

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
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Exelon Nuclear Texas Holdings, LLC) Docket No. 52-042
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(Early Site Permit for Victoria County)
Station Site))

NRC STAFF'S ANSWER TO "TEXANS FOR A SOUND ENERGY POLICY'S
PETITION TO INTERVENE AND CONTENTIONS"

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INTRODUCTION

Pursuant to 10 C.F.R. § 2.309(h)(1), the staff of the U.S. Nuclear Regulatory Commission (Staff) hereby answers the "Petition to Intervene and Contentions" submitted by Texans for a Sound Energy Policy ("TSEP"). The Staff agrees that TSEP ("Petitioners") have presented information sufficient to support their standing in this proceeding. The Staff also agrees that TSEP has proffered at least one admissible contention. Therefore, the Staff submits that the Petition should be granted.

BACKGROUND

On March 25, 2010, Exelon Nuclear Texas Holdings LLC ("Applicant"), pursuant to the Atomic Energy Act of 1954, as amended (AEA) and the Commission's regulations, submitted an application for an early site permit (ESP) for a location approximately 13.3 miles south of the city of Victoria, Texas, identified as the Victoria County Station ESP site ("Application"). See Letter from Marilyn C. Kray, Exelon Generation, to U.S. Nuclear Regulatory Commission (Mar. 25, 2010) (ADAMS Accession No. ML101030742). The Application does not reference a standard

design certification (DCD), using instead a plant parameters envelope (PPE) for one or more reactors or reactor modules.

On April 28, 2010, the Staff published a notice of the receipt and availability of the Application in the *Federal Register*. 75 Fed. Reg. 22,434 (Apr. 28, 2010). The Application was accepted for docketing on June 7, 2010. 75 Fed. Reg. 33,653 (June 14, 2010). On November 23, 2010, the NRC published a Notice of Hearing and Opportunity to Petition for Leave to Intervene, which provided members of the public sixty days from the date of publication to file a petition for leave to intervene in this proceeding. See "Exelon Nuclear Texas Holdings, LLC, Early Site Permit Application for the Victoria County Station Site, Notice of Hearing, Opportunity To Petition for Leave To Intervene, and Associated Order Imposing Procedures for Access to Sensitive Unclassified Non-Safeguards Information and Safeguards Information for Contention Preparation," 75 Fed. Reg. 71,467 (November 23, 2010). In response to the Notice of Hearing, on January 24, 2011, the Petitioners submitted their Petition ("Petition"), through which they seek to intervene in this proceeding.

DISCUSSION

In their Petition, TSEP asserts that they have representational standing to intervene by demonstrating that several members of their organization have standing to intervene based on the proximity principle. Petition at 2-5. The Petitioners further proffer twenty-three contentions. *Id.* at 8-114. For the reasons explained below, the Staff does not oppose the Petitioners' standing to intervene as a party. As discussed in Section III below, the Staff also does not object to the admission of several contentions related to whooping cranes and portions of contentions related to the Applicant's satisfaction of the requirements of 10 C.F.R. Part 100. However, the remaining contentions proposed by the Petitioners do not satisfy the criteria in

10 C.F.R. § 2.309(f)(1) and should be rejected. In addition, the Petitioners' request to participate in any hearing on uncontested issues cannot be granted.¹

I. LEGAL STANDARDS

A. Standing to Intervene

In accordance with the Commission's Rules of Practice:

[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.

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).

¹ In addition to seeking admission as parties to the contested portion of the proceeding, should any contentions be admitted, the Petitioners have asked to "participate in the resolution of uncontested issues to the same extent, and in the same manner, as Exelon or any other party may be allowed to participate in the resolution of the issues." Petition at 4. Such a request has previously been addressed and denied by the Commission, which stated "[t]he scope of the Intervenors' participation in adjudications is limited to their admitted contentions, i.e., they are barred from participating in the uncontested portion of the hearing. Any other result would contravene the objectives of our 'contention' requirements." *Exelon Generation Company, LLC* (Early Site Permit for Clinton ESP Site), CLI-05-17, 62 NRC 5, 49-50 (2005) (internal citations omitted). Therefore, to the extent that the Petitioners seek to participate in resolution of uncontested issues, their request cannot be accepted by the Board.

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 most 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). 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.

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). 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.

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).²

² Section 2.309(f) provides:

- (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:
 - (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.

10 C.F.R. § 2.309(f)(1)-(f)(2).

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. 2182, 2202 (Jan. 14, 2004); *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 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).

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. THE PETITIONERS HAVE ESTABLISHED STANDING.

TSEP asserts representational standing to intervene in this proceeding by identifying members of its organization who live within fifty miles of the proposed Victoria County Station site and who have authorized TSEP to represent them in this proceeding. Petition at 3. The Petitioners state that these members “have presumptive standing by virtue of their proximity to the proposed nuclear plant that may be constructed on the site.” *Id.*

The Staff agrees that TSEP has established representational standing by demonstrating that its members would otherwise have standing to participate in their own right, the interests that the organization seeks to protect are germane to its own purpose, neither the asserted claim nor the requested relief requires an individual member to participate in the organization’s legal action and at least one of their members has authorized them to represent the member’s interests. *See Palisades*, CLI-07-18, 65 NRC at 409. All of the named members, except Mr. Michael S. Anderson, have provided declarations, which were filed with the Petition as Exhibits A, B, and C, that identify the location of the declarant’s residence. Each of TSEP’s three named members has established standing to intervene in his or her own right by satisfying the proximity presumption.³ Further, all of these same individuals have authorized TSEP to represent their interests in the instant proceeding. Accordingly, TSEP has satisfied the standards for representational standing. *See Palisades*, CLI-07-18, 65 NRC at 409.

III. CONTENTIONS

The Petition proffers twenty-three contentions. For the reasons explained below, the staff submits that the contentions should not be admitted except to the extent and in the manner set forth below.

³ The residential address provided in the declaration of Mr. Michael S. Anderson did not include a street address. However, Rockport, Texas, the city/state which Mr. Anderson provided, is within 50 miles of the Victoria County Station site. Address locations were reviewed using Google Maps.

A. PROPOSED CONTENTION TSEP-SAFETY-1:

The Exelon application does not satisfy the requirements of 10 C.F.R. § 100.23(d)(2) because it does not provide sufficient geological data regarding growth faults or present an adequate evaluation of the potential for subsurface deformation. As result, Exelon underestimates the risk of surface deformation.

Petition at 10. In challenging the Site Safety Analysis Report's (SSAR) analysis of the potential for surface deformation as a result of growth faults, the Petitioners assert that the Exelon application does not provide sufficient geological data regarding growth faults, contrary to the requirements of 10 C.F.R. § 100.23(d)(2). Specifically, the Petitioners assert that "the movement along the faults is considerably more than that estimated in the SSAR." Petition at 10. The Petitioners also state that there is "evidence of significant historical as well as recent movement along some of these faults" and that, while the Applicant's SSAR identifies only two faults on the site, the Petitioners "identified as many as four growth faults reaching the surface on the site itself." Petition at 12-13. In support of Proposed Contention TSEP-SAFETY-1 the Petitioners provide four additional bases: (1) movement of growth faults "poses an immediate and substantial threat to the stability of the cooling pond and related infrastructure"; (2) "the SSAR does not evaluate the possibility that seepage from the pond into the fault zone could cause activation of the fault"; (3) the "SSAR erroneously maintains that the cooling ponds are not a safety feature"; and (4) the SSAR erroneously maintains that "a release of water from the cooling ponds would not flood the reactors." Petition at 10.

Staff Response: Proposed Contention TSEP-SAFETY-1 is admissible in part and inadmissible in part. The Staff does not oppose the admissibility of Proposed Contention TSEP-SAFETY-1 to the extent that the Petitioners have asserted the following issue: the application does not satisfy the requirements of 10 C.F.R. § 100.23(d)(2) because it does not provide sufficient geological data regarding growth faults or present an adequate evaluation of the potential for subsurface deformation. However, the remaining issues raised in this contention are inadmissible because the Petitioners fail to explain why these issues are material to the

findings that the NRC must make in this proceeding; lack adequate factual or expert support; or fail to demonstrate a genuine dispute with the Applicant on a material issue of fact or law. See 10 C.F.R. § 2.309(f)(1)(iv)-(vi).

Because the contention includes several additional bases which are inadmissible, the Staff response will summarize and address the admissibility of each additional basis separately, before assessing the extent to which the bases support the admissibility of the contention as a whole. *Cf. Crow Butte Resources, Inc.* (North Trend Expansion Area), CLI-09-12, 69 NRC 535, 553 (2009) (the scope of an admitted contention is defined by its bases); *see also Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 379 (2002).

1. Basis 1: Movement of growth faults poses an immediate and substantial threat to the stability of the cooling pond and related infrastructure

The Petitioners estimate that, based on figures in the Applicant's SSAR, "Fault D would cross very close to the depicted locations of the cooling pond intake/outfall structures or the pipes carrying cooling water to the power block," and assert that movement of growth faults underlying the cooling pond could pose "an immediate and substantial threat to the stability of" the cooling pond and related infrastructure. Petition at 14, 10. In support of this assertion, the Petitioners reference a report titled *Contested Issues Concerning Early Site Permit, Exelon's Victoria County Station*, prepared by John C. Halepaska and Associates (the "JCHA Report" or "Exhibit D-2"), and a summary of this report (*A Summary of Contentions on Exelon's ESP Application for the proposed Victoria County Station Site*, "Exhibit D-1"). Petition at 10-14. The portion of Exhibit D-2 which discusses this contention (Contested Issue 7) indicates that movement of growth faults in the area surrounding the site "showed a rate movement [of] (0.265 in/year)." Exhibit D-2 at 114. The report further indicates that, "[d]esign of the cooling pond and the adjacent GBRA [Guadalupe-Blanco River Authority] pond needs to be done with consideration for the presence of these faults, and the potential structural weakness caused by

them.” Exhibit D-2 at 113. The report also states that, “[i]n addition to the relative [structural] weakness introduced by the presence of the growth faults, there is also potential for aftershock waves from distant earthquakes to damage the cooling pond.” Exhibit D-2 at 113.

To support a contention, “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.”)). In Proposed Contention TSEP-SAFETY-1, while the Petitioners support their assertion that there is ongoing movement of growth faults underlying the VCS site, they do not explain the factual or expert support for their assertion that movement of the growth faults could pose “an immediate and substantial threat” to the cooling pond and related infrastructure. Nor do the Petitioners explain the factual or expert support for their conclusion that any resulting “relative weakness” of the cooling pond or related infrastructure could pose an immediate and substantial threat to the stability of the cooling pond. As a result, the Petitioners offer no facts or expert opinion to explain what safety-related impacts to the cooling pond or related infrastructure they allege could occur, contrary to 10 C.F.R. § 2.309(f)(1)(v).

Even assuming the Petitioners have demonstrated that movement of growth faults could create “relative weakness” to the cooling pond or related infrastructure, the Petitioners do not explain why such weakness would have an effect on plant safety. Section 2.309(f)(1)(iv) requires that a petitioner “demonstrate that the issue raised in the contention is material to the findings the NRC must make.” 10 C.F.R. § 2.309(f)(1)(iv); *Duke Energy*, CLI-99-11, 49 NRC at 333-34 (citing 54 Fed. Reg. 33,168, 33,172 (Aug. 11, 1989)) (A “dispute at issue is ‘material’ if

its resolution would ‘make a difference in the outcome of the licensing proceeding.’”); *see also Nuclear Management Co., LLC* (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.”). Here, neither the Petition nor the cited exhibits demonstrate how growth faults could pose “an immediate and substantial threat” to the cooling pond and related infrastructure, nor do they show how this asserted threat would be expected to affect any conclusion in the SSAR. Thus, the Petitioners fail to demonstrate why the location of growth faults relative to the cooling pond and related infrastructure would be material to a finding the staff must make in its safety review, contrary to 10 C.F.R. § 2.309(f)(1)(iv). *See* 10 C.F.R. § 2.309(f)(1)(iv).

For these reasons, this portion of Proposed Contention TSEP-SAEFTY-1 fails to meet 10 C.F.R. § 2.309(f)(1)(iv) and (v) and thus does not support the admissibility of Contention 1 or constitute an admissible independent contention.

2. Basis 2: Activation of Growth Faults as a Result of Seepage from the Cooling Pond

The Petitioners also assert that seepage from the cooling pond into an underlying growth fault could cause activation of that fault and result in damage to the cooling pond and related infrastructure. Petition at 10. In support of the contention, though not referenced specifically in support of this basis, the Petitioners rely on Exhibits D-1 and D-2, and the SSAR. Petition at 10-14. With respect to activation of growth faults from seepage, Exhibit D-2 states that “[t]he SSAR does not evaluate the possibility that seepage from the pond into the fault zone could cause activation of the fault, resulting in dam failure” and “[t]he growth faults in the area of the proposed site have a proven history of acting as conduits for fluid transport.” Exhibit D-2 at 108 and 114, respectively. However, neither the Petition nor Exhibit D-2 indicates how seepage from the cooling pond could cause activation of a growth fault. “[N]either mere speculation nor

bare or conclusory assertions, even by an expert, alleging that a matter should be considered will suffice to allow the admission of a proffered contention.” *Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-07-03, 65 NRC 237, 253 (2007) (citing *Fansteel, Inc.* (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003)). The Petitioners therefore have not demonstrated any factual or expert support for the assertion that fluid seepage from the cooling pond could activate the growth faults, contrary to 10 C.F.R. § 2.309(f)(1)(v).

3. Basis 3: The SSAR erroneously maintains that cooling ponds are not a safety feature

The Petitioners also appear to assert that the proposed cooling basin is a safety feature, stating that “any potential damage to the cooling ponds is a considerable safety issue: a total loss of normal load cooling water and the resulting water levels would pose significant safety-related operational difficulties.” Petition at 10-11. However, the Petitioners provide no facts or expert opinion indicating that the cooling basin serves a safety function. *Id.*

Regarding safety-related water supply, Regulatory Guide 1.27 indicates that the ultimate heat sink “constitutes the source of service ... water supply necessary to safely operate, shut down, and cool down a plant[]” and states that “[t]his safety-related water supply may be shared by nonsafety systems (e.g., circulating water supply).” R.G. 1.27 at 1.27-1. The SSAR and Environmental Report (ER) for the Victoria County Station ESP Application indicate, as stated most clearly in the ER:

[t]he VCS cooling basin dissipates heat from the power cycle by transferring heat from the main condenser via the circulating water system (CWS) and other nonsafety-related heat exchangers of the plant to the environment. The cooling basin would also provide makeup water to the mechanical draft cooling towers associated with the service water cooling system for each unit. Additionally, the cooling basin would provide makeup water to the external ultimate heat sink (UHS), if included in the selected plant design.

The CWS operates in a closed loop as the cooling basin supplies cooling water at one end through a common pump intake structure and receives the heated

water at the other end via a common discharge structure. The cooling basin surface area provides the mechanism for dissipation of heat to the atmosphere.

Makeup water is supplied to the cooling basin via the raw water makeup (RWMU) system, which includes a pumphouse located adjacent to the Guadalupe River and a water supply pipeline. Makeup water is obtained from the Guadalupe River. The makeup water supply to the cooling basin compensates for evaporation, seepage, and blowdown.

ER at 1.1-2 to -3. Therefore, the cooling basin, while providing makeup water to the ultimate heat sink, is not intended to serve as the ultimate heat sink. *Id.*

In addition, SSAR § 2.4.1 states that “[t]he cooling basin is part of the nonsafety-related cooling system that has the design function of dissipating the heat load in the circulating water system of VCS.” SSAR at 2.4.1-1. Several other portions of SSAR Section 2.4 also state specifically that the cooling basin does not serve a safety function. See SSAR §§ 2.4.8, 2.4.11.6. The Petitioners, although claiming that the cooling basin is a “safety feature”, do not mention, much less dispute, the conclusion in SSAR Section 2.4.8.1 that cooling basin water conditions are not safety-related and thus “no impact to safety-related SSCs will result from operation of the cooling basin at normal or low water conditions.” SSAR at 2.4.8-5.

In support of their assertions regarding the safety significance of the cooling basins, the Petitioners cite only to Exhibits D-1 and D-2. Petition at 10-14. However, neither exhibit provides an analysis demonstrating the safety significance of the cooling basin and neither exhibit challenges the relevant portions of the SSAR. See *Vogtle*, LBP-07-03, 65 NRC at 253. The Petitioners therefore have not demonstrated any factual or expert support for the assertion that the cooling basin serves a safety function at the VCS site, contrary to 10 C.F.R. § 2.309(f)(1)(v). In addition, because the discussion in Proposed Contention TSEP-SAFETY-1 fails to identify a dispute with any aspect of the analysis in this section, it also fails to identify a genuine dispute with the application contrary to 10 C.F.R. § 2.309(f)(1)(vi).

For these reasons, this portion of Proposed Contention TSEP-SAEFTY-1 fails to meet § 2.309(f)(1)(v) and (vi) and thus does not support the admissibility of Contention 1 or constitute an admissible independent contention.

4. Basis 4: The SSAR erroneously maintains that “a release of water from the cooling ponds would not flood the reactors.”

