UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	Docket No. 52-042-ESP
EXELON NUCLEAR TEXAS HOLDINGS, LLC	)	
	)	
(Early Site Permit for Victoria County Station Site)	)	February 15, 2011

EXELON NUCLEAR TEXAS HOLDINGS, LLC'S ANSWER TO PETITION TO INTERVENE AND CONTENTIONS

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TABLE OF CONTENTS

Page

I. INTRODUCTION 1

II. BACKGROUND 2

III. RESPONSE TO TSEP'S PROPOSED CONTENTIONS 3

A. Applicable Legal Standards and Relevant NRC Precedent 3

1. Petitioners Must Specifically State the Issue of Law or Fact to Be Raised 5

2. Petitioners Must Briefly Explain the Basis for the Contention 5

3. Contentions Must Be Within the Scope of the Proceeding 6

4. Contentions Must Raise a Material Issue 8

5. Contentions Must Be Supported by Adequate Factual Information or Expert Opinion 9

6. Contentions Must Raise a Genuine Dispute of Material Law or Fact 11

7. Waiver of Regulations Under 10 C.F.R. § 2.335 12

B. Exelon's Position on TSEP's Proposed Contentions 13

1. TSEP-SAFETY-1 – Identification of Growth Faults 13

2. TSEP-SAFETY-2 – Rate of Recent Surface Movement at Growth Faults 22

3. TSEP-SAFETY-3 – Hazards from Oil and Gas Wells and Borings 24

4. TSEP-SAFETY-4 – Dependable Water Supply 28

5. TSEP-ENV-1 – Impacts from Cooling Basin Seepage 32

6. TSEP-ENV-2 – Impacts of Limited Water Availability 37

7. TSEP-ENV-3 – Impacts on Regional Water Availability 47

8. TSEP-ENV-4 – Impacts on Long-Term Water Availability 51

9. TSEP-ENV-5 – Potential Federal Reserved Water Right for the Aransas National Wildlife Refuge 53

10. TSEP-ENV-6 – Impacts on Water Availability and Aquatic Resources in Light of Climate Change 59

11. TSEP-ENV-7, 8, 9, 10, 11, 12, 13, and 14 – Impacts to Whooping Cranes 62

12. TSEP-ENV-7 – Impacts to the Endangered Whooping Crane 64

13. TSEP-ENV-8 – Whooping Crane Mortality in 2008-2009 70

TABLE OF CONTENTS
(continued)

Page

14. TSEP-ENV-9 – The SAGES Report 72

15. TSEP-ENV-10 – Sediment and Nutrient Inflow Into San Antonio Bay 76

16. TSEP-ENV-11 – Aquatic Impacts to San Antonio Bay and Ecosystems 78

17. TSEP-ENV-12 – Adverse Modification of Whooping Crane Designated Critical Habitat 81

18. TSEP-ENV-13 – Monitoring Impacts to Whooping Crane Designated Critical Habitat 83

19. TSEP-ENV-14 – Compliance with the Endangered Species Act 86

20. TSEP-ENV-15 – Socioeconomic Impacts of Plugging Wells and of the Impacts on Mineral Rights Holders 88

21. TSEP-ENV-16 – Alternative Site at Matagorda County 90

22. TSEP-ENV-17 – Reliance on Waste Confidence Rule 97

23. TSEP-ENV-18 – Reliance on Table S-3 101

24. TSEP-MISC-1 – Coastal Zone Management Act Consistency Determination 102

IV. TSEP HAS NOT REQUESTED USE OF SUBPART G HEARING PROCEDURES 104

V. TSEP MAY NOT PARTICIPATE ON UNCONTESTED ISSUES 105

VI. CONCLUSION 107

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I. INTRODUCTION

In accordance with 10 C.F.R. § 2.309(h), Exelon Nuclear Texas Holdings, LLC ("Exelon") files this Answer to the Petition to Intervene and Contentions ("Petition") filed on January 24, 2011, by the Texans for a Sound Energy Policy ("TSEP"). The Petition responds to the U.S. Nuclear Regulatory Commission ("NRC" or "Commission") Notice of Hearing and Opportunity to Petition for Leave to Intervene ("Hearing Notice") published in the *Federal Register* on November 23, 2010, concerning Exelon's application for an early site permit ("ESP") for two or more reactors at the Victoria County Station ("VCS") site located in Victoria County, Texas.[1]

Exelon does not object to the standing of TSEP. At this stage of the proceeding, Exelon also does not object to the admission of a single consolidated contention raising TSEP's allegations regarding the potential impacts of VCS water use on whooping cranes, although

[1] 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 (Nov. 23, 2010) ("Hearing Notice").

Exelon believes those allegations are without merit. The remaining contentions proposed by TSEP do not satisfy the admissibility criteria in 10 C.F.R. § 2.309(f)(1) and should be rejected.

Based on TSEP's allegations and reports related to whooping cranes, it appears that there is a genuine dispute of material fact between Exelon and TSEP concerning the potential impact of VCS water withdrawals on whooping cranes in the Aransas National Wildlife Refuge, which is about 18 miles downstream from VCS. At this stage, the Atomic Safety and Licensing Board ("Board") need not resolve these differences, and instead can admit a contention related to the alleged impacts of VCS water use on whooping cranes. At the appropriate stage of this proceeding, Exelon will demonstrate that VCS water use will not have a significant adverse effect on whooping cranes or their designated critical habitat in Aransas National Wildlife Refuge.

II. BACKGROUND

On March 25, 2010, Exelon submitted an application to the NRC for an ESP that would approve the Victoria site for two or more nuclear reactors.[2] Issuance of an ESP is separate from the approval of an application for a construction permit or combined license ("COL").[3] Therefore, approval to construct and operate a nuclear plant at the Victoria site would require a separate NRC authorization and would be the subject of a separate licensing proceeding.[4]

The VCS ESP application is organized in six parts as follows: Part 1, Administrative Information; Part 2, Site Safety Analysis Report ("SSAR"); Part 3, Environmental Report

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2 *See* Notice of Receipt and Availability of Application for an Early Site Permit, 75 Fed. Reg. 22,434 (Apr. 28, 2010).

3 10 C.F.R. § 52.12.

4 Concurrently with the submission of the ESP application, Exelon requested the withdrawal of its COL application for VCS Units 1 and 2, and the Commission granted this request on July 20, 2010. Notice of Withdrawal of Application for a Combined License, 75 Fed. Reg. 43,579 (July 26, 2010). Exelon has not resubmitted, or even decided whether to resubmit, an application to construct and operate a nuclear plant at the VCS site.

("ER"); Part 4, Emergency Plan; Part 5, Enclosures; and Part 6, Proprietary Information.[5] The NRC accepted Exelon's application for docketing on June 7, 2010, and published a Hearing Notice on November 23, 2010.[6] The Commission Hearing Notice stated that any person whose interest may be affected by this proceeding and who wishes to participate as a party must, in accordance with 10 C.F.R. § 2.309, file a petition for leave to intervene by January 24, 2011.[7] TSEP filed its Petition on January 24, 2011.

To be admitted as a party to this proceeding, TSEP must demonstrate standing and submit at least one admissible contention.[8] Exelon does not object to TSEP's standing in this proceeding. As discussed in Section III below, Exelon also does not object to the admission of a single consolidated contention related to the alleged impacts of VCS water use on whooping cranes at the Aransas National Wildlife Refuge. However, the remaining contentions proposed by TSEP do not satisfy the criteria in 10 C.F.R. § 2.309(f)(1) and should be rejected.

III. RESPONSE TO TSEP'S PROPOSED CONTENTIONS

A. Applicable Legal Standards and Relevant NRC Precedent

To intervene in an NRC licensing proceeding, a petitioner must propose at least one admissible contention.[9] Under 10 C.F.R. § 2.309(f)(1), a hearing request "must set forth with particularity the contentions sought be raised." In addition, that section specifies that each 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

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5 *See generally* VCS ESP Application (Mar. 25, 2010), *available at* ADAMS Accession No. ML101110201.

6 Acceptance for Docketing of an Application for an Early Site Permit for the Victoria County Station Site, 75 Fed. Reg. 33,653 (June 14, 2010); Hearing Notice, 75 Fed. Reg. at 71,467.

7 Hearing Notice, 75 Fed. Reg. at 71,467.

8 *See* 10 C.F.R. § 2.309(a).

9 *Id.*

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; and (6) provide sufficient information to show that a genuine dispute exists with regard to a material issue of law or fact.[10]

The purpose of these six criteria is to "focus litigation on concrete issues and result in a clearer and more focused record for decision."[11] 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."[12]

The Commission's rules on contention admissibility are "strict by design."[13] The rules were "toughened . . . in 1989 because in prior years 'licensing boards had admitted and litigated numerous contentions that appeared to be based on little more than speculation.'"[14] As the Commission has stated:

> Nor does our practice permit "notice pleading," with details to be filled in later. Instead, we require parties to come forward at the outset with sufficiently detailed grievances to allow the adjudicator to conclude that genuine disputes exist justifying a commitment of adjudicatory resources to resolve them.[15]

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10 *See id.* § 2.309(f)(1)(i)-(vi). The seventh contention admissibility requirement—10 C.F.R. § 2.309(f)(1)(vii)—is only applicable in proceedings arising under 10 C.F.R. § 52.103(b) and, therefore, has no bearing on the admissibility of TSEP's proposed contentions in this proceeding.

11 Final Rule, Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004).

12 *Id.*

13 *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 NRC 349, 358 (2001) (citing *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, & 3), CLI-99-11, 49 NRC 328, 334 (1999)).

14 *Id.* (citing *Oconee*, CLI-99-11, 49 NRC at 334).

15 *N. Atlantic Energy Serv. Corp.* (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201, 219 (1999).

Furthermore, the failure to comply with any one of the six admissibility criteria is grounds for rejecting a proposed contention.[16]

The legal standards governing each of the six pertinent criteria from 10 C.F.R. § 2.309(f)(1) are discussed below.

1. Petitioners Must Specifically State the Issue of Law or Fact to Be Raised

A petitioner must provide "a specific statement of the issue of law or fact to be raised or controverted."[17] The petitioner must "articulate at the outset the specific issues [it] wish[es] to litigate as a prerequisite to gaining formal admission as [a party]."[18] Namely, an "admissible contention must explain, with specificity, particular safety or legal reasons requiring rejection of the contested [application]."[19] The contention rules "bar contentions where petitioners have only 'what amounts to generalized suspicions, hoping to substantiate them later.'"[20]

2. Petitioners Must Briefly Explain the Basis for the Contention

A petitioner must provide "a brief explanation of the basis for the contention."[21] This includes "sufficient foundation" to "warrant further exploration."[22] The petitioner's explanation serves to define the scope of a contention, as "[t]he reach of a contention necessarily hinges upon

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16 *See* Final Rule, Changes to Adjudicatory Process, 69 Fed. Reg. at 2221. *See also Private Fuel Storage, L.L.C.* (Indep. Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999).

17 10 C.F.R. § 2.309(f)(1)(i).

18 *Oconee*, CLI-99-11, 49 NRC at 338.

19 *Millstone*, CLI-01-24, 54 NRC at 359-60.

20 *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-03-17, 58 NRC 419, 424 (2003) (quoting *Oconee*, CLI-99-11, 49 NRC at 337-39).

21 10 C.F.R. § 2.309(f)(1)(ii). *See also* Final Rule, Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,168 (Aug. 11, 1989).

22 *Pub. Serv. Co. of N.H.* (Seabrook Station, Units 1 & 2), ALAB-942, 32 NRC 395, 428 (1990) (citation omitted).

its terms coupled with its stated bases."[23] Licensing Boards, however, must determine the admissibility of the contention itself, not the admissibility of individual "bases."[24]

As the Commission has observed, "[i]t is the responsibility of the Petitioner to provide the necessary information to satisfy the basis requirement for the admission of its contentions and demonstrate that a genuine dispute exists within the scope of [the] proceeding."[25] In other words, "[a] contention's proponent, not the licensing board, is responsible for formulating the contention and providing the necessary information to satisfy the basis requirement for the admission of contentions."[26]

3. Contentions Must Be Within the Scope of the Proceeding

A petitioner must demonstrate "that the issue raised in the contention is within the scope of the proceeding."[27] The scope of the proceeding is defined by the Commission's notice of opportunity for a hearing.[28] Moreover, contentions are necessarily limited to issues that are germane to the specific application pending before the Board.[29] Any contention that falls outside the specified scope of the proceeding must be rejected.[30]

A contention that challenges an NRC rule is outside the scope of the proceeding because, absent a waiver, "no rule or regulation of the Commission . . . is subject to attack . . . in any

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23 *Pub. Serv. Co. of N.H.* (Seabrook Station, Units 1 & 2), ALAB-899, 28 NRC 93, 97 (1988), *aff'd sub nom.*, *Massachusetts v. NRC*, 924 F.2d 311 (D.C. Cir. 1991).

24 *See La. Energy Servs., L.P.* (Nat'l Enrichment Facility), LBP-04-14, 60 NRC 40, 57 (2004) ("licensing boards generally are to litigate 'contentions' rather than 'bases'") (citation omitted).

25 *Balt. Gas & Elec. Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 & 2), CLI-98-14, 48 NRC 39, 41 (1998).

26 *Statement of Policy on Conduct of Adjudicatory Proceedings*, CLI-98-12, 48 NRC 18, 22 (1998).

27 10 C.F.R. § 2.309(f)(1)(iii).

28 *See Duke Power Co.* (Catawba Nuclear Station, Units 1 & 2), ALAB-825, 22 NRC 785, 790-91 (1985).

29 *See Yankee Atomic Elec. Co.* (Yankee Nuclear Power Station), CLI-98-21, 48 NRC 185, 204 (1998).

30 *See Portland Gen. Elec. Co.* (Trojan Nuclear Plant), ALAB-534, 9 NRC 287, 289 n.6 (1979).

adjudicatory proceeding."[31] Furthermore, a contention that raises a matter that is, or is about to become, the subject of a rulemaking, is also outside the scope of this proceeding.[32] This includes contentions that advocate stricter requirements than agency rules impose or that otherwise seek to litigate a generic determination established by a Commission rulemaking.[33]

Similarly, any contention that collaterally attacks applicable statutory requirements or the basic structure of the NRC regulatory process must be rejected by the Board as outside the scope of the proceeding.[34] Accordingly, a contention that simply states the petitioner's views about what regulatory policy should be does not present a litigable issue.[35]

While the adequacy of the NRC Staff's National Environmental Policy Act ("NEPA") review may ultimately be within the scope of this proceeding, a petitioner is initially required to base its NEPA-based contentions on the applicant's environmental report.[36] Thus, any environmental contentions must initially be filed based on the applicant's environmental report, not future NRC environmental documents.

In addition, an ESP application need not contain detailed design information because issues that relate to design rather than siting are appropriately left for consideration at the COL

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31 *See* 10 C.F.R. § 2.335(a).

32 *See Oconee*, CLI-99-11, 49 NRC at 345 (citing *Potomac Elec. Power Co.* (Douglas Point Nuclear Generating Station, Units 1 & 2), ALAB-218, 8 AEC 79, 85 (1974)). *See also* Final Policy Statement, Conduct of New Reactor Licensing Proceedings, 73 Fed. Reg. 20,963, 20,972 (Apr. 17, 2008).

33 *See Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 & 4), LBP-01-6, 53 NRC 138, 159, *aff'd*, CLI-01-17, 54 NRC 3 (2001).

34 *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant), LBP-07-11, 65 NRC 41, 57-58 (2007) (citing *Phila. Elec. Co.* (Peach Bottom Atomic Power Station, Units 2 & 3), ALAB-216, 8 AEC 13, 20 (1974)).

35 *See Peach Bottom*, ALAB-216, 8 AEC at 20-21. Within the adjudicatory context, however, a petitioner may submit a request for waiver of a rule under 10 C.F.R. § 2.335(b) as discussed in Section III.A.7 of this Answer, *infra*. Conversely, outside the adjudicatory context, a petitioner may file a petition for rulemaking under 10 C.F.R. § 2.802 or request that the NRC Staff take enforcement action under 10 C.F.R. § 2.206.

36 10 C.F.R. § 2.309(f)(2).

stage.[37] Therefore, a contention that raises design-related challenges is beyond the scope of an ESP proceeding.[38]

4. Contentions Must Raise a Material Issue

A petitioner must 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."[39] The standards defining the findings that the NRC must make to support issuance of an ESP in this proceeding are set forth in 10 C.F.R. §§ 51.105 and 52.24. As the Commission has observed, "[t]he dispute at issue is 'material' if its resolution would 'make a difference in the outcome of the licensing proceeding.'"[40] In this regard, each contention must be one that, if proven, would entitle the petitioner to relief.[41] Additionally, contentions alleging an error or omission in an application must establish some significant link between the claimed deficiency and protection of the health and safety of the public or the environment.[42]

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37 *Dominion Nuclear North Anna, LLC* (Early Site Permit for North Anna ESP Site), CLI-07-27, 66 NRC 215, 236-37 (2007).

38 *See Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), LBP-04-17, 60 NRC 229, 244-45 (2004).

39 10 C.F.R. § 2.309(f)(1)(iv).

40 *Oconee*, CLI-99-11, 49 NRC at 333-34 (citing Final Rule, Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,172).

41 *See Duke Energy Corp.* (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-02-26, 56 NRC 358, 363 n.10 (2002).

42 *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 & 3), LBP-04-15, 60 NRC 81, 89, *aff'd*, CLI-04-36, 60 NRC 631 (2004).

5. Contentions Must Be Supported by Adequate Factual Information or Expert Opinion

A petitioner bears the burden to present the factual information or expert opinions necessary to support its contention adequately, and failure to do so requires the Board to reject the contention.[43] The petitioner's obligation in this regard has been described as follows:

> [A]n intervention petitioner has an ironclad obligation to examine the publicly available documentary material pertaining to the facility in question with sufficient care to enable [the petitioner] to uncover any information that could serve as the foundation for a specific contention. Stated otherwise, neither Section 189a. of the Act nor Section [2.309] of the Rules of Practice permits the filing of a vague, unparticularized contention, followed by an endeavor to flesh it out through discovery against the applicant or staff.[44]

Where a petitioner neglects to provide the requisite support for its contentions, the Board may not make assumptions of fact that favor the petitioner or supply information that is lacking.[45] The petitioner must explain the significance of any factual information upon which it relies.[46]

With respect to factual information or expert opinion proffered in support of a contention, "the Board is not to accept uncritically the assertion that a document or other factual information or an expert opinion supplies the basis for a contention."[47] Any supporting material provided by a petitioner, including those portions thereof not relied upon, is subject to Board scrutiny, "both

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43 *See* 10 C.F.R. § 2.309(f)(1)(v); *Yankee Atomic Elec. Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 262 (1996).

