Colorado River during drought conditions. The Environmental Report also fails to evaluate the effect of increased groundwater withdrawals on flow in adjacent streams and rivers including the Colorado River.

Petition at 41. The sole support for this contention is the Report by D. Lauren Ross. See *id.* (citing Lauren Ross, Ph.D., P.E., Water Quality and Quantity Impacts from Proposed South Texas Plant Expansion at 14 (Apr. 2009)). Petitioners assert that the proposed project will impact the surface water by withdrawing additional water from the Colorado River to replace water that evaporates from the MCR and by reducing surface water flows. Ross Report at 11, 13. Petitioners also assert that the Applicant failed to analyze impacts associated with these

withdrawals. *Id.* at 11. For instance, Petitioners argue that the ER fails to discuss whether the backup volume of water can be delivered reliably “at a sufficient flow to be useable during drought conditions”; the environmental affects from STP’s withdrawal of a significant fraction of the total river flow; the “increase in withdrawal and its implications for the environmental health of the Colorado River estuary . . . .”; and the magnitude of stream flow reduction and any available mitigation measures. *Id.* at 11, 13-14.

Staff Response: The Staff opposes admission of Proposed Contention 15 because it fails to raise a genuine dispute regarding a material issue of law or fact, does not demonstrate that the allegedly missing information is required by law, does not raise an issue that is material to this proceeding, and is not adequately supported by alleged facts or expert opinions. See 10 C.F.R. § 2.309(f)(1)(i), (ii), (iv), (v) and (vi).

1. Proposed Contention 15 cannot be construed as a contention of omission and fails to raise a genuine dispute.

Section 2.309(f)(1)(vi) requires that, “if the petitioner believes that the application fails to contain information on a relevant matter as required by law,” the Petitioner must identify “each failure and the supporting reasons for the petitioner’s belief.” 10 C.F.R. § 2.309(f)(1)(vi).

Further, “[t]o 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.” *Calvert Cliffs Nuclear Project, LLC & Unistar Nuclear Operating Services, LLC* (Combined License Application for Calvert Cliffs Unit 3), LBP-09-04, 69 NRC \_\_ (slip op. at 22) (Mar. 24, 2009).

Here, Petitioners assert that the Applicant under evaluated the reduction in surface water flow (Petition at 41) and failed to discuss various environmental impacts from its water use. See Ross Report at 11, 13-14. However, Petitioners fail to provide any legal basis to demonstrate that these allegedly missing discussions are required by law. Nowhere in Proposed Contention 15 do Petitioners reference any legal or regulatory requirement.

Therefore, Proposed Contention 15 cannot be construed as a contention of omission and fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(i), (ii), and (vi). See *Calvert Cliffs*, LBP-09-04, 69 NRC at \_\_\_ (slip op. at 22).

If a petitioner fails to identify information he/she believes is missing as a matter of law and provide supporting reasons for this belief, then he/she must reference “specific portions of the application . . . that the petitioner disputes and the supporting reasons for each dispute” in order to satisfy 10 C.F.R. § 2.309(f)(1)(vi).

Here, Petitioners do not satisfy 10 C.F.R. § 2.309(f)(1)(vi) because, as discussed above, they have not shown that the allegedly missing information is required by law nor do they reference a specific section of the ER anywhere in Proposed Contention 15. For example, current water use in the vicinity of the proposed plants is discussed in ER Sections 2.3.1 and 2.3.2 and groundwater use is discussed in Sections 2.3.1, 2.4.3, and 5.2.2.2. In addition, the Applicant has provided additional information regarding water use in response to Staff RAIs, including water use during drought conditions. See RAI Response 02.03-03 at Attachment 4, page 1 (July 2, 2008) (ML081900569). Finally the ER also discusses the Applicant’s current water use permitting limits: STP is limited to divert “55% of the flows of the Colorado River in excess of a 300 cfs base flow” and is limited to pumping an average of 3,000 acres-feet of groundwater a year. ER at pages 2.3.2-3 (ML082831285) and 5.2-4 (ML082831311). Because Petitioners have failed to identify and dispute any of the Applicant’s relevant discussions, Petitioners have failed to raise a genuine dispute. See 10 C.F.R. § 2.309(f)(1)(vi). Accordingly, Proposed Contention 15 should be dismissed. See *id.*

2. Proposed Contention 15 fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(iv) and (v).

Section 2.309(f)(1)(v) requires that an admissible contention include a concise statement of alleged facts of expert opinions to support the petitioner’s position. 10 C.F.R. § 2.309(f)(1)(v).

Further, an admissible contention must also demonstrate that the issue raised by the contention is material to the findings the NRC must make. 10 C.F.R. § 2.309(f)(1)(iv).

Here, the text of Proposed Contention 15 simply indicates that “[i]n support of this contention Petitioners reference D. Lauren Ross, Ph.D., P.E. Report, p.11.” Petition at 41. However, as discussed below, Dr. Ross fails to provide the requisite support for her opinions. A statement “that merely states a conclusion (e.g., the application is ‘deficient’, ‘inadequate,’ or ‘wrong’) without providing a reasoned basis or explanation for that conclusion”, even if made by an expert, “is inadequate because it deprives the board of the ability to make the necessary, reflective assessment of the opinion . . . .” *USEC Inc. (American Centrifuge Plant)*, CLI-06-10, 63 NRC 451, 472 (2006) (internal quotations omitted).

Here, Dr. Ross makes a number of assertions without providing supporting references or a reasoned explanation. For example, Dr. Ross states that additional water will have to be withdrawn from the Colorado River to replace water that is evaporated from the MCR and that this will amount to about 74,500 acre-feet per year. Ross Report at 11. Dr. Ross does not, however provide any references, point to any section in the ER, or explain how this replacement quantity was calculated. In addition, Dr. Ross does not provide any information to indicate what impacts, if any, this may have on the NRC’s licensing decision. See 10 C.F.R. § 2.309(f)(1)(iv). Finally, as discussed above, Petitioners do not show, by referencing regulatory requirements, that this analysis is required by law. Absent support, such bare assertions cannot support the admission of this contention. See *Fansteel, Inc. (Muskogee, Oklahoma Site)*, CLI-03-13, 58 NRC 195, 203 (2003) (internal citation omitted).

Dr. Ross also claims that an increase in withdrawal from the two proposed units and the implications this may have on environmental health of the river estuary have not been evaluated. Ross at 11. Specifically, Dr. Ross asserts that the ER fails to discuss environmental impacts where the plant is withdrawing a significant fraction of the total river flow and reference a situation where STP withdrew 48% of the total river flow. Ross Report at 11. However,

Petitioners do not acknowledge in this Proposed Contention that STP is “limited to diverting 55% of the flows of the Colorado River in excess of a 300 cfs base flow at the authorized diversion point on the Colorado River.” ER at page 2.3.2-3 (ML082831284). Nor do Petitioners identify any specific impact or provide any facts, references, or analysis to indicate that withdrawal of this amount of river flow may have significant impacts on the environmental health of the river. *Nuclear Management Co. (Monticello Nuclear Generating Plant)*, LBP-05-31, 62 NRC 735, 748-49 (2005) (“Materiality’ requires that the petitioner show why the alleged error or omission is of possible significance to the result of the proceeding. This means that there must be some significant link between the claimed deficiency and either health and safety of the public, or the environment”). The foregoing bare and speculative assertions claiming that the application is deficient because it fails to assess unidentified impacts, cannot support the admission of this contention absent support or reasoning. See *USEC, CLI-06-10*, 63 NRC at 472.

Finally, Petitioners assert, without support, that the proposed project “will reduce surface water flows . . . by lowering the groundwater table through pumping.” Ross Report at 13. Again, Petitioners fail to provide any information to suggest that the Applicant, who is only permitted to use 3000 acres-feet of groundwater per year (ER Sections 2.3.1.2.4.3, 5.2.2.2), will exceed this limit. See 10 C.F.R. § 2.309(f)(1)(v). Furthermore, Petitioners have not provided any support to demonstrate that impacts from the proposed pumping may be significant such that they may affect the outcome of this proceeding. See 10 C.F.R. § 2.309(f)(1)(iv); *Susquehanna*, LBP-07-10, 66 NRC at 24.

Therefore, for the reasons stated, Proposed Contention 15 should be dismissed because it does not meet the contention admissibly requirements set forth in 10 C.F.R. § 2.309(f)(1)(i), (ii), (iv)-(vi).

P. PROPOSED CONTENTION 16:

Unevaluated Reduction in Groundwater Supply for Adjacent Landowners. The Environmental Report fails to provide adequate information regarding the effect of the expansion on the availability of groundwater from the regional Gulf Coast Aquifer. A determination of key information necessary for an analysis of impact is deferred to a later detailed engineering phase. Information provided in the Environmental Report underestimates the predicted effect of the proposed expansion on groundwater availability to wells on adjacent property.

Petition at 41. The sole support for this contention is a Report by D. Lauren Ross, Ph.D., P.E.. See *id.* (citing Ross Report at 14). Petitioners argue that “the availability of the necessary groundwater supply is an important question that should be addressed prior to detailed engineering.” Ross Report at 14. In addition, Petitioners argue that the ER’s predicted drop in groundwater levels only considers the difference between the existing and currently permitted groundwater use and is based on the permitted pumping rate of 1860 gallons per minute (gpm), not the actual projected needs. *Id.* Petitioners include an analysis of predicted groundwater levels from which they conclude that the ER underestimates the lowering of the groundwater table. *Id.* at 15.

Staff Response: The Staff opposes admission of Proposed Contention 16 because it fails to meet the requirements of 10 C.F.R. § 2.309(f)(1).

1. Proposed Contention 16 does not satisfy 10 C.F.R. § 2.309(f)(1)(v).

In accordance with 10 C.F.R. § 2.309(f)(1)(v) an admissible contention must be supported by alleged facts or expert opinions. See 10 C.F.R. § 2.309(f)(1)(v). A contention based only on bare assertions and speculation is inadmissible. See *Fansteel, Inc.* (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003).