The Petition also characterizes the SSAR as “erroneously” asserting that “a release of water from the ponds would not flood the reactors.” *Id.* at 10. As a threshold matter, neither the text of the contention nor the references cited in Proposed Contention TSEP-SAFETY-1 explain the factual basis for the Petitioners’ conclusion that a release of water from the cooling ponds would flood the reactors. See 10 C.F.R. § 2.309(f)(1)(v). In addition, the potential for flooding of the VCS power block as a result of a breach of the cooling basin is discussed in the SSAR at Section 2.4.4.3.2, Water Level at the VCS Site from Breach of the Cooling Basin, a section of the SSAR which the Petitioners do not specifically address or controvert. See SSAR § 2.4.4.3.2. Therefore, the discussion in Proposed Contention TSEP-SAFETY-1 fails to identify a dispute with any aspect of the analysis in this section and thus fails to identify a genuine dispute with the application contrary to 10 C.F.R. § 2.309(f)(1)(vi). For these reasons, this portion of Proposed Contention TSEP-SAEFTY-1 fails to meet § 2.309(f)(1)(v) and (vi) and thus does not support the admissibility of Contention 1 or constitute an admissible independent contention.

Summary of Staff Response: to Contention TSEP-SAFETY-1:

As explained above, Contention TSEP-SAFETY-1 is admissible in part, with all other portions being inadmissible. With respect to each of its constituent bases discussed above, the Contention either fails to explain why the issue is material to the findings that the NRC must make in this proceeding; is unsupported by alleged facts or expert opinion; or fails to identify a genuine dispute with the application regarding a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(iv)-(vi). Although each of the four Proposed Contention TSEP-SAFETY-1 bases

asserts inadequacies with respect to the SSAR's analysis of potential growth faults, each basis appears to focus on separate failings. The Staff has identified no assertions with cumulative force that, despite the inadmissibility of the four individual TSEP-SAFETY-1 bases discussed, would support the admissibility of the entire "parent" contention (Petition at 10). The Staff does not oppose admission of the contention, limited to the issue of whether the application satisfies 10 C.F.R. § 100.23(d)(2) because it does not provide sufficient geological data regarding growth faults or present an adequate evaluation of the potential for subsurface deformation.

B. PROPOSED CONTENTION TSEP-SAFETY-2:

Exelon fails to satisfy 10 C.F.R. § 100.23(d)(2) because the SSAR greatly understates the rate of recent surface movement of the growth faults, as established by field studies showing rates of movement 1000 to 10,000 times greater than Exelon estimates.

Petition at 14. In asserting that the Exelon application fails to satisfy 10 C.F.R. § 100.23(d)(2) the Petitioners state that "the fault traversing the cooling pond area exhibits evidence of recent and continuing movement." Petition at 16. In addition to this assertion, the Petitioners state that "[t]he rate of recent surface deformation of the growth faults on the site is much greater than estimated in the Exelon application." Petition at 14.

Staff Response: The Staff does not oppose the admission of Proposed Contention TSEP-SAFETY-2.

C. PROPOSED CONTENTION TSEP-SAFETY-3:

Exelon's SSAR fails to provide adequate data or an adequately reasoned evaluation of the threats of explosion and seepage of poisonous gas posed by the existence of hundreds of active and abandoned oil and gas wells and borings on and near the VCS site.

Petition at 18. The Petition states that "[t]here are hundreds of active and abandoned oil and gas wells on and near the VCS site. The presence of these wells on and near the proposed nuclear power station and massive cooling pond poses a grave and unanalyzed threat to the safety of the construction and operation of the power station." *Id.* Further, the Petition asserts that "[o]ld abandoned wells are poorly documented, may be improperly plugged, and

pose risks from possible emissions of explosive and poisonous gases and upward migration of hydrocarbons.” *Id.* at 19. The Petition describes the site as “a veritable ‘Swiss cheese’ and unsuitable as a location of a future nuclear power plant.” *Id.*

Staff Response: Proposed Contention TSEP-SAFETY-3 is admissible in part and inadmissible in part. The Staff does not oppose the admissibility of Proposed Contention TSEP-SAFETY-3 to the extent that the Petitioners have asserted that the SSAR does not fully describe the active and abandoned oil and gas wells and borings on the VCS site contrary to the requirements of 10 C.F.R. Part 100 and guidance of RG 1.70, Standard Format and Content of Safety Analysis Report for Nuclear Power Plants LWR Edition. Petition at 18. However, the remaining issues raised in this contention are inadmissible because they are either outside the scope of this proceeding; they are insufficiently supported by alleged facts or expert opinion; or they fail to identify a genuine dispute with the application regarding a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(iii) and (vi). Because the contention appears to be focused on two distinct concerns which serve as bases for admissibility, the Staff response will summarize and address the admissibility of these bases, before assessing the extent to which the bases support the admissibility of the contention as a whole. *Cf. Crow Butte*, CLI-09-12, 69 NRC at 553; *see also Duke Energy*, CLI-02-28, 56 NRC at 379.

1. Basis 1: Explosions and upward migration of hydrocarbons

In support of Proposed Contention Safety-3, the Petitioners assert that the site could be affected by the upward migration of hydrocarbons and other contaminants at the VCS site. Petition at 24. The Petitioners state that “oil moving up a well could pose a danger to the stability of the cooling dam, as well as the structural integrity of the reactor building.” *Id.* The Petitioners also assert that “[t]he active and abandoned oil and gas wells and borings pose threats of explosion on and near the proposed facility.” Petition at 22. Further, the Petitioners state that “[e]xplosions can occur as a result of natural gas venting from the ground” and note several examples of explosions purportedly related to abandoned oil and gas wells located

under or near structures. *Id.* The Petitioners take issue with the Application's alleged assumption that "all wells are known and that unused wells have been properly abandoned," and state their disagreement with the SSAR's conclusion that the "potential hazards from these wells are bounded by the analysis of the natural gas pipeline." Petition at 25-26.

However, SSAR Section 2.2.2.3.4 explains its conclusion that these potential hazards are bounded. See SSAR at 2.2-15. Specifically, the SSAR provides that [p]otential hazards from these wells are bounded by the analysis of the natural gas transmission lines due to their closer proximity to the VCS site, the larger volume (larger diameter and operating pressure) of natural gas in the transmission lines, ..., and the expected damage radius." *Id.* The Petitioners do not dispute this finding and other than asserting that the SSAR is incorrect, the Petitioners fail to explain why the rationale provided in the SSAR is flawed. "A contention that simply alleges that some matter ought to be considered does not provide the basis for an admissible contention." See *Sacramento Mun. Util. Dist. (Rancho Seco Nuclear Generating Station)*, LBP-93-23, 38 NRC 200, 246 (1993). Thus, the Petitioners have not raised a genuine dispute with the application, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

As additional support for concerns related to these wells, the Petitioners state that explosions have occurred as a result of abandoned oil and gas wells being left in place under or near commercial structures or private residences. Petition at 22. However, the Petitioners do not indicate that the site conditions where these explosions occurred are similar to the future conditions at the VCS site surrounding safety-related structures. Neither the Petitioners nor their experts acknowledge statements in the SSAR regarding excavations that will occur in the power block area for placement of backfill. The extent of these excavations is described in SSAR Section 2.5.4.5.1, Sources and Quantities of Backfill where the applicant describes the depth of the excavations and final graded elevations:

Significant earthwork is required to establish finish grades at the VCS site, especially to provide for the embedment of major power block area structures (including seismic Category I structures) (deepest excavation to elevation -15

feet), to achieve cooling basin base level (excavation to elevation 69 feet), to raise the power block area to finish grade (fill to elevation 95 feet), and to provide for cooling basin embankment dams (fill to elevation 102 feet) and interior dikes (fill to elevation 99 feet). The deepest excavation depth in the power block area is dependent on the reactor technology selected and will be confirmed at the COL stage.

SSAR at 2.5.4-41. In SSAR Section 2.5.4.5.2, Extent of Excavations, Fills, and Slopes, the Applicant states specifically that “[a]s noted in the table below, the deepest excavation assumed in the power block area is approximately 110 feet below finish grade (elevation 95 feet).” SSAR at 2.5.4-44. As a result of these anticipated changes to the power block and cooling basin locations, the potential for gas explosions from abandoned wells asserted by the Petitioners will be reduced as these wells are located and capped.

The Petitioners also reference Exhibit D-2 to support their claim that oil and gas wells onsite will affect plant safety. Exhibit D-2 indicates that one consultant recommended that “to find every well on the site, the entire area needs to be excavated with a dozer to make sure there are no wells that have been covered up over the hundred plus years that prospecting has been occurring in the region.” Exhibit D-2 at 84. However, having failed to address the SSAR sections discussing onsite excavation in the area of the power block area, the Petitioners do not appear to assert that the depth of excavations anticipated in the power block area would fail to locate any undocumented or unplugged abandoned oil or gas wells under or adjacent to safety-related structures. In addition, the Applicant intends to locate and either cap or abandon all wells within the footprint of the cooling basin and plant in accordance with appropriate regulations, stating:

To prevent the water and inactive oil and gas wells from acting as conduits to the underlying aquifers, the wells within the footprint of the cooling basin and plant would be capped or abandoned, in accordance with the Texas Department of Licensing and Registration (through Texas Occupations Code, Title 12, Sections 1901.255 and 1901.256) and Victoria County Groundwater Conservation District regulations in effect at that time. The oil and gas wells would be properly capped by a licensed contractor.

See ER § 4.2.3.2 at 4.2-12.

In determining contention admissibility, “[a]ny contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed.” See *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), LBP-08-9, 67 NRC 421, 433 (citing *Sacramento Mun. Util. Dist.* (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 247-48 (1993), *review declined*, CLI-94-2, 39 NRC 91 (1994)). Here the Petitioners have failed to acknowledge, much less challenge, the SSAR explanation for selecting analysis of the natural gas pipeline as bounding for explosion hazards at the VCS site or the ER discussion related to capping oil and gas wells in the footprint of the plant and cooling basin. Accordingly, this basis for Proposed Contention TSEP-Safety-3 does not establish a genuine dispute with the application on a material issue of law or fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi) and cannot support the admissibility of Proposed Contention TSEP-Safety-3.

2. Basis 2: Poisonous gases

In support of Proposed Contention TSEP-SAFETY-3, the Petitioners state that poisonous gases, including hydrogen sulfide, can be released from oil and gas wells and that the “ESP application defers consideration of poisonous gases to the combined operating license (COL) stage.” Petition at 26. The Petitioners also assert that “it appears that any consideration [of poisonous gases] will be focused on transportation of hazardous materials (for example, movement of materials along U.S. Highway 77, which is adjacent to the Exelon property),” but acknowledge that this evaluation will include hydrogen sulfide gas. *Id.*

NRC regulations regarding the contents of an Early Site Permit application do not require the submission of information regarding poisonous gases at the ESP stage. See *generally* 10 C.F.R. § 52.17. NRC guidance on the Evaluation of Potential Accidents, NUREG-0800, Section 2.2.3, states specifically that hazards associated with nearby industrial activities, military activities, and transportation routes will be considered with respect to “[t]oxic vapors or gases and their potential for incapacitating nuclear plant control room operators.” See NUREG-

0800 at 2.2.3-1 to 2. Section 2.2.3 also states that the “potential offsite accidents on, or in the vicinity of, the site which could affect control room habitability (e.g., release of toxic gases, asphyxiants) [] will be accommodated on a design basis[.]” *Id.* at 2.2.3-2. With respect to the staff’s review of accidents “involving the release of smoke, flammable or nonflammable gases, or toxic-chemical-bearing clouds” this guidance further states that “[i]f the design details necessary for these evaluations are not available at the ESP stage, the evaluation will need to be performed at the COL stage. *Id.* at 2.2.3-5. Therefore, as the ESP application does not propose to use a specific design and as the NRC guidance specifically allows applicants to “defer” evaluation of accidents related to toxic gases to the COL application, the Petitioners have failed to demonstrate that this contention is within the scope of this proceeding. See 10 C.F.R. § 2.309(f)(1)(iii).

In addition, the Petitioners fail to address SSAR Section 2.2.3.1.3, which states that hazardous materials with the potential for forming a toxic or asphyxiating vapor cloud will be “analyzed at the COL stage in order to account for the control room ventilation design for the selected technology. Accordingly, the impact on the units from toxic chemicals stored onsite or nearby will be evaluated in the COL application in order to provide a detailed control room habitability assessment.” See SSAR at 2.2-31. The Petitioners do not acknowledge this or address the SSAR determination that an analysis of the impacts can be deferred to the COL application. In determining contention admissibility, “[a]ny contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed.” See *Millstone*, LBP-08-9, 67 NRC at 433. Accordingly, this basis for Proposed Contention TSEP-Safety-3 does not establish a genuine dispute with the application on a material issue of law or fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

Summary of Staff Response to Contention TSEP-SAFETY-3: As explained above, Contention TSEP-SAFETY-3 is admissible in part, with all other portions being inadmissible. With respect to each of its constituent bases discussed above, the Contention either fails to

explain why the issue is within the scope of the proceeding; is unsupported by alleged facts or expert opinion; or fails to identify a genuine dispute with the application regarding a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(iii) and (vi). Although each of the Proposed Contention TSEP-SAFETY-3 bases asserts inadequacies with respect to the SSAR's analysis of oil and gas wells on the VCS site, each basis appears to focus on separate failings. The Staff has identified no assertions with cumulative force that, despite the inadmissibility of the TSEP-SAFETY-3 bases discussed, would support the admissibility of the entire contention. Petition at 18. The Staff does not oppose admission of the contention, limited to the issue of whether the application satisfies 10 C.F.R. § 100.23(d)(2) because it fails to provide adequate data regarding the existence of hundreds of active and abandoned oil and gas wells and borings on the VCS site.

D. PROPOSED CONTENTION TSEP-SAFETY-4:

The ER fails to demonstrate the existence of a dependable water supply for a new reactor.

Petition at 26. Petitioners allege that the Application misrepresents the amount of water that will be used from the Guadalupe-Blanco River Authority's ("GBRA") lower basin rights. Further, Petitioners claim that Exelon's Application is inadequate because it fails to account for other pending permit applications as well as the Texas law requiring environmental flows for new permits. *Id.* They likewise assert that there is no unappropriated surface water right for Exelon to obtain and the Application does not adequately consider the consequences of permit applications pending with the Texas Commission on Environmental Quality ("TCEQ") which will have earlier priority dates than any new Exelon permit. As a result, "Exelon fails to consider the true availability of water during drought and other factors that render the long-term availability of water from the Guadalupe River too uncertain for the ESP to be issued. *Id.* at 27.

Staff Response:

Proposed Safety Contention 4⁴ is inadmissible because it fails to demonstrate a genuine dispute with the application and fails to provide a concise statement of the alleged facts or expert opinions which support the Petitioners' position on the issue. 10 C.F.R. § 2.309(f)(1)(v) and (iv).

1. Proposed Safety Contention 4 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). Here Petitioners allege that the ESP fails to consider pending water permits and the lack of availability of water during drought conditions which render the long-term availability of water too uncertain. Petition at 27. However, Petitioners do not cite to or take issue with any portions of the Applicant's SSAR that addresses water supply and availability. For instance, SSAR Section 2.4.8.1 discusses the capacity of the cooling water basin and water use:

The [raw water makeup] RWMU system has a total design capacity of 267 cfs (120,000 gpm). The RWMU pumphouse provides makeup water at a rate of up to 217 cfs (97,500 gpm) to the cooling basin, and an additional 50 cfs (22,500 gpm) capacity is reserved for use by another entity or entities in the future. The annual makeup water supply to the cooling basin is based on a diversion limit of 75,000 acre-feet per year, subject to run-of-river availability, which will require securing the necessary water rights at the COL application stage.

SSAR at 2.4.8-2. Petitioners do not dispute any of this information or otherwise claim that the amount of water necessary is incorrect. Nor do they take issue with the SSAR's findings regarding cooling basin water availability and water rights:

⁴ Although Petitioners labeled this Proposed Safety Contention 4 as a safety contention, it repeatedly alleges inadequacies in Exelon's ER as well as references portions of Exelon's ER, and contains similar issues as those argued in Proposed Environmental Contention 2, "IMPACTS OF LIMITED WATER AVAILABILITY." Therefore, to the extent that Petitioners also frame Proposed Safety Contention 4 as an environmental contention, the NRC Staff responds to those claims in its response to Proposed Environmental Contention 2.

A water budget analysis of the cooling basin is performed to evaluate the impacts of potential drought conditions on the water supply to sustain plant operation. The study assumes a repeat of the historical hydrometeorological conditions from 1947 to 2006...The run-of-river availability at the RWMU system intake location, for the model period of 1947 to 2006, is projected based on an extension to 2006 of the conservative "Full Authorization" scenario of the Guadalupe-San Antonio River Basin Water Authority Model (GSA-WAM) for the region. The "Full Authorization" scenario reflects the condition in which all water rights in the river basin use their maximum authorized amounts. The cooling basin water budget model further assumes that 70,000 acre-feet per year of treated effluent is discharged by the City of San Antonio and is added to the run-of-river flow available for withdrawal at the RWMU intake location.

SSAR at 2.4.8-4.

Further, Petitioners dispute the Application's finding that "the VCS cooling basin would contain enough water to support the operation of the plant 'for several months during potential low flow periods'...Exelon fails to recognize that future droughts will result in increased groundwater use which will result in further decreases in available surface water flows for diversion to the VCS." Petition at 30.