44 *Duke Power Co.* (Catawba Nuclear Station, Units 1 & 2), ALAB-687, 16 NRC 460, 468 (1982), *vacated in part on other grounds*, CLI-83-19, 17 NRC 1041 (1983).

45 *See Ariz. Pub. Serv. Co.* (Palo Verde Nuclear Station, Units 1, 2, & 3), CLI-91-12, 34 NRC 149, 155 (1991).

46 *See Fansteel, Inc.* (Muskogee, Okla., Site), CLI-03-13, 58 NRC 195, 203 (2003).

47 *Private Fuel Storage, L.L.C.* (Indep. Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 181, *aff'd on other grounds,* CLI-98-13, 48 NRC 26 (1998).

for what it does and does not show."[48] The Board will examine documents to confirm that they support the proposed contentions.[49] A petitioner's imprecise reading of a document cannot be the basis for a litigable contention.[50] Moreover, vague references to documents do not suffice—the petitioner must identify specific portions of the documents on which it relies.[51] The incorporation of massive documents by reference is similarly unacceptable.[52]

In addition, "an expert opinion that merely states a conclusion (*e.g.*, the application is 'deficient,' 'inadequate,' or 'wrong') without providing *a reasoned basis or explanation* for that conclusion is inadequate because it deprives the Board of the ability to make the necessary, reflective assessment of the opinion" as it is alleged to provide a basis for the contention.[53] Conclusory statements cannot provide "sufficient" support for a contention, simply because they are made by an expert.[54] In short, a contention "will be ruled inadmissible if the petitioner 'has offered no tangible information, no experts, no substantive affidavits,' but instead only 'bare assertions and speculation.'"[55]

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48 *See Yankee Atomic Elec. Co.* (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61, 90, *rev'd in part on other grounds*, CLI-96-7, 43 NRC 235 (1996).

49 *See Vt. Yankee Nuclear Power Corp.* (Vt. Yankee Nuclear Power Station), ALAB-919, 30 NRC 29, 48 (1989), *vacated in part on other grounds and remanded*, CLI-90-4, 31 NRC 333 (1990).

50 *See Ga. Inst. of Tech.* (Ga. Tech Research Reactor, Atlanta, Ga.), LBP-95-6, 41 NRC 281, 300, *aff'd*, CLI-95-12, 42 NRC 111 (1995).

51 *Pub. Serv. Co. of N.H.* (Seabrook Station, Units 1 & 2), CLI-89-3, 29 NRC 234, 240-41 (1989).

52 *Id. See also Tenn. Valley Auth.* (Browns Ferry Nuclear Plant, Units 1 & 2), LBP-76-10, 3 NRC 209, 216 (1976).

53 *USEC, Inc.* (Am. Centrifuge Plant), CLI-06-10, 63 NRC 451, 472 (2006) (emphasis added) (quoting *Private Fuel Storage*, LBP-98-7, 47 NRC at 181).

54 *Id.*

55 *Fansteel*, CLI-03-13, 58 NRC at 203 (quoting *GPU Nuclear Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 208 (2000)).

6. Contentions Must Raise a Genuine Dispute of Material Law or Fact

A petitioner must "provide sufficient information to show . . . a genuine dispute . . . with the applicant . . . on a material issue of law or fact."[56] The Commission has stated that the petitioner must "read the pertinent portions of the license application . . . state the applicant's position and the petitioner's opposing view," and explain why it disagrees with the applicant.[57] If a petitioner believes the license application fails to adequately address a relevant issue, then the petitioner is to "explain why the application is deficient."[58] A contention that does not directly controvert a position taken by the applicant in the application is subject to dismissal.[59]

Similarly, a petitioner's oversight or mathematical error does not raise a genuine issue. For example, if a petitioner submits a contention of omission, but the allegedly missing information is indeed in the license application, then the contention does not raise a genuine issue.[60] Further, an allegation that some aspect of a license application is "inadequate" or "unacceptable" does not give rise to a genuine dispute unless it is supported by facts and a reasoned statement of why the application is unacceptable in some material respect.[61]

At the contention admissibility stage, it is also necessary for the Board to consider a proffered expert's qualifications in evaluating whether a contention is adequately supported.[62]

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56 10 C.F.R. § 2.309(f)(1)(vi).

57 Final Rule, Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,170; *Millstone*, CLI-01-24, 54 NRC at 358.

58 Final Rule, Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,170. *See also Palo Verde*, CLI-91-12, 34 NRC at 156.

59 *See Tex. Utils. Elec. Co.* (Comanche Peak Steam Electric Station, Unit 2), LBP-92-37, 36 NRC 370, 384 (1992).

60 *See Millstone*, LBP-04-15, 60 NRC at 95-96.

61 *See Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 & 4), LBP-90-16, 31 NRC 509, 521, 521 n.12 (1990).

62 *Progress Energy Fla., Inc.* (Levy Cnty. Nuclear Power Plants, Units 1 & 2), CLI-10-2, 71 NRC __, slip op. at 17 (Jan. 7, 2010).

Thus, the Board should ensure that the proffered expert has at least a minimal amount of knowledge to prepare a report for the purposes of supporting a contention.[63]

7. Waiver of Regulations Under 10 C.F.R. § 2.335

A contention that challenges an NRC rule is outside the scope of the proceeding because, absent a waiver, "no rule or regulation of the Commission . . . is subject to attack . . . in any adjudicatory proceeding."[64] In order to seek waiver of a rule in a particular adjudicatory proceeding, a petitioner must submit a petition pursuant to 10 C.F.R. § 2.335. The requirements for a Section 2.335 petition are as follows:

> The 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 (or a provision of it) would not serve the purposes for which the rule or regulation was adopted.[65]

Further, such a petition, "*must be 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 or regulation (or provision of it) would not serve the purposes for which the rule or regulation was adopted," and "*must state with particularity* the special circumstances alleged to justify the waiver or exception requested."[66]

In accordance with NRC precedent, a Section 2.335 petition "can be granted only in unusual and compelling circumstances."[67] The Commission decision in the *Millstone* case states the test for Section 2.335 petitions, under which the petitioner must demonstrate that it satisfies each of the following four criteria:

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63 *Id.*

64 *See* 10 C.F.R. § 2.335(a).

65 *Id.* § 2.335(b).

66 *Id*. (emphasis added).

67 *Pub. Serv. Co. of N.H.* (Seabrook Station, Units 1 & 2), ALAB-895, 28 NRC 7, 16 (1988), *aff'd*, CLI-88-10, 28 NRC 573, 597, *recons. denied*, CLI-89-3, 29 NRC 234 (1989) (citation omitted).

> (i) the rule's strict application "would not serve the purposes for which [it] was adopted"; (ii) the movant has alleged "special circumstances" that were "not considered, either explicitly or by necessary implication, in the rulemaking proceeding leading to the rule sought to be waived"; (iii) those circumstances are "unique" to the facility rather than "common to a large class of facilities"; and (iv) a waiver of the regulation is necessary to reach a "significant safety problem."[68]

If the petitioner makes the required prima facie showing, then the Licensing Board must certify the matter to the Commission.[69] However, if the petitioner fails to satisfy any of the factors of the four-part test required for making a prima facie showing, then the matter may not be litigated, and "the presiding officer may not further consider the matter."[70]

B. Exelon's Position on TSEP's Proposed Contentions

Most of TSEP's proposed contentions are deficient on one or more legal grounds and should be rejected in accordance with 10 C.F.R. § 2.309(f)(1). However, as discussed in more detail below with respect to Contentions TSEP-ENV-7 through 14, Exelon does not object to the admission of a consolidated contention raising TSEP's allegations about certain impacts of VCS water use on whooping cranes in the Aransas National Wildlife Refuge.

1. TSEP-SAFETY-1 – Identification of Growth Faults

Contention TSEP-SAFETY-1 alleges that 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

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[68] *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 & 3), CLI-05-24, 62 NRC 551, 559-60 (citing *Pub. Serv. Co. of N.H.* (Seabrook Station, Units 1 & 2), CLI-89-20, 30 NRC 231, 235 (1989); *Seabrook*, CLI-88-10, 28 NRC at 597).

[69] *See* 10 C.F.R. § 2.335(c), (d).

[70] *See id.* § 2.335(c). *See also Millstone*, CLI-05-24, 62 NRC at 560 ("The use of 'and' in this list of requirements is both intentional and significant. For a waiver request to be granted, *all four* factors must be met.") (citation omitted).

deformation" and thus, "Exelon underestimates the risk of surface deformation."[71] As a basis for this contention, TSEP states that there are at least two, and perhaps as many as four,[72] growth faults which reach the surface onsite or adjacent to the VCS site, that there are other growth faults beneath and near the VCS site, that some of these faults have evidence of recent movement, and the movement across some of the faults is several hundred feet and is more than estimated in the VCS SSAR. TSEP further claims that such faults present the potential for damage to VCS structures that are constructed on top of the growth faults, such as the cooling basin for the plant (which TSEP incorrectly argues is a "safety feature").[73] As discussed below, this proposed contention does not raise a genuine dispute of material fact and therefore does not satisfy 10 C.F.R. § 2.309(f)(1)(vi).

a. Background on Growth Faults

By way of background, the VCS site is located in Victoria County, Texas, near the Gulf of Mexico. The geology of the site is characterized by thick layers of sediment, which extend more than 40,000 feet beneath the surface before reaching bedrock.[74] There is no evidence of capable tectonic faulting in the bedrock within the VCS site area.[75]

The VCS site is located within the Vicksburg fault zone, which is characterized by numerous "growth faults" in the sediment.[76] These growth faults do not originate in or extend to the basement bedrock[77] and therefore are not tectonic in nature.[78]

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71 Petition at 10.

72 Although TSEP claims that there may be as many as four growth faults, its supporting exhibit only identifies two. *See* Petition, Ex. D-2, John C. Halepaska and Associates, Inc. ("JCHA"), Texans for a Sound Energy Policy, Contested Issues Concerning Early Site Permit Exelon's Victoria County Station at 109 (Jan. 2011) ("JCHA Report").

73 *See* Petition at 10-14.

74 *See* SSAR at 2.5.3-11.

75 *Id.*

76 *See id.* at 2.5.1-45 to -46, 2.5.1-70 to -71.

Growth faults occur parallel to the Gulf Coast when the weight of the younger sediment causes the underlying sediment to slip and creep toward the Gulf.[79] Movement of a growth fault occurs in a direction normal to the fault itself, with that portion of the sediment on the Gulf side of the fault dropping to a lower elevation than the inland side of the fault.[80]

Because growth faults occur in the sediment rather than the bedrock, growth faults do not have the capability to store significant amounts of elastic strain energy that can be released during movement of the fault in the form of an earthquake. In contrast, tectonic faults commonly release substantial elastic strain energy in the form of an earthquake when the fault moves.[81] Accordingly, growth faults do not present any significant seismic hazard.[82] Instead, growth faults represent a surface displacement hazard if they are active and move while directly underneath a structure.[83] As stated in Regulatory Guide 1.208:

> Large, naturally occurring growth faults as those found in the coastal plain of Texas and Louisiana can pose a surface displacement hazard, even though offset most likely occurs at a much less rapid rate than that of tectonic faults. They are not regarded as having the capacity to generate damaging vibratory ground motion, can often be identified and avoided in siting, and their displacements can be monitored.[84]

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77 *See id.* at 2.5.1-45 to -46, 2.5.1-70 to -71, 2.5.3-3, 2.5.3-11.

78 *See id.* at 2.5.1-72, 2.5.3-3.

79 *See id.* at 2.5.1-47, 2.5.1-70 to -72; *id.*, Figure 2.5.1-25 (showing that the growth faults in Texas generally run parallel to the Gulf Coast).

80 *See id.* at 2.5.1-70 to -71.

81 *See id.* at 2.5.1-71 to -72, 2.5.3-3.

82 *See id.* at 2.5.1-52, 2.5.1-72.

83 *See id.* at 2.5.1-73.

84 Regulatory Guide 1.208, A Performance-Based Approach to Define the Site-Specific Earthquake Ground Motion at C-7 (Mar. 2007).

The Petition agrees that the risk associated with growth faults is the potential "for failure or damage to the VCS structures constructed on top of these growth faults."[85]

b. Applicable Regulations

The applicable regulations related to growth faults are contained in General Design Criterion ("GDC") 2 in Appendix A of 10 C.F.R. Part 50, 10 C.F.R. § 100.23, and Appendix S to 10 C.F.R. Part 50. GDC 2 requires that structures, systems, and components ("SSCs") important to safety be designed to withstand the effects of natural phenomena such as earthquakes without loss of capability to perform their safety functions.

Section 100.23(c) in turn provides as follows:

> The geological, seismological, and engineering characteristics of a site and its environs must be investigated in sufficient scope and detail to permit an adequate evaluation of the proposed site, to provide sufficient information to support evaluations performed to arrive at estimates of the Safe Shutdown Earthquake Ground Motion, and to permit adequate engineering solutions to actual or potential geologic and seismic effects at the proposed site.[86]

Such information must address the potential for "nontectonic deformation," and Section 100.23(d) states that this information must be considered for the design.

Section IV(b) of Appendix S to Part 50 contains the following provisions related to surface deformation:

> *Surface Deformation.* The potential for surface deformation must be taken into account in the design of the nuclear power plant by providing reasonable assurance that in the event of deformation, certain structures, systems, and components will remain functional. In addition to surface deformation induced loads, the design of safety features must take into account seismic loads and applicable concurrent functional and accident-induced loads. The design provisions for surface deformation must be based on its postulated occurrence in any direction and azimuth and under any part of the

[85] Petition at 13.

[86] 10 C.F.R. § 100.23(c).

> nuclear power plant, unless evidence indicates this assumption is not appropriate, and must take into account the estimated rate at which the surface deformation may occur.

Thus, NRC regulations do not prohibit the location of a nuclear plant on a site subject to growth faults with the potential for surface deformation—instead, the regulations only require that such potential be identified and accounted for in the design. In this regard, the NRC has licensed other nuclear plants that have been located on sites with or near growth faults.[87]

c. SSAR Information on Growth Faults in the VCS Area

As discussed in SSAR Section 2.5.1.2.4.2.1, Exelon conducted extensive evaluations of growth faults in the area around the VCS site, including reviews of published and proprietary materials, aerial photography, processing of topographical data, and obtaining two-dimensional seismic reflection data. These methods are in accordance with Regulatory Guides 1.206 and 1.208.[88]

The SSAR indicates that there are numerous growth faults in the area around the VCS site, including some that underlie the site.[89] Most of the growth faults near and under the VCS site terminate at or below the Frio Formation, which is overlaid with layers of sediment that are thousands of feet of thick and millions of years old.[90] The layers of sediment are interspersed with layers of salt or shale that form "horizons" between the layers of sediment.[91] When a growth fault does not extend through the upper horizons, the growth fault is not active and

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87 *See, e.g.*, *Houston Lighting & Power Co.* (Allens Creek Nuclear Generating Station, Units 1 & 2), LBP-75-66, 2 NRC 776, 804 (1975); *Houston Lighting & Power Co*. (South Texas Project, Units 1 & 2), LBP-75-71, 2 NRC 894, 901-02 (1975). In both of these cases, the growth faults were deep below the surface and did not present a hazard of surface deformation. The Petition (at 12-13) contains similar information.

88 *See* SSAR at 2.5.1-2.

89 *See, e.g.*, *id.* at 2.5.1-80, 2.5.3-4; *id.*, Tables 2.5.1-1, 2.5.1-3.

90 *See id.* at 2.5.1-73, 2.5.1-87, 2.5.1-89, 2.5.3-4, 2.5.3-7. The Frio Formation was deposited during the Oligocene period (*id.* at 2.5.1-22), which lasted from 23.8 to 33.7 million years ago (*id.*, Figure 2.5.1-7).

91 *See id.* at 2.5.1-87, 2.5.3-5.

therefore does not pose a hazard of surface deformation. Most of the growth faults near and under the VCS site are of this nature.[92]

However, as discussed in the SSAR, there are two growth faults under or near the VCS site with some indication of surface deformation.[93] On the surface, these growth faults are characterized by a drop in elevation of 1 to 4 feet over a width on the order of 1000 feet (*i.e.*, the surface has a gradient of less than 1 degree).[94] The nearest growth fault (identified as Growth Fault "D" in the SSAR) is located more than 500 feet south of the designated power block area,[95] and the other growth fault (identified as Growth Fault "E" in the SSAR) is located more than two miles away.[96]

These two growth faults do not underlie the power block area and therefore would not affect any safety-related structures.[97] Furthermore, as discussed in the next section, even though one of the growth faults underlies the cooling basin, the cooling basin is not safety-related and a failure of the cooling basin would not adversely affect any safety-related function. Therefore, even if those growth faults were to move during the lifetime of VCS, they would not pose any threat to the safety of VCS.[98]

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92 *See id.* at 2.5.1-73, -96.

93 *See id.* at 2.5.1-83 to -85, -90. Such activity is indicated by some surface deformation and data that indicate that the faults extend into the Quaternary sediment (*see id.* at 2.5.1-96, 2.5.3-1, 2.5.3-8), which is the period within the last million or so years. *Id.*, Figure 2.5.1-7.

94 *See id.* at 2.5.1-91, 2.5.1-92, 2.5.1-94, 2.5.3-7 to -10.

95 *See id.* at 2.5.1-85, 2.5.1-94, 2.5.1-96, 2.5.3-1, 2.5.3-7 to -9.

96 *See id.* at 2.5.1-85, 2.5.1-95, 2.5.3-1, 2.5.3-9.

97 *See id.* 2.5.3-1, -15

98 *See id.* at 2.5.3-1.

d. The Contention Does Not Raise a Genuine Issue of Material Fact Regarding the SSAR

Contention TSEP-SAFETY-1 is not inconsistent with *any* of the material facts in the SSAR. The contention makes much of the fact that there are historical and active growth faults at the VCS site, but the SSAR acknowledges that there are growth faults at the VCS site and that some of the growth faults have evidence of surface deformation and have been active sometime during the Quaternary period (*i.e.*, the period encompassing the present to the last million or so years).[99] TSEP also argues that the active growth faults have a significantly higher offset than identified in the SSAR.[100] However, in arriving at that conclusion, TSEP mixes two concepts—offsets at the surface and offsets below the surface. When the same reference point is used, the values provided in the SSAR and the Petition are consistent.[101]

In any event, the amount of the offset is not material because there is no dispute that the growth faults do not underlie any safety-related structures, which all will be located on the power block. The contention states that there is an active growth fault under the proposed location of the cooling basin. The SSAR also shows that Growth Fault D underlies the area of the cooling basin.[102] However, as discussed below, the cooling basin is not a safety-related structure. TSEP

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99 *See id.* at 2.5.1-91 to -92, -95; *id.*, Figure 2.5.1-7.