Here, Petitioners claim that the ER is inadequate because “[a] determination of key information necessary for an analysis of impact is deferred to a later detailed engineering phase.” See Petition at 41. See *also* Ross Report at 14 (“The question of the availability of the necessary groundwater supply is an important question that should be addressed prior to detailed engineering.”). Petitioners base this assertion on a section in the ER, which states that

“[a] detailed evaluation of groundwater availability and estimates of aquifer drawdown, water conservation measures, and identification of alternative sources, if practicable will be addressed as part of the detailed engineering for STP 3 & 4.” Ross Report at 14 (quoting ER at 2.3.1-22 (ML082831279)). In addition, Petitioners claim, based on their analysis of the predicted groundwater drop calculated by combining the groundwater use for both the existing and proposed plants, that the ER underestimates the drawdown effect on groundwater availability to adjacent properties. *Id.* at 14-15.

Petitioners’ analysis, however, seems to assume that the Applicant will pump any needed water in excess of the currently permitted groundwater withdrawal limit for the proposed units from groundwater. See *id.* at 14-15 (stating their analysis “consider[s] the estimated groundwater needs of the proposed expansion, rather than the lower pumping amount that i[s] currently permitted.”). To the contrary, the Applicant states that it would use groundwater “up to the current permitted limit of 3000 acre-feet/year (average of 1860 gpm).” ER at 5.2-4.<sup>25</sup>

Units 1 and 2 use approximately 798 gpm, thus, there is approximately 1062 gpm available for normal operation of Units 3 and 4 under the current permitted limit. See ER at 5.2-4 (ML082831311). To the extent that “additional water above this value is required for continued operations,” the Applicant states that it would use water from the Main Cooling Reservoir (MCR). *Id.* Although the Applicant states that it is “evaluating the possibility of permitting and installing additional groundwater wells” (ER at 5.2-4 to 5.2-5 (ML082831311)), Petitioners have not shown with alleged facts or expert opinion that contrary to the Applicant’s assertions, the 3000 acre-feet/year withdrawal limit will be exceeded if additional wells are added. Thus, because Petitioners have not provided any alleged facts or reasoned expert

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<sup>25</sup> The 3000 acre-feet/year withdrawal limit represents an average rate. Therefore, the actual withdrawal rate may fluctuate above and below this limit based on demand. See *e.g.*, RAI Response No. 02.04.12-23 (Sept. 10, 2008) at Attachment 2, page 1 (ML082560248) (stating that “additional well water capacity will be required to meet peak operation demand with sufficient operating margin.”).

opinion to support their assertion that the 3000 acre-feet/year permitted withdrawal limit will be exceeded, Proposed Contention 16 fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(v); *See Muskogee*, CLI-03-13, 58 NRC at 203.

In addition, to the extent that Petitioners have misinterpreted the Application as stating that the Applicant will exceed the current permitted withdrawal limits, Proposed Contention 16 fails to generate an issue suitable for litigation. *See Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Ga.)*, LBP-95-6, 41 NRC 281, 300 (1995), *vacated on other grounds*, CLI-95-10, 42 NRC 1 (1995), (stating that “[a] petitioner’s imprecise reading of a reference document cannot serve to generate an issue suitable for litigation.”). For example, Petitioners provide an analysis of predicted groundwater drawdown over the next ten years. *See Ross Report* at 14-15 and Table 4. Petitioners base this analysis on the “estimated groundwater needs of the proposed expansion, rather than the lower pumping amount that i[s] currently permitted” despite the Applicant’s statement that groundwater will only be used “up to the current permitted limit of 3000 acre-feet/year” (ER at 5.2-4). *See Ross Report* at 14-15. As discussed above, Petitioners have not shown with alleged facts or expert opinion that the basis of their analysis is valid. Therefore, Petitioners analysis projecting the groundwater level in ten years, which is based on the assumption that the current permitted pumping rate is too low, does not support admission of this contention. *See* 10 C.F.R. § 2.309(f)(1)(v). Accordingly, Proposed Contention 16 should be dismissed.

2. Proposed Contention 16 cannot be construed as a contention of omission and fails to raise a genuine dispute.

In addition, Proposed Contention 16 fails to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(vi). An admissible contention must show that a “genuine dispute exists with the applicant/licensee on a material issue of law or fact,” identify either specific portions of, or alleged omissions from, the application, and provide supporting reasons for the petitioner’s position. 10 C.F.R. § 2.309(f)(1)(vi). A petitioner must submit more than “bald or conclusory

allegation[s]' of a dispute with the applicant," but instead "must 'read the pertinent portions of the license application . . . and . . . state the applicant's position and the petitioner's opposing view.'" *Millstone*, CLI-01-24, 54 NRC at 358 (citing Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,170-171 (Aug. 11, 1989)).

Here, Petitioners do not reference any legal or regulatory requirement to support their assertions regarding the Applicant's ER. See Ross Report at 11. Further, Petitioners have failed to satisfy Section 2.309(f)(1)(i)-(ii), because Proposed Contention 16 does not "describe the information that should have been included in the ER *and provide the legal basis* that requires the omitted information to be included." *Calvert Cliffs Nuclear Project, LLC & Unistar Nuclear Operating Services, LLC* (Combined License Application for Calvert Cliffs Unit 3), LBP-09-04, 69 NRC \_\_ (slip op. at 22) (Mar. 24, 2009) (emphasis added). Therefore, Proposed Contention 16 cannot be construed as a contention of omission.

Further, Petitioners do not specifically reference Section 5.2.2.2, which explains the Applicant's approach regarding groundwater use and permit limitations. The only portions of the ER specifically referenced by Petitioners include page 2.3.1-22 and Table 5.2-2. See Ross Report at 14. Therefore, Proposed Contention 16 should be dismissed because Petitioners have not disputed the specific portion of the ER that addresses projected groundwater use. See 10 C.F.R. § 2.309(f)(1)(vi); *Millstone*, CLI-01-24, 54 NRC at 358.

Accordingly, for the reasons stated, Proposed Contention 16 should be dismissed for failure to comply with 10 C.F.R. § 2.309(f)(1)(i), (ii), (v), and (vi).

Q. PROPOSED CONTENTION 17:

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.

Petition at 41. In this contention, the Petitioners assert that the Applicant's calculated radiation doses from consumption of fish and invertebrates, reported in Chapter 5.4 of the ER, are incorrect because the Applicant used the LADTAP II computer program to calculate them. *Id.* at 42. 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." *Id.* The Petitioners argue that LADTAP XL, which they describe as an "updated version" of LADTAP II,<sup>26</sup> 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. LADTAP II Model Declaration of Dr. Arjun Makhijani ("Makhijani LADTAP II Decl.").<sup>27</sup> 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

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<sup>26</sup> LADTAP XL 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>. Additionally, the version of LADTAP II that Mr. Hamby referenced in his report is not the NRC approved version of LADTAP II.

<sup>27</sup> The Petitioners' discussion of this contention closely echoes Dr. Makhijani's declaration, which is the sole support provided for this contention. *Compare* Petition at 41-42 *with* Makhijani LADTAP II Decl.

“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.*

Staff Response: 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).

1. Contention 17 fails to provide a concise statement of the alleged facts or expert opinions which support the Petitioners’ position, together with references to specific sources and documents.

The Petitioners’ first claim, that LADTAP II underestimates doses for commercial fish and invertebrates, is not adequately supported. Initially, the Staff notes that Dr. Makhijani believes that LADTAP II systematically underestimates doses, and specifically underestimates doses from commercial fish and saltwater invertebrates. Makhijani LADTAP II Decl.; Petition at 42. The ER addresses doses calculated from fish and invertebrate consumption in Chapter 5.4. ER at 5.4-1 to 5.4-16 (ML082831313). Dr. Makhijani’s statements do not address the Applicant’s analysis and 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. Further, Dr. Makhijani does not explain how the custom spreadsheet designed for the Savannah River Site and any assumptions used to develop the spreadsheet apply to STP. The mere fact that doses may have been calculated differently at a different site, does not legally or factually support the conclusion that LADTAP II would systematically underestimate doses. The Staff recognizes that LADTAP II could be updated to improve its precision, but does not concede that a planned update means that LADTAP II systematically underestimates doses.<sup>28</sup>

The Petitioners have not provided any additional facts or expert opinion to support their claims that the assumptions employed by LADTAP II are inappropriate, that the dose calculations for STP 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 STP should be rejected because it lacks adequate support. 10 C.F.R. § 2.309(f)(1)(v).

2. The Contention does not identify a genuine dispute with the Applicant on a material issue of law or fact and fails to provide a concise statement of the alleged facts or expert opinions which support the Petitioners' position, together with references to specific sources and documents.

The Petitioners also claim that LADTAP II improperly uses adult dose conversion factors to calculate doses to children. Petition at 42. This claim also lacks adequate support. First,

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<sup>28</sup> In SECY-08-0197, the Staff proposed that certain NRC regulations and guidance, including the use of LADTAP II, be revised to align with International Commission on Radiological Protection (ICRP) Publication 103 by incorporating updated recommendations, concepts, and qualities. However, the Staff maintained that "the current regulatory framework continues to provide adequate protection of public health and safety." SECY-08-0197 at 5-6. The Commission, in the corresponding Staff Requirements Memorandum, agreed, stating, "The Commission agrees with the staff and the Advisory Committee on Reactor Safeguards (ACRS) that the current NRC regulatory framework continues to provide adequate protection of the health and safety of workers, the public, and the environment." SRM at 1.