However, as discussed above, the VCS cooling basis is not intended to serve a safety function . Regarding safety-related water supply, Regulatory Guide 1.27 indicates that the ultimate heat sink "constitutes the source of service ... water supply necessary to safely operate, shut down, and cool down a plant[]" and states that "[t]his safety-related water supply may be shared by nonsafety systems (e.g., circulating water supply)." R.G. 1.27 at 1.27-1. The VCS SSAR and ER indicate, as stated most clearly in ER Section 1.1.4, that "[t]he VCS cooling basin dissipates heat from the power cycle by transferring heat from the main condenser via the circulating water system (CWS) and other nonsafety-related heat exchangers of the plant to the environment." ER at 1.1-2. In addition, SSAR § 2.4.1 states that "[t]he cooling basin is part of the nonsafety-related cooling system that has the design function of dissipating the heat load in the circulating water system of VCS." SSAR at 2.4.1-1. Several other portions of SSAR Section 2.4 also state specifically that the cooling basin is not intended to serve a safety function. See SSAR Sections 2.4.8, 2.4.11.6. Also regarding the proposed VCS' water availability, SSAR

Section 2.4.8 states that “no impact to safety-related SSCs will result from operation of the cooling basin at normal or low water conditions.” SSAR at 2.4.8-5. Thus, despite Petitioners’ claim, they do not directly controvert the conclusions in SSAR Sections 2.4.8.1 and 2.4.11.6 or in ER Section 1.1.4.

Also, although Petitioners claim the VCS will not have a dependable water supply, they do not dispute the finding in SSAR Section 2.4.11 that “the cooling basin storage capacity was determined to be adequate to allow continuous operation of the plant for the drought of record with infrequent and reduced makeup, which is more severe than the 100-year drought based on the low flow frequency analysis.” *Id.* at 2.4.11-2. Nor do Petitioners take issue with any other SSAR section that addresses this issue. *See, e.g.*, SSAR Section 2.4.8.1 and 2.4.11. In determining contention admissibility, “[a]ny contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed.” *See Millstone*, LBP-08-9, 67 NRC at 433 (citing *Sacramento Mun. Util. Dist.* (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 247-48 (1993), *review declined*, CLI-94-2, 39 NRC 91 (1994)). Therefore, as Petitioners fail to identify a genuine dispute with the application on a material issue of law or fact, Proposed Safety Contention 4 is inadmissible. 10 C.F.R. § 2.309(f)(1)(vi).

2. Proposed Safety Contention 4 is not supported by 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 which [it] intends to rely to support its position.” 10 C.F.R. § 2.309(f)(1)(v). Here, Petitioners have failed to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(v). Petitioners assert that because the Application does not address the actual water usage from the GBRA lower basin, pending water permit applications, and priorities of earlier permit holders, “Exelon fails to give assurance that a ‘highly dependable’ supply of water exists.” Petition at 27. As support for this claim, they reference 10 C.F.R. § 100, Appendix

A, Seismic and Geological Siting Criteria for Nuclear Power Plants, which requires that “[a]ssurance of adequate cooling water supply for emergency and long-term shutdown decay heat removal shall be considered in the design of the nuclear power plant.” 10 C.F.R. §100, App. A, § V.(d)(3). In addition, Petitioners cite to Regulatory Guide 4.7, *General Site Suitability for Nuclear Power Stations* (Rev. 2, Apr. 1998), at 4.7-13, which recommends that “a highly dependable system of water supply sources must be shown to be available under postulated occurrences of natural and site-related accidental phenomena.” *Id.*; see also Petition at 27-28. However, Petitioners do not explain why 10 C.F.R. §100 Appendix A or Regulatory Guide 4.7 render the SSAR inadequate with respect to its description of future water availability. These documents are used by the NRC Staff when conducting its safety review of water required for a safe shut down. However, neither Appendix A nor R.G. 4.7 are applicable here, because as explained above, the water in the cooling basin is not a safety-related issue unless the cooling basin floods. See SSAR at 2.4.1-1 and Sections 2.4.8, 2.4.11.6. Only then does the cooling basin water become a safety-related issue. See R.G. 4.7 at 4.7-3, 4.7-6, A-6, and A-7; see also NUREG-0800, *Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition*, at Section 2.4.4 (Mar. 2007). As a result, Appendix A and R.G. 4.7 do not support Petitioners’ claim because there is no safety-related issue regarding water in the cooling basin. Thus, Petitioners have failed to provide a concise statement of the alleged facts or expert opinions which support their position on the issue. 10 C.F.R. § 2.309(f)(1)(v).

In addition, the Petitioners cite to Exhibit E-1 to support their claim that Exelon’s ER inadequately addresses water availability. Petition at 29. This exhibit, *Effect of Diversions from the Guadalupe River on San Antonio Bay and Estuary Health*, January 2011, depicts a table listing the reported diversions for GBRA’s lower basin right permit 18-5178, from 1992 through 2008. However, Petitioners do not explain how the figures in this table relate to the Application’s description of water availability or Petitioners’ claim that the Application is inadequate. Simply attaching a document in support of a contention without any explanation of

its significance does not provide an adequate basis for a contention. See *Fansteel, Inc.*, CLI-03-13, 58 NRC at 204-205.

Next, Petitioners reference Exhibit H, Summary of Water Management Strategies, 2011 *South Central Texas Regional Water Plan*, as support for their assertion that proposed water supply projects have the potential to reduce the Guadalupe River's available water supply and the "Exelon application fails to appropriately identify the consequences" of these pending permits that will take priority over any new Exelon permits. Petition at 29. This exhibit contains a long list of the 2011 South Texas Regional Water Plan management recommendations and strategies along with predicted costs, water demands, and shortages. Ex. H at D-1 to D-9. However, it is not clear how the information in this exhibit corresponds to the Petitioners' claims that Exelon's application does not adequately address water availability. Further, a simple reference to a large number of documents does not provide a sufficient basis for a contention. A petitioner must clearly identify and summarize the documents being relied upon, and identify specific portions of the documents. *Commonwealth Edison Co. (Braidwood Nuclear Power Station, Units 1 and 2)*, LBP-85-20, 21 NRC 1732, 1741 (1985), *rev'd and remanded on other grounds*, CLI-86-8, 23 NRC 241 (1986), citing *Tennessee Valley Authority (Browns Ferry Nuclear Plant, Units 1 and 2)*, LBP-76-10, 3 NRC 200, 216 (1976). Thus, Petitioners fail to provide a concise statement of the alleged facts or expert opinions which support their position on the issue. Accordingly, this contention is inadmissible. 10 C.F.R. § 2.309(f)(1)(v).

In addition, Petitioners cite to Exhibit D-1, *A summary of Contentions on Exelon's ESP Application for the proposed Victoria County Station Site*, to further support illustrate their claim that the Guadalupe and San Antonio River basin is drought-prone and this area is a growing in population. *Id.* at 14 and 66. As such, according to the Petitioners this will place increased demands on the water supply and make water unavailable for the Exelon ESP. "Exelon fails to recognize that future droughts will result in increased groundwater use which will result in further decreases in available surface flows for diversion to the VCS." Petition at 30. This exhibit

discusses potential future water needs of the region, water rights on the Guadalupe River, and predicted population increases and demands on the water supply. Ex. D-1, JCHA Summary, at 14. However, Petitioners do not explain how this summary supports their claim that the Application presents no data regarding the sale of water rights or that the Application fails to recognize the alleged impacts of future droughts on surface water availability. A document set forth by a petitioner as supporting the basis for a contention is subject to scrutiny for what it does and does not show. See *Yankee Atomic Electric Co.*, LBP-96-2, 43 NRC at 90.

Lastly, Petitioners reference Exhibit D-2, *Contested Issues Concerning Early Site Permit, Exelon's Victoria County Station*, to support their claim that due to increased water demands on the region, the VCS does not have a dependable water supply. Petition at 30. Figure 2-2 of this exhibit depicts the projected per capita water use and municipal water demand in the South Central Texas region from 1990 through 2060. Ex. D-2 at 66. The figure predicts that water demand per capital will increase and water use will decrease:

This study estimates that due to population and industrial growth, water demand will rise from about 325,000 acre-ft/year to 650,000 acre-ft/year. However in order to service an additional 3 million people, Region L speculates that a significant drop in irrigation water demand will take place and per capita water use will significantly drop. Since surface water rights are virtually unavailable that are "Senior" enough to provide a reliable future water supply, groundwater is expected to make up much of the shortfall.

Id. The exhibit also predicts that the GBRA water supply will decrease:

Assuming 125 gallons per person per day and a population growth of 3 million people translates to an increase in future demand of 420,000 acre-ft per year. This simple calculation ignores all other increases or decreases in demand but clearly indicates that potentially GBRA has more legal water than real water to sell. It is highly unlikely that the water supply purported to be available to the GBRA will be physically available.

Id. However, Petitioners do not explain how this exhibit supports their claim that Exelon's Application is deficient. In its Application, Exelon accounts for the potential for an increase in water demand due to population growth. Nothing in the referenced exhibit demonstrates that this Application is deficient regarding future water needs and availability. Again, simply

attaching a document in support of a contention without any explanation of its significance does not provide an adequate basis for a contention. See *Fansteel*, CLI-03-13, 58 NRC at 204-205. Therefore, as Petitioners have failed to provide sufficient support for their contention, Proposed Safety Contention 4 should not be admitted. 10 C.F.R. § 2.309(f)(1)(v).

E. PROPOSED CONTENTION TSEP-ENV-1:

The ER fails to satisfy 10 C.F.R. § 51.45 because it understates and does not rigorously evaluate the environmental impacts of enhanced seepage of fluids and contaminants out of the cooling pond into oil and gas wells and borings beneath the VCS site. Exelon's ER does not identify how it will prevent or mitigate this impact by identifying and plugging the wells and borings.

Petition at 34.

Staff Response:

Petitioners' Environmental Contention 1 is inadmissible because the contention fails to provide sufficient information to show that a genuine dispute exists with the application and fails to provide a concise statement of the alleged facts or expert opinions to support their position on the issue. 10 CFR § 2.309(f)(1) (v) and (vi).

1. Proposed Environmental Contention 1 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). As the basis for their contention, Petitioners assert that "[t]he abandoned oil and gas wells within the footprint of the cooling basin pose dangers of enhanced seepage of liquids out of the site's cooling basin. Undocumented or unplugged wells and corroded casing could allow fluids and contaminants to seep out of the cooling pond and into the groundwater." Petition at 34. To support this claim, Petitioners cite to ER Section 5.2.1.2.2.1, "Simulation of cooling basin" and state that seepage will cause the loss of 3,930 gallons of water per minute which amounts to nearly six million gallons of water a day. Ex. D-2 at 79-81. Despite this estimation, the Petitioners do not take issue with the ER's conclusion that "[t]he primary impacts of the cooling

basin seepage appear to be restricted to the adjacent creeks and seeps. There appears to be minimal contribution to the base flows of the Black Bayou, Linn Lake, and Guadalupe River as a result of cooling basin seepage.” ER at 5.2-5. Despite, Petitioners’ claim that seepage from the cooling basin will be a significant problem, they do not directly dispute the conclusions in the ER which state that seepage will be minimal. *Id.*

Petitioners also assert that “Exelon does not discuss the possibility of increased seepage and movement of water due to the large number of abandoned and active oil and gas wells beneath the cooling pond.” Petition at 35. However, a contention alleging an omission in the Application, must identify the missing information and the requirement for its inclusion. 10 C.F.R. § 2.309(f)(1)(vi). However, Petitioners do not show why this possibility of increased seepage is reasonably foreseeable such that Exelon should have accounted for it in the ER beyond what is already discussed in ER Section 5.2.1.2.2.1. Although NEPA requires an applicant to take a “hard look” to predict reasonably foreseeable environmental impacts, this review is governed by the “rule of reason” and an application is not required to account for every conceivable scenario. *See Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-03-17, 58 NRC 419, 431 (2003)*. Because the Petitioners have not demonstrated that seepage above what is already predicted in the ER is reasonably foreseeable, they fail to show that the ER is inadequate.

Similarly, Petitioners allege that Exelon did not account for the location of “abandoned and active” oil and gas wells beneath the cooling pond and these wells “could become conduits for contaminated water to seep out of the cooling basin, affecting groundwater.” Petition at 35. The Applicant discusses groundwater quality in ER Section 5.2.1.2.1. “Groundwater would be withdrawn from the Evangeline Aquifer, as described in Subsections 2.3.1 and 2.3.2. The Evangeline Aquifer is not in communication with local surface water bodies in the vicinity of VCS site. Therefore, site groundwater withdrawals would not affect local surface water bodies.” ER

at 5.2-2. According to this ER section, groundwater near the VCS will not be contaminated by any seepage from the cooling basin. Further, ER Section 4.2.1.1.4 discusses seepage:

The embankment would be constructed of compacted, low permeability clay fill that would reduce seepage from the cooling basin. Seepage from the cooling basin through the embankments would be intercepted, in part, by drainage ditches around the periphery of the embankment and would discharge to surface water at various locations.

ER at 4.2-4. Petitioners do not take issue with this analysis nor any other ER Section on seepage. As such, the contention is inadmissible because Petitioners fail to raise a genuine dispute with the application. 10 C.F.R. § 2.309(f)(1)(vi). Moreover, Petitioners have not shown how it is reasonably foreseeable that wells could cause seepage and affect groundwater quality. Such speculative and remote scenarios are not required to be considered under NEPA. See *Nuclear Fuel Servs. Inc.* (Erwin, Tennessee), LBP-05-8, 61 NRC 202, 208 (2005) (quoting *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 348-49 (2002)). As such, Petitioners fail to identify a genuine dispute with the Applicant's analysis. 10 C.F.R. § 2.309(f)(1)(vi).

Petitioners also assert that "Exelon does not discuss seepage losses posed by oil and gas wells." *Id.* However, the ER mentions oil and gas wells as well as seepage prevention measures. For instance, ER Section 3.9.1.2 discusses the sealing and removal of abandoned oil and gas wells. "Existing gas/oil wells that are deemed necessary for in-place abandonment will be filled with concrete or grout, sealed and/or capped, and abandoned in accordance with the applicable guidelines of those regulatory agencies having jurisdiction. Other facilities within the cooling basin footprint will be removed." ER at 3.9-3. In addition, ER Sections 4.1.1.1 and 4.2.3.2 contain information on the location of these wells:

Many of the active oil and gas wells are located north and east of the construction site and will not be impacted. Wells in the protected area will be sealed and abandoned in place. Within the site boundary, there are approximately 26 active gas wells, and approximately 10 permitted exploration sites as of October 2007... natural gas pipelines are located in the area of the proposed power block and cooling basin. These would be rerouted north of the property to connect to existing pipelines in already disturbed areas. The

remaining wells would be sealed and abandoned in place.... the wells within the footprint of the cooling basin and plant would be capped or abandoned, in accordance with the Texas Department of Licensing and Registration (through Texas Occupations Code, Title 12, Sections 1901.255 and 1901.256) and Victoria County Groundwater Conservation District regulations in effect at that time. The oil and gas wells would be properly capped by a licensed contractor.

ER at 4.1-3 and 4.2-12. The Petitioners do not mention these ER sections much less take issue with the conclusions therein. As such, Petitioners fail to demonstrate a genuine dispute with the application on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi).

Although labeled as an environmental contention, the Petitioners also cite Section SSAR 2.4.12-12 when discussing seepage of groundwater in support of the proposed contention.

According to this section:

The cooling basin will be fully enclosed by a compacted earth embankment dam. The embankment dam will be constructed of compacted, low permeability, clay fill that will reduce seepage from the cooling basin. Seepage from the cooling basin through the embankment dam will be intercepted, in part, by drainage ditches around the outside of the embankment dam that will discharge to surface water at various locations.

SSAR at 2.4.12-12. Cooling basin seepage is also discussed in SSAR Section 2.4.12.3.2.1.

“The primary impacts of the cooling basin seepage appear to be restricted to the adjacent creeks and seeps. There appears to be minimal impact on Black Bayou, Linn Lake, and the Guadalupe River.” SSAR at 2.4.12-34. Although they cited to this discussion in the SSAR, they do not take any specific issue with the SSAR’s findings and do not point to any other SSAR sections to bolster their claim that the Application inadequately discusses cooling basin seepage. As such, Petitioners fail to demonstrate a genuine dispute with the application on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi). Therefore, the contention is inadmissible.

2. Proposed Environmental Contention 1 is not supported by alleged facts or expert opinions

As support for their claims that Exelon does not discuss the potential for increased seepage due to abandoned active oil and gas wells under the cooling pond, Petitioners cite to ER Figure 2.2-5, “Intake and Blowdown Pipelines Land Use” which depicts a map of the land

and boundaries at the proposed Victoria site. ER at 2.2-25. However, Petitioners do not connect the information in this figure to their seepage claim and do not state how this ER figure is inadequate. Simply attaching a document in support of a contention without any explanation of its significance does not provide an adequate basis for a contention. See *Fansteel, Inc.* CLI-03-13, 58 NRC at 204-205. The Petitioners also reference Exhibit D-2, *Contested Issues Concerning Early Site Permit, Exelon's Victoria County Station*, January 2011, which discusses alleged deficiencies in Exelon's ESP regarding seepage:

Exelon potentially underestimates the amount of seepage that will occur...There is no mention in the ESP of the possibility of increased seepage and movement of water due to the large number of plugged and active oil and gas wells in and near the VCS site. Laws governing oil and gas well plugging and abandonment were not heavily enforced or documented prior to the mid 1960's. Because of this, it is likely that there are oil and gas wells within the footprint of the proposed cooling basin that are not documented, or were not properly abandoned in the first place. These wells could become conduits for contaminated water to seep out of the cooling basin.