100 Petition at 12, 13. TSEP also argues that the SSAR did not evaluate the possibility that seepage from the cooling basin could activate a growth fault. Petition at 10. However, the groundwater level at the cooling basin area is approximately 40-50 feet from the surface. *See* SSAR Table 2.4.12-6; *id.*, Figure 2.4.12-15. Therefore, the growth faults within the site area are already saturated for all or essentially all of their depths.

101 Based on a summary report prepared by JCHA, TSEP states that the offsets are approximately 0.06 seconds or 210 feet at a distance of 1500 to 2000 feet below the surface. Petition, Ex. D-1, JCHA, Summary of Contentions, Exelon's ESP Application for the Proposed Victoria County Station Site at 108 (Oct. 8, 2010) ("JCHA Summary"). However, as also noted in the JCHA Summary, the offset at the surface is only 0.67 feet. *Id.* at 110. These values are consistent with and bounded by the values in the SSAR. The SSAR (at 2.5.1-128) shows offsets at depth ranging from 0.011 to 0.107 seconds depending upon the fault, and reports an offset of 4.9 feet at the surface over a distance of 980 feet for Growth Fault E (SSAR at 2.5.1-95).

102 *See* SSAR at 2.5.1-174 (Figure 2.5.1-43) (showing Growth Fault D running 500 to 1000 feet south of the power block, which is the area designated for the cooling basin); *see also id.* at 2.1-13 (Figure 2.1-4) (showing the location of the cooling basin).

does not dispute that there are no active growth faults under the power block area, which will house all safety-related structures.

Without any support, TSEP argues that the cooling basin is a "safety feature." However, that argument is belied by the ESP application. The cooling basin will nominally cover 4900 acres and provide the normal power heat sink for the *non-safety-related* circulating water system ("CWS"). The CWS would take waste heat from the plant's main condensers and *non-safety-related* auxiliary heat exchangers during normal operation and discharge that heat to the cooling basin. Therefore, the cooling basin is not safety-related.[103]

In contrast, the ultimate heat sink ("UHS") for the plant would consist of mechanical draft cooling towers if VCS were to utilize a non-passive reactor technology.[104] The UHS would provide cooling water for safety-related systems that are necessary for safe shutdown under normal operation, anticipated operational occurrences, and design basis accidents. The UHS as well as other safety-related buildings would be located in the power block area.[105] Accordingly, there is no genuine dispute that the cooling basin is not needed to ensure the safety of the plant.

TSEP's argument appears to be premised on a misunderstanding of the term "safety-related." This term, however, has a specific definition in the regulations. As provided in 10 C.F.R. § 50.2, "safety-related" refers to those SSCs that are relied upon to remain functional during and following a design basis event to assure: (1) the integrity of the reactor coolant pressure boundary; (2) the capability to shut down the reactor and maintain it in a safe shutdown condition; or (3) the capability to prevent or mitigate the consequences of accidents. The cooling

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103 *See id.* § 2.4.8; ER §§ 3.1.5, 3.4.1.1.

104 SSAR § 2.4.8; ER §§ 3.2.2, 3.4.1.2. As discussed at SSAR page 2.4.8-1 and ER page 3.4-2, the mechanical draft cooling towers would be used for the UHS for non-passive reactor technologies. Passive designs do not utilize an external UHS, but instead rely upon passive cooling.

105 ER at 3.1-2, 3.9-8, 3.9-10 to -11.

basin performs none of those functions. Therefore, the cooling basin is not safety-related or "important to safety," and the requirements of GDC 2 (protection against natural phenomena) do not apply to the cooling basin.[106]

TSEP argues that a total loss of normal cooling water from the cooling basin "would pose significant safety-related operational difficulties."[107] However, the safety-related SSCs will be designed to handle a loss of normal cooling, as required by GDC 44 (cooling water during emergencies). Furthermore, although TSEP claims that a failure of the cooling basin might result in safety consequences, the SSAR evaluates such a scenario and finds that maximum flooding levels would be below the minimum finished grade at the power block.[108] Therefore, a breach of the cooling basin would not result in flooding of any safety-related SSCs. TSEP has not challenged that evaluation in the SSAR.

This contention is similar to a geological contention that was rejected by the Licensing Board in the *Bellefonte* COL proceeding. In that proceeding, the petitioners contended that there were sinkholes and caves near the site. However, the safety analysis report identified and evaluated the sinkholes and caves on and near the site and determined that they would not adversely affect the safety of the plant. As a result, the Board ruled that the contention was "wholly insufficient to create a genuine dispute regarding the matter that is of concern here, i.e., that these geological phenomena exist on the site so as to have some significance relative to the

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106 In this regard, Regulatory Guide 1.29, Seismic Design Classification (Mar. 2007), identifies the types of components that must be designed to withstand seismic events. Sources of water for normal cooling for the plant's main condensers are not listed among the listed components. Instead, the list is confined to those SSCs that meet the definition of safety-related.

107 Petition at 10-11.

108 *See* SSAR at 2.4.4-1.

construction and operation of proposed Bellefonte Units 3 and 4."[109] The same logic is applicable here with respect to Contention TSEP-SAFETY-1.

In summary, the contention does not raise a genuine dispute with respect to any material fact. Therefore, Contention TSEP-SAFETY-1 does not satisfy 10 C.F.R. § 2.309(f)(1)(vi) and should be dismissed.

2. TSEP-SAFETY-2 – Rate of Recent Surface Movement at Growth Faults

Contention TSEP-SAFETY-2 alleges that "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."[110] As discussed below, this proposed contention does not raise a genuine dispute of material fact and therefore does not satisfy 10 C.F.R. § 2.309(f)(1)(iv) and (vi).

The information provided in the contention pertains only to Growth Fault E.[111] Growth Fault E, however, is located *more than two miles away* from the VCS power block area.[112] As discussed above with respect to Contention TSEP-SAFETY-1, a growth fault does not pose any threat to a structure unless it is located under the structure. Therefore, TSEP's characterization of the rate of deformation of this fault does not establish any dispute over a *material* fact. In other words, even if TSEP's allegations were assumed to be accurate, it would not affect the conclusion that Growth Fault E does not pose a threat to any safety-related structure on the VCS site.

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109 *Tenn. Valley Auth.* (Bellefonte Nuclear Power Plant Units 3 & 4), LBP-08-16, 68 NRC 361, 391 (2008).

110 Petition at 14.

111 *Id.* at 16-17.

112 *See* SSAR at 2.5.1-85, 2.5.1 -95, 2.5.3-1, 2.5.3-9.

The contention provides no information related to the rate of deformation of Growth Fault D, which underlies the location of the VCS cooling basin. However, even if it were assumed that TSEP's allegations regarding deformation rates applies to Growth Fault D as well as Growth Fault E, such a fact would not be material. As discussed above with respect to Contention TSEP-SAFETY-1, the cooling basin is not a safety-related structure and Growth Faults D and E do not run underneath the power block, which houses safety-related SSCs. There is no dispute that growth faults pose a potential hazard only to structures located above such faults and that growth faults that are not located underneath a structure do not pose a hazard.[113] Therefore, since Growth Faults D and E do not underlie any safety-related SSCs, they do not pose a risk to safety even if its deformation rate were assumed to be equivalent to that calculated by TSEP.

Finally, the information in the Petition and supporting exhibit on the deformation rate of Growth Fault E is largely based upon observations of changes in the surface of a road and railroad bridge.[114] However, the Petition and the supporting exhibit simply speculate that the changes in the surface are due to movement of the growth fault rather than some other cause (such as settlement or erosion). Such speculation is not sufficient to support a contention.[115]

In summary, the deformation rates of the Growth Faults D and E are not material because those faults do not run underneath any safety-related SSCs. Accordingly, this contention should be dismissed for failure to satisfy 10 C.F.R. § 2.309(f)(1)(iv) and (vi).

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113 *See, e.g.*, Petition at 13.

114 *Id.* at 16-17.

115 *See, e.g.*, *Fansteel*, CLI-03-13, 58 NRC at 203 (explaining a contention is inadmissible if it is based on bare assertions and speculation).

3. TSEP-SAFETY-3 – Hazards from Oil and Gas Wells and Borings

Contention TSEP-SAFETY-3 alleges that the "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."[116] In particular, as a basis for the contention, TSEP states that abandoned wells present the potential for migration of explosive, poisonous gases, or flammable oil if the wells are not properly plugged or if the casings and seals of wells are deteriorated.[117] As discussed below, this proposed contention does not raise a genuine dispute of material fact and therefore does not satisfy 10 C.F.R. § 2.309(f)(1)(vi).

As an initial matter, there is no prohibition in NRC regulations or guidance against locating a nuclear power plant on sites with natural gas or oil wells. Instead, as stated in the siting criteria in 10 C.F.R. § 100.20(b): "The nature and proximity of man-related hazards (e.g., airports, dams, transportation routes, military and chemical facilities) must be evaluated to establish site parameters for use in determining whether a plant design can accommodate commonly occurring hazards, and whether the risk of other hazards is very low."[118] Similarly, Section 2.2.3 of NRC's Standard Review Plan ("SRP") states that the NRC requires that nuclear plants evaluate the hazards posed by such substances and that the plant be designed to withstand such hazards.[119] SRP Section 2.2.3 provides the following guidance for an application:

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116 Petition at 18.

117 *See id.* at 18-26.

118 *See also* 10 C.F.R. Part 50, App. A, GDC 4 (stating that "structures, systems, and components shall be appropriately protected against dynamic effects, including the effects of missiles, pipe whipping, and discharging fluids, that may result from equipment failures and from events and conditions outside the nuclear power unit").

119 *See* NUREG-0800, Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition, § 2.2.3 (Mar. 2007).

> [T]he applicant has identified and evaluated potential accidents related to the presence of hazardous materials or activities in the site vicinity that could affect a nuclear power plant or plants that might be constructed on the proposed site, and from these the applicant has selected those which should be considered as design-basis events at the combined license stage.[120]

In fact, TSEP acknowledges that some existing nuclear plants are located on or near sites with oil and gas wells.[121]

The focus of Contention TSEP-SAFETY-3 is on the risks from abandoned wells. Rather than identify any abandoned wells or borings at the VCS site that have not been properly plugged, this contention engages in speculation. For example, the contention states that abandoned wells "*may* be improperly plugged" and that "the casing on the wells *may* be aging beyond its effectiveness."[122] Furthermore, TSEP in fact concedes that it does not know whether the wells are leaking.[123] As has been previously ruled by the Commission, a contention will be ruled inadmissible if the petitioner has offered no tangible information but instead only "bare assertions and speculation."[124]

In contrast to the speculation provided by TSEP, the SSAR contains an extensive evaluation of hazards posed by oil and gas wells as well as natural gas pipelines at VCS:

- SSAR Section 2.2.2.3.4 discusses six major natural gas or oil extraction fields located within a 5-mile radius of VCS. SSAR Figure 2.2-5 identifies the individual natural gas and oil wells within 5 miles of VCS, including numerous wells located on the VCS site. As indicated on that figure and SSAR page 2.2-15, the closest active well is located approximately 0.76 miles (4013 feet) from the VCS power block.

- SSAR Section 2.2.2.3 discusses the natural gas pipelines on and near the site, including Exelon's plans to relocate some of the pipelines. Following relocation, the

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120 *Id.* at 2.2.3-7 to -8.

121 Petition at 24-25.

122 *Id.* at 19, 21 (emphasis added).

123 *Id.* at 20.

124 *Fansteel*, CLI-03-13, 58 NRC at 203 (quoting *Oyster Creek*, CLI-00-6, 51 NRC at 208).

nearest pipeline would be approximately 0.42 miles (2237 feet) from the power block area.

- As discussed in SSAR Section 2.2.2.3.4, the hazard posed by the natural gas wells is bounded by the hazard posed by the natural gas pipelines due to their closer proximity to the VCS site and the fact that the pipelines have a larger volume (larger diameter and operating pressure) than the gas wells.

- SSAR Section 2.2.3.1.1.1 evaluates the hazards posed by deflagrations of natural gas posed by a breach of a natural gas pipeline, and SSAR Section 2.2.3.1.2.1 evaluates the hazards posed by a delayed explosion of a flammable vapor cloud of natural gas. SSAR Section 2.2.3.1.1.1 demonstrates that the overpressure produced by a deflagration would be less than 1 psi and therefore would not adversely affect safety-related structures. SSAR Section 2.2.3.1.2.1 demonstrates that the probability of an explosive vapor cloud at the VCS power block or a delayed explosion of a vapor cloud of natural gas that results in an overpressure of 1 psi or greater at the VCS power block is 3.67×10^{-7} per year, which is acceptable per Regulatory Guide 1.206 given the conservative assumptions used in the calculation.[125]

The Petition does not contest *any* of this information and therefore does not establish that a genuine dispute of material fact exists. Instead, the contention rests solely on an unsupported allegation that some abandoned wells might be leaking explosive or toxic gases if the wells were not properly plugged or if they deteriorated.

TSEP contends that "[t]he only practical way to confirm whether a well has been properly plugged is to locate it on the ground and re-drill it."[126] As explained in the ESP application:

> [T]here are a series of active and inactive oil and gas wells on the site. 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

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[125] Regulatory Guide 1.206, Combined License Applications for Nuclear Power Plants (LWR Edition) at C.I.2.7 (June 2007). The conservatisms include longer ignition delay times to allow a release from a pipeline to travel to a location nearer to VCS. SSAR at 2.2-27.

[126] Petition at 21.

> time. The oil and gas wells would be properly capped by a licensed contractor.[127]

Thus, Exelon will be doing precisely what TSEP has requested in TSEP-SAFETY-3—ensuring that abandoned oil and gas wells are properly capped in accordance with state regulations.

The contention also states that the natural gas and oil wells present a hazard from release of hydrogen sulfide and other toxic gases.[128] However, the contention does not identify any actual releases of hydrogen sulfide from wells on the VCS site. Furthermore, the hazard posed by toxic gases to the safety of the plant is dependent upon the design of the control room ventilation system. As stated in SSAR Section 2.2.3.1.3, the potential for 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. This is fully consistent with NRC guidance for ESP applications in RS-002, which states:

> With respect to potential accidents on or in the vicinity of the site which could affect control room habitability (e.g., toxic gases, asphyxiants), those accidents which are to be accommodated on a design basis, as determined within the review conducted using Section 2.2.3 of this review standard, will need to be addressed within the design of the nuclear power plant or plants of specified type (or falling within a PPE [plant parameter envelope]) that might be constructed on the proposed site and reviewed at the combined license (COL) stage (if the information is not available at the ESP stage) using NUREG-0800 Section 6.4.[129]

TSEP next speculates that abandoned oil wells would also present a risk of fire "if improperly abandoned."[130] However, the SSAR evaluates the risk of fires external to the plant, including fires from breaks of natural gas pipelines and brush and woodland fires, and the SSAR

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127 ER at 4.2-12.

128 Petition at 23-24, 26.

129 RS-002, Processing Applications for Early Site Permits at 2.2.3-1 (May 3, 2004), *available at* ADAMS ML040700409. Similar provisions are contained in the SRP. *See* SRP § 2.2.3 at 2.2.3-5.

130 Petition at 24.

demonstrates that such external fires would not pose a threat to the safety of the plant.[131] TSEP has not alleged or provided any information suggesting that a fire from an oil well "if improperly abandoned" would be more severe than the external fires evaluated in the SSAR.

In summary, Exelon will ensure that abandoned oil and gas wells within the footprint of the cooling basin and plant are capped in accordance with Texas regulations. Furthermore, the SSAR demonstrates that the explosive risk of active wells is bounded by the risk posed by natural gas pipelines in the area, and that the plant will be designed to withstand an explosion of a natural gas pipeline. The SSAR also contains a bounding analysis of external fires and demonstrates that such fires would not threaten the safety of the plant. The hazards posed by toxic gases such as hydrogen sulfide will be evaluated at the COL stage, as permitted by NRC guidance in RS-002 and SRP Section 2.2.3. TSEP does not dispute any of these material facts. Accordingly, this proposed contention does not satisfy 10 C.F.R. § 2.309(f)(1)(vi) and should be dismissed.

4. TSEP-SAFETY-4 – Dependable Water Supply

Contention TSEP-SAFETY-4 alleges "[t]he ER fails to demonstrate the existence of a dependable water supply for a new reactor."[132] As a basis for this contention, TSEP alleges that there will not be sufficient surface water available from the Guadalupe River to satisfy the needs of VCS.[133] As discussed below, this proposed contention does not raise a genuine dispute of material fact and does not satisfy 10 C.F.R. § 2.309(f)(1)(vi).

The wording of Contention TSEP-SAFETY-4 is almost identical to the wording of TSEP-ENV-2. The only substantive difference between the two contentions is that TSEP-

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131 SSAR at 2.2-33 to -34.

132 Petition at 26.

133 *See id.* at 26-32.

SAFETY-4 is labeled as a safety contention and TSEP-ENV-2 is labeled as an environmental contention, and the last paragraph of TSEP-SAFETY-4 contains questions related to the safety of the cooling basin that are not contained in TSEP-ENV- 2.[134] Here, we address the safety issues associated with water availability, while the environmental issues associated with water availability are addressed below as part of the response to TSEP-ENV-2.

Although Contention TSEP-SAFETY-4 is labeled as a safety contention, it contains almost no discussion of safety issues. In fact, this contention mentions safety only in conjunction with the cooling basin.[135] However, as discussed above with respect to TSEP-SAFETY-1, the cooling basin is *not* a safety-related structure and adequate protection of safety is provided even if the cooling basin is not functional.

Furthermore, with one exception, Contention TSEP-SAFETY-4 does not mention or reference the SSAR, which provides the safety analysis for the VCS site. The one exception is an allegation that the SSAR and ER understate and misrepresent the actual surface water use, without reference to any particular pages or sections of the SSAR.[136] In particular, TSEP-SAFETY-4 does not reference or discuss SSAR Section 2.4.11, which provides an evaluation of the safety implications of low water considerations. Since this contention does not reference the specific portion of the SSAR that pertains to the subject raised by this contention, the contention does not satisfy 10 C.F.R. 2.309(f)(1)(vi), which requires that a contention "include references to

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134 *Id.* at 32. Additionally, the discussion of materiality in Contention TSEP-ENV-2 references NEPA (*id.* at 34), whereas the corresponding discussion in TSEP-SAFETY-4 references 10 C.F.R. Part 100 and Regulatory Guide 4.7 (*id.* at 27-28).

135 *See id.* at 32. The Petition (at 27) also references Appendix A to 10 C.F.R. Part 100. However, as provided in 10 C.F.R. § 100.23(a), Appendix A only applies to applications under 10 C.F.R. Part 50 prior to January 10, 1997, and not to ESP applicants. The Petition (at 27-28) also references Regulatory Guide 4.7, General Site Suitability Criteria for Nuclear Power Stations (Apr. 1998), which addresses both environmental and safety issues related to siting. We address the issues related to the passage in Regulatory Guide 4.7 quoted by TSEP as part of our response to TSEP-ENV-2.