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, the Applicant used the "STP 2006 Offsite Dose Calculation Manual (ODCM) as inputs to the LADTAP II computer program." FSAR at 12.2-3 (ML082831154). The Applicant applied its specific factors to children for example:

The single-unit liquid activity releases (source terms) for each radionuclide to the MCR are shown in Table 3.5-1. Those values are multiplied by two (for two-unit operation) and nuclide specific factors (Reference 5.4-3) which represent the fraction of the release to the MCR which reaches each of the three water bodies. The MEI, for all organ doses except bone, determined by LADTAP to be a teenager because teenagers tend to use the shoreline more than other age groups, eats fish from and is exposed to the shoreline at Little Robbins Slough. The MEI for organ doses to bone is a child at the same location because of the greater sensitivity (calculationally, larger dose conversion factors) of that organ for that age group to internal exposure from ingestion of fish.

ER at 5.4-3. Dr. Makhijani does not address the information in the Application in making his assertions. The Petitioners have not disputed the information in the FSAR or the ER, nor have they provided facts or expert support to indicate that the Applicant did not use the specific dose factors for children, or that those dose factors are inappropriate. Thus, because the opinion on which this claim is based does not address the information in the Application, 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.

R. PROPOSED CONTENTION 18:

The STP Environmental Report concedes that in order to support the uranium fuel cycle for STP 3 and 4 at least twenty-one acres off-site will never be available for future use. The COLA adjudication should require that the Applicant explain the basis for the permanent dedication of these twenty-one acres to

nuclear operations and specify the means by which the twenty-one acres will be secured and maintained in perpetuity.

Petition at 43. Petitioners suggest that the Applicant should explain why 21 acres will never be available for future use, how the quantity of 21 acres will be determined, what assumptions were made about the availability of and quantity of offsite waste disposal including decommissioning, and the long-term consequences of permanently dedicating this land to STP operations. *Id.* Petitioners claim that the consequences of having this land “permanently dedicated to plant operations is the manifestation of a nuclear wasteland.” *Id.* Petitioners argue that consideration of long-term consequences of permanent dedication of this land to nuclear operations is important because the ER states that these impacts cannot be mitigated. *Id.*

Staff Response: The Staff opposes admission of this contention because it fails to comply with 10 C.F.R. § 2.309(f)(1)(iv) and (vi). In addition, to the extent that Proposed Contention 18 is intended as an attack on a Commission regulation, it should be dismissed.

1. Proposed Contention 18 fails to raise a genuine dispute with the Applicant.

To proffer an admissible contention, a petitioner must “provide sufficient information to show that a genuine dispute exists . . . includ[ing] 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.” 10 C.F.R. § 2.309(f)(1)(vi).

Here, Petitioners’ assertions are based on the Applicant’s statements in Chapter 10 of the ER, specifically Section 10.2.1 and Table 10.1-2. Petition at 43 (citing ER). Petitioners argue that additional analysis is needed. However, Petitioners do not reference Section 5.7 of the ER which specifically addresses uranium fuel cycle impacts including land use (Section 5.7.1).

Section 5.7 of the ER states that the Applicant used the values in Table S-3, 10 C.F.R. § 51.51(b), to assess the environmental impacts from the uranium fuel cycle. ER at page 5.7-1 (ML082831316). The Applicant explains that the output of the proposed ABWR units is approximately 60% greater than the output for the reference reactor that was used to create the values in Table S-3; therefore, the Applicant has scaled its evaluation of uranium fuel cycle impacts accordingly. *Id.* at page 5.7-1, 5.7-2. The ER states that “[a]pproximately 21 acres will be permanently committed land . . . .” ER at page 5.7-3 (ML082831316). *See also* Petition (citing ER at Table 10.1-2 and Section 10.1.2.1 (ML082831344)). The Applicant defines permanent as “land that may not be released for use after decommissioning because decommissioning does not result in the removal of sufficient radioactive material to meet the limits of 10 CFR 20, Subpart E for release of an area for unrestricted use.” *Id.* The Applicant concludes that impacts from the uranium fuel cycle on land use will be small “and will *not warrant* mitigation.” *Id.* (emphasis added).

Petitioners have not referenced this discussion, nor have they provided any information to demonstrate that the Applicant’s conclusion regarding impacts of the uranium fuel cycle on land use is flawed. Because Petitioners have not referenced the relevant portions of the application and provided an explanation as to why they dispute this analysis, Petitioners have failed to raise a genuine dispute. *Millstone*, CLI-01-24, 54 NRC at 358 (stating petitioners must submit more than “bald or conclusory allegation[s]’ of a dispute with the applicant,” but instead “must ‘read the pertinent portions of the license application . . . and . . . state the applicant’s position and the petitioner’s opposing view.’”) (citing Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,170-171 (Aug. 11, 1989)).

Further, Petitioners have not provided a regulatory basis to support the assertion that the Applicant must “explain the basis for the permanent dedication of” 21 acres of land and the means by which it “will be secured and maintained in perpetuity” (Petition at 43). *See* 10 C.F.R.

§ 2.309(f)(1)(vi) (stating 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.”) (emphasis added). Thus, Proposed Contention 18 should be rejected for failure to comply with 10 C.F.R. § 2.309(f)(1)(vi).

2. Proposed Contention 18 fails to raise an issue that is material to this proceeding.

Materiality requires Petitioners to “show why the alleged error or omission is of possible consequence to the result of the proceeding.” See *Nuclear Management Co.* (Monticello Nuclear Generating Plant), LBP-05-31, 62 NRC 735, 748-49 (2005). Here, Petitioners suggest that the Applicant must explain the basis for permanent commitment of 21 acres of land to nuclear operations as well as the means by which this land will be secured and maintained in perpetuity. See Petition at 43. Petitioners do not, however, provide any information to demonstrate that consideration of this information “is of possible consequences to the result of the proceeding.” See *Monticello*, LBP-05-31, 62 NRC at 748-49. Thus, Proposed Contention 18 fails to meet the admissibility requirement of 10 C.F.R. § 2.309(f)(1)(iv) and should, therefore, be rejected.

3. To the extent that Proposed Contention 18 challenges Table S-3, it should be dismissed.

Petitioners state that the Applicant should provide additional information regarding the 21 acres of land that will be permanently committed to fuel cycle operations. See Petition at 43. However, as the ER indicates, the impact from uranium fuel cycle on land was derived using Table S-3. ER at Section 5.7 (ML082831316).

The Commission has generically determined numerical values representing the environmental effects of the uranium fuel cycle, including permanent land commitment. 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. 10 C.F.R. § 51.51(a); 44 Fed. Reg. at 45,362. To the extent that Proposed Contention 18

asserts that further consideration of land use impacts is necessary, it should be rejected as an impermissible attack on Table S-3. See 10 C.F.R. § 2.335(a).

An attack on a Commission regulation is only permitted where a waiver is explicitly granted or an exception is made for a particular proceeding. 10 C.F.R. § 2.335(a), (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 regulation . . . would not serve the purposes for which the rule or regulation was adopted.” 10 C.F.R. § 2.335(b). 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.* Petitioners have failed to establish that they meet any of these requirements imposed by the Commission’s regulations. Petitioners have not submitted an affidavit explaining why a waiver is appropriate nor have they established that application of 10 C.F.R. Part 51 to this particular proceeding would not serve the purpose for which the rule was adopted.

Therefore, to the extent Proposed Contention 18 constitutes an attack on a Commission regulation and a waiver or exception has not been granted, this contention should not be admitted. See 10 C.F.R. § 2.335; *Oconee*, CLI-99-11, 49 NRC at 334.

Consequently, for all the foregoing reasons, Proposed Contention 18 should be rejected.

S. PROPOSED CONTENTION 19:

The STP Environmental Report states that an unquantified amount of land onsite will be dedicated to licensed radioactive waste disposal facilities and be unavailable for other uses. But the Applicant has failed to specify the location onsite for the disposal facility and has not applied for the necessary permit for such activities pursuant to 10 CFR Pt. 72.

Petition at 44. Petitioners argue that Table 10.1-2 in the ER conclusively indicates that onsite land will be used for radioactive waste disposal and therefore the Applicant needs to, but has not yet applied for a Part 72 license. *Id.* (citing ER and Table 10.1-2 (ML082831344)). In addition, Petitioners state that the ER discusses dry cask storage, but the Applicant does not identify the area that will be used for this storage. *Id.* (citing Figure 1.1-1).

Staff Response: The Staff opposes admission of this contention because it fails to raise a genuine dispute, does not raise issues material and within the scope to this proceeding, and is unsupported by either alleged facts or expert opinion. See 10 C.F.R. § 2.309(f)(1)(iii)-(vi).

1. Proposed Contention 19 fails to demonstrate a genuine dispute and raises issues that are outside the scope of this proceeding.

To proffer an admissible contention, a petitioner must demonstrate that the issue raised by the contention is within the scope of this proceeding. 10 C.F.R. § 2.309(f)(1)(iii).

Contentions based on projected changes to a license, not currently before the NRC in any proceeding or application, are not sufficient to support admission of a contention. *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 & 2, and Catawba Nuclear Station Units 1 & 2), CLI-02-14, 55NRC 278, 294 (2002). In addition, an admissible contention must show that a “genuine dispute exists with the applicant/licensee on a material issue of law or fact,” identify either specific portions of, or alleged omissions from, the application, and provide supporting reasons for the petitioner’s position. 10 C.F.R. § 2.309(f)(1)(vi).

Here, Petitioners assert that the Applicant plans to use onsite land for disposal, but has not submitted an application for a Part 72 license. See Petition at 44 (citing ER at Table 10.1-2 (ML082831344)). In addition, Petitioners assert that the Applicant identifies dry cask storage in

its application, but instead of identifying the land that will be used for this storage, the Applicant states “TBD.” *Id.* (citing ER at Figure 1.1-1 (ML082831274)).

Contrary to Petitioners’ assertion, Table 10.1-2 does not conclusively state that land will be used for onsite disposal; rather, it states that there are “*potential* environmental impacts onsite and offsite from disposal of radioactive wastes generated as a result of the fuel cycle.” ER at Table 10.1-2 (ML082831344) (emphasis added). The Table indicates that any disposal area “would be a *permitted waste disposal facility* with a land use designated for such activities.” *Id.* (emphasis added).