Ex. D-2 at 79. Nothing in this exhibit specifically takes issue with the application, which, as noted above, does discuss oil and gas wells, or provides expert support for why Petitioners are alleging that the ESP application is inadequate. A document set forth by an intervenor as supporting the basis for a contention is subject to scrutiny for what it does and does not show. See *Yankee Atomic Electric Co.*, LBP-96-2, 43 NRC at 90.

Further, Petitioners allege that there will be damage from possible seepage of water treatment chemicals, including tritium, from the cooling basin into the groundwater. "In the ESP application, Exelon does not discuss seepage losses posed by the oil and gas wells, nor has Exelon rigorously evaluated the possible tritium contamination of groundwater that could occur due to the additional seepage losses. Exelon has not evaluated the impacts on the water treatment chemicals that would be released from the cooling basin." Petition at 36. However, Exelon addresses the impacts from possible seepage from the cooling basin in ER Section 6.2.2.1:

Groundwater monitoring and sampling locations will consist of wells in the general area of the site boundary and around the VCS cooling basin dikes. Subsection 2.3.1.2 indicates that groundwater flow in the vicinity of the site is toward Linn Lake in the east-northeast direction and is expected to continue to flow in that direction after the cooling basin is constructed and filled. Accordingly, several wells will be located downgradient from the site and the cooling basin in the area west of Linn Lake. In addition, tritium will be monitored at the 17 onsite wells (single and couplet).

ER at 6.203. Although Petitioners assert that Exelon's analysis is inadequate and is not rigorous enough, they fail to demonstrate specifically what aspects of the analysis is allegedly inadequate. Petitioners likewise cite Exhibit D-2 to support their claim that "[i]mproperly abandoned oil and gas wells on the Exelon property provide additional seepage pathways for tritiated water to escape the cooling basin and enter the surrounding freshwater aquifers." However, they do not connect the information in this exhibit it to alleged inadequacies in the ER. Thus, it is not clear how this exhibit provides support for the Petitioners' claim that the ER is inadequate. See Ex. D-2 at 79-80. Simply attaching a document in support of a contention without any explanation of its significance does not provide an adequate basis for a contention. See *Fansteel*, CLI-03-13, 58 NRC at 204-205. Petitioners have failed to provide a concise statement of the alleged facts or expert opinions which support their position on the issue. In sum, Proposed Environmental Contention 1 is inadmissible as it fails to provide a concise statement of the alleged facts or expert opinions which support the Petitioners' position on the issue. 10 C.F.R. § 2.309(f)(1)(v).

F. PROPOSED CONTENTION TSEP-ENV-2:

The ER fails to provide an adequate evaluation of the environmental impacts of severe limits on water availability in the region of the VCS site.

Petition at 36. Petitioners contend that Exelon misrepresents the amount of water the Victoria County Site will use from the Guadalupe-Blanco River Authority's (GBRA) lower basin water rights. Specifically, the ER underestimates GBRA water usage that occurred from 2000 through 2006 and does not identify higher reported usages in earlier years. *Id.* at 37. "The ER does not adequately describe the consequences of several water permit applications pending with the

TCEQ.” *Id.* Further, due to pending permit applications and the Texas law requiring environmental flows for new permits, there is no unappropriated firm water right for Exelon to obtain a new surface water right. *Id.* at 36-37. As a result, the long-term availability of water from the Guadalupe River is too uncertain for the NRC to issue an ESP to Exelon.

Staff Response:

This contention is inadmissible as it does not demonstrate that the issue raised in the proceeding is material to the findings the NRC must make, does not provide a concise statement of the alleged facts or expert opinions which support the Petitioner’s position on the issue, and does not show that a genuine dispute exists with the application. 10 C.F.R. § 2.309(f)(1)(iv) and (v).

1. Proposed Environmental Contention 2 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). In support of their argument, Petitioners claim that Exelon’s plans to secure water rights to the Guadalupe River are inadequate as they will “impact other currently permitted or future users. Permitted users of surface water bodies potentially impacted by this project include municipal water supply, manufacturing, steam electric, irrigation, mining, and livestock.” Petition at 38. As evidenced in ER Section 2.3.2.3.5, Exelon has several options for obtaining surface water rights. It can secure existing senior water rights through a contractual agreement, obtain ownership of existing water rights, obtain a new water right, or acquire water through a combination of the new and existing water rights. ER at 2.3-133; see *also* ER Section 4.2.2 at 4.2-8. Petitioners do not take issue with this analysis. In addition, Petitioners claim that the ER underestimates GBRA water usage from 2000-2006. Yet, they do not take issue with the ER’s finding that based on this maximum water usage, seventy percent of the joint water rights remained available and “approximately 115,926 acre-feet per year are projected to be available

in 2060 under the GBRA/UCC water rights, excluding the proposed VCS water withdrawal, after Victoria County needs and Calhoun County demands have been satisfied.” ER at 2.3-133 and 134; *see also* ER Section 4.2.2 at 4.2-8. As such, Petitioners fail to demonstrate a genuine dispute with the application as required by 10 C.F.R. § 2.309(f)(1)(vi).

Likewise, despite claiming that there are no unappropriated firm water rights in the Lower Guadalupe River Basin and therefore Exelon cannot obtain a new water right, Petitioners do not dispute that:

[i]n addition to the available portion of the GBRA/UCC rights, there are many water rights holders that do not divert the full amount of their authorized diversions. Because the available portions of these water rights in the Guadalupe-San Antonio (GSA) River Basin represent a potential source of surface water for the proposed VCS, these water rights are being evaluated by Exelon.

ER at 2.3-134. Further, Petitioners mention that Certificates of Adjudication 18-5173 through 18-5178, which held by the GBRA and Union Carbide, allocate the “only existing lower basin water rights sufficient for Exelon’s needs.” Petition at 38. However, this assertion without further explanation, does not demonstrate any inadequacies in Exelon’s plan to acquire water rights, as discussed in the ER. ER at 2.3-133. Nor do Petitioners take issue with ER Section 5.2.2.1 which analyzes future water availability:

A surplus of more than 115,000 acre-feet per year is projected in 2060 under the GBRA/UCC water rights...For the potentially available portions of these water rights, Exelon estimates a current surplus of approximately 39,000 acre-feet per year...The estimated plant water withdrawal was less than 15 percent of the Guadalupe River flow 85 percent of the time. Approximately 17 percent of the time, the plant either needed no additional makeup water, or no water was available for plant use as the result of low flow conditions. The withdrawal rate exceeded 30 percent of the estimated river flow less than 3 percent of the time.

ER at 5.2-11. As such, because Petitioners fail to demonstrate a genuine dispute with the application, the contention is inadmissible. 10 C.F.R. § 2.309(f)(1)(vi).

Petitioners also take issue with the plan that “Exelon would finalize contractual agreements to withdraw water under one or more existing rights and/or a new water right(s) at the COL stage.” ER at 5.2-12. However, they do not mention, much less dispute, the ER’s

finding that Exelon “continues to coordinate with the GBRA to ensure that ample water will be available for VCS in the future. As discussed previously, a significant volume of potentially available water rights exist in the Guadalupe and San Antonio Rivers.” *Id.* Petitioners likewise fail to reference any section in the ER to support their assertion that Exelon does not “appropriately identify the consequences” of pending GBRA water permits. Instead, they only reiterate that the application erroneously asserts that there are available unappropriated firm water rights. Petition at 39. Also, Petitioners claim that pending permits will potentially reduce water availability in the Guadalupe River. However, they do not dispute the ER’s finding that “the 2011 Region L Water Plan is currently under development and is expected to recognize the proposed VCS project (referred to as the “GBRA-Exelon Project”) as a recommended project.” ER at 2.3-121. Thus, because Petitioners do not demonstrate a genuine dispute with the application, Environmental Contention 2 is inadmissible, pursuant to 10 C.F.R. § 2.309(f)(1)(vi).

2. Proposed Environmental Contention 2 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 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.* LBP-98-7, 47 NRC at 180.

Here, Petitioners have failed to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(v). They reference Table 1 in Exhibit E-1, the Trungale Report, to support their position that data from the South Texas Water Master “shows that the reported water usage for just one of

GBRA's lower basin rights (18-5178) was higher than Exelon reports in its ER." Petition at 39. This table shows reported diversions for Certificate of Adjudication 18-5178, and lists total flows allotted under this permit from 1993 through 2008. Ex. E-1 at 3. However, the table does not show that the ER understates water usage, nor how pending water permits "create tremendous uncertainty" regarding Exelon's water availability. Petitioners do not explain how this table supports their claim that Exelon's ER is incorrect. Merely attaching a document in support of a contention without any explanation of its significance does not provide an adequate basis for a contention. See *Fansteel, Inc.*, CLI-03-13, 58 NRC at 204-205.

Petitioners next cite to Exhibit H, the Region L 2011 Water Plan to support their claim that proposed water supply projects will "most certainly eliminate any option for Exelon to apply for a new permit for firm water from TCEQ." Petition at 39. However, this exhibit is consists of a long table which lists recommended management strategies for hundreds of water user groups. Ex. H at D-3 to D-8. Again, Petitioners do not explain the significance of the names, values, and other information in this table to demonstrate their assertion that Exelon won't be able to apply for new water permits. Petition at 39. The Petitioners do not link this lengthy exhibit to their claim or explain how it supports their contention. A simple reference to a large number of documents does not provide a sufficient basis for a contention. A petitioner must clearly identify and summarize the documents being relied upon, and identify specific portions of the documents. *Braidwood*, LBP-85-20, 21 NRC at 1741.

Further, Petitioners note that the Guadalupe and San Antonio river basin is drought-prone and water demands in the region are very high. To illustrate their claim that Exelon's application does not "recognize" the affect the future droughts will have on groundwater and surface water availability, they reference Exhibit D-1, JCHA Summary. This exhibit discusses potential future water needs of the region, water rights on the Guadalupe River, and predicted population increases and demands on the water supply. Ex. D-1, JCHA Summary, at 14.

However, Petitioners do not connect the information in this summary to their claim that the ER presents no data regarding the sale of water rights or that the ER fails to recognize the alleged impacts of future droughts on surface water availability. Simply attaching a document in support of a contention without any explanation of its significance does not provide an adequate basis for a contention. See *Fansteel, Inc.*, CLI-03-13, 58 NRC at 204-205. Thus, as Petitioners have failed to provide sufficient support for their contention, Proposed Environmental Contention 2 should not be admitted. 10 C.F.R. § 2.309(f)(1)(v).

G. PROPOSED CONTENTION TSEP-ENV-3:

The ER fails to satisfy 10 C.F.R. §§ 51.50 & 51.45 because it does not evaluate the impacts on regional water availability. In order to provide water for Exelon, other water supply projects must be developed or changed in the region to satisfy other demands.

Petition at 42. In support of their contention of omission, Petitioners allege that Exelon fails to account for the fact that the Guadalupe and San Antonio River basin areas are drought-prone and are also experiencing rapid population growth. As such, the ER is inadequate because it does not evaluate the impacts on regional water availability. *Id.*

Staff Response:

Environmental Contention 3 is inadmissible because it does not show that a genuine dispute exists with the application and does not provide a concise statement of the alleged facts or expert opinions which support the Petitioner's position on the issue. 10 C.F.R. § 2.309(f)(1)(v) and (vi).

1. Proposed Environmental Contention 3 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). In support of their argument that the ER does not evaluate the impacts on regional water availability, Petitioners claim that there is no unappropriated water right for Exelon to obtain for

the proposed Victoria County Site and further Exelon's application does not "identify any existing permit that it might purchase or contract" in order to obtain a water rights permit. Petition at 43. However, to the extent that Petitioners' assert that the application contains an omission, they have not shown which ER sections they are claim are inadequate. Since Petitioners' claim fails to take issue with the application on a material issue of law or fact, the contention is inadmissible pursuant to 10 CFR § 2.309(f)(1)(vi).

Petitioners first argue that Exelon did not analyze the "consequences and derivative impacts" from the alleged loss of water from the Guadalupe basin. However, they have not shown where in the ER they disagree with Exelon's cumulative impacts analysis. Cumulative impacts are assessed in ER Section 5.11:

The impacts to the lower Guadalupe River basin's hydrology and water use from existing users and dischargers were factored into the analysis of the impacts of VCS operation.... Considered for cumulative impact is the up to 60,000 acre-feet per year of water that would be withdrawn by GBRA for the LGWSP...No additional hydrology impacts to the lower Guadalupe River basin are expected from the operation of these water conveyance projects... cumulative impacts related to the proposed withdrawals for the VCS cooling basin and LGWSP and the execution of the proposed GBRA water right of up to 189,484 acre-feet per year from the Guadalupe River, are expected to be SMALL.

ER at 5.11-3, 4, and 5. Petitioners do not mention these findings, nor do they take issue with the cumulative impacts analysis in ER Section 5.11, or information in any other ER section. Also, Petitioners argue that the ER does not account for Region L Plan's various surface and groundwater projects that "are likely to have an impact on regional water availability." Petition at 46. However, ER Section 5.11 describes the projects that are factored into Exelon's cumulative impacts analysis:

Projects in the geographic area considered for cumulative impacts (see Table 5.11-1) include Coletto Creek Power Station; the South Texas Project; Guadalupe-Blanco River Authority (GBRA) development of water withdrawal, storage, and delivery infrastructure to meet the existing and projected water supply demands of their 10-county district; a clean coal plant in Matagorda County, the White Stallion Energy Center (WSEC); and a uranium mining project, the Uranium Energy Corporation (UEC) Goliad Project, in Goliad County...

ER at 5.11-1. Petitioners do not mention ER Section 5.11 and fail to show how the findings therein are inadequate. Therefore, because Petitioners do not demonstrate a genuine dispute with the application, Environmental Contention 3 is inadmissible, pursuant to 10 C.F.R. § 2.309(f)(1)(vi).

Also, Petitioners claims the ER omits information on “current water availability” and this is a “serious” omission. Petition at 46. However, current water availability is discussed in ER Section 2.3.2. ER at 2.3-121 to 126. Despite their assertion that the ER omits information regarding current water availability, the Petitioners fail to dispute findings in the ER which discuss regional water planning, availability, and appropriation. For instance, ER Section 2.3.2.1 discusses regional water planning:

The VCS site is located in the South Central Texas regional water planning area, initially designated by the TWDB as "Region L... (Region L) Regional Water Plan was adopted in September 2009 with an associated addendum to the 2007 State Water Plan in December 2009 and is the water plan currently in use for the region encompassing the VCS site. Accordingly, the 2006 plan provides the basis for analyzing water availability for VCS as well as potential water use impacts...the 2011 Region L Water Plan is currently under development and is expected to recognize the proposed VCS project (referred to as the “GBRA-Exelon Project”) as a recommended project.

ER at 2.3-121. ER Section 2.3.2.3.1 describes water planning during drought periods:

South Central Texas (Region L) water planning process utilizes the Guadalupe-San Antonio Basin Water Availability Model (TNRCC Dec 1999), modified for regional planning purposes, to quantify water availability through a repeat of the drought of record and throughout the planning horizon.

ER at 2.3-128. ER Section 2.3.2.3.5 contains information on water that is available for use by the Victoria County Site:

The source of the plant's makeup water would be the Guadalupe River... The required makeup water could be secured under existing water rights via contract with an existing water rights holder or obtaining ownership of existing water right(s). Alternatively, water could be withdrawn from the Guadalupe River under a new water right or via a combination of new and existing water rights.

ER at 2.3-133. None of these ER Sections are referenced or disputed in Environmental Contention 3. Petitioners also mention the Texas Senate Bill 1, which they claim limits the

amount of unused water from the GBRA/UCC lower basin right, permit 18-5718 that Exelon plans to use for the Victoria County Site. “Under the terms of the Reservation Agreement between GBRA and Exelon in 2007, GBRA has committed 75,000 acft/yr of water from 18-5178 to the VCS. Importantly, this makes water unavailable for other projects in the region.” Petition at 44. Again, however, Petitioners have not taken issue with the application. For instance, ER Section 2.3.2.3.5 illustrates Exelon’s water availability options:

As an example, water rights totaling 175,501 acre-feet per year and authorized for municipal, industrial, and irrigation use are held either jointly or directly by the GBRA and Union Carbide Corporation (GBRA/UCC). The maximum reported water use under GBRA/UCC rights at the GBRA Saltwater Barrier did not exceed 51,670 acre-feet per year from 2000 to 2006, thereby leaving approximately 70 percent of the joint water rights available. As described in Section 2.3.2.3.3, approximately 115,926 acre-feet per year are projected to be available in 2060 under the GBRA/UCC water rights, excluding the proposed VCS water withdrawal, after Victoria County needs and Calhoun County demands have been satisfied. In addition to the available portion of the GBRA/UCC rights, there are many water rights holders that do not divert the full amount of their authorized diversions. Because the available portions of these water rights in the Guadalupe-San Antonio (GSA) River Basin represent a potential source of surface water for the proposed VCS, these water rights are being evaluated by Exelon. In order to determine the amount of water that is potentially available...

ER at 2.3-133 and 134. ER Section 2.3.2.1.1 also mentions Texas Senate Bills 1, 2, and 3, which detail planning processes for instream and freshwater flows and establish development, management, and conservation plans for groundwater resources. ER at 2.3-121 and 122. Petitioners do not even mention these portions of the ER, much less specifically challenge how the ER addresses these bills or information in any other ER Section. As such, they fail to demonstrate a genuine dispute with the application. 10 C.F.R. § 2.309(f)(1)(vi).