136 *See id.* at 26.

specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes." Accordingly, TSEP-SAFETY-4 should be summarily rejected. As has been repeatedly ruled in the past, a contention that does not directly controvert a position taken by the applicant in the application is subject to dismissal.[137]

In any event, TSEP's allegations regarding the availability of surface water have no bearing on safety. Surface water is used at VCS only as a source of makeup water for the cooling basin.[138] As mentioned above, the cooling basin is not safety-related.[139] Furthermore, as discussed in SSAR Section 2.4.11, "[t]he safety-related cooling functions for VCS, including the UHS [ultimate heat sink], do not rely upon river or stream flow rates or water levels."[140]

The cooling basin would be used as a source of makeup water for the mechanical draft cooling towers that, for some reactor designs, may be needed for the safety-related UHS or the non-safety-related service water system.[141] However, the makeup water function is *not* a safety-related function.[142] Specifically, for non-passive reactor technologies, the UHS cooling tower basins would store enough water to provide the required post-accident cooling for 30 days without makeup water,[143] and passive reactor technologies would not utilize any cooling towers for the UHS. Thus, the ESP application makes clear that during accident conditions, when the UHS needs to operate, the required makeup flow is 0 gpm.[144]

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137 *See, e.g.*, *Luminant Generation Co.* (Comanche Peak Nuclear Power Plant), LBP-09-17, 70 NRC 311, 362 (2009); *Oconee*, CLI-99-11, 49 NRC at 342; *Comanche Peak*, LBP-92-37, 36 NRC at 384.

138 *See* SSAR at 2.4.11-1; ER at 3.3-2.

139 *See* SSAR at 2.4.11-1.

140 *Id.* at 2.4.11-2.

141 *Id.* at 2.4.11-1.

142 Similarly, groundwater will be used as a source of makeup for some safety systems, but the makeup water function is not a safety-related function. *See id.* at 2.4.12-13.

143 ER at 3.4-3.

144 *Id.* at 3.1-8.

As indicated above, makeup water from the cooling basin will be supplied to the safety-related UHS during normal operation for non-passive reactor technologies.[145] If the water level of the cooling basin drops below the design low water level of the basin, the plant would be shut down.[146] Additionally, if, for whatever reason, the makeup water is not supplied to the UHS and the UHS becomes inoperable as a result, the plant would be required to shut down until the UHS is restored to operable conditions.[147] However, since the plant would be shut down, the lack of makeup water for the UHS would not adversely impact safety. This point was made by the Atomic Safety and Licensing Appeal Board ("Appeal Board") in the *Palo Verde* operating license proceeding, which noted that "although an insufficient supply of condenser cooling water might necessitate a reduction in power levels (and perhaps total reactor shutdown), it would not pose a safety threat" and that "the equipment associated with the condenser cooling system is not required to meet the standards established for facility components that are deemed to be safety-related."[148] More recently, the Licensing Board in the *Comanche Peak* COL proceeding, in rejecting a contention that global warming would deprive the plant of needed water, found that "the FSAR [final safety analysis report] contains sections describing the minimum water

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[145] The amount of makeup water needed for the mechanical draft cooling towers would be insignificant. As shown on ER at 3.1-8, the cooling basin will consume on average approximately 46,000 gpm, whereas the evaporation rate from the mechanical draft cooling towers for the safety-related UHS and non-safety-related service water system that will need to be replaced with makeup water will be only 620 gpm (or slightly more than 1% of the water that VCS will withdraw from the Guadalupe River).

[146] ER at 3.4-8 to -9. The cooling basin intake will be designed to allow operations until the water level drops to 71.5 feet NAVD 88. *Id.* at 3.4-13; SSAR at 2.4.11-5. However, the ER shows "that with the operation of the station at a long-term average station capacity factor of 96 percent, the water level is not expected to drop below 73.5 feet NAVD 88, even at the return of the drought of record." ER at 3.4-13.

[147] By way of example, Technical Specification 3.7.1 for South Texas Project Units 3 and 4, which also will use mechanical draft cooling towers for the UHS, establishes operability requirements of the UHS. *Available at* ADAMS ML102860595. The technical specifications for VCS will not be developed until the COL stage after a reactor design is selected.

[148] *Ariz. Pub. Serv. Co.* (Palo Verde Nuclear Generating Station, Units 1 & 2), ALAB-713, 17 NRC 83, 84 n.2 (1983).

requirements for plant operation, below which the plant would not be permitted to operate, so that Petitioners' concerns are effectively addressed in this context."[149]

In summary, supply of makeup water is not a safety-related function, and the UHS can perform its safety-related cooling function for the duration needed without makeup water. For designs that utilize UHS cooling towers, if makeup water is not available for indefinite periods and if the UHS were to become inoperable as a result, the plant would be required to shut down, thereby ensuring the safety of the plant. Thus, water from the Guadalupe River is not needed to ensure the safety of VCS. Since TSEP has not disputed any of these material facts, Contention TSEP-SAFETY-4 should be dismissed pursuant to 10 C.F.R. § 2.309(f)(1)(vi).

5. TSEP-ENV-1 – Impacts from Cooling Basin Seepage

Contention TSEP-ENV-1 alleges that "[t]he 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" and "does not identify how it will prevent or mitigate this impact by identifying and plugging the wells and borings."[150] As demonstrated below, this proposed contention does not raise a genuine dispute of material fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi), and is not properly supported, contrary to 10 C.F.R. § 2.309(f)(1)(v).

TSEP claims 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."[151] This statement is incorrect. ER Section 4.2.3.2 directly addresses this topic:

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149 *Comanche Peak*, LBP-09-17, 70 NRC at 362.

150 Petition at 34.

151 *Id.* at 35.

> In addition to the water wells, there are a series of active and inactive oil and gas wells on the site. 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.[152]

The Commission has stated that a petitioner must "read the pertinent portions of the license application . . . state the applicant's position and the petitioner's opposing view," and explain why it disagrees with the applicant.[153] TSEP has not done this. In upholding the rejection of a contention, the Commission stated that "general assertions, without some effort to show why the assertions undercut findings or analyses in the ER, fail to satisfy the requirements of Section 2.309(f)(1)(vi)."[154] Accordingly, this contention should be dismissed because it does not directly controvert a position taken in the ER.[155]

This contention also appears to be based on TSEP's conclusion that Exelon will not properly plug oil and gas wells in the footprint of the cooling basin.[156] Specifically, TSEP claims that Exelon does not state how it will locate the wells and "the ESP application references certain regulations for water wells but does not reference the proper regulations for plugging oil and gas wells."[157] However, ER Section 4.2.3.2 references the regulations applicable to the plugging of

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152 ER at 4.2-12.

153 Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,170. *See also Millstone*, CLI-01-24, 54 NRC at 358.

154 *S.C. Elec. & Gas Co.* (Virgil C. Summer Nuclear Station, Units 2 & 3), CLI-10-1, 71 NRC __, slip op. at 28 (Jan. 7, 2010) (upholding rejection of an energy alternatives contention because the proposed contention failed to challenge the analysis contained in the ER).

155 *See Comanche Peak*, LBP-92-37, 36 NRC at 384. *See also Millstone*, LBP-04-15, 60 NRC at 95.

156 *See* Petition at 34-36; Petition, Ex. D-2, JCHA Report at 79-81.

157 Petition at 35.

water wells referred to by TSEP because the discussion in question pertained in part to the plugging of water wells.[158] Furthermore, ER Section 3.9.1.2 plainly states that oil and gas wells that must be abandoned in place "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*."[159] TSEP does not cite any regulatory provision or precedent (and we are aware of none) that would require the ER to describe procedures on how Exelon will identify the wells. In this regard, as the Commission has noted, "[o]ur boards do not sit to 'flyspeck' environmental documents or to add details or nuances."[160]

As noted above, Exelon commits to properly plugging the wells as required by applicable state regulations. TSEP has not provided any information indicating Exelon will not follow these regulations. Indeed, it is a settled principle in NRC proceedings that the Commission will not litigate issues based on the assumption that a licensee will violate regulatory requirements.[161]

Nonetheless, even if TSEP had shown that the wells would not be properly plugged, TSEP has not provided any information to show this would be problematic. TSEP claims that "there is the potential of enhanced seepage of tritium, which can contaminate groundwater."[162] However, as explained in the ER, during normal operation, any radioactive material will be discharged from the plant's liquid waste management system ("LWMS") directly to the Guadalupe River, not to the cooling basin.[163] Therefore, TSEP's allegations regarding seepage

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158 *See* ER at 4.2-12.

159 *Id.* at 3.9-3 (emphasis added). *See also id.* at 4.1-3.

160 *Sys. Energy Res., Inc.* (Early Site Permit for Grand Gulf ESP Site), CLI-05-4, 61 NRC 10, 13 (2005).

161 *See, e.g.*, *Private Fuel Storage, L.L.C.* (Indep. Spent Fuel Storage Installation), CLI-01-9, 53 NRC 232, 235 (2001) ("[I]n the absence of evidence to the contrary, the NRC does not presume that a licensee will violate agency regulations wherever the opportunity arises.").

162 Petition at 35.

163 *See, e.g.*, ER at 3.5-1, 5.4-1. Additionally, ER Chapter 6 describes tritium monitoring that would be conducted within the cooling basin and at 17 onsite wells. *See id.* at 6.2-3; *id.*, Tables 6.2-2, 6.2-3.

of tritium from the cooling basin are unsupported and fail to establish a genuine dispute, because VCS will not discharge tritium to the cooling basin during normal operation.

SSAR Section 2.4.13 also evaluates accidental releases of radioactive liquids from the LWMS to groundwater and surface water. That evaluation in turn is referenced and summarized in ER Section 7.2.3.3. That evaluation includes an assumption that tritium is released to groundwater[164] and demonstrates that the concentration of tritium would be less than the effluent concentration limits ("ECL") in 10 C.F.R. Part 20, Appendix B, Table 2, Column 2 and that the total release would be within the limits in Appendix B to Part 20 at the site boundary.[165] The Petition does not contest any of this information and therefore does not show a genuine dispute of material fact.

Finally, TSEP claims that "[t]here is further danger of seepage from the water treatment chemicals, which are harmful to the ecosystem."[166] TSEP, however, provides absolutely no support for this statement. TSEP does not identify any harmful chemicals, does not identify any concentrations of these chemicals in groundwater, and does not identify any impact whatsoever. Because TSEP fails to provide any "alleged facts or expert opinion" for this argument, it does not satisfy 10 C.F.R. § 2.309(f)(1)(v). As the Commission has held, a contention will be rejected if it includes only "bare assertions and speculation."[167]

TSEP references the JCHA Report for this contention, which states: "The potential chemicals to be found in the cooling basin were not listed in the ESP. Rather, the identification and listing of chemicals is deferred to the COL Application stage."[168] This statement is

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164 *See, e.g.*, SSAR at 2.4.13-1, -10.

165 *See id.* at 2.4.13-6 to -8; ER at 7.2-8 to -9.

166 Petition at 35.

167 *Fansteel*, CLI-03-13, 58 NRC at 203.

168 Petition, Ex. D-2, JCHA Report at 80.

inaccurate. ER Section 3.3.2 discusses water treatment and includes the types of chemicals that would be used. ER Section 3.6.1 discusses effluents containing chemicals or biocides. In fact, Table 3.6-1 provides a listing of the constituents and concentrations in the makeup to the cooling basin and the blowdown effluent from the cooling basin to the Guadalupe River. ER Section 5.2.3.1 further states that "[b]iocides and chemical additives used in VCS plant systems would be consistent with those approved by the U.S. Environmental Protection Agency or the state of Texas."[169] ER Section 6.6.3.2 also discusses the groundwater monitoring program. As discussed in ER Section 5.3.2.2.2, the chemical concentrations in the water in the cooling basin that is discharged to the Guadalupe River will be subject to applicable state water quality standards, which will be specified in a Texas Pollutant Discharge Elimination Standard ("TPDES") permit. The ER demonstrates that the impact from such discharges will be SMALL.[170] Additionally, ER Section 5.2.1.2.2 evaluates discharges from the cooling basin to groundwater. The ER concludes that "[b]ecause any hydrologic alterations to groundwater would be local, the impact of hydrologic alterations of groundwater from the operation of the VCS cooling basin would be SMALL."[171] TSEP's failure to controvert any of this information in the ER renders this contention inadmissible because it does not comply with 10 C.F.R. § 2.309(f)(1)(v) and (vi).

In summary, there is no genuine dispute of material fact that VCS will not discharge tritium to the cooling basin during normal operation, that any accidental releases of tritium to groundwater would be in compliance with the limits in 10 C.F.R. Part 20, and that the chemical

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169 ER at 5.2-17.

170 *Id.* at 5.3-24. As explained in the ER, the concentration of chemicals in the river from the discharge water would return to ambient levels almost immediately downstream.

171 *Id.* at 5.2-9. Although the ER does not specifically discuss the impacts of chemical discharges from the cooling basin to groundwater, it stands to follow that such discharges would also have a SMALL impact given that the water in the cooling basin must satisfy the TPDES permit upon discharge to the River and given the localized hydrological impact of discharges from the cooling basin to the groundwater. TSEP has provided no basis for contending that chemical discharges to the groundwater from the cooling basin will have anything other than a SMALL impact.

discharges from the cooling basin to the Guadalupe River and groundwater will have SMALL environmental impacts. Accordingly, this contention should be dismissed for failure to demonstrate a genuine dispute as required by 10 C.F.R. § 2.309(f)(1)(vi) and for lack of support as required by 10 C.F.R. § 2.309(f)(1)(v).

6. TSEP-ENV-2 – Impacts of Limited Water Availability

Contention TSEP-ENV-2 alleges that "[t]he ER fails to provide an adequate evaluation of the environmental impacts of severe limits on water availability in the region of the VCS site."[172] This proposed contention does not raise a genuine dispute of material fact and is not material to a finding that the NRC must make under NEPA and therefore does not satisfy 10 C.F.R. § 2.309(f)(1)(iv) or (vi).

a. Background on Water Availability in South Central Texas

Surface water in Texas is considered to be state water and is regulated by various state agencies and bodies.[173] Requests for new rights to use surface water must be submitted to the Texas Commission on Environmental Quality ("TCEQ"), which analyzes the request with respect to water availability, effect on other water rights holders, and the impact on the environment.[174] Additionally, Texas has established Regional Water Planning Groups ("RWPGs") that are required by state law to plan for the future water needs under drought conditions.[175] The RWPG for the South Central Texas Regional Water Planning Area ("Region L") has prepared a water plan for the area encompassing VCS and the Guadalupe River, including a state-mandated, detailed analysis of projected water demands and supplies during a

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172 Petition at 36.

173 ER at 2.3-122 to -123.

174 *See id.* at 2.3-122, -134.

175 *Id.* at 2.3-121. The RWPGs are subject to the rules of the Texas Water Development Board.

repeat of the drought of record (which occurred in 1950-57).[176] That plan includes a recommended project to supply water to VCS, and the analysis conducted for the Region L RWPG concluded that sufficient water will be available for VCS.[177]

VCS would withdraw up to 75,000 acre-feet per year from the Guadalupe River to support operation of the cooling basin.[178] ER Section 2.3.2.3.5 explains that Exelon would obtain cooling water from the Guadalupe River either by (1) contracting for use of an existing water right; (2) using a new water right, which could be created by applying to the TCEQ; or (3) a combination of these two options.

In that regard, the Guadalupe Blanco River Authority ("GBRA") holds water rights—either directly or jointly with Union Carbide Corporation ("UCC")—totaling 175,501 acre-feet per year for municipal, industrial, and irrigation use.[179] GBRA is a water conservation and reclamation district for the Guadalupe and Blanco Rivers established by the Texas Legislature. GBRA's mission is to protect, conserve, reclaim, and steward the water resources of the district in order to ensure and promote the quality of life of the people served by GBRA.[180] In addition to its existing water rights, GBRA is seeking new water rights from TCEQ of up to 189,484 acre-feet per year from the lower Guadalupe River basin, which would be junior to existing water rights.[181]

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176 *See id.* at 2.3-121, -131.

177 *See id.* at 2.3-134 to -135.

178 *Id.* at 3.3-2, 3.4-7.

179 *Id.* at 2.3-133.

180 *See* Guadalupe-Blanco River Authority, About GBRA, http://www.gbra.org/about/default.aspx (last visited Feb. 10, 2011).

181 ER at 5.11-5. Water rights that are senior in time have first claim on water from the river; more junior rights would not be served during conditions of low river flow if sufficient water is not available. *Id.* at 2.3-131.

Contention TSEP-ENV-2 primarily consists of three arguments by TSEP: (1) that new water rights will not be available for the VCS project; (2) that GBRA's existing water rights would not be sufficient to supply VCS given the actual water use under those rights; and (3) that Exelon's evaluations have not accounted for the effect of droughts. Each of those arguments is addressed below.

b. New Water Rights

TSEP claims that "no unappropriated firm water remains for a new surface water right that Exelon might seek."[182] In this regard, TSEP claims that the ER fails to identify two pending GBRA permits that would have priority over any new application by Exelon and that the pending GBRA permits will consume the remaining unappropriated water.[183] However, TSEP has apparently misinterpreted the ER. The ER does not state that *Exelon* would apply for new rights. Instead, it states that Exelon could contract to use a new water right. Specifically, the ER states 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."[184] Thus, contrary to TSEP's allegation, there is nothing inconsistent with stating that Exelon may utilize new water rights for VCS and the fact that GBRA has applied to TCEQ for new water rights (which, according to TSEP, would consume all remaining unappropriated water) because Exelon could contract with GBRA to use the new water rights being sought by GBRA. In that regard, the acquisition of additional water rights by GBRA under these new permits would serve to increase the amount of water that Exelon and others could acquire from GBRA.

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182 Petition at 36, 38.

183 *Id.* at 39, 42.

184 ER at 5.2-12.

Furthermore, contrary to TSEP's contention, the ER does discuss the impacts of the pending GBRA water rights permits on water availability. TSEP identifies two proposed GBRA projects for 189,484 acre-feet per year and 75,000 acre-feet per year that it claims must be discussed in the ER.[185] While TSEP references Petition Exhibit H, a summary of water management strategy from the 2011 Region L Water Plan, for this information, these values do not appear there, and so it is unclear which projects TSEP is referencing.[186] However, based on other information in the 2011 Region L Water Plan, TSEP appears to be referring to Project 4C.14 (GBRA New Appropriation – Lower Basin) and Project 4C.15 (GBRA Mid-Basin Project).[187]

Contrary to TSEP's claims, the ER addresses the cumulative impacts of other projects on water availability in the lower Guadalupe River basin. This evaluation is found in ER Section 5.11. In fact, ER Section 5.11.2 specifically addresses Project 4C.14 and other projects, including their effect on water use.[188] This section concludes that "cumulative impacts related to the proposed withdrawals for the VCS cooling basin and [Lower Guadalupe Water Supply Project] 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."[189] Although ER Section 5.11.2 does not specifically mention Project 4C.15 because it is in a different part of the basin, the evaluation in the ER relies on the cumulative effects evaluation in the 2011 Region L Water Plan (which considers Project 4C.15) and concludes that "implementation of the 2011 Region L Water Plan is

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185 Petition at 39.