Table 1.2-4, which Petitioners fail to reference, lists in accordance with 10 C.F.R. § 51.45(d), all other permits, licenses, or approvals that may need to be acquired in connection with the proposed action. The Applicant states that a Part 72 license “to receive, transfer, and possess power reactor spent fuel and other associated radioactive materials in an independent spent fuel storage installation” will be acquired “if necessary.” *Id.* at Table 1.2-4. Because the Applicant has not yet submitted a Part 72 application, issues regarding onsite disposal and dry cask storage are outside the scope of this proceeding. See *McGuire & Catawba*, CLI-02-14, 55 NRC at 294. Petitioners have not provided any factual evidence or supporting documents that would produce some doubt that the Applicant has in fact, contrary to Table 1.2-4, determined that licenses for onsite disposal and dry cask storage will be necessary. See *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 & 4), LBP-90-16, 31 NRC 509, 515, 521 & n.12 (1990) (stating that a petitioner will fail to demonstrate a genuine issue of fact if he/she does not “provide any factual evidence or supporting documents that produce some doubt about the adequacy of a specified portion of Applicant’s documents or that provides supporting reasons that tend to show that there is some specified omission from Applicant’s documents.”).

In addition, 10 C.F.R. § 2.309(f)(1)(vi) states that “if the petitioner believes that the application fails to contain information on a relevant matter as required by law,” the Petitioner

must identify “each failure and the supporting reasons for the petitioner’s belief.” 10 C.F.R. § 2.309(f)(1)(vi). Here, Petitioners argue that the Applicant has not identified the location for onsite disposal and dry cask storage and has not submitted the requisite application. See Petition at 44. Petitioners, however, fail to provide any factual or legal basis to demonstrate that the Applicant is required by law to determine if and where it will use onsite disposal and dry cask storage and submit the appropriate application(s) at this time in the proceeding. In fact, Petitioners do not provide any facts or expert opinions to support this contention; the only references in Proposed Contention 19 are to the ER and Part 72, generally. Therefore, Proposed Contention 22 cannot be construed as a contention of omission and fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(v).

Accordingly, Proposed Contention 19 should be dismissed for failure to comply with 10 C.F.R. § 2.309(f)(1)(iii), (v), and (vi).

2. Proposed Contention 19 fails to raise an issue that is material to this proceeding.

The materiality requirement requires the petitioner to “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.” 10 C.F.R. § 2.309(f)(1)(iv). Here, Petitioners do not provide any information to demonstrate that the issues raised by this Proposed Contention are material to the NRC’s licensing decision. Nothing in Proposed Contention 19 demonstrates that the Applicant’s failure to identify if and where it will use onsite disposal and dry cask storage in the COL Application is material to the NRC’s licensing determination regarding the pending application. See *Nuclear Management Co. (Monticello Nuclear Generating Plant)*, LBP-05-31, 62 NRC 735, 748-49 (2005) (“Materiality’ requires that the petitioner show why the alleged error or omission is of possible significance to the result of the proceeding.”). As stated above, if the Applicant decides to pursue these avenues of storage and disposal, it will have to submit the appropriate application(s). Therefore, at this time, issues regarding onsite disposal and dry

cask storage are outside the scope of this proceeding and fail to raise a material issue. See 10 C.F.R. § 2.309(f)(1)(iii), (iv).

Accordingly, for the reasons discussed, Proposed Contention 19 should be dismissed for failure to comply with 10 C.F.R. § 2.309(f)(1)(iii)-(vi).

T. PROPOSED CONTENTION 20:

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

Petition at 44. 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.” *Id.* at 44-45. 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.

The Petitioners further claim that the ER “fails to carefully compare the greenhouse gas effects expected from each of the alternative technologies and their relative costs.” *Id.* The Petitioners justify their claim stating, “[t]his analysis is crucial because of the relationship between greenhouse gases and global warming and because it is expected that the use of fossil fuels to support the uranium fuel cycle will become more expensive over time.” *Id.*

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

1. The Contention does not provide a concise statement of the alleged facts or expert opinions which support the Petitioners' position, together with references to the specific sources or documents to support its position. Nor does the Contention provide sufficient information to show that a genuine dispute exists with the Applicant on a material issue of law or fact or why the information, which they claim is missing, is a relevant matter required by law.

The Application discusses air quality in general in section 2.7.2. ER Sections 5.7, 5.7.3 and associated Table 5.7-1 contain an analysis of impacts from the Uranium fuel cycle. Although these sections do not explicitly address CO<sub>2</sub> emissions from the fuel cycle, they may be used with the CO<sub>2</sub> emission estimates for coal (ER Section 9.2.3.1.1 (ML082831342)) and natural gas (ER Section 9.2.3.2.1 (ML082831342)) to estimate CO<sub>2</sub> emissions 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 fuel cycle emissions 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.<sup>29</sup> Therefore, Contention 20 is inadmissible.

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<sup>29</sup> Both the *Bellefonte* Licensing Board and the *Lee* Licensing Board ruled substantially similar contentions were inadmissible. However, both Licensing Boards referred their rulings to the Commission, which has not yet ruled on 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* (Continued...)

2. The Contention does not provide a concise statement of the alleged facts or expert opinions which support the Petitioners' position, together with references to the specific sources or documents to support its position. Nor does the Contention provide sufficient information to show that a genuine dispute exists with the Applicant on a material issue of law or fact or why the information, which they claim is missing, is a relevant matter required by law.

The Petitioners' suggest that the ER "fails to carefully compare the greenhouse gas effects expected from each of the alternative technologies." Petition at 45. They state that the analysis is "crucial" because of "global warming." *Id.* However, the Petitioners do not account for the discussion of greenhouse gas emissions from comparable alternative power generation sources in the ER. The ER in Section 9.2.3.1.1, examines coal plant emissions and states, "a coal-fired plant would also emit carbon dioxide (CO<sub>2</sub>), which has been linked to global warming." ER at 9.2-20 (ML082831341). The ER then calculates expected CO<sub>2</sub> emissions to be "27 million tons per year." *Id.* Likewise, the ER discusses CO<sub>2</sub> emissions from a gas fired power plant. ER at 9.2-24 (ML082831341). The Petitioners do not acknowledge this information in the ER when they claim that it is omitted, and a discussion of CO<sub>2</sub> emissions from the remaining power generating alternatives is unnecessary because they could not meet the stated goal of generating 2,740 MWe of baseload power. Similarly, the Petitioners do not dispute the analysis provided in the ER regarding the expected CO<sub>2</sub> emissions from alternative power generation sources, and therefore, do not raise a genuine dispute with the Applicant. 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.").

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(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 13-14).

The Petitioners have not provided any facts or expert opinions to support their position in this Contention. The Petitioners have not provided support for why “[t]his analysis is crucial” or how the Applicant has failed to “carefully compare the greenhouse gas effects.” Petition at 45. 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.”)). Therefore, Proposed Contention 20 should be dismissed for failure to comply with 10 C.F.R. § 2.309(f)(1)(v) and (vi).

U. PROPOSED CONTENTION 21:

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

Petition at 46. 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.” *Id.* “Petitioners contend that the location of the STP 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.*

Staff Response: Contention 21 is inadmissible because it does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(iii), (iv), and (vi).

1. The Contention does not provide sufficient information to identify a genuine dispute with the Applicant on a material issue of law or fact, or include references to specific portions of the Application.

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 U.S. ABWR DCD Section 6.4. FSAR at 6.4-1 (ML082831106). The Applicant also determined in the FSAR that an unanticipated event at Units 1 and 2 would not affect the operation of the proposed Units 3 and 4.<sup>30</sup> FSAR at 2.2S-26 (ML082831019). Likewise, the effects of fires and explosions are discussed in FSAR Section 2.2S.3. FSAR at 2.2S-12 to 2.2S-26 (ML082831019). The Petitioners do not dispute the information in the Application nor provide a legal requirement for why it must be stated in the ER, and therefore do not meet the requirements of Section 2.309(f)(1)(vi).

2. The Petitioners do not show that the issue raised is within the scope of this proceeding, and the Petitioners do not show that the issues raised in this Contention are material to the findings the NRC must make.

Although the Petitioners do not clearly raise this issue, Contention 21 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

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<sup>30</sup> FSAR Section 2.2S.3.1.7 Radiological Hazards provides, "The release of radioactive material from STP 1 & 2, as a result of normal operations or as a result of an unanticipated event, would not threaten the safety of STP 3 & 4. The Control Room habitability system for the ABWR provides the capability to detect and protect main Control Room personnel from airborne radioactivity.

In addition, safety-related structures, systems, and components for the ABWR have been designed to withstand the effects of radiological events and the consequential releases that would bound the contamination from a release from either of these potential sources." FSAR at 2.2S-26 (ML082831019).

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).

V. PROPOSED CONTENTION 22:

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

Petition at 47. Petitioners argue that the Applicant’s assumptions regarding decommissioning are unreasonable because: 1) “there is no indication that spent fuel and high-level radioactive waste will ever leave the plant site”; 2) it is unreasonable to assume parts of the plant will be removed and dispositioned “because no such facility currently exists nor is projected to exist in the future”; and 3) “[t]here is no projection for custodial and maintenance costs related” to leaving the plant intact indefinitely and encasing it in concrete. *Id.* Petitioners suggest that the Applicant should consider the impacts and implications of decommissioning including radiological and public health impacts, environmental justice, and implications from disposition of materials off-site including whether offsite disposition is feasible. *Id.* at 47-48. In addition,

Petitioners suggest that the Applicant should consider the scenario where decommissioning is indefinitely delayed. *Id.* at 48. Thus, Petitioners argue that the Applicant's decommissioning discussion should be rejected and amended to incorporate realistic assumptions. *Id.*

Staff Response: The Staff opposes admission of Proposed Contention 22 because it fails to meet the admissibility requirements of 10 C.F.R. § 2.309(f)(1)(iii), (iv), (v), and (vi).