Petitioners also assert that Exelon “currently maintains a Reservation Agreement with GBRA for up to 75,000 acft/yr of water from permit number 18-5178.” *Id.* This statement, however, points to a proposed agreement that was part of Exelon’s combined license application, which Petitioners acknowledge was withdrawn. Petition at 43, fn. 142. Moreover, Petitioners do not explain the significance of this agreement on the pending Application. Thus,

as Petitioners fail to show that a genuine dispute exists with the application, Proposed Environmental Contention 3 is inadmissible. 10 C.F.R. § 2.309(f)(1)(vi).

2. Proposed Environmental Contention 3 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 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.*, LBP-98-7, 47 NRC at 180.

Here, Petitioners have failed to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(v). In support of their claim that Exelon’s ER does not evaluate the impacts on regional water availability and in particular, “must also look at the consequences and derivative impacts,” they reference Exhibit H, the Regional L 2011 Water Plan. See Ex. H, Summary of Water Management Strategies, *2011 South Central Texas Regional Water Plan*; see also Petition at 44 and 45. This document contains a long list of the 2011 South Texas Regional Water Plan management recommendations and strategies along with predicted water demands and shortages. Ex. H at D-1 to D-9. It is not clear how the information in this exhibit corresponds to the Petitioners’ claims that the ER is deficient regarding impacts of regional water availability. A document set forth by a petitioner as supporting the basis for a contention is subject to scrutiny for what it does and does not show. See *Yankee Atomic Electric Co.*, LBP-96-2, 43 NRC at 90. Thus, Petitioners fail to provide a concise statement of the alleged facts or expert opinions which support their position on the issue. Accordingly, this contention is inadmissible. 10 C.F.R. § 2.309(f)(1)(v).

In addition, Petitioners cite to Exhibit D-2, *Contested Issues Concerning Early Site Permit, Exelon's Victoria County Station*, January 2011, to support their position that "Exelon has not demonstrated an understanding that removal of groundwater will reduce the amount of water available for surface flows and thus the amount of water available for diversion." Petition at 46; see also Ex. D-2 at 67. This exhibit attempts to describe the cumulative effects from drought which Petitioners allege Exelon's ER does not address. However, Petitioners do not show how Exhibit D-2 supports Petitioners' claim that Exelon's ER is deficient and that there is not enough water for the Victoria County Site. The exhibit contains bare assertions alleging that Exelon's ER is inadequate and that the ER ought to contain information, but does not explain why such information must be included. For example:

Exelon therefore finds itself in a position of proposing to build a nuclear reactor facility where the legal and physical availability of the water in question lacks legal and scientific definition. There is no legal or scientific basis for Exelon to assume future water will be available where the fundamental assumptions of the projected availability of this water are flawed.... Exelon did not adequately address these issues, preferring simply to assert that the water supply for the Exelon facility could be met by leasing, new sources, buying existing rights or some combination... Petitioners believe that future development of ground water under Texas law will result in surface water being unavailable for use by Exelon in the quantities required for plant operation.

Ex. D-2 at 67. Petitioners do not attempt to connect the information in this exhibit to their claim that Exelon's ER fails to analyze the impacts of regional water availability. Merely attaching a document in support of a contention without any explanation of its significance does not provide an adequate basis for a contention. See *Fansteel, Inc.*, CLI-03-13, 58 NRC at 204-205. In addition, to support a contention, "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.*, LBP-98-7, 47 NRC at 180. Therefore, as Petitioners have failed to provide sufficient support for their contention, Proposed Environmental Contention 3 should not be admitted. 10 C.F.R. § 2.309(f)(1)(v).

H. PROPOSED CONTENTION TSEP-ENV-4:

The ER fails to satisfy 10 C.F.R. §§ 51.50 & 51.45 because it does not evaluate the impacts on long-term water availability. In order to provide water for Exelon, other water supply projects must be developed or changed to satisfy other demands. Because the ESP has a life span of twenty to forty years, water availability over that long-term period must be fully evaluated. The ER does not describe or evaluate the long-term impacts on water availability.

Petition at 47. In support of their position, Petitioners refer to the drought-prone Guadalupe and San Antonio river basin, which they claim “suffers from frequent and prolonged droughts” and is one of the fastest growing areas in the state. *Id.* These factors increase demands on water resources and as a result, groundwater and surface water are highly valued resources.

Exelon’s application, however, does not account for these long-term considerations.

Staff Response:

The Proposed Environmental Contention 4 is inadmissible as it fails to provide a concise statement of the alleged facts or expert opinions which support the Petitioners’ position on the issue and fails to show a genuine dispute with the application. 10 C.F.R. § 2.309(f)(1)(v) and (vi).

1. Proposed Environmental Contention 4 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). Here Petitioners allege that the Application fails to consider and evaluate impacts from water projects in the GBRA Lower Basin, GBRA Mid-Basin, GBRA Simsboro project, and the LGWSP for Upstream GBRA. Ex. H at D-1 and D-2. The Application is therefore inadequate, because these projects “must be described as indirect effects in the ESP.” Petition at 49. However, despite the Petitioners’ assertion, the ER does address these impacts. Specifically, ER Section 5.11 discusses and analyzes the cumulative impacts from future water projects, as well as water availability over the next fifty years. For instance:

Projects in the geographic area considered for cumulative impacts (see Table 5.11-1) include Coletto Creek Power Station; the South Texas Project; Guadalupe-Blanco River Authority (GBRA) development of water withdrawal, storage, and delivery infrastructure to meet the existing and projected water supply demands of their 10-county district; a clean coal plant in Matagorda County, the White Stallion Energy Center (WSEC); and a uranium mining project, the Uranium Energy Corporation (UEC) Goliad Project, in Goliad County... The impacts to the lower Guadalupe River basin's hydrology and water use from existing users and dischargers were factored into the analysis of the impacts of VCS operation... Considered for cumulative impact is the up to 60,000 acre-feet per year of water that would be withdrawn by GBRA for the LGWSP (TWDB Feb 2010).

ER at 5.11-1 to 3. Further:

Preparation of the 2011 draft Initially Prepared Plan included use of hydrologic models to quantify the cumulative effects of implementation of the South Central Texas Regional Water Plan through the year 2060... The cumulative impact assessment for the 2011 draft Initially Prepared Plan includes implementation of the VCS project and LGWSP as well as other recommended water management strategies... cumulative impacts related to the proposed withdrawals for the VCS cooling basin and LGWSP and the execution of the proposed GBRA water right of up to 189,484 acre-feet per year from the Guadalupe River, are expected to be SMALL.

ER at 5.11-4 and 5. Although Petitioners contend that the ER is deficient, they do not take issue with these findings in ER Section 5.11 or findings in any other portion of the ER. As such, they have failed to demonstrate a genuine dispute with the application. Accordingly, Proposed Environmental Contention 4 is inadmissible. 10 C.F.R. § 2.309(f)(1)(vi).

2. Proposed Environmental Contention 4 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 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.*, LBP-98-7, 47 NRC at 180.

Here, Petitioners have failed to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(v). In support of their claim that Exelon's ER does not describe or evaluate the impacts on long-term water availability and fails to analyze the alleged impacts from proposed water projects over the next fifty years, they reference Exhibit H, the Regional L 2011 Water Plan. See Ex. H, Summary of Water Management Strategies, *2011 South Central Texas Regional Water Plan*; see also Petition at 47 to 49. This document contains a long list of the 2011 South Texas Regional Water Plan management recommendations and strategies along with predicted costs, water demands, and shortages. Ex. H at D-1 to D-9. It is not clear how the information in this exhibit corresponds to the Petitioners' claims that the ER is deficient regarding impacts of long-term water availability, nor do the Petitioners explain how it supports their assertion. Further, a simple reference to a large number of documents does not provide a sufficient basis for a contention. Merely attaching a document in support of a contention without any explanation of its significance does not provide an adequate basis for a contention. See *Fansteel, Inc.*, CLI-03-13, 58 NRC at 204-205. Thus, Petitioners fail to provide a concise statement of the alleged facts or expert opinions which support their position on the issue. Accordingly, reliance on Ex. H does not support the admission of this contention. 10 C.F.R. § 2.309(f)(1)(v).

In addition, Petitioners cite to Exhibit D-2, *Contested Issues Concerning Early Site Permit, Exelon's Victoria County Station*, January 2011, to support their position that the ESP application fails to describe and analyze impacts from regional proposed water projects and also "fails to describe or evaluate water availability over the twenty to forty-year life span on the ESP. The ESP application does not provide sufficient information or an accurate description of these indirect effects." Petition at 49; see also Ex. D-2 at 67. Exhibit D-2 describes the cumulative effects from drought, but does not discuss long-term water availability, proposed future water projects, or the impacts from such projects which Petitioners claim the ER does not address. Rather, Exhibit D-2 only contains short paragraphs that reiterate Petitioners' belief that Exelon's ER is deficient regarding long-term water availability:

Exelon therefore finds itself in a position of proposing to build a nuclear reactor facility where the legal and physical availability of the water in question lacks legal and scientific definition. There is no legal or scientific basis for Exelon to assume future water will be available where the fundamental assumptions of the projected availability of this water are flawed.... Exelon did not adequately address these issues, preferring simply to assert that the water supply for the Exelon facility could be met by leasing, new sources, buying existing rights or some combination... Petitioners believe that future development of ground water under Texas law will result in surface water being unavailable for use by Exelon in the quantities required for plant operation.

Ex. D-2 at 67. Petitioners do not attempt to connect the information in this exhibit to their claim that Exelon's ER is deficient. It is not clear how Exhibit D-2 or Exhibit H lend support for their position in Proposed Environmental Contention 4. Merely attaching a document in support of a contention without any explanation of its significance does not provide an adequate basis for a contention. See *Fansteel, Inc.*, CLI-03-13, 58 NRC at 204-205. Also, 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.*, LBP-98-7, 47 NRC at 180. Therefore, as Petitioners have failed to provide sufficient support for their contention, Proposed Environmental Contention 4 should not be admitted. 10 C.F.R. § 2.309(f)(1)(v).

I. PROPOSED CONTENTION TSEP-ENV-5:

The ER fails to document the potential federal reserved water right mandating freshwater inflow requirements for the Aransas National Wildlife Refuge. The federal government may invoke this right to protect the endangered Whooping Crane, which would preclude further use of the waters of the Guadalupe River.

Petition at 49. Petitioners argue that the federal government may invoke the reserved water rights doctrine, which reserves land from becoming part of the public domain because it is being saved for a primary federal purpose. *Id.* at 51. The minimum amount of water on the land that is needed to fulfill the primary federal purpose is thus reserved by implication. See Ex. D-2 at 14; *citing Winters v. U.S.*, 207 U.S. 564 (1908). If the government asserts a federal reserved water right for the Aransas National Wildlife Refuge, it will have an earlier priority date than the

GBRA's surface water rights on the Guadalupe River. Petition at 52. Consequently, "should the government invoke this right, Exelon's water supply will not be highly dependable." *Id.* at 50.

Staff Response:

Proposed Environmental Contention 5 is inadmissible because it fails to demonstrate that the issue raised in the proceeding is material to the findings the NRC must make, does not provide sufficient information to show that a genuine dispute exists, and fails to provide a concise statement of the alleged facts or expert opinions which support the Petitioners' position on the issue. 10 C.F.R. § 2.309(f)(1)(iv), (v) and (vi).

1. Proposed Environmental Contention 5 is not material

Section 2.309(f)(1)(iv) requires that a petitioner "demonstrate that the issue raised in the contention is material to the findings the NRC must make." 10 C.F.R. § 2.309(f)(1)(iv). As support for their contention, Petitioners cite the water rights doctrine⁵ and allege that Exelon's ER fails to comply with NEPA because it does not analyze the "reasonably foreseeable impacts to the environment" that will ensue if the federal government invokes the reserved water rights doctrine for the Aransas National Wildlife Refuge. Petition at 50-52. This right, if invoked, would then "preclude further use for waters of the Guadalupe River" and leave Exelon with an undependable water supply. Petition at 49-50. However, this contention is speculative and fails to show how such alleged impacts are reasonably foreseeable such that the ER should consider them. For instance, Petitioners claim that under the reserved water rights doctrine, the federal government could possibly assert a reserved water right on behalf of the Refuge. This is based on several assumptions. First, Petitioners assume that if the federal government ever asserts the water right, it would reserve 1,242,500 acft/yr of water for the Refuge. Petition at 51. This amount, however, is also an assumption as it is only the "best estimate of the minimum quantity

⁵ See *Winters v. U.S.*, 207 U.S. 564 (1908).

of water needed to fulfill the purposes of the Refuge.” *Id.* Next, since the Aransas National Wildlife Refuge was established on December 31, 1937, Petitioners claim that water reserved for the Refuge would take priority over any new water rights, including the GBRA’s surface water rights on the Guadalupe River. See Ex. D-2 at 12; see also Petition at 51. However, this will only come to pass if the government invokes the federal reserved water right for the Refuge in the way that Petitioners describe. Finally, Petitioners conclude that if government ever chooses to invoke this reserved right, “historic records indicate that” Exelon will not have a sufficient water supply for the Victoria County Site. Petition at 50. Thus, Petitioners’ claim is founded on speculative assumptions and NEPA does not require an analysis of speculative and remote scenarios. See *Nuclear Fuel Servs. Inc.* LBP-05-8, 61 NRC at 208. Moreover, Petitioners have not shown how it is reasonably foreseeable that the government will invoke the reserved water rights doctrine, or if invoked, how it this doctrine will impact Exelon’s water supply to make it not “highly dependable.” Petition at 50. Nor have they demonstrated how such impacts are reasonably foreseeable. *Duke Energy Corp.*, CLI-03-17, 58 NRC at 431.

2. Proposed Environmental Contention 5 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 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.*, LBP-98-7, 47 NRC at 180.

Here, Petitioners have failed to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(v). In support of their claim that Exelon's water supply is not "dependable" and the ER fails to "identify the potential that the federal government might assert a federal reserved water right for the Refuge," Petitioners cite to Exhibit D-2, *Contested Issues Concerning Early Site Permit, Exelon's Victoria County Station*, January 2011, at 14, 18, 12-32. The portion of this exhibit contains general information on the reserved water rights doctrine, including historical background, case law, and several studies regarding minimum inflows for various Texas estuaries. See Ex. D-2 at 12-32. Exhibit D-2 mentions the Aransas National Wildlife Refuge, but does not include any additional information about the Refuge. *Id.* at 21. From this exhibit, it is not clear how this information relates to Petitioner's contention alleging omissions in the ER. Specifically, Petitioners do not explain how this exhibit supports their claim because it fails to demonstrate that the government will exercise that right and how it will impact the conclusions in the ER. Nor do Petitioners attempt to link the information in this exhibit to their claim that Exelon does not analyze the "reasonably foreseeable impacts" stemming from this federal reserved water right. Simply attaching a document in support of a contention without any explanation of its significance does not provide an adequate basis for a contention. See *Fansteel, Inc.*, CLI-03-13, 58 NRC at 204-205.

Petitioners likewise reference Exhibit D-2's discussion of the "Texas prior appropriation doctrine" as support for their claim that Exelon will not have sufficient water for the proposed Victoria County Site. See Ex. D-2 at 49-62. These pages provide an overview of the prior appropriation doctrine, reference case law and statutes, and show charts illustrating GBRA water rights and inflows. *Id.* However, it is not clear how these pages correspond to Petitioner's claims. In particular, Petitioners do not link the information in Exhibit D-2 to their claim that the government may invoke the federal reserved water right, which would in turn render the proposed VCS's water supply undependable. Again, simply attaching a document in support of

a contention without any explanation of its significance does not provide an adequate basis for a contention. See *Fansteel, Inc.*, CLI-03-13, 58 NRC at 204-205.

In addition, Petitioners reference Regulatory Guide 4.7, *General Site Suitability for Nuclear Power Stations* (Rev. 2, Apr. 1998), at 4.7-13, as support for their position that Exelon will not have a dependable water supply and that the NRC cannot approve an application without a prior demonstration that there will be a “highly dependable system of water supply sources...available under postulated occurrences of natural and site-related accidental phenomena.” Petition at 50; *citing* RG 4.7 at 13. However, Petitioners have not shown how Regulatory Guide 4.7, which is a safety regulatory guide, lends support for their assertion that the ER is inadequate. Therefore, as Petitioners have failed to provide sufficient support for their contention, Proposed Environmental Contention 5 should not be admitted. 10 C.F.R. § 2.309(f)(1)(v).

J. PROPOSED CONTENTION TSEP-ENV-6:

The ER fails to describe or analyze the future changes in water availability in light of the reasonably foreseeable impacts of a changing climate in the Guadalupe and San Antonio River basin.

Petition at 53. Petitioners assert that based upon scientific models and reports, climate change will cause reduced river flows in the Guadalupe and San Antonio River basins as well as increased evaporation in the San Antonio Bay. This, in turn, will cause increased salinities. *Id.* Due to these impacts, there will be a freshwater deficit to the San Antonio Bay of 270,000 acft/yr by 2100. As a result, “these changes will affect the availability of water for VCS itself, and they will result in increased impacts to salinities in the San Antonio Bay and increased impacts on the Whooping Crane, if VCS continued to divert water despite the reduced river flows.” *Id.* Petitioners thus claim that Exelon has not complied with NEPA, because its application does not analyze impacts from climate change.