186 *See* Petition, Ex. H, App. D, Summary of Water Management Strategies, 2011 South Central Texas Regional Water Plan, South Central Texas Regional Water Planning Group (Sept. 2010) ("Water Management Summary").

187 S. Cent. Tex. Reg'l Water Planning Area, 2011 Regional Water Plan, §§ 4C.14, 4C.15 (Sept. 2010), *available at* http://www.regionltexas.org/2011_RegWaterPlan/Vols1and2.pdf.

188 *See* ER at 5.11-2 to -5.

189 *Id.* at 5.11-5.

expected to slightly increase inflows to the Guadalupe Estuary relative to the Baseline (Full Permits) case during dry or drought periods."[190] By not identifying, much less challenging, the ER's discussion of the cumulative impacts of the new water rights being sought by GBRA, TSEP fails to demonstrate a genuine dispute of material fact.[191]

In summary, TSEP's arguments related to new water rights are based upon a misreading of the ESP application. Accordingly, those arguments should be rejected pursuant to 10 C.F.R. § 2.309(f)(1)(vi) for failure to create a genuine dispute of material fact.

c. Historical Water Use from GBRA's Existing Water Rights

TSEP claims that the ER understates the historical usage of water from the GBRA's lower basin water rights.[192] TSEP further contends that data obtained from the South Texas Water Master ("STWM") shows that the reported water usage from just one of GBRA's water rights was higher than the ER reports for all of GBRA's water rights.[193] For the reasons discussed below, TSEP's allegations do not establish a genuine dispute of material fact.

As discussed in ER Sections 3.3.1.1 and 5.2.2.1, makeup water for the cooling basin would be taken from the Guadalupe River, and the withdrawal rate would not be more than 75,000 acre-feet per year.[194] Furthermore, because the water rights for VCS would be "run-of-river" rights, withdrawals of water from the Guadalupe River by VCS would vary depending upon the flow of the river, and in some cases no water would be withdrawn by VCS due to low river flow conditions.[195] ER Section 5.2.2.1 evaluates the impacts of use of up to 75,000 acre-

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190 *Id.* at 5.11-8.

191 *See* Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,170. *See also Millstone*, CLI-01-24, 54 NRC at 358.

192 Petition at 36-37.

193 *Id.* at 39, 41.

194 ER at 3.3-2, 5.2-10.

195 *Id.* at 5.2-11 to -12.

feet per year. ER Section 5.2.2.1 concludes that the availability of water under the rights held either jointly or directly by GBRA would be sufficient to satisfy Exelon's needs.[196] ER Section 2.3.2.3.5, which TSEP does not challenge here, concludes that GBRA holds existing *unused* water rights which are projected to total more than 115,000 acre-feet per year in 2060,[197] which are more than enough to satisfy the needs of VCS while leaving substantial amounts of unused water rights (at least 40,000 acre-feet per year) for other needs.

Furthermore, TSEP's allegations regarding actual water use under GBRA's water rights are not sufficient to establish a genuine issue of material fact. ER Section 2.3.2.3.5 states that out of the 175,501 acre-feet per year of rights held by GBRA/UCC, "[t]he 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."[198] Exelon obtained its water use data, which is reproduced in ER Table 2.3.2-13, directly from GBRA in November 2007.[199] GBRA is the actual holder of the water rights in question and Exelon has confirmed the accuracy of the total water use values in ER Table 2.3.2-13. TSEP claims that information in the ER obtained from GBRA is incorrect. TSEP claims that based on information from the STWM, the reported water usage for just one of GBRA's permits (Certificate of Adjudication 18-5178) was 58,526 acre-feet in 2001, 70,544 acre-feet in 2000, and 115,966 acre-feet in 1994.[200] As a basis for this claim, TSEP references pages 2 to 3 and Table 1 of a report by Mr. Joseph F. Trungale ("Trungale Report"), which are

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196 *See id.* at 5.2-11.

197 *Id.* at 2.3-134.

198 *Id.* at 2.3-133.

199 *Id.* at 2.3-130, -135.

200 Petition at 41.

included as Exhibit E-1 to the Petition.[201] However, the cited portions of the Trungale Report do not support the conclusions in the Petition. For example:

- Table 1 identifies water use of 47,046 acre-feet in 2000, not 70,544 acre-feet as stated in the Petition.[202] The value in Table 1 of the Trungale Report is roughly consistent with (but slightly lower than) the data for 2000 (49,930 acre-feet per year) as reported in ER Table 2.3.2-13.[203] The difference of a few thousand acre-feet per year in water use values between Table 1 of the Trungale Report and ER Table 2.3.2-13 does not demonstrate a genuine dispute of material fact, particularly because the ER values are actually higher and thus more conservative.

- Table 1 does identify a water use of 58,526 acre-feet in 2001, which is consistent with the statements in the Petition.[204] However, that value is not significantly different than the value of 51,670 reported in the ER at 2.3-133. Even if the value reported in the Trungale Report were accepted, there still would have been more than 115,000 acre-feet of water available for VCS and other users in 2001, as reported in the ER.[205]

- The value of 115,966 acre-feet in 1994 that is reported in the Petition does not appear in Table 1 of the Trungale Report. Instead, Table 1 reports a value of 105,081 acre-feet for 1994. In any event, the 1994 data predates and therefore is not inconsistent with the data in the ER, which is from 2000-2006.[206] Furthermore, the water usage values reported for the 2000s as a whole are substantially less than the values reported for the 1990s. Indeed, in the most recent years, Table 1 of the Trungale Report identifies a steadily decreasing water usage—52,900 to 44,893 to 33,460 to 18,265 acre-feet per year of water usage from 2005 to 2008, respectively.[207] Thus, even if the values in Table 1 of the Trungale Report are taken at face value, neither the contention nor the Trungale Report provides any basis for believing that data from the 1990s is reflective of current usage patterns, especially given the changes in water usage over time.

In summary, the Trungale Report does not support the statements in the Petition, and the information in the Trungale Report is not materially different than the information in the ER. Moreover, TSEP has not claimed or provided any information to demonstrate that 75,000 acre-

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201 *Id.* at 39-41; *id.*, Ex. E-1, Joseph F. Trungale, Effect of Diversions from the Guadalupe River on San Antonio Bay and Estuary Health at 1-2, 5-10, 12-15 (Jan. 20, 2011) ("Trungale Report").

202 Petition, Ex. E-1, Trungale Report at 3.

203 ER at 2.3-157.

204 Petition, Ex. E-1, Trungale Report at 3.

205 ER at 2.3-134.

206 *See id.* at 2.3-133.

207 Petition, Ex. E-1, Trungale Report, at 3.

feet per year of water is unavailable under the existing GBRA permits. Since no genuine dispute of material fact exists with respect to historical water usage under the GBRA water use rights, this portion of the contention must fail.

d. Effect of Droughts

TSEP states that there are "frequent and prolonged droughts" in the area and implies that VCS may not have sufficient water availability during droughts.[208] ER Section 2.3.2.1.1, however, describes the state's regional planning process relied upon by the ER analysis (and Exelon's water availability determination) and indicates that this process quantifies "surface and groundwater supplies reliably available during a repeat of the drought of record (1950-1957)."[209] ER Section 2.3.2.3.1 also discusses the impacts of drought on water availability, including the drought of record, which (by definition) was more serious than the droughts identified by TSEP.[210] ER Section 2.3.2.3.3 further discusses the surface water availability projections and concludes that "a surplus of approximately 115,926 acre-feet per year remains in 2060 under the GBRA/UCC water rights."[211] ER Section 5.2.2.1 explains that the ER Section 2.3.2.3.3 evaluation "considers the use of water allocated under existing rights during a repeat of the 1950s drought of record and through the planning horizon."[212] Thus, the ER's evaluation of water availability considers the drought of record and still concludes that sufficient water will be available for VCS. TSEP's discussion of droughts does not identify a genuine dispute with that discussion.

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208 Petition at 39-40.

209 ER at 2.3-121.

210 *See id.* at 2.3-128 to -129.

211 *Id.* at 2.3-131 to -132.

212 *Id.* at 5.2-11.

To the extent TSEP is alleging that Exelon does not have sufficient water to continue to operate during droughts, it fails to dispute the relevant information in the ER. Specifically, ER Section 3.4.2.3 concludes that "[t]he results of the water budget model indicate that there is sufficient inventory in the cooling basin to support plant cooling water needs during the repeat of the historical regional drought of record, when there would be reduced and infrequent withdrawals of makeup water."[213]

TSEP further argues that "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."[214] However, Exelon's water availability analysis relies upon the Region L Water Plan, which evaluates groundwater consumption in future years.[215] TSEP alleges no errors in that analysis.

TSEP also bases its argument on the speculation that return flows of 70,000 acre-feet from the City of San Antonio to the river basin may be unavailable in the future because San Antonio may recycle and use those flows for its own purposes.[216] The Petition provides no citation to any information to support such arguments. In fact, the cumulative effects analysis in the Region L Water Plan assumes that the City of San Antonio will fully utilize the capacity of its existing water recycling and reuse infrastructure.[217] TSEP has provided no information to show that San Antonio plans to increase this capacity for recycling water. Thus, TSEP is engaging in speculation that San Antonio will return less water to the River in the future.

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213 *Id.* at 3.4-12 to -13.

214 Petition at 40.

215 *See* ER at 2.3-128 to -129.

216 Petition at 40.

217 *See* S. Cent. Tex. Reg'l Water Planning Area, 2006 Region L Water Plan at 3-14 (Jan. 2006), *available at* http://www.regionltexas.org/documents/2006rwp/vol1/09-Section_3_Water_Supply_Analyses.pdf; S. Cent. Tex. Reg'l Water Planning Area, 2011 Region L Water Plan at 3-14 to 3-15 (Sept. 2010), *available at* http://www.regionltexas.org/2011_ RegWaterPlan/2011_vol1/Section_3.pdf.

Contentions based upon such speculation are not cognizable under 10 C.F.R. § 2.309(f)(1)(vi) or NEPA.[218]

e. Materiality of TSEP's Claim under NEPA

Even if it were assumed that VCS would be required to temporarily shut down due to low water availability, such an assumption would not constitute a genuine dispute on a material issue. A shutdown for lack of water for plant operation would not implicate any environmental concerns under NEPA—instead, a shutdown would constitute an economic issue.

In this regard, the Licensing Board in the *Palo Verde* operating license proceeding rejected similar arguments about the uncertainties of future cooling water supplies, stating that "[i]nsofar as environmental matters are concerned, under the National Environmental Policy Act (NEPA) there is no legal basis for refusing [the applicant] its operating licenses merely because some environmental uncertainties may exist in [the applicant's] future coolant supply," including an inability to operate the plant 100% of the time due to temporary water shortages.[219]

f. Summary

There is no genuine dispute of material fact that VCS would withdraw up to 75,000 acre-feet per year from the Guadalupe River, that such withdrawals are accounted for in the state-mandated regional water plan and are substantially less than the *unused* water rights that the GBRA is projected to hold through 2060, that the state's projections of water availability account for the effects of droughts, and that Exelon is coordinating with GBRA to ensure that the water

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218 *See Vermont Yankee*, ALAB-919, 30 NRC at 44 (citing *Limerick Ecology Action, Inc. v. NRC*, 869 F.2d 719, 739 (3d Cir. 1989)) (holding that NEPA does not require consideration of such "remote and speculative" impacts).

219 *Ariz. Pub. Serv. Co.* (Palo Verde Nuclear Generating Station, Units 1 & 2), LBP-82-117A, 16 NRC 1964, 1992-93 (1982), *aff'd*, ALAB-713, 17 NRC 83 (1983). Furthermore, this issue concerns the benefits of the proposed project. NRC regulations make clear that, at the ESP stage, an ER "need not include an assessment of the economic . . . benefits . . . of the proposed action." 10 C.F.R. § 51.50(b)(2). Therefore, TSEP's concern about the potential for the plant to shut down due to low water availability is also outside the scope of this proceeding, contrary to 10 C.F.R. § 2.309(f)(1)(iii).

will be available in the future for VCS through an existing unused GBRA water right or a new right. Accordingly, this contention does not satisfy 10 C.F.R. § 2.309(f)(1)(vi) and should be dismissed. Furthermore, even if VCS needed to shut down during conditions of low water availability, such a shutdown would not be material to the findings that the NRC must make to issue an ESP under NEPA. Therefore, this contention should also be rejected in accordance with 10 C.F.R. § 2.309(f)(1)(iv).

7. TSEP-ENV-3 – Impacts on Regional Water Availability

Contention TSEP-ENV-3 alleges that the "ER fails to satisfy 10 C.F.R. §§ 51.50 & 51.45 because it does not evaluate the impacts on regional water availability" and that "[i]n order to provide water for Exelon, other water supply projects must be developed or changed in the region to satisfy other demands."[220] This proposed contention does not raise a genuine dispute of material fact and therefore does not satisfy 10 C.F.R. § 2.309(f)(1)(vi).

TSEP identifies projects in the 2011 Region L Water Plan related to GBRA and their corresponding sections in the Plan: GBRA-Exelon Project (4C.10); Lower Guadalupe Water Supply Project ("LGWSP") for Upstream Needs at Reduced Capacity (4C.11); LGWSP for Upstream GBRA Needs (4C.12); GBRA New Appropriation (Lower Basin) (4C.14); GBRA Mid-Basin Project (4C.15); and GBRA Simsboro Project (4C.21).[221] TSEP then alleges that "projects 4C.11, 4C.14, 4C.15, 4C.21 and the Simsboro project are a direct consequence of GBRA committing 75,000 acft/yr to VCS and needing to replace it to satisfy the future demands elsewhere."[222] TSEP provides no support for this claim or any reason to believe that the need for water from these projects is any way connected with the VCS project. The VCS project itself

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220 Petition at 42.

221 *Id.* at 44.

222 *Id.* at 49. TSEP appears to claim that there is a "Simsboro project" that is separate from Project 4C.21. Based on the 2011 Region L Water Plan, this is incorrect.

does not create water demand in other areas. This is further illustrated by the description of the identified projects from the 2011 Region L Water Plan:

- LGWSP for Upstream Needs at Reduced Capacity (4C.11): Diversion of underutilized surface water from the GBRA Calhoun Canal System water rights to portions of Caldwell, Hays, Guadalupe, Comal, and Kendall Counties.[223] This is an alternative water management strategy.[224]

- GBRA New Appropriation (Lower Basin) (4C.14): Diversion and storage of water under a new appropriation in the lower basin from the Guadalupe River via the Calhoun Canal System.[225] The diversion and storage will serve municipal and industrial water users in GBRA's ten-county statutory district.[226]

- GBRA Mid-Basin Project (4C.15): Provide supplemental water supplies directly to customers in Hays and Caldwell Counties in the near-term and indirectly to customers in Comal, Guadalupe, and Kendall Counties.[227]

- GBRA Simsboro Project (4C.21): Provide supplemental water supplies from groundwater directly to customers in Hays and Caldwell Counties in the near-term and indirectly to customers in Comal, Guadalupe, and Kendall Counties.[228]

Similarly, TSEP concludes that "[t]hese five projects must be described as indirect effects in the ESP application, and must be analyzed accordingly to satisfy the requirements of NEPA."[229] Here again, TSEP misunderstands the consequences of the VCS project. Exelon's ESP application does not create the new projects identified by TSEP, and TSEP has provided no basis for believing that such projects would not proceed absent the ESP.

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223 2011 Region L Water Plan § 4C.11.

224 Petition, Ex. H, App. D, Water Management Summary at D-1.

225 2011 Region L Water Plan § 4C.14.

226 *Id.* at 4C.14-1.

227 *Id.* at 4C.15-1.

228 *Id.* § 4C.21.

229 Petition at 47. In a somewhat similar vein, TSEP contends that Exelon has a Reservation Agreement with GBRA for 75,000 acre-feet of water that runs through 2013, and that this Agreement makes water unavailable for other projects in the region. *Id.* at 44-45. However, as discussed in the ER, GBRA has a surplus of more than 115,000 acre-feet through 2060. ER at 5.2-11. Therefore, GBRA has sufficient water not only for the needs of VCS, but also for other projects.

TSEP's claim that the additional projects are "indirect effects" of the ESP application also must fail. The Council on Environmental Quality ("CEQ") regulations, 40 C.F.R. § 1508.8(b), state that effects include:

> Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.[230]

As discussed above, these other projects are not caused by the VCS project—they are independent projects.[231] Therefore, these other projects are not indirect effects and need not be treated as such in the ER.

TSEP further claims that the groundwater projects in the 2011 Region L Water Plan will alter river flows and, "[a]s the aquifers in the Guadalupe and San Antonio River basins are drawn-down, the base flow of the rivers will likely decrease," and that this impact is not described or evaluated in the ESP application or the 2011 Region L Water Plan.[232] However, the cumulative impacts evaluation in ER Section 5.11.2 incorporates the cumulative effects analysis in the 2011 Region L Water Plan. In turn, the Region L Water Plan accounts for the interrelation between groundwater withdrawals and surface water flow, as indicated by the following passage from the Plan:

> Surface water supplies available to the region are also a function of recharge to and withdrawal from the aquifers, as are the quantities of streamflows permitted for use in counties of the Nueces, San Antonio, and Guadalupe River Basins outside of the South Central Texas Region. In water planning for the South Central Texas

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230 Pursuant to 10 C.F.R. § 51.14(b), the NRC has adopted this CEQ definition.

231 *See Airport Neighbors Alliance, Inc. v. United States*, 90 F.3d 426, 432-33 (10th Cir. 1996) (finding that construction of an airport runway that would "proceed regardless" of whether the proposed action was adopted need not be considered as a direct or indirect effect).

232 Petition at 46.

> Region, these factors, together with the numerous potential water management strategies available to the South Central Texas Region, are taken into account herein.[233]

Therefore, TSEP's claims regarding groundwater do not demonstrate a genuine dispute of material fact.