1. Proposed Contention 22 fails to satisfy 10 C.F.R. § 2.309(f)(1)(vi) and (iii).

Section 2.309(f)(1)(vi) requires that, "if the petitioner believes that the application fails to contain information on a relevant matter as required by law," the Petitioner must identify "each failure and the supporting reasons for the petitioner's belief." 10 C.F.R. § 2.309(f)(1)(vi). Here, Petitioners assert that the Applicant's assumptions regarding decommissioning are unrealistic and, therefore, the ER's analysis should be rejected or withdrawn and "amended to make realistic assumptions." See Petition at 48. Throughout Proposed Contention 22, Petitioners provide a number of suggestions regarding information that should be included in the Applicant's decommissioning analysis. See *id.* at 47-48. Petitioners have, however, failed to provide any factual or legal basis to demonstrate that these considerations are required by law. The only regulation Petitioners refer to is the Commission's definition of "decommission" in 10 C.F.R. § 20.1003. Therefore, Proposed Contention 22 cannot be construed as a contention of omission. See 10 C.F.R. § 2.309(f)(1)(vi).

Further, contrary to Petitioners' assertions, 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, the licensee has sixty years to complete decommissioning. 10 C.F.R. § 52.110(c). Thus, Petitioners claim that the Applicant should consider various decommissioning scenarios is outside the scope of this proceeding. Consequently, Proposed Contention 22 should be rejected. See 10 C.F.R. § 2.309(f)(1)(iii).

2. Proposed Contention 22 is unsupported and fails to demonstrate that the issues raised are material to this proceeding.

To proffer an admissible contention, Petitioners must provide support 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 Petitioner intends to rely to support their position. 10 C.F.R. § 2.309(f)(1)(v). Here, Petitioners argue that the Application is deficient because the assumptions that underpin its decommissioning analysis are unreasonable; but Petitioners have provided no alleged facts, documents, sources or expert opinions for support. Similarly, Petitioners assert that the Applicant should consider “the radiological and public health impacts, environmental justice and other implications of disposition of highly irradiated materials off-site” (Petition at 47), but again fail to provide support for this assertion.

Petitioners do not recognize that 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. 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 ER discusses and applies this guidance in Section 5.9. The Applicant concludes “that the environmental impacts identified in the GEIS are representative of impacts that can be reasonably expected from decommissioning the GE ABWR.” ER at 5.9-5 (ML082831318).

While Petitioners reference ER Section 5.9, they have not provided any support to demonstrate that the Applicant’s analysis and conclusions regarding decommissioning impacts are flawed. See 10 C.F.R. § 2.309(f)(1)(vi). Further, Petitioners have failed to demonstrate that any of the impacts they suggest should be analyzed have a “significant link between the claimed deficiency and . . . the environment” and are of “possible significance to the result of the proceeding.” See *Nuclear Management Co.* (Monticello Nuclear Generating Plant), LBP-05-31, 62 NRC 735, 748-49 (2005) (“Materiality’ requires that the petitioner show why the alleged error or omission is of possible significance to the result of the proceeding. This means that there must be some significant link between the claimed deficiency and either health and safety of the public, or the environment”). Thus, Petitioners have not satisfied the requirements of 10 C.F.R. § 2.309(f)(1)(iv).

Accordingly, for the reasons discussed, Proposed Contention 22 should be dismissed for failure to comply with 10 C.F.R. § 2.309(f)(1)(iii)-(vi).

W. PROPOSED CONTENTION 23:

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

Petition at 48. The Petitioners raise the issue that the ER “excuses the consideration of conservation/energy efficiency because STP Units 3 and 4 will be merchant power plants intended to generate baseload power.” Petition at 49. Citing the fact that one of the owners of the proposed Units 3 and 4 is City Public Service Board of San Antonio, the Petitioners argue that “CPS would not function as a merchant power plant owner and would be required to factor

in [demand side management] DSM as an alternative to adding new nuclear generating capacity.” Petition at 50.

The Petitioners contend that the ER “generally understates the efficacy of alternative energy sources of electric power generation.” Petition at 48. The Petitioners provide several examples of alternative sources of electric power generation and argue that, “[t]here is no good excuse as to why these potentially cost effective and better environmental solutions were not explored.” Petition at 52.

The Contention states that the ER fails to make “a realistic comparison between the environmental impacts and public health consequences (externalities) of nuclear power compared to renewable fuels.” Petition at 50. The Petitioners argue that there should be a side-by-side comparison of “mortality and morbidity” and “the effects of catastrophic accidents.” *Id.*

Additionally, the Petitioners contend that “there is no quantified cost comparison of nuclear with energy alternatives.” Petition at 53. They argue that “a detailed cost analysis and quantified comparison with alternatives must be conducted by the applicants, included in the application and made available to the public.” Petition at 54.

Staff Response: The Staff opposes admission of Proposed Contention 22 because it fails to meet the admissibility requirements of 10 C.F.R. § 2.309(f)(1)(iii), (iv), (v), and (vi).

1. The Contention does not demonstrate that the issue raised is within the scope of this proceeding; does not demonstrate that the issue raised is material to the findings the NRC must make; and does not show that a genuine dispute exists with the Applicant on a material issue of law or fact.

The Petitioners’ claim that because the City Public Service Board is a utility, the Application must contain an analysis of demand side management, i.e. conservation and energy efficiency. However, the Petitioners’ position does not acknowledge the relevant discussion in the Application or that demand side management is not an alternative to the proposal to build new baseload power generation. The ER provides that, “As a municipal utility, CPS Energy

meets the definition of an electric utility in 10 CFR 50.2, that provides retail power to its service area around San Antonio, which is within the ERCOT region, and sells excess capacity to wholesale buyers anywhere within the ERCOT system.” The Petitioners’ do not explain how DSM would meet the purpose of the City Public Service Board to sell excess capacity, and therefore do not raise a genuine dispute with the Application on a material issue of law or fact. 10 C.F.R. 2.309(f)(1)(vi).

Additionally, 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’s 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.

2. The Contention does not demonstrate that the issue raised is material to the findings the NRC must make; or provide a concise statement of the facts or expert opinions which support the Petitioners’ position; and does not demonstrate that the Application fails to contain information on a relevant matter as required by law.

The Petitioners provide several examples of power generating alternatives. Petition at 50-52. However, the Petitioners do not provide facts or expert opinions to show that those

suggested alternatives can supply baseload generating power at the scale of the proposed plants. Without showing that the suggested alternative generating sources are viable alternatives to the proposed plants, the Petitioners do not demonstrate that the Application must contain this information as required by law. 10 C.F.R. § 2.309(f)(1)(vi).

According to the Council on Environmental Quality (CEQ), the analysis of alternatives is the heart of the EIS. 40 C.F.R. § 1502.14.<sup>31</sup> 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

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<sup>31</sup> 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)).

only “briefly discuss” the reasons why an alternative was rejected from more detailed study. 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 the suggested alternative forms of energy generation, 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 of 2740MWe (ER at 8.1-1) when formulating alternatives they would prefer to see discussed in great detail in the ER. The Petitioners do not provide sufficient facts or expert opinions to support their assertion that their alternative power generation suggestions should be considered in detail in the Application because the Petitioners do not show that those suggested

alternatives are available to generate the proposed level of baseload power. 10 C.F.R. § 2.309(f)(1)(v).

In this instance, the 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 9.2-19 to 9.2-25 (ML082831341). 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).<sup>32</sup>

3. The Contention does not demonstrate that the issue raised is material to the findings the NRC must make; or provide a concise statement of the facts or expert opinions which support the Petitioners' position; and does not demonstrate that the Application fails to contain information on a relevant matter as required by law.

The arguments from the Petitioners that there should be a side-by-side comparison of “mortality and morbidity” and “the effects of catastrophic accidents” do not support an admissible contention. The Petitioners request that additional comparisons be made in “mortality and morbidity” and “public health impacts.” Petition at 50. 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 without conducting a detailed comparison. 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

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<sup>32</sup> 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).

such alternatives was not determined to be environmentally preferable. An admissible contention must be supported by a “concise statement of the alleged facts or expert opinions which support the requestor’s/petitioner’s position on the issue . . . together with references to the specific sources and documents on which [it] intends to rely to support its position.”

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, 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 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 48-53. Therefore, Contention 23 does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(iii), (iv), and (vi).

4. The Contention does not demonstrate that the issue raised is material to the findings the NRC must make; and does not demonstrate that the Application fails to contain information on a relevant matter as required by law.

Additionally, the Petitioners contend that “there is no quantified cost comparison of nuclear with energy alternatives.” Petition at 53. They argue that “a detailed cost analysis and quantified comparison with alternatives must be conducted by the applicants, included in the application and made available to the public.” Petition at 54. A NEPA alternatives analysis of “cost would only come into the analytical balancing if the environmental impact balancing indicates that a reasonable alternative is environmentally preferable to the proposed project.” *Exelon Generating Co., LLC* (Early Site Permit for Clinton ESP Site) LBP-05-19, 62 NRC 134,

179 (2005) (footnote omitted). See also *Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 and 3) LBP-08-21, 68 NRC \_\_ (October 30, 2008) (slip op. at 26) (“NEPA only requires a cost-benefit analysis where there exists an environmentally preferable alternative”). Therefore, the Contention does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(iv) and (vi).

X. PROPOSED CONTENTION 24:

The COLA is inadequate and unreliable because it fails to discuss the access to and costs of uranium used for power plant fuel.