Staff Response:

Proposed Environmental Contention 6 is inadmissible as it fails to show a genuine dispute with the application and fails to provide a concise statement of the alleged facts or expert opinions which support the Petitioners' position on the issue. 10 C.F.R. § 2.309(f)(1)(v) and (vi).

1. Proposed Environmental Contention 6 fails to demonstrate 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). Here Petitioners allege that the ESP fails to analyze future changes in water availability caused by impacts from climate change in the Guadalupe and San Antonio River Basin. Although the Commission has held that it expects "the Staff to include consideration of carbon dioxide and other greenhouse gas emissions in its environmental reviews for major licensing actions under the National Environmental Policy Act," the Petitioners have not shown how the ER inadequately addresses future water availability at the proposed VCS "in light of the reasonably foreseeable impacts" of climate change. *Duke Energy Carolinas* (Combined License Application for William States Lee III Nuclear Station, Units 1 and 2) CLI-09-21, 70 NRC 927, 931 (2009); see also Petition at 53.

First, Petitioners claim that "by the year 2100 there will be dramatic reductions in precipitation and runoff for the Guadalupe River and San Antonio River basins, resulting in lower river flows." Petition at 53. As a result, "[t]hese changes will likely equate to a freshwater deficit to the bay of 270,000 acft/yr" and "will affect the availability of water for VCS itself, and they will result in increased impacts to salinities in the San Antonio Bay and increased impacts on the Whooping Crane." *Id.* Despite these assertions, Petitioners do not specifically challenge the Application's treatment of future water availability that is discussed in the ER. For instance,

Petitioners do not dispute the information in ER Section 5.2.2.1 which analyzes future water availability:

A surplus of more than 115,000 acre-feet per year is projected in 2060 under the GBRA/UCC water rights...For the potentially available portions of these water rights, Exelon estimates a current surplus of approximately 39,000 acre-feet per year...The estimated plant water withdrawal was less than 15 percent of the Guadalupe River flow 85 percent of the time. Approximately 17 percent of the time, the plant either needed no additional makeup water, or no water was available for plant use as the result of low flow conditions. The withdrawal rate exceeded 30 percent of the estimated river flow less than 3 percent of the time.

ER at 5.2-11. In addition, ER Section 5.11 discusses and analyzes the cumulative impacts from future water projects, as well as water availability over the next fifty years:

Projects in the geographic area considered for cumulative impacts (see Table 5.11-1) include Coletto Creek Power Station; the South Texas Project; Guadalupe-Blanco River Authority (GBRA) development of water withdrawal, storage, and delivery infrastructure to meet the existing and projected water supply demands of their 10-county district; a clean coal plant in Matagorda County, the White Stallion Energy Center (WSEC); and a uranium mining project, the Uranium Energy Corporation (UEC) Goliad Project, in Goliad County... The impacts to the lower Guadalupe River basin's hydrology and water use from existing users and dischargers were factored into the analysis of the impacts of VCS operation...Considered for cumulative impact is the up to 60,000 acre-feet per year of water that would be withdrawn by GBRA for the LGWSP (TWDB Feb 2010).

ER at 5.11-1 to 3. Second, Petitioners allege that there will be "reductions in precipitation" which will result in lower river flows. Petition at 53. However, "freshwater inflows to the Guadalupe Estuary during drought are expected to increase when all regional projects considered in the plan are implemented." ER at 5.11-4. In addition:

through the year 2060...cumulative impacts related to the proposed withdrawals for the VCS cooling basin and LGWSP and the execution of the proposed GBRA water right of up to 189,484 acre-feet per year from the Guadalupe River, are expected to be SMALL.

Id. at 5.11-4 and 5. Petitioners do not state how these conclusions are inadequate. Nor do they specifically challenge the ER's findings regarding salinity and impacts on the Whooping Crane in Section 5.11.3.1:

Based on the information provided in the cumulative effects assessment prepared as part of the Region L 2011 Initially Prepared Plan and the discussion

of cumulative hydrologic impacts...it is concluded that the cumulative impacts on freshwater inflows to the Guadalupe Estuary would be small. Accordingly, although the relationship of freshwater inflows, salinity, and other factors to whooping crane health and energetics remains unclear, the cumulative impacts on aquatic and terrestrial wildlife relying on the Guadalupe Estuary and San Antonio Bay system, including whooping cranes and their habitat, would be SMALL.

ER at 5.11-8. Petitioners assert deficiencies in the Application but do not mention, much less dispute the findings in ER Section 5.11 or in any other section. "A contention that simply alleges that some matter ought to be considered does not provide the basis for an admissible contention." *Rancho Seco*, LBP-93-23, 38 NRC at 246. Thus, because Petitioner's have failed to raise a genuine dispute with the Application, the contention is inadmissible. 10 C.F.R.

§ 2.309(f)(1)(vi).

2. Proposed Environmental Contention 6 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 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.*, LBP-98-7, 47 NRC at 180.

Here, Petitioners have failed to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(v). As support for their claim that the ER should analyze climate change impacts, they cite to Exhibit F-1, *Grus Americana and a Texas River: A Case for Environmental Justice*, at 22-25. This exhibit contains a section entitled, "The Added Threat from Future Climate Change," and discusses the characteristics of the various Texas climates, including the "subtropical subhumid zone" of the Guadalupe River Basin. Ex. F-1 at 21-22:

The Intergovernmental Panel on Climate Change (IPCC) precipitation levels for the entire region are predicted to fall by 5 to 20 percent by 2100. The IPCC (2007) predicts a positive temperature change of 3.5°C (6.3°F) or more in this same area.

As the climate warms, evapotranspiration will increase with a subsequent loss of soil moisture, and the net amount of water added to the watershed (precipitation minus evaporation) will certainly decrease. Thus the consequences of climate change are predicted to result in a temperature increase of 3.5°C (6.3°F) and a net decrease in annual precipitation of 15 percent along the Guadalupe River and, subsequently, on San Antonio Bay by the year 2100.

Id. at 22. The exhibit also describes studies and theories which seek to predict the relationship between precipitation and river flow in the Guadalupe River and San Antonio River Basins. *Id.* at 23. Exhibit F-1 also predicts that:

the effect of climate change on the Guadalupe River can be estimated. Two aspects will be discussed: 1) the change in frequency of drought events and 2) the decrease in the general flow from the Guadalupe Basin. ... The San Antonio River also supplies freshwater runoff to San Antonio Bay. On the average, this flow adds about a third of the flow from the Guadalupe River. The climate change caused reduction in the annual flow of this river will be approximately 42,000 ac ft/yr. This would bring the total reduction in the freshwater river inflow to the San Antonio Bay to essentially 162,200 ac ft/yr, a very significant loss of renewal water.

Id. at 24. However, despite these detailed studies and predictions, Petitioners make no effort to connect the findings in Exhibit F-1 to the alleged deficiencies in Exelon's ER regarding climate change. Moreover, Petitioners do not provide expert support for how the proposed VCS project will make a difference to impacts on water availability. Merely attaching a document in support of a contention without any explanation of its significance does not provide an adequate basis for a contention. See *Fansteel, Inc.*, CLI-03-13, 58 NRC at 204-205. The Petitioners have not demonstrated that their alleged facts or expert opinions support the bases for their contention. Accordingly, Proposed Environmental Contention 6 is inadmissible. 10 C.F.R. § 2.309(f)(1)(v).

K PROPOSED CONTENTION TSEP-ENV-7:

The Exelon ER is inadequate because it fails to rigorously explore and objectively evaluate the potential for catastrophic impacts of VCS water use on the endangered Whooping Crane—impacts that threaten the survival of the species.

Petition at 55. In Proposed Contention TSEP-ENV-7, the Petitioners assert that the Exelon ER contains an inadequate analysis of the impacts caused by reduced freshwater inflows on the primary food and water sources of the whooping crane. *Id.* at 57-60. Accordingly, the Petitioners argue, the ER's conclusion that the impacts on the Whooping Crane would be "small" is erroneous. *Id.* at 61.

Staff response: The Staff does not oppose the admission this contention.

L. PROPOSED CONTENTION TSEP-ENV-8:

Exelon's ER fails to rigorously explore and objectively evaluate the unprecedented 2008-2009 mortality event of Whooping Cranes at the Aransas National Wildlife Refuge. In the ER, Exelon attempts to undermine the official reports of a federal agency and urges the NRC to rely instead on biologically unsound rationales.

Petition at 61. In Proposed Contention TSEP-ENV-8, the Petitioners argue that the Applicant's ER is inadequate because it does not include a complete evaluation of a significant Whooping Crane mortality event during 2008-2009. *Id.* The Petitioners argue that Exelon avoided analyzing the U.S. Fish and Wildlife Service reported die-off of 8.5% of the Aransas Whooping Crane flock by attempting "to discount the findings of a federal agency" and providing alternative explanations for reduced crane census counts. *Id.* at 62-65. Finally, the Petitioners assert that the mortality event should be analyzed because it occurred during a period of reduced freshwater inflows due to a drought and that reduced freshwater inflows due to plant operation will have a major effect on the Whooping Crane. *Id.* at 65.

Staff response: The Staff does not oppose the admission of this contention.

M. PROPOSED CONTENTION TSEP-ENV-9:

The ER fails to rigorously explore and objectively evaluate the impact of VCS water use on food resources and energetics of Whooping Cranes. Exelon relies heavily upon the SAGES report, despite the fact that it was universally criticized by experts in the field as flawed. Experts agreed it contained false assumptions, and was inconsistent and contrary to published science. 211 ER June 24, 2010 update at 2.4-11; 5.11-7. Exelon failed to bring these critical facts to the attention of the NRC. TSEP contends that not only is the SAGES study fatally flawed on important scientific principles, but it also represents a prime example of junk science created by the same water supplier, GBRA, who wants to sell water to Exelon. As such, this contention challenges the use of the SAGES Report under the precedent of *Daubert*.

Petition at 65-66. In Proposed Contention TSEP-ENV-9, the Petitioners challenge the adequacy of the Applicant's ER analysis of impacts on the Whooping Crane due to reduced freshwater inflows and increased salinity. *Id.* at 71-72. In particular, the Petitioners assert that Exelon bases its "small" impact conclusion primarily on the SAGES study that was "universally criticized on numerous grounds by expert scientists and by biological staff of the USFWS and Texas Parks & Wildlife Department." *Id.* at 66-73. The Petitioners cite a number of comments on the SAGES study from experts that question its conclusions regarding the relationship between low inflows/high salinities and the Whooping Crane and its food sources. *Id.* at 68-70. Finally, the Petitioners state that this contention challenges the SAGES study under *Daubert*. *Id.* at 66.

Staff response: The Staff does not oppose the admission of this contention to the extent that its challenge to the adequacy of the ER analysis of the impacts of reduced freshwater inflows on the Whooping Crane satisfies the threshold admissibility requirements of 10 C.F.R. § 2.309(f)(1).⁶

⁶ To the extent that the Petitioner seeks a ruling on the admissibility of evidence by "challeng[ing] the use of the SAGES Report under the precedent of *Daubert*," the Staff notes that this is not the appropriate stage of the proceeding for such a challenge. Petition at 66.

N. PROPOSED CONTENTION TSEP-ENV-10:

The ER fails to explore and evaluate the impacts that the diversion and consumption of water from the Guadalupe River will have upon the San Antonio Bay due to the reduced sediment and nutrient inflows.

Petition at 73. In Proposed Contention TSEP-ENV-10, the Petitioners allege that the ER does not contain an analysis of the environmental impacts of reduced sediment and nutrient loads to the San Antonio Bay due to water consumption and diversion caused by plant operations. *Id.* at 73-75. The Petitioners argue that sediments and nutrients from rivers are an essential part of estuary health. *Id.*

Staff Response: The Staff does not oppose the admission of this contention.

O. PROPOSED CONTENTION TSEP-ENV-11:

The water used by VCS will have tremendous aquatic impacts; it will result in more severe, more frequent, and longer lasting “man-made” high salinity drought conditions in the San Antonio Bay system. It will also significantly impact the bay’s ecosystems.

Petition at 75. In Proposed Contention TSPEP-ENV-11, the Petitioners argue that the ER does not adequately analyze the effects of water use and diversion by the proposed VCS plant. Petitioner asserts that use and diversion of water will increase “the severity, frequency and duration of ‘man made’ drought conditions.” *Id.* at 75-76. As a result, the Petitioners argue, freshwater inflows to estuaries will be reduced and salinity will increase to levels that are unsuitable for many estuarine species, particularly some that are primary food sources for the Whooping Crane. *Id.* at 76-79.

Staff Response: The Staff does not oppose the admission of this contention.

P. PROPOSED CONTENTION TSEP-ENV-12:

The water used by VCS will have tremendous aquatic impacts; it will result in more severe, more frequent, and longer lasting “man-made” high salinity drought conditions in the San Antonio Bay system. It will significantly impact the bay’s ecosystems and will adversely modify designated critical habitat for an endangered species.

Petition at 80. Proposed Contention TSEP-ENV-12 is plead similarly to TSEP-ENV-11. The Petitioners additionally assert that the ER “does not specifically address adverse modification of designated critical habitat” of the Whooping Crane due to salinity impacts caused by reduced freshwater inflows. *Id.* at 82.

Staff Response: The Staff does not oppose the admission of this contention.

Q. PROPOSED CONTENTION TSEP-ENV-13:

Exelon fails to satisfy 10 C.F.R. § 51.50(b)(4) because Exelon has not identified the procedures to protect the endangered Whooping Cranes’ environment, specifically the designated critical habitat at the Aransas National Wildlife Refuge.

Petition at 84. In Proposed Contention TSEP-ENV-13, the Petitioners assert that the Applicant’s ER does not comply with 10 C.F.R. § 51.50(b)(4) because it does not include provisions for mitigating and monitoring the impacts of increased salinity and dewatering impacts on designated critical habitat for the Whooping Crane. *Id.* at 84-86.

Staff Response: The Staff does not oppose the admission of this contention.

R. PROPOSED CONTENTION TSEP-ENV-14:

The Exelon application does not include sufficient or accurate information to enable the NRC to comply with the requirements of the federal Endangered Species Act, 16 U.S.C. § 1531 et seq., because Exelon has not rigorously explored or objectively evaluated the impacts of the proposed VCS plant on listed Whooping Cranes.

Petition at 87. In Proposed Contention TSEP-ENV-14, the Petitioners argue that the NRC will not be able to comply with its consultation responsibilities under the ESA because the Applicant’s ER inadequately analyzes the impacts of the proposed VCS plant on the Whooping

Crane and its designated critical habitat as described in proposed contentions 7-13. *Id.* at 87-89.

Staff Response: The Staff does not oppose the admission of this contention, but notes that it is largely repetitive of Proposed TSEP-ENV-7-13.

S. PROPOSED CONTENTION TSEP-ENV-15:

Exelon's ER fails to address the economic impacts of plugging oil and gas wells, and impacts of the VCS on owners of onsite and adjacent mineral rights.

Petition at 92. In support of this Proposed Contention TSEP-ENV-15, the Petitioners assert that the ER does not address the financial impacts of plugging the oil and gas wells on the Applicant itself. Petition at 92-95. The Petitioners also assert that the Applicant has not addressed the socioeconomic impacts of VCS on onsite and adjacent mineral owners. *Id.* Specifically, the Petitioners state that "Exelon has not evaluated the costs of locating and properly plugging" abandoned oil and gas wells on and around the VCS site." Petition at 92. The Petitioners further assert that "because it is inconceivable that Exelon would be able to operate the VCS plant with ongoing mineral exploration and extraction activities on the site, Exelon must evaluate the costs of condemning the minerals within the site boundaries." *Id.* The Petitioners also state that nearby offsite oil and gas activities must also be evaluated to ensure compatibility with safe VCS operation so that any incompatible activities would be curtailed." *Id.*

Staff Response:

Proposed Contention TSEP-ENV-15 is inadmissible because it fails to demonstrate that this issue is within the scope of the proceeding, fails to provide a concise statement of the alleged facts or expert opinions which support the Petitioners' position on the issue, and fails to demonstrate a genuine dispute with the application. 10 C.F.R. § 2.309(f)(1)(iii), (v) and (vi).

1. Proposed Contention TSEP-ENV-15 is outside the scope of this proceeding.

In support of Proposed Contention TSEP ENV-15 the Petitioners assert that the ER fails to evaluate the costs of locating and properly plugging oil and gas wells onsite, and fails to

include details of Exelon's plans to obtain mineral rights through purchase or condemnation and the associated costs. Petition at 92-95. However, pursuant to 10 C.F.R. § 51.50(b) an environmental report submitted in support of an ESP "need not include an assessment of the economic, technical, or other benefits ... and costs of the proposed action" 10 C.F.R. § 51.50(b) (emphasis added). Therefore, to the extent that the Petitioners assert that the ER must include an analysis of the costs which Exelon will incur as a result of locating and properly plugging oil and gas wells onsite and obtaining mineral rights, this information is not required by Commission regulation. *Id.* Therefore the assertion that the Applicant must evaluate the expense of plugging wells and obtaining mineral rights cannot support the admissibility of Proposed Contention TSEP-ENV-15 because it is outside the scope of this proceeding, contrary to 10 C.F.R. 2.309(f)(1)(iii).

2. Proposed Contention TSEP-ENV-15 is not supported by 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 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.*, LBP-98-7, 47 NRC at 180.