Furthermore, TSEP's claim that the ER omits an evaluation of regional water availability is incorrect. Specifically, ER Section 5.11 addresses the cumulative impacts of other projects in the lower Guadalupe River basin. In fact, ER Section 5.11.2 specifically addresses Project 4C.11 and Project 4C.14, including their effect on water use.[234] ER Section 5.11.2 does not specifically mention Project 4C.15 because it is in a different part of the basin, or Project 4C.21 because it is for groundwater withdrawal, not surface water. Nonetheless, the cumulative impacts evaluation in the ER accounts for all of these projects. ER Section 5.11.2 states:

> 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. Cumulative effects were quantified through long-term simulation of natural hydrologic processes including precipitation, streamflow, aquifer recharge, springflow, and evaporation as they are affected by human influences such as aquifer pumpage, reservoirs, diversions, and the discharge of treated effluent. *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. That analysis indicates freshwater inflows to the Guadalupe Estuary during drought are expected to increase when all regional projects considered in the plan are implemented.*[235]

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233 2011 Region L Water Plan at 1-1 to 1-2.

234 *See* ER at 5.11-2 to -5.

235 *Id.* at 5.11-4 (emphasis added).

Therefore, the cumulative impacts section of the ER incorporates the 2011 Region L Water Plan's cumulative effects evaluation, which includes all recommended water management strategies.

ER Section 5.11.2 concludes that "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."[236] TSEP does not discuss, much less challenge, the ER's cumulative impacts discussion in ER Section 5.11.2. Because TSEP has not controverted the relevant sections of the ER, TSEP has failed to demonstrate a genuine dispute of material fact.[237]

In summary, there is no basis for TSEP's claims that VCS is the cause of other projects mentioned in the Region L Water Plan. Therefore, the impacts of those projects are not indirect effects of VCS. Additionally, contrary to TSEP's claims, the ER evaluates the cumulative impacts from these projects (including the impact of regional groundwater withdrawals on river flows) and the corresponding environmental impacts on regional water availability, and Contention TSEP-ENV-3 does not discuss or controvert that evaluation. For these reasons, this contention does not demonstrate a genuine dispute of material fact or law, and should be dismissed in accordance with 10 C.F.R. § 2.309(f)(1)(vi).

8. TSEP-ENV-4 – Impacts on Long-Term Water Availability

Contention TSEP-ENV-4 alleges that "[t]he ER fails to satisfy 10 C.F.R. §§ 51.50 & 51.45 because it does not evaluate the impacts on long-term water availability."[238] According to TSEP, "[i]n order to provide water for Exelon, other water supply projects must be developed or

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236 *Id.* at 5.11-5.

237 *See* Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,170. *See also Millstone*, CLI-01-24, 54 NRC at 358.

238 Petition at 47.

changed to satisfy other demands" and "[b]ecause the ESP has a life span of twenty to forty years, water availability over that long-term period must be fully evaluated."[239] Thus, TSEP claims that the ER "does not describe or evaluate the long-term impacts on water availability."[240] This proposed contention does not raise a genuine dispute of material fact and therefore does not satisfy 10 C.F.R. § 2.309(f)(1)(vi).

Contention TSEP-ENV-4 is similar to TSEP-ENV-3 except that TSEP-ENV-4 claims the ER does not evaluate the impacts on "long-term water availability" whereas TSEP-ENV-3 refers to "regional water availability."[241] TSEP fails to provide any additional information that relates to long-term water availability. In fact, TSEP incorporates by reference all of the facts and opinions from Contention TSEP-ENV-3.[242]

Contention TSEP-ENV-4 mischaracterizes the ER and fails for the same reasons as Contention TSEP-ENV-3:

- The projects identified by TSEP are not directly caused by VCS. The need for water from those projects is independent from the VCS project.
- The projects identified by TSEP are not indirect effects from VCS and need not be treated as such in the ER.
- ER Section 5.11 addresses the cumulative impacts of the projects identified by TSEP.
- ER Section 5.11 addresses long-term water availability. For example, this section addresses "reasonably foreseeable future actions."[243] This section also incorporates the cumulative effects evaluation in the 2011 Region L Water Plan, which is based on a 50-year planning horizon, and similarly accounts for long-term water availability.

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239 *Id.*

240 *Id.*

241 *See id.*at 42-49.

242 *Id.* at 48.

243 ER at 5.11-1.

- ER Section 5.2.2.1 demonstrates that there will be more than sufficient water available for VCS through 2060.[244]

The contention does not discuss, much less challenge, the ER's discussion of long-term water availability for VCS. Accordingly, TSEP has failed to demonstrate a genuine dispute of material fact, and this contention should be dismissed in accordance with 10 C.F.R. § 2.309(f)(1)(vi).[245]

9. TSEP-ENV-5 – Potential Federal Reserved Water Right for the Aransas National Wildlife Refuge

Contention TSEP-ENV-5 alleges that "[t]he ER fails to document the potential federal reserved water right mandating freshwater inflow requirements for the Aransas National Wildlife Refuge" and that "[t]he federal government may invoke this right to protect the endangered Whooping Crane, which would preclude further use of the waters of the Guadalupe River."[246] As demonstrated below, this proposed contention does not raise a genuine dispute of material fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi), and is not properly supported, contrary to 10 C.F.R. § 2.309(f)(1)(v).

TSEP incorrectly claims that *Winters v. United States*,[247] a 1908 U.S. Supreme Court case that established the federal reserved water right doctrine (also known as the implied-reservation-of-water doctrine), "mandat[es] freshwater inflow requirements for the Aransas National Wildlife Refuge."[248] TSEP relies upon this doctrine to support its theory that the federal government may assert a federal reserved water right for the Aransas National Wildlife Refuge to protect the whooping crane, which would in turn reduce water available to VCS.[249] This

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244 *See id.* at 5.2-11.

245 *See* Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,170. *See also Millstone*, CLI-01-24, 54 NRC at 358.

246 Petition at 49.

247 *Winters v. United States*, 207 U.S. 564 (1908).

248 Petition at 49.

249 *Id.*

theory, however, misapplies *Winters* and corresponding precedent established over the past 100 years.

The Aransas National Wildlife Refuge was created in 1937 by Executive Order No. 7784. TSEP and Exelon agree that the underlying purpose of the reservation in Executive Order No. 7784 is "to effectuate further the purposes of the Migratory Bird Conservation Act . . . [and] as a refuge and breeding ground for migratory birds and other wildlife."[250] In determining whether there is a federal reserved water right, courts have applied a straightforward three-part analysis. A court will assess: (1) whether there has been a reservation of land, and, if so, (2) whether the federal government has provided an express reservation of water, and (3) if not, whether the federal government has implied a reservation of water.[251] These requirements are described by the U.S. Supreme Court in *United States v. New Mexico*.[252] TSEP's arguments fail the second and third factors because there is no express or implied reservation of water for the Aransas National Wildlife Refuge.

The first question is whether the federal government has withdrawn the land from the public domain and reserved it for a public purpose.[253] The answer to this question here is clear and undisputed. In 1937, through Presidential Executive Order No. 7784, the federal government reserved a refuge and breeding ground for migratory birds (including the whooping crane) and other wildlife as part of the Aransas National Wildlife Refuge.[254]

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250 Exec. Order No. 7784, Establishing the Aransas Migratory Waterfowl Refuge, 3 Fed. Reg. 10, 10-11 (Jan. 5, 1938). *See also* Petition at 51; Petition, Ex. D.2, JCHA Report, at 12.

251 *United States v. Idaho*, 135 Idaho 655, 660 (2001). *See also United States v. New Mexico*, 438 U.S. 696, 700 (1978).

252 *See New Mexico*, 438 U.S. at 699-700.

253 *See New Mexico*, 438 U.S. at 699-700; *Idaho*, 135 Idaho at 660.

254 *See* Exec. Order No. 7784, 3 Fed. Reg. at 11.

The second question is whether the implementing federal action contains an express reservation of water.[255] Such express reservations are uncommon.[256] Here, the Migratory Bird Conservation Act[257] and Executive Order No. 7784 do *not* expressly reserve water use.[258] TSEP does not allege otherwise, and thus this issue is similarly not in dispute.

The final question is whether the Migratory Bird Conservation Act or Executive Order No. 7784 implied or intended to reserve unappropriated water. On this point, TSEP merely asserts without support that "the minimum quantity of unappropriated water needed to meet the primary purposes of the reservation is reserved *by implication*."[259] The U.S. Supreme Court has held, however, that to establish an implied federal reserved water right, the underlying purposes of the reservation of land must be "entirely defeated" absent a water right.[260] For example, in *Winters* the court determined that the primary purpose behind Congress' establishment of the Fort Belknap Indian Reservation was to change the Native Americans into "a pastoral and civilized people."[261] Without water to irrigate the lands, the reservation would be "practically valueless," and the development of communities, as intended by the underlying congressional reservation of federal land, could not occur.[262]

In *United States v. Idaho*, a federal reserved water right case, the Supreme Court of Idaho determined the underlying purpose of the Migratory Bird Conservation Act while interpreting an

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255 *See New Mexico*, 438 U.S. at 699-700; *Idaho*, 135 Idaho at 660.

256 *New Mexico*, 438 U.S. at 699.

257 16 U.S.C. §§ 715-715s.

258 *See* Exec. Order No. 7784, 3 Fed. Reg. at 10-11.

259 Petition at 51 (emphasis added).

260 *New Mexico*, 438 U.S. at 700 & n.4.

261 *Winters*, 207 U.S. at 576.

262 *Id.*

Executive Order issued in 1937 for a different wildlife refuge.[263] Similar to Executive Order No. 7784 for the Aransas National Wildlife Refuge, the Executive Order at issue in *United States v. Idaho* was enacted "to effectuate further the purposes of the Migratory Bird Conservation Act" and to establish a "refuge and breeding ground for migratory birds and other wildlife."[264] The court concluded that the purpose of the Migratory Bird Conservation Act is to provide sanctuaries "where the birds could not be molested by hunters."[265] In other words, the primary purpose of the Act is related to protection of birds from hunters. The court concluded in no uncertain terms that "[t]he primary purpose of the Migratory Bird Conservation Act will not be defeated without a federal reserved water right."[266] Similarly, the purpose of protecting birds from hunters is indicated by Executive Order No. 7784, which describes the purpose of the Aransas National Wildlife Refuge as a "refuge" for migratory birds and other wildlife.[267]

The primary purpose as a refuge from hunters would not be "entirely defeated" by lower water flows to the Aransas National Wildlife Refuge. Water flows are unrelated to the protection of whooping cranes from hunting. TSEP does not claim or demonstrate otherwise. For this reason, a federal reserved water right "mandating freshwater inflow requirements for the Aransas National Wildlife Refuge" does not exist. TSEP's claims instead relate to a secondary purpose of the Refuge. The U.S. Supreme Court stated: "Where water is only valuable for a secondary use of the reservation, however, there arises the contrary inference that Congress intended,

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263 *See Idaho*, 135 Idaho at 661-62.

264 *Id*. at 659.

265 *Id.* at 661.

266 *Id.* at 665.

267 The Executive Order also describes the Aransas National Wildlife Refuge as a breeding ground for migratory birds and other wildlife. It is undisputed that whooping cranes do not breed in the Aransas National Wildlife Refuge but instead breed in Wood Buffalo National Park in the Northwest Territories, Canada. ER at 2.4-10; Petition, Ex. F-1, R. Sass, *Grus Americana* and a Texas River: A Case for Environmental Justice at 7, 10 (Nov. 9, 2010) ("Sass Report").

consistent with its other views, that the United States would acquire water in the same manner as any other public or private appropriator."[268] Under the Migratory Bird Conservation Act, water reservation is a secondary purpose, and therefore no reserved water right exists under the Act.[269] Because no federal reserved water right exists for the Aransas National Wildlife Refuge for the purpose identified by TSEP, this contention does not demonstrate a genuine dispute of material fact or law, and fails to satisfy 10 C.F.R. § 2.309(f)(1)(vi).

However, even if it were assumed that the federal reserved water rights doctrine applies here, the contention still would not be admissible. TSEP has not claimed that the federal government has enforced or is planning to enforce a federal reserved water right for the Aransas National Wildlife Refuge. Instead, this contention is based entirely on TSEP's speculation that the government may invoke the federal reserved water right for the Aransas National Wildlife Refuge, and this could in turn reduce the water available for VCS.[270] TSEP essentially concedes that this action is speculative by stating that the federal government "*could* assert a federal reserved water right" or "*may* invoke the Federal Reserved Water Rights Doctrine."[271] TSEP provides nothing suggesting that the federal government might invoke such rights.[272]

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268 *New Mexico*, 438 U.S. at 702.

269 *Idaho*, 135 Idaho at 664-65. In *Idaho*, the government claimed that a reserved water right was needed to preserve the island character of the refuge and thereby protect the migratory birds from predators, and to provide proximity to open water and riparian habitat. The court found these to be secondary purposes. *Id.*

270 *See* Petition at 49-52.

271 *Id.* at 50-51 (emphasis added).

272 Furthermore, since the federal government has not expressed any plans to invoke a federal reserved water right for Aransas National Wildlife Refuge, TSEP engages in speculation when it asserts that the amount of that right would be 1,242,500 acre-feet. *See* Petition at 50, 51. Additionally, with respect to the amount of a reserved water right, the Supreme Court stated in *Cappaert v. United States*, 426 U.S. 128, 141 (1976), that a federal reserved water right should be designed to reflect the "minimal need" for water to accomplish the federal government's purpose.

NEPA requires a "hard look" at the environmental impacts of a proposed action.[273] This "hard look" is subject to the "rule of reason."[274] This means that an "agency's environmental review, rather than addressing every impact that could possibly result, need only account for those that have some likelihood of occurring or are reasonably foreseeable."[275] Consideration of "remote and speculative" impacts is not required.[276]

TSEP has not satisfied this standard. TSEP has speculated, without any basis, that the federal government may invoke federal reserved water rights for the Guadalupe River. The Commission has stated that a contention "will be ruled inadmissible if the petitioner 'has offered no tangible information, no experts, no substantive affidavits,' but instead only 'bare assertions and speculation.'"[277] Therefore, this contention is unsupported and fails to comply with 10 C.F.R. § 2.309(f)(1)(v) and (vi).[278]

In summary, the federal reserved water right claimed by TSEP does not apply to the Aransas National Wildlife Refuge, and therefore there is no genuine dispute of material law about the impact of this right on water availability for VCS, as required by 10 C.F.R. § 2.309(f)(1)(vi). Moreover, even if the right were available, TSEP has only speculated without support that the federal government might assert such a right. Such speculation is not sufficient

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273 *See La. Energy Servs., L.P.* (Claiborne Enrichment Ctr.), CLI-98-3, 47 NRC 77, 87-88 (1998). *See also Balt. Gas & Elec. Co. v. Natural Res. Def. Council, Inc.*, 462 U.S. 87, 97-98 (1983) (stating that NEPA requires agencies to take a "hard look" at environmental consequences prior to taking major actions).

274 *La. Energy Servs., L.P.* (National Enrichment Facility), LBP-06-8, 63 NRC 241, 258 (2006) (citing *Long Island Lighting Co.* (Shoreham Nuclear Power Station), ALAB-156, 6 AEC 831, 836 (1973)). *See also Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 767-69 (2004) (stating that the rule of reason is inherent in NEPA and its implementing regulations).

275 *LES*, LBP-06-8, 63 NRC at 258-59 (citing *Shoreham*, ALAB-156, 6 AEC at 836).

276 *See Vermont Yankee*, ALAB-919, 30 NRC at 44 (citing *Limerick Ecology*, 869 F.2d at 739).

277 *Fansteel*, CLI-03-13, 58 NRC at 203 (quoting *Oyster Creek*, CLI-00-6, 51 NRC at 208).

278 TSEP claims that the ER is deficient because "Exelon is also required to demonstrate a 'highly dependable' supply of water," citing Regulatory Guide 4.7. Petition at 50, 52. This is a safety requirement, not a NEPA requirement. We address that issue in response to Contention TSEP-SAFETY-4.

to support a contention and demonstrate a genuine dispute, as required by 10 C.F.R. § 2.309(f)(1)(v) and (vi). Accordingly, this contention should be dismissed.

10. TSEP-ENV-6 – Impacts on Water Availability and Aquatic Resources in Light of Climate Change

Contention TSEP-ENV-6 alleges that "[t]he 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."[279] As demonstrated below, this proposed contention does not raise a genuine dispute of material fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi), and raises issues that are outside the scope of this proceeding, contrary to 10 C.F.R. § 2.309(f)(1)(iii).

The ESP application includes an evaluation of the impacts of climate change. Specifically, SSAR Section 2.3.1.7 evaluates climate changes, including trends in temperature and rainfall in Texas over a 70-year period.[280] That section demonstrates that there has been a slight increase in average temperatures (about 0.2 to 0.3°F) and a marked *increase* in rainfall (about 2.2 to 4.4 inches per year) during the periods evaluated.[281] Therefore, this data (which TSEP has not controverted) does not indicate any reduction in water availability for VCS or the San Antonio Bay due to previous climate change.

Additionally, SSAR Section 2.3.1.7 discusses projections of future climate change. In particular, that section states:

> Predictions of global and U.S. climatic changes expected during the period of reactor operation are very general and uncertain on the regional scale. The VCS site region is between portions of the United States that forecasts show little agreement between modeling scenarios (Reference 2.3.1-35). It is unclear and

[279] Petition at 53.

[280] SSAR at 2.3-21 to -24.

[281] *Id.* at 2.3-22.

> speculative as to how the general large-scale trends in these climatic quantities would translate to regional design criteria, specifically with respect to extreme values. Until higher resolution, more sophisticated Global Climate Models (GCMs) can be developed, there will be a high degree of uncertainty in the forecasts used to determine the changes that will occur in the climate in the site region.[282]

Nevertheless, the ESP application provides estimates of the potential impact of regional climate change. For example, the SSAR notes that there might be an increase in median temperature of 5.8°F by the year 2080.[283] Additionally, the ER discusses the variability of normal annual rainfall in the area around VCS (ranging from 38.58 to 40.83 inches), and based upon that variability concludes that the "long-term average annual total rainfall at the VCS site could reasonably be expected to be within this range."[284] Therefore, TSEP's claim that consideration of climate change is omitted from the ESP application is incorrect.

Moreover, TSEP does not dispute or even cite to these discussions in the ESP application. Under similar circumstances, other licensing boards have rejected contentions which alleged that climate change could impact water availability on the grounds that the contention did not raise a genuine dispute with the application. For example, in the *South Texas Project*, *Comanche Peak*, and *William S. Lee* COL proceedings, the Licensing Boards rejected contentions which alleged that the ER failed to analyze the impact of global warming on rainfall, finding that the contentions failed to controvert the very portions of the application that directly address water availability and precipitation trends.[285] Similarly, since TSEP has not controverted those sections of the ESP application that discuss global warming and long-term trends in

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282 *Id.* at 2.3-23.

283 *Id.* at 2.3-23.