Petition at 57. Petitioners assert that the ER fails to note that currently “there are virtually no domestic sources of uranium available in the United States . . . .” *Id.* at 58. Therefore, Petitioners state that economic conditions favor using foreign sources of uranium. *Id.* (citing Comanche Peak Nuclear Power Plant, Units 3 & 4 Environmental Report at 5.7-4). In addition, Petitioners assert that the COL Application does not acknowledge that uranium prices have increased over the last 15 years. *Id.* (citing United States Energy Information Administration data for 2007, Table S1b *available at* <http://www.eia.doe.gov/cneaf/nuclear/umar/summarytable1.html>). Based on this, Petitioners conclude that “long-term trend costs and supplies are much more problematic than suggested” in the ER. *Id.* Therefore, Petitioners suggest that the Applicant “should consider whether the cost and supply assumptions that underpin the decision to use nuclear fuel are unreasonable.” *Id.*

Staff Response: The Staff opposes admission of Proposed Contention 24 because it is unsupported by alleged facts or expert opinion, fails to raise a genuine dispute with the application, and does not raise an issue that is material to this proceeding. See 10 C.F.R. § 2.309(f)(1)(iv), (v) and (vi).

1. Proposed Contention 24 fails to comply with 10 C.F.R. § 2.309(f)(1)(vi).

Section 2.309(f)(1)(vi) requires that, “if the petitioner believes that the application fails to contain information on a relevant matter as required by law,” the Petitioner must identify “each failure and the supporting reasons for the petitioner’s belief.” 10 C.F.R. § 2.309(f)(1)(vi). Here, Petitioners assert that the ER is inadequate and unreliable because it does not discuss access to and costs of uranium. Petition at 57. Petitioners suggest that the Applicant should consider whether the cost and supply assumption underlying the decision to use nuclear fuel are reasonable. *Id.* at 58. Petitioners have, however, failed to provide any factual or legal basis to demonstrate that these considerations are required by law. Nowhere in Proposed Contention 24 do Petitioners reference any legal or regulatory requirement. Therefore, Proposed Contention 24 cannot be construed as a contention of omission and fails to satisfy 10 C.F.R. § 2.309(f)(1)(vi).

2. Proposed Contention 24 is unsupported and fails to raise an issue that is material to this proceeding.

An admissible contention must be supported by a “concise statement of the alleged facts or expert opinions which support the requestor’s/petitioner’s position on the issue . . . together with references to the specific sources and documents on which [it] intends to rely to support its position.” 10 C.F.R. § 2.309(f)(1)(v). In addition, the materiality requirement “requires that the petition show why an alleged error or omission is of possible significance to the result of the proceeding. This means that there must be some significant link between the claimed deficiency and either health and safety of the public, or the environment.” *Nuclear Management Co. (Monticello Nuclear Generating Plant)*, LBP-05-31, 62 NRC 735, 748-49 (2005).

Here, Petitioners argue that the ER does not acknowledge that there are virtually no domestic sources of uranium. Petition at 58. In addition, Petitioners state that the supply of uranium fuel over the last fifteen years has trended towards foreign sources. *Id.* Petitioners do not, however provide any information to indicate that foreign sources of uranium have a

significant link to health and safety or the environment and, therefore, raise an issue material to the outcome of this proceeding. See *Monticello*, LBP-05-31, 62 NRC at 748-49; 10 C.F.R. § 2.309(f)(1)(iv). Similarly, Petitioners do not provide any information to demonstrate that their assertions regarding increasing prices over the last fifteen years are material; Petitioners have not shown what impact, if any, price trends over the last fifteen years may have on the NRC's licensing decision. See *Susquehanna Steam Electric Station, Units 1 and 2*, LBP-07-10, 66 NRC at 24 (July 27, 2007) ("To be admissible, the regulations require that all contentions assert an issue of law or fact that is material to the outcome of a licensing proceeding, meaning that the subject matter of the contention must impact the grant or denial of a pending license application.")

Finally, Petitioners state that the data referenced in Proposed Contention 24 "suggest[s] that the long-term trend costs and supplies are much more problematic than suggested in the STP Environmental Report." Petition at 58. Petitioners' discuss information from 1994-2007. See Petition at 58 and references. However, Petitioners do not provide any facts or reasoned expert opinion to demonstrate that this data indicates that long-term trends will be problematic. Rather, Petitioners state that this data "suggest[s] that long-term trend costs and supplies" will be more problematic. See *id.* Absent support, mere speculation regarding future trends cannot support the admission of this contention. See *Fansteel, Inc.* (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (internal citation omitted).

Accordingly, for the reasons discussed, Proposed Contention 24 should be dismissed for failure to comply with 10 C.F.R. § 2.309(f)(1)(iv)-(vi).

Y. PROPOSED CONTENTION 25:

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

Petition at 59. 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 South Texas Units 3 and 4. *Id.* at 59. 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. *Id.* at 59-60.

Staff Response: Contention 25 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). Although the Petitioners state in the Contention that the Applicant must use the prepayment method of assuring decommissioning funding, they abandon this argument because they provide no basis or support for it in the basis for the contention. 10 C.F.R. § 2.309(f)(1)(ii)-(vi).

1. The Contention is outside of the scope of this proceeding, and constitutes an impermissible attack on a Commission rule, and does not provide a brief explanation of the basis for the Contention.

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 explains 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 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.<sup>33</sup> 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 294, 315 (2008) (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 bindingly specified 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 59-60. In doing so, the Petitioners are challenging the validity of the current Texas law which is outside the scope of this proceeding and

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<sup>33</sup> 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.

constitutes an impermissible attack on a regulation or statute in an adjudicatory proceeding. *Peach Bottom*, 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. 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 mechanisms 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 this proceeding 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)(1)(ii),(iii), and (iv), and 2.335, this proposed contention is inadmissible.

Z. PROPOSED CONTENTION 26:

The Applicant has not established that there is a need for the power that would be generated by STP Units 3 and 4.

Petition at 62. Petitioners argue that applicants are required by 10 C.F.R. Part 51 and NUREG-1555 to demonstrate a need for power and that there is a greater burden on municipal utilities to demonstrate this need. *Id.* Proposed Contention 26 raises a number of concerns with regard to CPS Energy, a municipal utility applicant, who Petitioners claim have failed to demonstrate a need for power in the COL Application. See Petition at 62-64. Finally, Petitioners assert that CPS Energy has provided evidence indicating that there is not a need for power because it has stated that electricity use and demand have actually decreased. See *id.* at 62-63 (internal citations omitted).

Staff Response: The Staff opposes admission of Proposed Contention 26 because it fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(iv), (v), and (vi).

1. Proposed Contention 26 fails to raise a genuine dispute regarding a material issue of law or fact.

To proffer an admissible contention, a petitioner must “provide sufficient information to show that a genuine dispute exists . . . includ[ing] 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.” 10 C.F.R. § 2.309(f)(1)(vi).

Here, Petitioners assert that “[t]he impact on electric demand and the viability of new nuclear generation from the economic downturn and the increased funding for energy efficiency and renewable energy sources has not been considered or analyzed.” Petition at 63.

Petitioners do not, however, reference any portion of the ER, in particular Section 8 which

discusses the Applicant's assessment of need for power at length. See ER Sections 8.0-8.4. Specifically, the ER states that four studies were used to evaluate the need for power. *Id.* at page 8.0-1. ER Section 8.2 discusses the studies and the forecast for demand, Section 8.3 addresses generation capacity, and Section 8.4 provides conclusions regarding need for power. Based on the ER's need for power analysis, the Applicant concludes there will be a need for power in the Electric Reliability Council of Texas market when the proposed units would be generating power. ER at Section 8.4.4, page 8.4-6 (ML082831339). Proposed Contention 26 fails to demonstrate that this analysis and conclusion are flawed. Petitioners cannot simply submit "'bald or conclusory allegation[s]' of a dispute with the applicant," rather, Petitioners are required to "read the pertinent portions of the license application . . . and . . . state the applicant's position and the petitioner's opposing view." *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 NRC 349, 358 (2001), *pet. for reconsid. denied*, CLI-02-01, 55 NRC 1 (2002) (citing Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,170-71 (Aug. 11, 1989)). Because Petitioners have failed to reference Section 8 of the ER and explain a specific dispute with the adequacy of the applicant's analysis, Proposed Contention 26 does not raise a genuine dispute regarding a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(vi).

2. Proposed Contention 26 is not supported by alleged facts or expert opinions and does not raise a material issue.

The need for power analysis has historically been equated "with the benefits of the proposed action" for the cost-benefit balance consideration. Nuclear Energy Institute; Denial of Petition for Rulemaking, 68 Fed. Reg. 55,905, 55,909 (Sept. 29, 2003) (internal citations to Appeal Board decisions omitted). Although a need for power analysis is required under NEPA,

the Commission is not looking for burdensome attempts by the applicant to precisely identify future market conditions and energy demand, or to develop detailed analyses of system generating assets, costs of production, capital replacement ratios, and the

like in order to establish with certainty that the construction and operation of a nuclear power plant is the most economical alternative for generation of power.

*Id.* at 55,910 (internal citation omitted). While NEPA requires a reasonable assessment of need for power, “the NRC does not supplant the States, which have traditionally been responsible for assessing the need for power generating facilities, their economic feasibility, and for regulating rates and services.” *Id.* at 59,909. Forecast for need statements are only required to be “reasonable . . . in light of what is ascertainable at the time” the forecast is made. *Kansas Gas & Electric Co.* (Wolf Creek Generating Station, Unit 1), ALAB-462, 7 NRC 320, 328 (1978) (internal references omitted). See also *Clinton ESP*, LBP-05-19, 62 NRC at 166 *review den’d* CLI-05-29, 62 NRC 801 (2005), *aff’d sub nom. Env’tl. Law & Policy Ctr. v. NRC*, 470 F.3d 676 (7th Cir. 2006) (stating that forecasts “must be ‘judged on their reasonableness.’”).

Here, Petitioners claim that the Applicant has not established a need for power and has failed to consider impacts on demand and viability of new nuclear generation. Petition at 62-63. As discussed below, Petitioners have not supported these assertions nor have they demonstrated that the alleged inadequacies in the ER are material to the outcome of this proceeding. See 10 C.F.R. § 2.309(f)(1)(iv), (v). Thus, Petitioners’ unsupported claims fail to demonstrate that the ER’s assessment of need for power is unreasonable. See *Wolf Creek*, ALAB-462, 7 NRC at 328; *Clinton ESP*, LBP-05-19, 62 NRC at 166.