Here the Petitioners allege that the ER fails to address the "socioeconomic costs of plugging abandoned wells and of the impacts on mineral rights holders" but do not indicate to what "socioeconomic costs" they are referring. The Petitioners assert that "nearby operating oil and gas facilities may need to cease operation and be properly closed prior to the operation of the Exelon Plant" and that the Applicant must "come to an agreement with the operators and

owners of the oil and gas interests in order to proceed with their construction.” Petition at 94-95. In support of these asserted costs, the Petitioners and their experts point out the monetary cost to identify and plug existing wells and give an estimate of the net present value of ongoing oil and gas operations on and near the VCS site. Petition at 95; Exhibit D-2 at 138; Preliminary Report McFaddin and Kay Creek Reserve Valuation, Victoria County, Texas (“Attachment A”).

However, neither the Petition, nor Attachment A to Exhibit D-2, asserts what socioeconomic impacts could be expected to occur. The Petitioners do not indicate how plugging any of these wells would have social impacts to the local community rather than simply financial impacts to the Applicant. *Id.* Attachment A provides the net present value of ongoing oil and gas operations which is a “preliminary estimate of the reserves, future production and income attributable to the gross (100%) mineral interests” for mineral assets located on and near the VCS site. Exhibit D-2 at 140. Here, the Applicant has asserted that it has either reached agreements with mineral rights holders or will obtain ownership through eminent domain. ER at 5.1-1. The Petition does not allege that the owners of these mineral interests would suffer an economic impact should the Applicant acquire the mineral rights either through purchase or eminent domain. Nor does the Petition assert that termination of these oil and gas operations would lead to job, business, or tax losses in the local community. Therefore, Proposed Contention TSEP-ENV-15 fails to provide adequate factual or expert support for its claims that obtaining these rights would result in socioeconomic impacts, contrary to 10 C.F.R. § 2.309(f)(1)(v).

3. Proposed Contention TSEP-ENV-15 fails to raise a genuine dispute

Proposed Contention TSEP-ENV-15 also fails to raise a genuine dispute with the Application, contrary to 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, although the Petitioners identify this contention as one of omission, the Petition references the ER discussion regarding ownership of the oil and gas wells at Section 5.1.1.1 and simply asserts that it lacks details. Petition at 95. ER Section 5.1.1.1 discusses the mineral ownership interests of the current VCS site landowners, states that "the current landowners have agreed that using the Mineral Valuation Formulas is a fair and reasonable method for calculating the value of the mineral interests to be acquired," and indicates that Exelon plans to acquire additional surface and mineral rights, if needed. ER at 5.1-1. Although the Petitioners state that the ER does not include any details regarding possible purchase or condemnation of mineral rights, they do not challenge the use of the Mineral Valuation Formulas for purchase of onsite mineral rights or dispute the underlying assumption that Exelon can "condemn the mineral interest rights and oil and gas leaseholds that it is unable to obtain through a negotiated purchase," if necessary. *Id.*

In determining contention admissibility, "[a]ny contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed." See *Millstone*, LBP-08-9, 67 NRC at 433. Although the Petition identifies this contention as one of omission, the Petitioners have not only referenced the applicable ER section discussing the information, but also failed to dispute its underlying assumptions. Therefore, the Petitioners have failed to identify a genuine dispute with the application on a material issue of law or fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

T. PROPOSED CONTENTION TSEP-ENV-16:

The Exelon ER does not comply with 10 C.F.R. § 51.50(b)(1) because it fails to rigorously explore and objectively evaluate all alternative sites. A comparison of the Matagorda County site and the Victoria County Station site shows that the Matagorda County site presents an obviously superior site for the construction and operation of a nuclear power plant. The alternative Matagorda County site considered by Exelon does not have the serious problems and large impacts identified at the Victoria site.

Petition at 95. In Proposed Contention TSEP-ENV-16, the Petitioners assert that the alternative sites analysis in the ER is inadequate because the Matagorda County alternative site is

“obviously superior.” *Id.* at 95-96. Petitioners assert that the Matagorda County site is obviously superior because of its: 1) superior water availability, 2) reduced potential for impacting endangered species, 3) absence of growth faults, 4) smaller risks associated with oil and gas wells, 5) smaller risks due to no oil and gas pipelines traversing the site, and 6) smaller need for new transmission line construction. *Id.* at 95-105.

Staff Response: The Staff does not oppose the admission of this contention to the extent that Petitioners challenge the adequacy of the alternatives analysis with respect to downstream ecological impacts and transmission line impacts on the Whooping Crane and other migratory birds. The Staff opposes the remaining bases of this contention for the reasons set out below. Because this contention includes several inadmissible bases, the Staff response will address the admissibility of each basis and assess the extent to which the bases support the admissibility of the contention as a whole. *Cf. Crow Butte*, CLI-09-12, 69 NRC at 553 (the scope of an admitted contention is defined by its bases); *see also Duke Energy*, CLI-02-28, 56 NRC at 379.

1. Water Availability

Petitioners argue that the Guadalupe River, which is the proposed VCS plant’s source of makeup water, will be periodically unavailable to cool the plant in the future and unable to support population and industrial growth due to over-appropriation. Petition at 97-98. The Matagorda County site is obviously superior, Petitioner’s assert, because its source of cooling water would be comparatively abundant seawater. *Id.* at 98.

The Staff notes that this basis makes assertions similar to those in TSEP-ENV-2 to ENV-6 pertaining to water availability. Similarly, this basis does not demonstrate a genuine dispute of material fact or law with the ER for reasons similar to those provided in the Staff response to TSEP-ENV-2 and 6. 10 C.F.R. § 2.309(f)(1)(vi); Staff Answer *supra* at 35-37, 53-55. In particular, although Petitioners assert that the Guadalupe River will provide an inadequate source of makeup water in the future, they do not directly controvert the ER, which provides that

Exelon has several options for obtaining surface water rights. First, Exelon can secure existing senior water rights through a contractual agreement, obtain ownership of existing water rights, obtain a new water right, or acquire water through a combination of the new and existing water rights. ER at 2.3-133; see *also* ER Section 4.2.2 at 4.2-8. Further, the ER states that, based on this maximum water usage, seventy percent of the joint water rights remained available and “approximately 115,926 acre-feet per year are projected to be available in 2060 under the GBRA/UCC water rights, excluding the proposed VCS water withdrawal, after Victoria County needs and Calhoun County demands have been satisfied.” ER at 2.3-133 and 134; see *also* ER Section 4.2.2 at 4.2-8. Petitioners also do not specifically challenge the future water availability projections at ER 5.2-11 and 5.11-1-5, 8. See Staff Answer *supra* at 53-55.

The Petitioners have not shown that their projected impacts are more than remote and speculative because they do not directly challenge Exelon’s future water availability analysis. Their asserted impacts are not, therefore, reasonably foreseeable, and they need not be analyzed under NEPA. See *Private Fuel Storage L.L.C.* (Independent Spend Fuel Storage Installation), CLI-02-25, 56 NRC 340, 348-49 (2002) (NEPA requires only a discussion of “reasonably foreseeable” impacts). Accordingly, Petitioners’ assertions regarding water availability at the VCS site do not factor into an environmental preferability comparison. For these reasons, the Petitioners fail to demonstrate a genuine dispute with the application as required by 10 C.F.R. § 2.309(f)(1)(vi).

2. Growth faults

Petitioners’ argument that the Matagorda County site is obviously superior because it lacks growth faults does not demonstrate a genuine dispute of material fact or law with the application. 10 C.F.R. § 2.309(f)(1)(vi). First, Petitioners misconstrue the nature of the safety and environmental reviews as they relate to site selection. The 10 C.F.R. Part 100 safety evaluation entails an analysis of the effects that the site may have on safety-related components of the plant; the site must have certain characteristics that reduce the risk to the public from

normal operation and postulated accidents. See 10 C.F.R. § 100.1(c). The environmental review, in contrast, is intended to evaluate the impacts of construction and operation of the plant on the site and the surrounding environment.⁷ As Petitioners note, the growth faults “do not pose a seismic risk resulting from tectonic activity.” Exhibit D-2 at 93. Petitioners present no information indicating that the power block would be affected by the growth faults in any way that could impact the environment. Thus, whether the ER adequately weighed the existence of growth faults on the site that could threaten the integrity of the power block is a safety issue relevant to the Part 100 site selection criteria, but is not a factor in determining if a site is environmentally preferable site under NEPA.⁸ Petitioner has not presented a basis for the Matagorda County site being an environmentally preferable site in this regard. For these reasons, this basis does not demonstrate a genuine dispute of material fact or law with the application. 10 C.F.R. § 2.309(f)(1)(vi).

Second, Petitioners argue that the Matagorda County site is preferable because growth faults that would cross the VCS cooling pond could result in the failure of the cooling pond dam. Petitioners do not explain, however, why this dam failure scenario should be considered in the ER or what the environmental consequences of such a failure would be.⁹ Thus, they do not demonstrate how this factor suggests that the Matagorda County site is preferable.

A “rule of reason” applies to the content of environmental analyses carried out under NEPA and Part 51; impacts that are “‘remote and speculative’ . . . or ‘worst-case’ scenarios”

⁷ Petitioners cite Regulatory Guide 4.7, which states that “[p]referred sites are those with a minimal likelihood of surface or near-surface deformation” Petition at 95-96. This statement, however, pertains to Part 100 site selection criteria. In comparison, Regulatory Guide 4.2, Rev. 2 “Preparation of Environmental Reports for Nuclear Power Stations,” contains guidance for applicants on the appropriate level of detail to include in their ER’s characterization of site geology: “Except for those specific features that are relevant to the environmental impact assessment, the discussion may be limited to noting the broad features and general characteristics of the site and environs (topography, stratigraphy, and soil and rock types).” At 2-6.

⁸ This portion of the contention is similar to TSEP-SAFETY-1.

⁹ Appendix A to Part 100 addresses the safety considerations for seismically induced floods.

need not be considered. *Private Fuel Storage L.L.C.* (Independent Spend Fuel Storage Installation), CLI-02-25, 56 NRC 340, 348-49 (2002) (NEPA requires only a discussion of “reasonably foreseeable” impacts). The Petitioners have not shown why dam failure caused by the growth faults at VCS would be a reasonably foreseeable impact rather than a worst case scenario. Therefore, because the environmental analysis need not consider dam failure due to the growth faults at the VCS site, this factor need not be weighed in the comparison of alternatives. Accordingly, the Petitioners have not demonstrated a genuine dispute of material fact or law with the application as required by 10 C.F.R. § 2.309(f)(1)(vi).

Even if dam failure were not a remote and speculative event, Petitioners still have not alleged what the consequences of such a failure would be for the environment. In this regard, Petitioners have failed to demonstrate a genuine dispute with the ER. 10 C.F.R. § 2.309(f)(1)(vi). Without an explanation of the likelihood or significance of such an event, much less how they directly controvert the conclusions in the ER, these assertions about dam failure do not support the admissibility of the contention. Because Petitioners do not show why NEPA requires a dam failure analysis for VCS, they have not shown a reason to conclude that the Matagorda County site is an environmentally preferable alternative, much less an obviously superior one.

3. Oil and gas wells

Petitioners’ argument that the Matagorda County site is an obviously superior location because it presents smaller risks of explosion and poisonous gas seepage does not demonstrate a genuine dispute of material fact or law with the application.¹⁰ 10 C.F.R. § 2.309(f)(1)(vi). Petitioners provide no explanation for why Part 51 requires these factors to be weighed in the alternative sites analysis in the ER, and, thus, how oil and gas well hazards

¹⁰ This contention is similar to TSEP-SAFETY-3.

suggest that the Matagorda County site is environmentally preferable. Indeed, for the reasons discussed above, this issue is appropriately considered in the safety analysis, not the environmental review. Section 100.21(e) provides the applicable non-seismic siting criteria, and Regulatory Guide 1.70 at 2-5, 2-6, and 2-7 provides guidance to applicants regarding the appropriate description of the site regarding, among other things, drilling operations, explosions, liquid spills, and vapor clouds. Because Part 100 is the appropriate vehicle for evaluating the site vis-à-vis the hazards posed by oil and gas wells, this basis does not demonstrate a genuine dispute of material fact or law with the ER because these issues do not factor into the NEPA analysis.

4. Oil and gas pipelines

Petitioners' argument that the Matagorda County site is an obviously superior location because a number of oil and gas pipelines cross the VCS site does not demonstrate a genuine dispute of material fact or law with the application. 10 C.F.R. § 2.309(f)(1)(v) and (vi). For the reasons discussed above, this issue is appropriately considered in the safety analysis, not the environmental review. Section 100.21(e) provides the applicable non-seismic siting criteria, and Regulatory Guide 1.70 at 2-5 and 2-6 provides guidance to applicants regarding the appropriate description of the site regarding, among other things, pipelines. Therefore, Part 100 is the appropriate vehicle for evaluating the appropriateness of the site vis-à-vis the hazards posed by oil and gas pipelines. These issues do not factor into the NEPA analysis and do not form the basis of an environmental contention. Additionally, Petitioners allege that the applicant does not plan to relocate the two gas pipelines that currently run under the proposed cooling pond. *Id.* at 101. However, the Petitioners do not acknowledge or dispute that the applicant describes its plans to relocate these gas pipelines. See SSAR at 2.2-10; ER at 2.2-1. For these reasons, this basis does not demonstrate a genuine dispute of material fact or law with the ER.

5. Summary of Staff response

The Staff partially opposes the admission of this contention because four of its bases do not meet the admissibility criteria of 10 C.F.R. § 2.309(f)(1). For this reason, these four bases should be dismissed. The Staff does not oppose the two bases of TSEP-ENV-16 that challenge the ER alternatives analysis with respect to downstream impacts on endangered species and transmission line impacts on the Whooping Crane and other migratory birds.

U. PROPOSED CONTENTION TSEP-ENV-17:

In Section 5.7.1.6 of the ER, Exelon relies on the Waste Confidence Decision for its assertion that a repository can and likely will be developed at some site that will comply with radiation dose limits imposed by the U.S. Environmental Protection Agency. Id. at 5.7-7. Because the assertion is not supported by an EIS, however, the ER is inadequate to comply with NEPA.

Petition at 105.

The Petitioners assert that the ER must contain “an adequate discussion of the environmental impacts of operating a new reactor at the VCS site” and the “relative costs and benefits of a new reactor in comparison to other sources of electricity.” Petition at 107. In short, the Petitioners assert that the ER is inadequate to comply with NEPA because the Applicant did not assess the project-related environmental impacts and costs associated with disposal of spent fuel due to its reliance on the Waste Confidence Rule at 10 C.F.R. § 51.23. Further, the Petitioners assert that the NRC “must prepare an EIS that examines the cumulative impacts and costs of the entire amount of radioactive waste that will be generated [by] new reactors, including the environmental impacts and costs of siting, building, and operating each additional repository that may be required to accommodate the spent fuel generated by the new reactors.” Petition at 106.

Although the Petitioners do not explicitly state that the Petition is a challenge to the Waste Confidence Rule, the Petitioners cite to the Waste Confidence Decision Update,¹¹ stating that the contention is “within the scope of the hearing because the Commission recently refused to prepare an EIS to support its waste confidence findings.” Petition at 107. However, the Petitioners also acknowledge that “[h]aving failed to obtain a full environmental analysis of the environmental impacts of spent fuel disposal, TSEP therefore seeks such an analysis in this individual licensing case.” *Id.*

Staff Response: Proposed Contention TSEP-ENV-17 is inadmissible because it constitutes an impermissible attack on the Commission’s Regulations for which the Petitioners have not sought a waiver, and fails to demonstrate that such issues are in the scope of this proceeding. See 10 C.F.R. § 2.309(f)(1)(iii); 10 C.F.R. § 2.335; *Millstone*, CLI-01-24, 54 NRC at 364; *Dominion*, LBP-04-18, 60 NRC at 269; *Indian Point*, CLI-10-19, 71 NRC __ (slip op at 2).

1. Proposed Environmental Contention TSEP-ENV-17 is an impermissible attack on Commission Regulations

Proposed Environmental Contention TSEP-ENV-17 constitutes an impermissible attack on Commission regulations. The environmental impacts associated with disposal of spent fuel at a geologic repository have been analyzed by the Commission and documented in the Environmental Survey of the Reprocessing and Waste Management Portions of the LWR Fuel Cycle (NUREG-0116). The results are codified in 10 C.F.R. § 51.51(b) (Table S-3). Every environmental report submitted in support of an ESP application is required to include the values of Table S-3, which may be supplemented by a discussion of the environmental significance of the data. See 10 C.F.R. § 51.51(a).

¹¹ Although the Petitioners cite to 76 Fed. Reg. at 81,040, it appears that the citation should be to 75 Fed. Reg. at 81,040.

In addition, the Waste Confidence Rule states that the “Commission believes there is reasonable assurance that sufficient mined geologic repository capacity will be available to dispose of the commercial high-level radioactive waste and spent fuel generated in any reactor when necessary.” See 10 C.F.R. § 51.23(a). As a result, no discussion of environmental impacts from onsite storage of spent fuel “for the period following the term of the reactor operating license or amendment, reactor combined license or amendment, or initial ISFSI license or amendment for which application is made, is required in any environmental report, environmental impact statement, environmental assessment, or other analysis prepared in connection with the issuance or amendment of an operating license for a nuclear power reactor . . . or any amendment thereto.” See 10 C.F.R. § 51.23(b).