284 ER at 2.7-6 to -7.

285 *South Texas Project Nuclear Operating Co.* (South Texas Project Units 3 & 4), LBP-09-25, 70 NRC 867, 881-82 (2009); *Comanche Peak*, LBP-09-17, 70 NRC at 362; *Duke Energy Carolinas, LLC* (William States Lee III Nuclear Station, Units 1 & 2), LBP-08-17, 68 NRC 431, 446 (2008).

precipitation, this contention should be dismissed pursuant to 10 C.F.R. § 2.309(f)(1)(vi) for failure to raise a genuine dispute of material fact regarding the ESP application.

Additionally, the only support provided by TSEP for this contention is a declaration by Dr. Ronald Sass. Dr. Sass summarizes his support for this contention as follows:

> The predicted impacts from climate change and hydroclimate models for the Guadalupe River and San Antonio River basins lead me to conclude that by 2100 there will be dramatic reductions in precipitation and runoff, resulting in lower river flows. Also, there will be increased evaporation from San Antonio Bay, leading to increased salinities. These impacts very likely will equate to a freshwater deficit of 270,000 acft/yr or more by 2100.[286]

Dr. Sass' evaluation focuses on the year 2100, which is well beyond the period of any licensing action sought by Exelon as part of this ESP proceeding. An ESP can only be issued for a maximum of 20 years.[287] Furthermore, a COL referencing the ESP can only be issued for a maximum of 40 years of operation.[288] Given that the NRC staff expects to complete its review of the VCS ESP application in mid-2013,[289] it is reasonable to assume that the ESP (if approved) would be issued in late-2013 or early 2014. If a COL were issued early during the term of the ESP, the COL could expire prior to 2060. Even if a COL were not granted until the end of the 20-year term for the ESP, the COL would most likely expire prior to 2080, or well before the period evaluated by Dr. Sass.[290]

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286 Petition, Ex. F, Decl. of Ronald L. Sass in Support of Texans for a Sound Energy Policy's Petition to Intervene and Contentions ¶ 4.d (Jan. 21, 2011) ("Sass Declaration").

287 10 C.F.R. § 52.26(a).

288 *Id.* § 52.104.

289 Letter from Janelle B. Jessie, NRC, to Marilyn C. Kray, Exelon, Victoria County Station Early Site Permit Application Review Schedule, Encl. 1 (Aug. 31, 2010), *available at* ADAMS Accession No. ML102080704.

290 An ESP or a COL may be renewed, but any renewal would require additional environmental reviews that would consider environmental conditions in the year 2100 if necessary. *See* 10 C.F.R. §§ 52.29, 54.23.

The Commission has held that contentions are limited to issues that are germane to the specific application pending before a board.[291] Therefore, since TSEP's claim is based upon environmental effects beyond the requested licensing action, TSEP's claim is outside the scope of this proceeding and should be dismissed pursuant to 10 C.F.R. § 2.309(f)(1)(iii).

In summary, contrary to TSEP's allegations, the ESP application includes a discussion of global warming, and Contention TSEP-ENV-6 should be rejected pursuant to 10 C.F.R. § 2.309(f)(1)(vi) for failure to controvert that evaluation.[292] Additionally, the contention is based upon an evaluation of the effects of global warming during a period that is well outside the combined period of an ESP and COL for VCS. Therefore, TSEP's contention should be dismissed because it is based upon an evaluation of conditions that are outside the scope of this proceeding.

11. TSEP-ENV-7, 8, 9, 10, 11, 12, 13, and 14 – Impacts to Whooping Cranes

Contentions TSEP-ENV-7, 8, 9, 10, 11, 12, 13, and 14 all relate to whooping cranes, and TSEP has provided reports from individuals with technical backgrounds in support of its contentions. Based on Exelon's review of these contentions and the reports referenced therein, it appears that there is a genuine dispute of material fact between TSEP and Exelon concerning the potential impacts to whooping cranes in the Aransas National Wildlife Refuge from VCS water withdrawals from the Guadalupe River. There is a fundamental disagreement between TSEP and Exelon regarding:

(1) Whether VCS water use would have a significant impact on fresh water inflow to San Antonio Bay and the salinity of the water in the Bay and Aransas National Wildlife Refuge; and

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[291] *Yankee*, CLI-98-21, 48 NRC at 204.

[292] *See* Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,170. *See also Millstone*, CLI-01-24, 54 NRC at 358.

(2) Whether the potential impact from VCS on salinity would have a significant impact on wolfberries, blue crabs, and drinking water for the whooping cranes; and

(3) Whether the potential impact from VCS on those food sources and drinking water would have a significant impact on whooping crane mortality.

At this stage, the Board need not resolve this fundamental disagreement. Instead, Exelon does not oppose the admission of a consolidated contention for further litigation that raises TSEP's allegations regarding the impacts of VCS water use on whooping cranes. Exelon has no objection to the following language for such a contention:

> TSEP contends that VCS water use will have a significant impact on whooping cranes in the Aransas National Wildlife Refuge because VCS water withdrawals from the Guadalupe River will significantly reduce fresh water flowing into San Antonio Bay,
>
> a. which in turn will significantly increase the salinity of the water in the Bay,
>
> b. which in turn will significantly impact sources of drinking water and wolfberries and blue crabs for the whooping cranes,
>
> c. which in turn will cause the deaths of a significant percentage of the flock of whooping cranes in the Aransas National Wildlife Refuge that reduces appreciably the likelihood of both the survival and recovery of the whooping crane as a species.

Although Exelon would not object to the admission of this contention for further litigation, at the appropriate stage of this proceeding, Exelon will demonstrate that VCS water use will not have a significant adverse effect on whooping cranes or their designated critical habitat in Aransas National Wildlife Refuge.

Notwithstanding that certain specific issues raised in Contentions TSEP-ENV-7 though 14 may warrant further litigation in the form of a single consolidated contention, other issues in these contentions are unsupported and fail to establish a genuine dispute on a material issue. Thus, Exelon opposes admission of TSEP's proposed Contentions TSEP-ENV-7, 8, 9, 10, 11, 12, 13, and 14, with the exception of certain parts of TSEP-ENV-11 and 12. Given the closely-

related issues raised in the portions of TSEP-ENV-11 and 12 that are admissible, Exelon suggests that these issues be consolidated as a single contention for further proceedings as indicated above. Exelon also recognizes that some of the issues raised in Contentions TSEP-ENV-7, 8, and 9, while not suitable for litigation as individual contentions, may come into play in litigating a single, consolidated contention on TSEP's allegations regarding significant impacts to whooping cranes. Such issues are discussed in more detail below, in Exelon's responses to each of TSEP's contentions on whooping cranes.

12. TSEP-ENV-7 – Impacts to the Endangered Whooping Crane

Contention TSEP-ENV-7 alleges that the "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."[293] According to TSEP, VCS water withdrawals from the Guadalupe River will reduce inflows to the San Antonio Bay, which will increase salinity levels in the Bay and nearby marsh areas. TSEP further contends that these increased salinity levels in these areas will adversely impact whooping cranes by causing (1) food shortages by adversely impacting the abundance of blue crabs and wolfberry fruit, the primary food sources for the whooping crane, and (2) drinking water shortages, requiring that whooping cranes expend greater energy due to increased reliance on upland water sources.[294] As support for this contention, TSEP references the Sass Report, comments on the San Antonio Guadalupe Estuarine System Project Report ("SAGES Report")[295] from Tom Stehn of the U.S. Fish and

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293 Petition at 55.

294 *Id.* at 58-59.

295 R. Douglas Slack et al., Final Report, Linking Freshwater Inflows and Marsh Community Dynamics in San Antonio Bay to Whooping Cranes (Aug. 2009), *available at* www.gbra.org/documents/studies/sages/FullReport.pdf ("SAGES Report").

Wildlife Service ("FWS") ("Stehn Comments"),[296] and the FWS Whooping Crane International Recovery Plan ("Recovery Plan").[297]

As the ER explains, while the whooping crane population dropped to about 30 cranes in the late 1930s, multinational recovery efforts now have resulted in a population of over 400 birds. A flock summers in the Wood Buffalo National Park in the Northwest Territories, Canada, and winters at the Aransas National Wildlife Refuge on the coast of Texas, approximately 18 miles south of the VCS site.[298]

No whooping cranes were observed at the VCS site itself during a year-long survey by Exelon, and no whooping cranes reside at the site.[299] However, the VCS site is located near, and the plant would withdraw water from, the Guadalupe River. The Guadalupe River merges with the San Antonio River and empties into the San Antonio Bay. The San Antonio Bay is protected by barrier islands, and the freshwater inflows to the Bay create a brackish estuarine environment. Within that environment is the Aransas National Wildlife Refuge, the wintering habitat of the whooping crane.[300]

Although TSEP's statement of Contention TSEP-ENV-7 refers to impacts of VCS water use on the whooping cranes, the supporting information provided on pages 57-60 of the Petition ignores VCS. In fact, other than a passing reference to VCS on page 58, there is no discussion of VCS at all in that supporting information. Instead, the supporting information focuses entirely on wide-ranging issues wholly unrelated to VCS, such as changes in the salinity of the water in

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296 Petition, Ex. G, T. Stehn, U.S. Fish & Wildlife Serv., Comments on SAGES Final Report (June 5, 2009) ("Stehn Comments").

297 Petition, Ex. I, FWS, International Recovery Plan, Whooping Crane (*Grus americana*) (3d Rev. Mar. 2007) ("Recovery Plan").

298 ER at 2.4-10.

299 *Id.* at 2.4-5, -9.

300 *Id.* at 2.4-10, 5.11-5, 5.11-6.

the Aransas National Wildlife Refuge due to drought and low river flows, the impacts of changes in salinity on sources of food and water, and the impacts of changes in abundance of wolfberries and blue crabs on the health of whooping cranes.

In Contention TSEP-ENV-7, TSEP makes no attempt to tie the discussion of these general issues to the impacts of VCS. Other than briefly mentioning that water withdrawals by VCS will reduce water flows in the Guadalupe River, the contention does not discuss whether such water withdrawals will have any significant impact on the salinity of the water in the Aransas National Wildlife Refuge or the abundance of wolfberries or blue crabs.[301] Such a discussion is critical, since it is undisputed that annual VCS water use will be far less than the annual variability of river flow.[302]

Under NRC regulations, the focus of this proceeding is the impacts of VCS. General issues related to the salinity of water in the Aransas National Wildlife Refuge, to the abundance of wolfberries and blue crabs, and to their impacts on whooping cranes in general are not material to the findings that the NRC is required to make in this proceeding. Because the supporting information for Contention TSEP-ENV-7 does not evaluate the impacts of VCS water

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[301] The Sass Report barely mentions VCS water withdrawals and provides no information that would establish that such withdrawals would have any appreciable impact on the San Antonio Bay or the whooping crane. Instead, the Sass Report only provides a conclusory statement that VCS withdrawals "certainly will adversely affect the salinity of the system and, consequently, the health of the whooping crane." Petition, Ex. F-1, Sass Report at 28. While the Sass Report attempts to correlate past river inflows to whooping crane mortality rate estimates, no attempt is made to assess the predictive strength of this relationship, let alone whether VCS water use might result in any change in mortality rates. *See* Petition, Ex. F-1, Sass Report at 16-18. As the Commission has held, a bare allegation or conclusion (even by a proffered expert) without a reasoned basis or explanation is not sufficient to raise a genuine dispute of material fact. *USEC*, CLI-06-10, 63 NRC at 472.

[302] *See* ER at 2.3-132. As discussed therein, the difference between the *average* annual flow and the low flow that occurs 15 percent of the time is approximately 500,000 acre-feet, compared to the 75,000 acre-feet of withdrawals for VCS. Even TSEP's own reports show that the annual variation in river flow dwarfs future withdrawals for VCS. *See* Petition, Ex. E-1, Trungale Report at 11.

withdrawals on the whooping cranes but instead focuses on whooping cranes in general, the contention should be rejected as a separate contention under 10 C.F.R. § 2.309(f)(1)(iv).[303]

In addition, Contention TSEP-ENV-7 should be dismissed because the ER discusses the very information that TSEP complains is missing from the ER, and therefore the contention fails to show a genuine dispute, pursuant to 10 C.F.R. § 2.309(f)(1)(vi). Extensive information regarding whooping cranes is provided in the ER and revisions to the relevant ER sections submitted by Exelon to the NRC on June 24, 2010 ("ER Update"),[304] which is referenced in the Notice of Hearing.[305] This information includes a detailed description of the population, migration, habitat, food sources, and mortality of the whooping cranes.[306]

The ER and ER Update explore the very types of information TSEP claims in this contention is necessary. In particular, the ER discusses that blue crabs and wolfberries are an important food source for the whooping cranes,[307] that wolfberry abundance is adversely affected by high levels of salinity in the Bay water,[308] that FWS reported 23 suspected mortalities of whooping cranes during the 2008-2009 overwintering period at the Aransas National Wildlife Refuge,[309] and that FWS has expressed the opinion that those mortalities of whooping cranes may be attributable to drought conditions that resulted in increased the salinity of San Antonio

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303 *See S. Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-07-3, 65 NRC 237, 257 (2007) (denying contention challenging baseline description of aquatic environment near proposed facility that was separate from challenge to the impact assessment of the facility on the environment).

304 Letter from Marilyn C. Kray, Exelon, to NRC, Environmental Report Revisions to Incorporate Additional Supporting Information, Encl. 1, Update Pages of Victoria County Station ESPA (June 24, 2010), *available at* ADAMS No. ML101820513 ("ER Update").

305 Hearing Notice, 75 Fed. Reg. at 71,468.

306 *See* ER § 2.4.1.5; ER Update § 2.4.1.5.

307 *See* ER Update at 5.2-16, 5.11-6.

308 *See* ER at 2.4-10 to -11, 5.11-6.

309 *See* ER Update at 2.4-11 to -13.

Bay water, which in turn resulted in a decrease in abundance of the blue crabs and wolfberries and the need for whooping cranes to fly inland for less saline drinking water.[310]

The ER Update also points out that there are differing professional and scientific opinions regarding the impacts of freshwater inflows on the whooping cranes and their habitat, explaining that the FWS Whooping Crane Coordinator "has expressed the opinion that there is a relationship between marsh salinities, blue crab populations, and whooping crane mortality rates" and "that with reduced freshwater inflows and high marsh and bay salinities, blue crabs do poorly and whooping crane mortality rises (comments dated June 5, 2009, included in Slack et al. Aug 2009)."[311] Additionally, as the ER and ER Update discuss, there are also differing professional and scientific opinions regarding the actual number of mortalities of whooping cranes during the winter of 2008-2009 (only four crane carcasses were found), the causes of the mortalities, and the ability of whooping cranes to substitute other food sources for blue crabs.[312]

NEPA does not require that the NRC determine which of the differing professional and scientific opinions is correct—what is necessary is to provide full disclosure of the differing opinions.[313] As explained in Part 51, an ER must "contain sufficient data to aid the Commission in its development of an independent analysis."[314] The NRC must then, in its environmental

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310 *See id.* at 2.4-12, 5.11-6, 5.11-7.

311 *Id.* at 5.11-6 (citing Stehn Comments).

312 *See id.* at 2.4-12.

313 *See Laguna Greenbelt, Inc. v. U.S. Dep't of Transp.*, 42 F.3d 517, 526 (9th Cir. 1994) ("NEPA does not require us to decide whether an EIS is based on the best scientific methodology available or to resolve disagreements among various experts."); *Friends of Endangered Species, Inc. v. Jantzen*, 760 F.2d 976, 986 (9th Cir. 1985) ("NEPA does not require that we decide whether an EIR is based on the best scientific methodology available, nor does NEPA require us to resolve disagreements among various scientists as to methodology.").

314 10 C.F.R. § 51.45(c).

impact statement ("EIS"), "include consideration of major points of view concerning the environmental impacts of the proposed action."[315]

In light of these requirements, there is no genuine dispute of material fact that Exelon has provided "sufficient data to aid the Commission" in preparation of the EIS discussion of the whooping crane. The ER discusses at length the various differing scientific views concerning the impacts of changes in salinity, the impacts of changes in abundance of wolfberries and blue crabs, and the mortality of whooping cranes. Because the ER discusses the various differing scientific views, it is adequate under NEPA and satisfies the requirements of Part 51.

Although Contention TSEP-ENV-7 is not admissible as a separate contention, Exelon does not object to the admission of a consolidated contention regarding whooping cranes, to the extent the contention concerns the impacts of VCS water consumption on whooping cranes. However, such a contention should be focused on the impacts of VCS and the following issues:

(1) Whether VCS water use would have a significant impact on fresh water inflow to San Antonio Bay and the salinity of the water in the Bay and Aransas National Wildlife Refuge; and

(2) Whether the potential impact from VCS on salinity would have a significant impact on wolfberries, blue crabs, and drinking water for the whooping cranes; and

(3) Whether the potential impact from VCS on those food sources and drinking water would have a significant impact on whooping crane mortality.

Because Contention TSEP-ENV-7 does not provide sufficient information to demonstrate a genuine dispute on these issues, it should be rejected as a separate contention. Instead, to the extent that TSEP desires to litigate issues related to salinity, food and water supplies, and impacts on whooping cranes, those issues should be considered within the context of a single consolidated contention related to VCS, as previously set forth. The NRC is not required to

[315] *Id.* § 51.71(b).

perform a wide-ranging inquiry into the overall health of the Aransas National Wildlife Refuge or whooping cranes, apart from its assessment of potential impacts from VCS.

In summary, Contention TSEP-ENV-7 does not evaluate impacts from VCS, and the ER addresses the generic issues raised by the contention, including the potential impacts of low river water flows on the whooping cranes. Accordingly, this contention should be dismissed for failure to satisfy 10 C.F.R. § 2.309(f)(1)(vi).

13. TSEP-ENV-8 – Whooping Crane Mortality in 2008-2009

Contention TSEP-ENV-8 asserts that the "ER fails to rigorously explore and objectively evaluate the unprecedented 2008-2009 mortality event of Whooping Cranes at the Aransas National Wildlife Refuge," and that "Exelon attempts to undermine the official reports of a federal agency and urges the NRC to rely instead on biologically unsound rationales."[316] According to TSEP, the ER improperly "questions the accuracy of official USFWS reports in an attempt to avoid discussion of adverse information, namely the cause of the mortality of 8.5% of the Whooping Crane flock and the relationship to low flows and high salinity."[317] As support for this contention, TSEP references portions of the Sass Declaration.[318] As discussed below, this proposed contention does not raise a genuine dispute of material fact and therefore does not satisfy 10 C.F.R. § 2.309(f)(1)(iv) and (vi).

As initial matter, this contention should be dismissed because TSEP fails to demonstrate that the issues raised in this contention are "material to the findings the NRC must make to support the action that is involved in the proceeding," contrary to 10 C.F.R. § 2.309(f)(1)(iv). In particular, the contention itself and the supporting information on pages 62-64 of the Petition do

316 Petition at 61.

317 *Id.* at 65.