To support this contention, Petitioners refer to a January 20, 2009, presentation by the City Public Service Energy (CPS) Board stating that there is a 16% decline in electricity use. Petition at 62-63 (citing *Summary of CPS Energy’s Commitment to Sustainability* (Jan. 20, 2009) (Attached to Petition)).<sup>34</sup> Petitioners assert that this decline in demand could be further

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<sup>34</sup> Petitioners also assert that municipal utilities have a greater burden than merchant applicants to assess need for power. Petition at 62. Petitioners do not, however, provide any regulatory basis or factual support for this assertion. See 10 C.F.R. § 2.309(f)(1)(v).

impacted by the current economic downturn. *Id.* However, CPS Energy is one owner of the proposed units. See ER at page 1.1-1 (ML082831274). The Applicant has assessed the need for power for the entire Electric Reliability Council of Texas (ERCOT) system, “which is the independent system operator for the electric grid for most of Texas” (ER at page 8.0-1); the City of San Antonio, which is acting by and through CPS Energy, is simply a part of this larger system (see ER at page 1.1-1 (ML082831274)). Petitioners have not provided any facts to show that the recent decrease in the CPS Energy system is indicative of future need for power for the EPCOT system. Further, Petitioners have not demonstrated that the recent decline in CPS Energy demand may have a material impact on the Applicant’s need for power analysis and the outcome of the NRC’s licensing decision. See 10 C.F.R. § 2.309(f)(1)(iv).

Similarly, Petitioners’ speculative assertions claiming that combined cycle gas plants will be shutdown to present an appearance of need for nuclear power and that STP “may arguably” create excess capacity also fail to provide support for admission of this contention. See Petition at 64. Petitioners have not shown that gas plants are actually being closed in order to facilitate the nuclear market and to create the appearance of a need for power. Nor do Petitioners point to any references to support their speculation that the Proposed Units may create excess capacity and, thereby, create a drag on the region’s economy. Unsupported and speculative statements cannot support admission of this contention. See *Fansteel, Inc.* (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003) (stating a contention “will be ruled inadmissible if the petitioner ‘has offered no tangible information, no experts, no substantive affidavits,’ but instead only ‘bare assertions and speculation.’”) (internal citation omitted).

In addition, Petitioners assert that the impacts of stimulus funding, which will boost energy efficiency and renewable energy industries, should be considered. Petition at 63. Petitioners discuss various funding projects for renewable energy and efficiency programs. *Id.* However, Petitioners do not provide any information to suggest that consideration of the currently available funding programs for renewables “is of possible consequence to the result of

this proceeding.” See *Susquehanna*, LBP-07-10, 66 NRC at 24; *Monticello*, LBP-05-31, 62 NRC at 748-49 (“‘Materiality’ requires that the petitioner show why the alleged error or omission is of possible consequence to the result of the proceeding.”).

Finally, Petitioners’ general reference to an entire report by Dr. Makhijani regarding energy efficiency potential in San Antonio does not support this contention. Petition at 62 (referencing Dr. Arjun Makhijani, *Energy Efficiency Potential San Antonio’s Bright Energy Future* (Oct. 2008) (Makhijani Report) (Attached to Petition)). Petitioners do not point to any specific section of this 49 page report for support. See *Muskogee*, CLI-03-13, 58 NRC at 204 (stating a petitioner cannot simply refer to voluminous documents to support a contention, but has “to provide analysis and supporting evidence as to why particular sections of those documents . . . provide a basis for the contention.”) (internal citation omitted). Further, this report focuses on CPS Energy’s investment in nuclear energy versus renewable energy efficiency programs. See e.g., Makhijani Report at 5. It’s conclusion that new nuclear power will not be needed is contingent on CPS Energy’s substantial investment “in efficiency and renewables, especially solar electric generation capacity . . . .” See *id.* at 5. Petitioners have not proffered any information to indicate that CPS Energy plans to make such an investment. See *Muskogee*, CLI-03-13, 58 NRC at 203 (stating that “bare assertions and speculation” cannot support the admission of a contention) (internal quotations omitted). Further, even if CPS Energy makes this investment, Petitioners have not shown that this will obviate the need for power for the ERCOT service area. Consequently, Proposed Contention 26 fails to satisfy 10 C.F.R. § 2.309(f)(1)(v).

Accordingly, for the reasons discussed, Proposed Contention 26 should be dismissed for failure to comply with 10 C.F.R. § 2.309(f)(1)(iv), (v), and (vi).

AA. PROPOSED CONTENTION 27:

The numerous “construction-related unavoidable impacts” have unacceptable adverse impacts. There should be remediation measures put in place that would

effectively address these adverse impacts, but none are described, and apparently none are planned.

Petition at 64. Petitioners quote from ER Chapter 10 and assert that the adverse impacts listed in Chapter 10 are unacceptable. Petitioners specifically call out “small temporary adverse impacts to aquatic ecology,” and assert that “no numbers are provided that would quantify such impacts, and ‘small’ is not an adequate term. Petition at 65. Petitioners further note that “The applicant is apparently aware of the best management practice of ‘frequent watering of potential dust-emitting areas,’ but fails to commit to using this practice, saying only that it ‘could be employed.’ *Id.* Petitioners then assert that “while the doses workers may receive may fall within regulatory limits, the application fails to provide information as to any protective gear that workers may be provided. It can only be assumed that protective gear will be minimal or none.” *Id.*

*Staff Response:* This contention is inadmissible for failure to provide a concise statement of the alleged facts or expert opinions which support the petitioners position on the issue, and failure to provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact, in contravention of 10 C.F.R. § 2.309(f)(1)(v) & (vi).

1. Failure to demonstrate a genuine dispute with the applicant on a material issue of law or fact.

10 C.F.R. § 2.309(f)(1)(vi) requires a Petitioner to provide sufficient information to show that a genuine dispute exists with the applicant. This information is required to include references to specific portions of the application. See 10 C.F.R. § 2.309(f)(1)(vi). Petitioners have an ironclad obligation to examine the publicly available documentary material pertaining to the facility in question with sufficient care to enable the petitioner to uncover any information that could serve as the foundation for a specific contention. See *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 & 2, Catawba Nuclear Station, Units 1 & 2), CLI-02-28, 56 NRC 373, 386 (2002). In the instant case, Petitioners simply cite to E.R. Section 10.1 “Unavoidable Adverse Environmental Impacts.” See Petition at 64-65; ER Section 10.1 (ML082831344).

Section 10.1 “summarizes those unavoidable adverse impacts identified as a result of construction and operation of STP 3 & 4.” Petitioners fail to cite to or dispute any of the information contained in Chapter 4 “Environmental Impacts of Construction.” See ER Chapter 4. For example, the planned mitigation measures for construction dewatering are discussed in ER sections 4.2.1. See ER 4.2.1 (ML082831303). Construction impacts to the aquatic ecosystem, and planned mitigation measures are discussed in ER Section 4.3.2. See ER 4.3.2 (ML082831304). Air Quality impacts and measures for controlling fugitive dust are discussed in ER Section 4.4.1.3. Noise impacts and potential mitigation measures are discussed in ER Sections 4.3.1.1.2 and ER Sections 4.4.1.2. See ER Section 4.3.1.1.2 (ML082831304) and 4.4.1.2 (ML082831305). Radiation Exposure to Construction Workers is addressed in Section 4.5 of the ER. See ER Section 4.5 (ML082831306). ER Table 4.6.1 outlines what additional controls may be applied during construction to mitigate impacts. See ER at Table 4.6.1 (ML082831307). Petitioners fail to dispute any of these sections. Since Petitioners have failed to provide sufficient information to show that genuine dispute exists with the applicant, this contention is inadmissible.

2. Petitioners fail to support the proposed contention with alleged facts or expert opinion.

10 C.F.R. § 2.309(f)(1)(v) requires a Petitioner to provide a concise statement of the alleged facts or expert opinions which support the petitioner’s position. See 10 C.F.R. § 2.309(f)(1)(v). A contention is inadmissible when, as in the instant case, a Petitioner has failed to provide any tangible information, any experts, or any substantive affidavits, but instead has offered only bare assertions and speculation. See *Fansteel Inc.* (Muskogee, Oklahoma, Site), CLI-03-13, 58 NRC 195, 203 (2003). In the instant case, Petitioners have simply asserted that there is not enough quantification of impacts, and assert that adverse impacts are unacceptable. See Petition at 64-65. There are no facts or expert opinions to support

Petitioners position. Since Petitioners have failed to support their position with facts or expert opinions, this contention is inadmissible for failure to comply with 10 C.F.R. § 2.309(f)(1)(v).

BB. PROPOSED CONTENTION 28:

Whooping cranes and endangered species analysis and protection are inadequate.

Petition at 66. Petitioners argue that the ER does not adequately address potential impacts to the endangered whooping crane such as whether flocks rest and feed in areas adjacent to the existing and proposed units, radiation exposure routes, availability of food supply, and impacts of potential accidents. *Id.* at 66-67. Petitioners assert that this species is “in a precarious state” and that “[a]dditional impacts could have catastrophic impacts.” *Id.* at 67.

Staff Response: The Staff opposes admission of Proposed Contention 28 because it fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(iv), (v) and (vi).

1. Petitioners’ assertions regarding impacts and need for further evaluations fail to meet the requirements of 10 C.F.R. § 2.309(f)(1)(iv) and (vi).

The materiality requirement under the Commission’s pleading standards “requires that the petition show why an alleged error or omission is of possible significance to the result of the proceeding. This means that there must be some significant link between the claimed deficiency and either health and safety of the public, or the environment.” *Nuclear Management Co.* (Monticello Nuclear Generating Plant), LBP-05-31, 62 NRC 735, 748-49 (2005).