Here, as noted by the Petitioners, the Applicant, in accordance with the requirements of 10 C.F.R. § 51.51(a), included a discussion of the environmental impacts associated with radioactive wastes in its discussion of the operational impacts of the uranium fuel cycle. See ER § 5.7.1. Relying on the provisions of 10 C.F.R. § 51.23(b), the Applicant did not evaluate any environmental impacts resulting from onsite storage of spent fuel for the period following the term of the license. *Id.* Therefore, in challenging the Applicant’s reliance on the provisions of 10 C.F.R. § 51.23(b), the Petitioners have raised an impermissible challenge to Commission regulations. Also, to the extent that the Petitioners intend Contention TSEP-ENV-17 to be a challenge to the assumptions and underlying data supporting Table S-3 this too is an impermissible challenge to Commission regulations. Such challenges to Commission regulations cannot serve as the basis for the admissibility of proposed Contention TSEP-ENV-17. See 10 C.F.R. § 2.335; *Tennessee Valley Auth.* (Bellefonte Nuclear Power Plant, Units 3 and 4), CLI-09-03, 69 NRC 68, 75 (2009).

The Petitioners also assert that the ER is inadequate to comply with NEPA because it fails to address the environmental impacts of “siting, building, and operating” a facility for disposal of spent fuel. Petition at 105-107. The Petitioners cite 40 C.F.R. § 1508.27(b)(5) in

support of their statement that “because the evaluation of the environmental impacts of radioactive waste disposal involves predictions far into the future, the generic EIS must address the uncertainty that attends those predictions.” Petition at 106. However, as discussed above, the environmental impacts associated with disposal of spent fuel at a geologic repository have been analyzed by the Commission, documented in NUREG-0116, and codified in 10 C.F.R. § 51.51(b) (Table S-3). To the extent that the VCS ESP application can be considered to result in impacts related to disposal of spent fuel, these environmental impacts have been evaluated generically for all such applications. *Id.* In accordance with 10 C.F.R. § 51.23(b) the Applicant did not evaluate any environmental impacts resulting from onsite storage of spent fuel for the period following the term of the license, including any “predictions far into the future” that the Petitioners assert should be included in the ER. Therefore, in challenging the Applicant’s reliance on the environmental impacts of spent fuel disposal codified in 10 C.F.R. § 51.51(b), and the Waste Confidence Rule at 10 C.F.R § 51.23, the Petitioners have again raised impermissible challenges to Commission regulations, that cannot serve as the basis for the admissibility of proposed Contention TSEP-ENV-17. See 10 C.F.R. § 2.335; *Bellefonte*, CLI-09-03, 69 NRC at 75.

The Commission has provided litigants in adjudicatory proceedings 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). In summary, section 2.335(b) requires:

- (1) A party to an adjudicatory proceeding may petition for a rule or regulation waiver or exception;
- (2) That special circumstances with respect to the subject matter of the particular proceeding are such that the application of the rule would not serve the purposes for which it was adopted;
- (3) The petition is accompanied by an affidavit that identifies the specific aspect or aspects of the subject matter of the proceeding as to which the application of the rule would not serve the purposes for which the rule was adopted; and

(4) The affidavit must state with particularity the special circumstances alleged to justify the waiver or exception requested.

The Petition does not meet the criteria for properly challenging a rule or regulation under these provisions. The Petitioners have not requested a waiver or exception, nor have they attempted to show that special circumstances exist with this application or in this proceeding. As the Commission noted in *Bellefonte* waivers are not granted where “the circumstances on which the waiver’s proponent relies are common to ‘a large class of applicants or facilities.’” *Bellefonte*, CLI-09-03, 69 NRC at 75 (citing *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-88-10, 28 NRC 573, 596, 597 (1988)).

The Petitioners reference several documents which were submitted to the Commission for consideration during the Waste Confidence Decision Update rulemaking, including the Comments of the Institute for Energy and Environmental Research on the U.S. Nuclear Regulatory Commission’s Proposed Waste Confidence Rule Update and Proposed Rule Regarding Environmental Impacts of Temporary Spent Fuel Storage (“IEER Report”) and Comments by Texans for a Sound Energy Policy *et al.* Regarding NRC’s Proposed Waste Confidence Decision Update and Proposed Rule Regarding Consideration of Environmental Impacts of Temporary Storage of Spent Fuel After Cessation of Reactor Operations. While these documents contain discussions related to the technical feasibility of a geologic repository for disposal of spent fuel and the environmental impacts of temporary onsite storage of spent fuel, they are insufficient to support a petition under 10 C.F.R. § 2.335 for waiver of or exception to a rule since they do not ask for a waiver. Nor do these documents or the Petition indicate what aspect of their contention is not common to “a large class of applicants or facilities.” *Bellefonte*, CLI-09-03, 69 NRC. at 75. Instead, the Petition merely asserts that the Applicant should not be able to rely on the regulation. Therefore, Contention TSEP-ENV-17, a challenge to the Commission’s Waste Confidence Rule and Table S-3, is inadmissible.

2. Proposed Environmental Contention TSEP-ENV-17 is outside the scope of this proceeding

The Petitioners also state that both the ER and EIS should address the costs associated with the nuclear fuel cycle, including siting, building, and operating a disposal repository. Petition at 106-107. The Petitioners assert that the ER should then compare the relative costs and benefits of a new reactor to those associated with other sources of electricity. *Id.* As support for this assertion the Petitioners point to the requirements of 10 C.F.R. § 51.71(d) regarding the contents of draft environmental impact statements. However, including such a cost analysis in the ER at the ESP stage is not required by 10 C.F.R. § 51.50(b)(2), the regulation governing the information to be addressed in an ESP application. Section 51.50(b)(2) states that “[t]he environmental report need not include an assessment of the economic, technical, or other benefits ... and costs of the proposed action or an evaluation of alternative energy sources.”¹² As a result, the information which Petitioners have asserted is not in the ESP application is not required to be included in the ESP application. Therefore, to the extent that the Petitioners assert that the ER for an ESP should contain an analysis of the relative costs of the nuclear fuel cycle as compared to other sources of energy, that assertion is outside the scope of this proceeding and cannot serve as a basis for an admissible contention. See 10 C.F.R. § 2.309(f)(iii).

¹² The Petitioners also assert that the staff’s environmental impact statement should include such a cost analysis. Petition at 106. As an initial matter, 10 C.F.R. § 2.309(f)(2) states, specifically, that “[o]n issues arising under the National Environmental Policy Act, the petitioner shall file contentions based on the applicant’s environmental report.” Therefore, a contention asserting that the staff’s EIS should include specific information is not ripe until the EIS is issued, at which time the Petitioners can file new or amended contentions. 10 C.F.R. 2.309(f)(2). Even if such a contention were permissible, here, where the costs analysis was not part of the applicant’s ER, an analysis of such costs in the staff’s EIS would be precluded by 10 C.F.R. § 51.75(b) which states that a draft environmental impact statement “must not include an assessment of the economic, technical, or other benefits . . . and costs of the proposed action or an evaluation of alternative energy sources, unless these matters are addressed in the early site permit environmental report.” See 10 C.F.R. § 51.75(b). Thus, the assertion that the EIS should include a consideration of costs is also outside the scope of this proceeding, in contravention of 10 C.F.R. § 2.309(f)(iii).

V. PROPOSED CONTENTION TSEP-ENV-18:

The ER lacks an adequate legal or factual basis to rely on Table S-3 for its assessment of the environmental impacts of the uranium fuel cycle because the assumptions on which Table S-3 is based are grossly outdated.

Petition at 108. In support of Proposed Contention TSEP-ENV-18, the Petitioners assert that it relates to the question of whether the ER contains an adequate discussion of the environmental impacts of operating a new reactor at the VCS site or the relative costs and benefits of a new reactor in comparison to other sources of electricity.” Petition at 110. The Petitioners also assert that the Commission’s refusal to reconsider Table S-3 as part of the Waste Confidence Decision Update was in error. Petition at 109.

Staff Response: Proposed Contention TSEP-ENV-18 is inadmissible because it is an impermissible attack on the Commission’s Regulations and because it is outside the scope of this proceeding. See 10 C.F.R. § 2.309(f)(1)(iii); 10 C.F.R. § 2.335; *Millstone*, CLI-01-24, 54 NRC at 364; *North Anna ESP Site*, LBP-04-18, 60 NRC at 269-270; *Indian Point*, CLI-10-19, 71 NRC __ (slip op at 2).

1. Proposed contention TSEP-ENV-18 is an impermissible attack on Commission Regulations.

In this contention, the Petitioners have again raised an impermissible attack on a Commission rule by challenging Table S-3 of 10 C.F.R. § 51.51, stating that “[t]he assumptions on which Table S-3 is based are grossly outdated.” *Id.* However, the Petition does not meet the criteria for properly challenging a rule or regulation under the provisions of 10 C.F.R. § 2.335. Furthermore, the Petitioners acknowledge that this contention is outside the scope of the hearing “because 10 C.F.R. § 51.51(b) permits Exelon to rely on Table S-3” and state that the contention was submitted “because the Commission has refused to revisit Table S-3 on a generic basis in the Waste Confidence Decision Update. Petition at 109.

The Commission has provided litigants in an adjudicatory proceeding subject to 10 C.F.R. Part 2 the opportunity to request that a Commission rule or regulation “be waived or an

exception made for the particular proceeding.” 10 C.F.R. § 2.335(b). The Commission has specified that “[t]he sole ground for petition of waiver or exception is that special circumstances with respect to the subject matter of the particular proceeding are such that the application of the rule or 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 cite several references in support of their contention, including the Comments of the Institute for Energy and Environmental Research on the U.S. Nuclear Regulatory Commission’s Proposed Waste Confidence Rule Update and Proposed Rule Regarding Environmental Impacts of Temporary Spent Fuel Storage (“IEER Report”). It appears that these references were submitted to the Commission for consideration when developing the December 23, 2010 Waste Confidence Decision Update (75 Fed. Reg. 81,037) and none of them relate specifically to the use of Table S-3 values to estimate environmental impacts related to construction of nuclear power units at the Victoria County Station ESP site. Moreover, the Petitioners have attempted neither to show that special circumstances exist in this proceeding, nor to establish that this contention meets any of the requirements imposed by the Commission on litigants wishing that a rule be waived or an exception granted. In addition, the Petitioners have made no effort to establish that application of Table S-3 in this particular proceeding would not serve the purpose for which the regulation was adopted. See Petition at 108-110. Therefore, the Contention is insufficient to support a petition under 10 C.F.R. § 2.335 for waiver of or exception to a rule, and, as a challenge to Table S-3, is inadmissible.

2. Proposed contention TSEP-ENV-18 is outside the scope of this proceeding.

In addition to challenging Table S-3, the Petitioners assert that the ER contains an inadequate discussion of the “relative costs and benefits of a new reactor in comparison to other sources of electricity.” Petition at 110. However, including such a cost analysis in the ER at the ESP stage is not required by 10 C.F.R. § 51.50(b)(2), the regulation governing the information to be addressed in an ESP application. Section 51.50(b)(2) states that “[t]he environmental report need not include an assessment of the economic, technical, or other benefits ... and costs of the proposed action or an evaluation of alternative energy sources.”¹³ As a result, the information which Petitioners have asserted is not in the ESP application is not required to be included in the ESP application. Therefore, to the extent that the Petitioners assert that the ER for an ESP should contain an analysis of the relative costs of the nuclear fuel cycle as compared to other sources of energy, that assertion is outside the scope of this proceeding and cannot serve as a basis for an admissible contention. See 10 C.F.R. § 2.309(f)(iii).

¹³ The Petitioners also assert that the staff’s environmental impact statement should include such a cost analysis. Petition at 109. As an initial matter, 10 C.F.R. § 2.309(f)(2) states, specifically, that “[o]n issues arising under the National Environmental Policy Act, the petitioner shall file contentions based on the applicant’s environmental report.” Therefore, a contention asserting that the staff’s EIS should include specific information is not ripe until the EIS is issued, at which time the Petitioners can file new or amended contentions. 10 C.F.R. 2.309(f)(2). Even if such a contention were permissible, here, where the costs analysis was not part of the applicant’s ER, an analysis of such costs in the staff’s EIS would be precluded by 10 C.F.R. § 51.75(b) which states that a draft environmental impact statement “must not include an assessment of the economic, technical, or other benefits . . . and costs of the proposed action or an evaluation of alternative energy sources, unless these matters are addressed in the early site permit environmental report.” See 10 C.F.R. § 51.75(b). Thus, the assertion that the EIS should include a consideration of costs is also outside the scope of this proceeding, in contravention of 10 C.F.R. § 2.309(f)(iii).

W. PROPOSED CONTENTION TSEP-MISC-1:

The Exelon application does not satisfy the requirements of the Coastal Zone Management Act ("CZMA"), 16 U.S.C. § 1456(c)(3)(A), because it does not include the required determination that the proposed activity is consistent with the Texas Coastal Management Program.

Petition at 110. The Petitioners claim that the ER is inadequate because it fails to include a consistency determination issued by the Texas Coastal Coordination Council. Petition at 110. The Petitioners also assert that Exelon erroneously concludes that since the proposed VCS site is not located within the Texas Coastal Management Zone, it does not need to include such a determination. However, the Petitioners claim that Exelon does need to submit a consistency determination because the application "states clearly that VCS impacts, such as those resulting from the withdrawal of cooling water from the Guadalupe River, do impact the Texas Coastal Management Zone, namely the San Antonio Bay and its ecosystems." *Id.* at 111. Petitioners also state that Exelon's ER fails to include a determination from the Texas General Land Office that issuance of the VCS ESP "does not require a federal consistency determination." *Id.* at 113.

Staff Response:

Proposed Miscellaneous Contention 1 is moot in part and is inadmissible in part. First, the Petitioners seem to confuse the Applicant's CZMA certification with the state's consistency determination. An applicant submits its certification, which indicates that its project will comply with the CZMA, to the state for review. The consistency determination itself is the state's ultimate decision on the applicant's certification:

[A]ny applicant for a required Federal license or permit to conduct an activity, in or outside of the coastal zone...shall provide in the application to the licensing or permitting agency a certification that the proposed activity complies with the enforceable policies of the state's approved program and that such activity will be conducted in a manner consistent with the program. At the same time, the applicant shall furnish to the state or its designated agency a copy of the certification, with all necessary information and data... At the earliest practicable time, the state or its designated agency shall notify the Federal agency concerned that the state concurs with or objects to the applicant's certification.

16 U.S.C. § 1456(c)(3)(A); see also 15 C.F.R. § 930.60(a): “The State agency's six-month review period...of an applicant's consistency certification begins on the date the State agency receives the consistency certification.” 15 C.F.R. § 930.60(a). Here Exelon has submitted its certification to the Texas General Land Office (“GLO”) and is awaiting the GLO’s consistency determination. Transmittal of Texas Coastal Management Program Consistency Statement and Determination Request, February 17, 2011 (ML110400171). Further, a copy of this certification submittal has been provided to the NRC for inclusion in Appendix A of the ESP application. See *Id.* Thus, to the extent that Proposed Miscellaneous Contention 1 alleges that Exelon’s certification must be included with the ESP application, it has been rendered moot by the Applicant’s submittal of its Texas Coastal Management Program Consistency Statement and Determination Request on January 25, 2011, as an addition to Appendix A of the ER. *Id.*

However, to the extent that the Petitioners assert that the Applicant is required to submit a consistency determination from the Texas Coastal Coordination Council as part of its Application to the NRC, the Petitioners have failed to provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi). Petitioners have not pointed to any requirement stipulating that Petitioners’ application must include the consistency determination.¹⁴ In addition, the regulatory language in 16 U.S.C. § 1456(c)(3)(A) states that only the certification application needs to be submitted, not the consistency determination as well. “[A]ny application for a Federal license or permit to conduct an activity, in or outside of the coastal zone...of that state shall provide in the application to the licensing or permitting agency a certification that the proposed activity complies with the enforceable policies of the state’s approved program.” *Id.* Further, to the

¹⁴ As a federal agency responsible for licensing nuclear facilities in coastal management zones, the NRC must comply with CZMA consistency requirements. This compliance entails that prior to licensing, the NRC must hear from the state regarding its consistency determination. Also, the NRC must inform licensees of the consistency requirements of their proposed activities. 15 C.F.R. § 930.53(d).

extent that the Petitioners are claiming this is a contention of omission, they have failed to show that the omitted consistency determination is required. In determining contention admissibility, “[a]ny contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed.” *Millstone*, LBP-08-9, 67 NRC at 433. Petitioners have mistakenly asserted that the application does not address a relevant issue and they have not provided sufficient information to show that a genuine dispute exists with the Applicant. Therefore, Proposed Miscellaneous Contention 1 is moot in part and is inadmissible in part. 10 C.F.R. § 2.309(f)(1)(vi).

CONCLUSION

In view of the foregoing, the Petitioners, TSEP, have demonstrated standing to intervene in this proceeding and have submitted at least one admissible contention. Accordingly, the Petition should be approved.

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 February, 2011

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
)
Exelon Nuclear Texas Holdings, LLC) Docket No. 52-042
)
(Early Site Permit for Victoria County)
Station Site))

CERTIFICATE OF SERVICE

I hereby certify that copies of the "NRC STAFF'S ANSWER TO 'TEXANS FOR A SOUND ENERGY POLICY'S PETITION TO INTERVENE AND CONTENTIONS'" has been served on the following persons by Electronic Information Exchange on this 18th day of February, 2011:

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