Here, Petitioners assert that whooping cranes are “in a precarious state” and any “[a]dditional impacts could have catastrophic impacts.” Petition at 67. More specifically, Petitioners assert that the ER is wholly inadequate because it fails to include an analysis of the impacts radiation exposure may have on the whooping cranes. *Id.* Therefore, Petitioners suggest that the whooping cranes and the species they feed on should be tested for radioactivity. *See id.*

The Applicant did, however, assess radiological doses using “surrogate species that provide representative information about the various dose pathways potentially affecting

broader classes of living organisms.” ER at 5.4-5 (ML082831313). For example, the ER discusses radiation exposure pathways to herons in ER Section 5.4.4 and states that the total dose to the heron is below established dose limits. *Id.* at Section 5.4.4 & Table 5.4-10 (ML082831313). Petitioners do not reference this section of the ER nor do Petitioners provide any information to indicate that the method of using surrogate species to represent broader classes of organisms is not sufficient. While Petitioners have stated that any additional impacts on the whooping crane may be catastrophic (Petition at 67), they have not shown that a separate radiation exposure analysis for whooping cranes is necessary and may impact the NRC’s licensing decision. See 10 C.F.R. § 2.309(f)(1)(iv); *PPL Susquehanna LLC* (Susquehanna Steam Electric Station, Units 1 & 2), LBP-07-10, 66 NRC 1, 24 (2007) (stating that the subject matter of an admissible contention “must impact the grant or denial of a pending license application.”). Similarly, Petitioners suggest that the Applicant should consider impacts of nuclear reactor accidents on whooping cranes and other endangered and threatened species in the South Texas region. Petition at 67. To the contrary, the Commission has stated “that there is no evidence that the current set of radiation protection controls is not protective of the environment, and that the NRC should *not develop separate radiation protection regulations for plant and animal species.*” SRM-SECY-08-0197 - Options to Revise Radiation Protection Regulations and Guidance with Respect to the 2007 Recommendations of the International Commission on Radiological Protection,” at 1 (Apr. 2, 2009) (ADAMS Accession No. ML090920103) (emphasis added).

Moreover, Petitioners have not shown that the analysis they suggest is required by law. Section 2.390(f)(1)(vi) specifically states 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” is required. 10 C.F.R. § 2.309(f)(1)(vi). Here, Petitioners do not reference a statutory or regulatory requirement anywhere in Proposed

Contention 28. Therefore, Petitioners fail to demonstrate a genuine dispute exists on a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(vi).

2. Petitioners' assertion regarding the location of whooping cranes is unsupported.

An admissible contention must be supported by a “concise statement of the alleged facts or expert opinions which support the requestor’s/petitioner’s position on the issue . . . together with references to the specific sources and documents on which [it] intends to rely to support its position.” 10 C.F.R. § 2.309(f)(1)(v). See also *Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, & 3), CLI-91-12, 34 NRC 149, 155 (stating a petitioner must meet its burden of presenting factual information and expert opinion necessary to support its contention).

Petitioners argue that the ER fails to discuss potential impacts that the proposed project may have on endangered whooping cranes and does not include whether the flock rests and feeds in the area adjacent to the proposed units. Petition at 66. Petitioners correctly note that the wintering habitat for whooping cranes is approximately 35 miles southwest of the proposed site. *Id.* at 66 (citing ER at 2.4-4 (ML082831286)). In addition, Petitioners state that this species’ migratory path brings them even closer to the reactor site. *Id.* See also ER at 2.4-3 (ML082831286) (stating the STP site is in the Central Flyway migration route).

To support Proposed Contention 28, Petitioners refer to two reports from Tom Stehn, Whooping Crane Coordinator for the U.S. Fish and Wildlife Service, and one article from the San Antonio Express News. *Id.* at 66-67 (internal citations omitted).

Petitioners provide a specific reference to one Stehn report from April 7, 2009. Petition at 66 (citing Tom Stehn, Whooping Crane April 7, 2009 Report available at [www.birdrockport.com/tom\\_stehn\\_whooping\\_crane\\_report.htm](http://www.birdrockport.com/tom_stehn_whooping_crane_report.htm)). Petitioners do not, however, explain how this report, which discusses migration status, mortality and species’ conditions, supports its assertion that the ER fails to adequately assess the impacts of whooping cranes

near the proposed Texas units. A petitioner cannot include references as support without showing why the reference provides a basis to support its contention. *See Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 & 3), LBP-04-15, 60 NRC 81, 89 (2004) (citing *Palo Verde*, CLI-91-12, 34 NRC at 155-56).

Petitioners reference a second Tom Stehn report, a March 14, 2007 aerial census report. Petitioners claim that this report points out “that at least one crane was in the Bay City area in January (2006).” Petition at 66. Petitioners’ assertion that the Applicant fails to adequately assess whooping crane and endangered species hinges on whether these species are in fact at or adjacent to the STP site; thus, this second report seems to provide the central support for this contention. Therefore, the contents of this report, in its entirety, should be subject to Board scrutiny. *See Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61, 90 (1996), *rev’d in part on other grounds*, CLI-96-7, 43 NRC 235 (1996). However, Petitioners do not attach the report, quote the report, or provide any additional information indicating where this report can be found, e.g., a hyperlink or title. The Staff, for instance, was unable to locate this report on the internet using a Google search. Absent a copy of the report or specific citation to indicate the location of the report, it is difficult for the Board and participants to evaluate this source and the Petitioners’ claim. *See id.* (“A document put forth by an intervenor as the basis for a contention is subject to scrutiny both for what it does and does not show.”); *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.”).

Further, unlike the Petitioners’ vague statements regarding whooping crane sightings, the ER includes information for bird sightings at and in the vicinity of the proposed units. *See* ER at 2.4-3 to 2.4-4 (ML082831286); RAI Response 02.02.01-01 at Attachment 2, pages 7-8, 16 (Jan. 21, 2009) (ML090270986). In addition, the ER states that there is no critical habitat

within or adjacent to the STP site and that the only federally listed species that have historically been observed within the STP site boundary include the bald eagle and American alligator; not the whooping crane. See ER at 2.4-4 (ML082831286). However, the ER does acknowledge that whooping cranes are present in Matagorda County. ER at Table 2.4-2, page 2.4-28 (ML082831286). Nonetheless, in response to Staff audit questions, the Applicant stated that

*Based on project location and habitat, potential for this species to occur in the vicinity of the project is limited; preliminary habitat assessment and documentation of species sightings will be conducted throughout the project survey limits.*

Responses to Environmental Site Audit Comments at Appendix 27, page 13, Table 2.2.5.1, (Feb. 28, 2008) (ADAMS Accession No. ML080660150) (emphasis added). Petitioners have not provided any information, other than the vague reference to the March 14, 2007 aerial report, to indicate that Applicant's analysis and protection are inadequate. See 10 C.F.R. § 2.309(f)(1)(v), (vi).

Finally, Petitioners reference a newspaper article dated March 7, 2009 from the San Antonio Express News stating that for the first time, a wild Texas whooping crane flock tested positive for a virus previously found only in captive cranes. Petition at 67 (citing Anton Caputo, *Deadly Winter for Whooping Cranes*, SAN ANTONIO EXPRESS, Mar. 7, 2009 available at [http://www.mysanantonio.com/news/Deadly\\_winter\\_for\\_whooping\\_cranes.html](http://www.mysanantonio.com/news/Deadly_winter_for_whooping_cranes.html).) Petitioners do not, however, explain how this article is relevant to their assertion regarding the Applicant's assessment of whooping cranes in the ER. See *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 & 3), LBP-04-15, 60 NRC 81, 89 (2004) (citing *Palo Verde*, CLI-91-12, 34 NRC at 155-56) ("A petitioner has the obligation to provide the analysis and expert opinion showing why its bases support its contentions . . . ."). Therefore, because Petitioners have not shown that this report provides a basis for its contention asserting that the Applicant's analysis and protection of whooping cranes and endangered species is inadequate, it cannot support the admission of this contention. See *id.*; 10 C.F.R. § 2.309(f)(1)(v).

Consequently, for the reasons discussed, Proposed Contention 28 fails to meet 10 C.F.R. § 2.309(f)(1)(iv)-(vi) and is, therefore, inadmissible.

CONCLUSION

In view of the foregoing, the Petitioners, SEED Coalition, Public Citizen, and South Texas Association for Responsible Energy have demonstrated representational standing to intervene in this proceeding. 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 18th day of May, 2009

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )  
 )  
 )  
STP NUCLEAR OPERATING COMPANY ) Docket Nos. 52-012 & 52-013  
 )  
 )  
(South Texas Project, Units 3 & 4) )

NOTICE OF APPEARANCE OF SARA B. KIRKWOOD

Notice is hereby given that the undersigned attorney herewith enters an appearance in the above-captioned matter. In accordance with 10 C.F.R. § 2.314(b), the following information is provided:

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Dated at Rockville, Maryland  
this 18th day of May, 2009

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )  
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STP NUCLEAR OPERATING COMPANY ) Docket Nos. 52-012 & 52-013  
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(South Texas Project, Units 3 & 4) )

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Respectfully submitted,

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

James P. Biggins  
Counsel for the NRC Staff

Dated at Rockville, Maryland  
this 18 day of May, 2009

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )  
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STP NUCLEAR OPERATING COMPANY ) Docket Nos. 52-012 & 52-013  
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(South Texas Project, Units 3 & 4) )

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Counsel for the NRC Staff

Dated at Rockville, Maryland  
this 18th day of May, 2009

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD PANEL

In the Matter of )  
)  
)  
STP NUCLEAR OPERATING COMPANY ) Docket Nos. 52-012 & 52-013  
)  
)  
(South Texas Project, 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," "NOTICE OF APPEARANCE OF SARA B. KIRKWOOD," "NOTICE OF APPEARANCE OF JAMES P. BIGGINS," and "NOTICE OF APPEARANCE OF JESSICA A. BIELECKI" have been served on the following persons by Electronic Information Exchange on this 15th day of May, 2009:

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