318 *Id.* at 63-64 (citing *id.*, Ex. F, Sass Decl. ¶¶ 8, 10, 12).

not make a single reference to VCS. The Commission has emphasized that "[t]he dispute at issue is 'material' if its resolution would 'make a difference in the outcome of the licensing proceeding.'"[319] TSEP fails to demonstrate that acceptance of this contention would result in any difference in this proceeding. Whether whooping crane mortalities during the 2008-2009 overwintering period were lower than the 23 mortalities estimated based on aerial counts, and whether such mortalities were the result of drought (or some other cause) is immaterial to the findings that the NRC must make in this proceeding. This proceeding is not the appropriate venue to adjudicate the accuracy of aerial census methodologies for whooping crane during drought conditions, without any tie whatsoever to VCS.[320]

Furthermore, this contention fails to provide sufficient information to raise a genuine dispute of material fact. The ER Update readily acknowledges the issue TSEP seeks to raise in this contention, clearly stating that "[h]igh mortality rates for the Aransas-Wood Buffalo population of whooping cranes during 2008- 2009 were documented."[321] In particular, the ER Update states that FWS concluded that there were 23 deaths of whooping cranes during 2008-2009.[322] The ER Update goes on to explain the uncertainties associated with the estimated number (and potential causes) of whooping crane deaths during the 2008-2009 period.[323]

For NEPA purposes, it is not necessary to resolve these uncertainties, particularly when such information is not linked to reasonably foreseeable significant environmental impacts from

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319 *Oconee*, CLI-99-11, 49 NRC at 333-34. *See also* Final Rule, Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,172.

320 TSEP attempts to tie the deaths of the whooping cranes with the impacts of VCS only in its last sentence of the contention, which states that "[i]f the deaths of 23 cranes occurred *without* Exelon diverting 75,000 acft/yr, it is entirely reasonable, and foreseeable, that when a drought reoccurs Crane mortality will be worse with the Exelon diversions." Petition at 65. Contention TSEP-ENV-8 provides no factual support for this conclusory statement, and therefore it is insufficient under 10 C.F.R. § 2.309(f)(1)(v) and (vi) to support this contention.

321 ER Update at 2.4-11.

322 *Id.* at 2.4-12.

323 *See id.* at 2.4-11 to -12.

the proposed action.[324] Instead, it is only necessary to provide full disclosure of the differing opinions.[325]

For the foregoing reasons, this contention does not demonstrate that a genuine material dispute exists, contrary to 10 C.F.R. §2.309(f)(1)(iv) and (vi). Therefore, the Board should reject Contention TSEP-ENV-8.

This is not to say that issues related to the deaths of whooping cranes in 2008-2009 would be irrelevant to litigation on a consolidated contention related to the impacts of VCS water use on whooping cranes. However, any litigation of issues related to the deaths of whooping cranes in 2008-2009 should occur in the context of discussing the impacts of VCS, and not as an issue regarding whooping cranes in general. Simply stated, apart from its assessment of potential impacts from VCS, the NRC need not make a separate finding on whether 23 or some lower number of whooping cranes died in 2008-2009.

14. TSEP-ENV-9 – The SAGES Report

Contention TSEP-ENV-9 purports to challenge the ER assessment of "the impact of VCS water use on food resources and energetics of Whooping Cranes" because "Exelon relies heavily upon the SAGES report," which TSEP claims "was universally criticized by experts in the field as flawed."[326] According to TSEP, the SAGES report is "inconsistent and contrary to published science" and is "junk science."[327] Thus, this contention "challenges the use of the SAGES

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324 *See* 40 C.F.R. § 1502.22(a).

325 *See Laguna Greenbelt*, 42 F.3d at 526 ("NEPA does not require us to decide whether an EIS is based on the best scientific methodology available or to resolve disagreements among various experts."); *Friends of Endangered Species*, 760 F.2d at 986 ("NEPA does not require that we decide whether an EIR is based on the best scientific methodology available, nor does NEPA require us to resolve disagreements among various scientists as to methodology.").

326 Petition at 65.

327 *Id.* at 65-66.

Report under the precedent of *Daubert*."[328] In this contention, TSEP references portions of the Sass Declaration and the Stehn Comments on the SAGES Report.[329] As demonstrated below, this contention should be dismissed pursuant to 10 C.F.R. § 2.309(f)(1)(vi), because the ER discusses the various differing scientific views on food resources and energetics, including the comments by Mr. Stehn.

The SAGES Report investigated several issues, including the relationship of variation of freshwater inflows on whooping crane food resources and crane use of the habitats in the San Antonio Bay.[330] As discussed in the Stehn Comments that are cited with approval and relied upon by TSEP, the SAGES Report "provided valuable new information" on several topics, including wolfberry production and blue crab abundance.[331] Furthermore, the SAGES Report was prepared for the GBRA and others[332] by researchers from the Department of Wildlife and Fisheries Sciences at Texas A&M University.[333] As discussed above, GBRA was established by the Texas Legislature as a water conservation and reclamation district for the Guadalupe and Blanco Rivers, and GBRA's mission is to protect, conserve, reclaim, and steward the water resources of the district in order to ensure and promote quality of life of the people served by GBRA.[334] It is consistent with NEPA, which is a full-disclosure statute,[335] to consider the findings of a scientific report on whooping cranes that was prepared for the government-created

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328 *Id.* at 66.

329 *See id.* at 71-72, 68-69 (citing *id.*, Ex. F, Sass Decl. ¶¶ 13-17; *id.*, Ex. G, Stehn Comments at 1, 5, 7-11, 13).

330 ER at 2.4-10, -11.

331 Petition, Ex. G, Stehn Comments at 1.

332 The SAGES Report was funded by GBRA, the San Antonio River Authority, the San Antonio Water System, and the Texas Water Development Board.

333 *See* ER at 2.4-41.

334 *See* Guadalupe-Blanco River Authority, About GBRA, http://www.gbra.org/about/default.aspx (last visited Feb. 10, 2011).

335 *Monroe Cnty. Conservation Council, Inc. v. Volpe*, 472 F.2d 693 (2d Cir. 1972) ("[NEPA] is, at the very least, 'an environmental full disclosure law,' for agency decision makers and the general public.") (citation omitted).

body responsible for Guadalupe River water resources and that contains "valuable new information."

TSEP states that the "heart" of its dispute with the SAGES Report is the premise "that the Whooping Crane will always have sufficient food regardless of the level of freshwater inflows."[336] TSEP incorrectly asserts that there is an "omission" in the ER because it does not provide critiques of the SAGES Report.[337] The ER Update readily acknowledges the complexity surrounding the relationship between inflows, salinity, and whooping cranes, indicating that "[t]here are differing professional and scientific opinions regarding the impacts of freshwater inflows on the whooping cranes and their habitat."[338] The ER Update goes on to discuss the differing professional opinions in the Stehn Comments that are referenced in this contention. In particular, the ER Update has the following discussion of the Stehn Comments on the SAGES Report:

> [T]he U.S. Fish and Wildlife Service (USFWS) Whooping Crane Coordinator [Mr. Stehn] has observed the whooping crane population at the Aransas National Wildlife Refuge (ANWR) for approximately 30 years. Based upon his observations, he has expressed the opinion that there is a relationship between marsh salinities, blue crab populations, and whooping crane mortality rates. He has stated that with reduced freshwater inflows and high marsh and bay salinities, blue crabs do poorly and whooping crane mortality rises (comments dated June 5, 2009, included in Slack et al. Aug 2009).[339]

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336 Petition at 72.

337 *See id.* at 71-72.

338 ER Update at 5.11-6.

339 *Id.* (citing Stehn Comments).

Thus, in claiming the ER "fails to include adverse information,"[340] this contention simply mischaracterizes the ER and fails to raise a genuine dispute of material fact with Exelon's application.[341]

For the foregoing reasons, TSEP's criticisms of the SAGES Report are immaterial to the findings NRC must make in this proceeding and fail to demonstrate that a genuine material dispute exists. Although the opening statement of the contention refers to impacts of VCS water use on food resources and energetics of whooping cranes, the remainder of the contention completely ignores VCS. Instead, the supporting information focuses entirely on broad-based issues related to the whooping crane, such as sources of food and water for whooping cranes. The contention does not attempt to tie the discussion of these general issues related to whooping cranes to the impacts of VCS. For example, the contention does not discuss whether VCS water use will have any significant impact on the salinity of the water in the Aransas National Wildlife Refuge or the abundance of wolfberries or blue crabs. Such a discussion is critical, since it is undisputed that annual VCS water use will be far less than the annual variability of river flow.[342]

In short, this proceeding requires an assessment of the impacts of VCS. More general issues related to the salinity of water in the Aransas National Wildlife Refuge, to the abundance of wolfberries and blue crabs, and to their impacts on whooping cranes in general are not material to the findings that the NRC must make in this proceeding. Because the supporting information for this contention does not evaluate the impacts of VCS water withdrawals on the

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340 Petition at 66.

341 Given the ER appropriately recognizes areas of uncertainty and competing scientific viewpoints, the TSEP's reference to *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579 (1993), is simply inapposite to assessing the adequacy of Exelon's ER.

342 *See* ER at 2.3-132. As discussed therein, the difference between the *average* annual flow and the low flow that occurs 15 percent of the time is approximately 500,000 acre-feet, compared to the 75,000 acre-feet of withdrawals for VCS. Even TSEP's own reports show that the annual variation in river flow dwarfs future withdrawals. *See* Petition, Ex. E-1, Trungale Report at 11.

whooping cranes, but only discusses whooping cranes in general, the contention should be rejected as a separate contention under 10 C.F.R. § 2.309(f)(1)(iv) and (vi).[343]

Although Contention TSEP-ENV-9 is not admissible as a separate contention, Exelon does not object to the admission of a consolidated contention related to the impacts of VCS water consumption on whooping cranes. However, such a contention should be focused on the impacts of VCS and the following issues:

(1) Whether VCS water use would have a significant impact on fresh water inflows to San Antonio Bay and the salinity of the water in the Bay and Aransas National Wildlife Refuge; and

(2) Whether the potential impact from VCS on salinity would have a significant impact on wolfberries, blue crabs, and drinking water for the whooping cranes; and

(3) Whether the potential impact from VCS on those food sources and drinking water would have a significant impact on whooping crane mortality.

Because Contention TSEP-ENV-9 does not provide any information on such issues, it should be rejected. Nonetheless, Exelon acknowledges that issues related to the SAGES Report may, within the context of the issues identified above, be relevant in the further litigation on a consolidated contention on the impacts of VCS water use on whooping cranes.

15. TSEP-ENV-10 – Sediment and Nutrient Inflow Into San Antonio Bay

Contention TSEP-ENV-10 asserts that "[t]he 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."[344] TSEP frames this contention as a "contention of omission," claiming that the ER only briefly mentions sediment loads and does not evaluate the impacts that VCS water withdrawals will have on sediment inflows to the

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343 *See Vogtle ESP*, LBP-07-3, 65 NRC at 257 (denying contention challenging baseline description of aquatic environment near proposed facility that was separate from challenge to the impact assessment of the facility on the environment).

344 Petition at 73.

San Antonio Bay.[345] Based on the JCHA Report,[346] TSEP claims that withdrawing 105,000 acre-feet of water per year from the Guadalupe River (*i.e.*, 75,000 acre-feet for VCS, plus 30,000 acre-feet for other potential GBRA withdrawals) "will reduce the amount of sediment and nutrients transported to the Guadalupe Estuary, and have a significant impact on the ecosystems and wildlife."[347] As discussed below, this proposed contention does not raise a genuine dispute of material fact and therefore does not satisfy 10 C.F.R. § 2.309(f)(1)(vi).

Initially, it should be noted that TSEP's evaluation is *not* based upon the water withdrawals for VCS. As is indicated above, TSEP's evaluation is based upon a withdrawal of 105,000 acre-feet, rather than a maximum of 75,000 acre-feet that will be withdrawn by VCS. Thus, the TSEP's contention is not material to VCS and therefore does not satisfy 10 C.F.R. § 2.309(f)(1)(iv).

Furthermore, TSEP incorrectly claims that the potential impacts from reduced sediment and nutrient inflows are omitted from the ER. Notwithstanding TSEP's assertions to the contrary, the ER discusses sediment loading and transport from the Guadalupe and San Antonio Rivers into the San Antonio Bay systems, as well as nutrient enrichment needed for aquatic species.[348] Specifically, the ER acknowledges that "[f]reshwater inflows provide nutrient and sediment loading to the estuary, and they are one factor affecting salinity gradients in the bay system."[349] Accordingly, to the extent that this contention is based on a view that the ER fails to address these issues, it must be dismissed for failing to satisfy 10 C.F.R. § 2.309(f)(1)(vi).

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345 *Id.* at 75.

346 Petition, Ex. D-2, JCHA Report at 97.

347 Petition at 73-74. Although this contention generally references ecosystems and wildlife, the whooping crane and its food resources are the only species of concern discussed in the contention. *See id.* at 73-75.

348 *See* ER at 2.3-7, -9.

349 ER Update at 5.11-8.

Moreover, to the extent that this contention and the supporting section of the JCHA Report are premised on the assertion that the ER should have evaluated these issues in a different manner, TSEP has not provided any "supporting reasons."[350] For example, TSEP makes no attempt to explain how this purported change in sediment and nutrient levels might impact the ecosystem. Simply concluding that such changes are "significant" is insufficient to establish a genuine dispute warranting a hearing.[351] Such an explanation is especially warranted given that annual VCS water use will be far less than the annual variation in river flow.[352]

For the foregoing reasons, Contention TSEP-ENV-10 does not demonstrate that a genuine material dispute of material fact exists. Therefore, the Board should reject this contention.

16. TSEP-ENV-11 – Aquatic Impacts to San Antonio Bay and Ecosystems

Contention TSEP-ENV-11 claims that VCS water withdrawals "will have tremendous aquatic impacts"; "will result in more severe, more frequent, and longer lasting 'man-made' high salinity drought conditions in the San Antonio Bay system"; and "will . . . significantly impact the bay's ecosystems."[353] According to TSEP, the Trungale Report[354] shows that VCS water

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350 10 C.F.R. § 2.309(f)(1)(vi). As the ER further explains, "the estuarine ecosystem is highly dynamic and complex, being comprised of many variables and their interactions." ER Update at 5.2-14; *see also id.* 5.2-34, Figures 5.2-5 to -6. Thus, rather than individually model the numerous variables that impact the estuary ecosystem (*e.g.*, sediment, nutrients, salinity), Exelon followed the guidance established by the Texas Environmental Flow Science Advisory Committee and examined the relationship between freshwater inflows and representative species in the San Antonio Bay. *Id.* at 5.2-14. TSEP fails to explain why (or how) Exelon should have addressed these issues differently (*e.g.*, by attempting to model sediment and nutrient loads impacts separately from inflow impacts).

351 *See USEC*, CLI-06-10, 63 NRC at 472 ("an expert opinion that merely states a conclusion (*e.g.*, the application is 'deficient,' 'inadequate,' or 'wrong') without providing *a reasoned basis or explanation* for that conclusion is inadequate because it deprives the Board of the ability to make the necessary, reflective assessment of the opinion").

352 *See* ER at 2.3-132. As discussed therein, the difference between the *average* annual flow and the low flow that occurs 15 percent of the time is approximately 500,000 acre-feet, compared to the 75,000 acre-feet of withdrawals for VCS. Even TSEP's own reports show that the annual variation in river flow dwarfs future withdrawals. *See* Petition, Ex. E-1, Trungale Report at 11.

353 Petition at 75.

withdrawals will result in unacceptably high salinity levels during naturally lower inflow periods, which will adversely impact the blue crab, a primary food source of the whooping crane.[355] Additionally, based upon the Trungale Report, TSEP contends that the bio-statistical study discussed in the ER Update is flawed.[356]

Exelon objects to the admission of this contention in part. As discussed in more detail in response to Contention TSEP-ENV-12, Exelon has no objection to admission of that part of the contention that pertains to the bio-statistical study.[357] However, as discussed below, this contention and the analysis in the Trungale Report contain a number of arguments that fail to raise a genuine dispute of material fact and therefore do not satisfy 10 C.F.R. § 2.309(f)(1)(vi).

The Trungale Report claims that VCS water use would result in substantial increases in the frequency, duration, and severity of "man made drought conditions," where flows would fail to meet target environmental flow goals.[358] However, the analysis in the Trungale Report is not based upon the water withdrawals by VCS (*i.e.*, a maximum of 75,000 acre-feet per year), but instead from the full exercise of all existing and potential future water rights.[359] VCS accounts for only a portion of the additional water consumption evaluated in the Trungale Report, and the Trungale Report does not evaluate the impact of consumption of water by VCS itself.

Additionally, the Trungale Report uses hypothetical "natural" conditions as the point of comparison.[360] In doing so, the Trungale Report is in direct contravention of CEQ guidance, which indicates that a cumulative impact analysis should focus "on the current aggregate effects

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354 *Id.*, Ex. E-1, Trungale Report at 1-2, 5-10, 12-15.

355 *See* Petition at 77-78.

356 *See id.* at 79-80.

357 *See id.*

358 *Id.*, Ex. E-1, Trungale Report at 1.

359 *See id.* at 2, 6. *See also* ER, Tables 2.3.2-8 to 2.3.2-12; ER at 5.11-4.

360 Petition, Ex. E-1, Trungale Report at 6-15.

of past actions without delving into the historical details of individual past actions."[361] As the Licensing Board in the Calvert Cliffs COL proceeding recently held in applying this guidance, rather than separately evaluating the environmental effects of individual past actions, the application permissibly examined the existing conditions of the environmental resource to form a "baseline against which to measure the cumulative impact of the proposed new reactor."[362] The analysis in the Trungale Report is also contrary to the Endangered Species Act ("ESA")[363] and FWS implementing regulations, which require that "past and present impacts of all Federal, State, or private actions and other human activities in the action area" be included within the "environmental baseline."[364] The impacts of the action are then to be "measured *relative* to the species' status under the baseline."[365]

Furthermore, even with the higher, cumulative withdrawal rates assumed in the Trungale Report, the results of the Trungale analysis do not support the conclusions in the report. In particular, as shown on Table 3 and Figure 2 of the Trungale Report, the frequency and duration of drought events do not significantly increase under conditions assuming the cumulative water rates relative to current conditions. Instead, as is apparent from the Trungale Report, the conclusion that there is a substantial increase in "drought events" is based upon a comparison of "natural" conditions versus the full exercise of all current and future water rights. Thus, the conclusion in the Trungale Report that VCS will substantially increase "drought events" appears to be supported only if it is assumed that all current and future consumption on the Guadalupe

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361 President's Council on Environmental Quality, Guidance on the Consideration of Past Actions in Cumulative Effects Analysis at 2 (June 24, 2005), *available at* http://ceq.hss.doe.gov/nepa/regs/Guidance_on_CE.pdf.

362 *Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), LBP-09-4, 69 NRC 170, 202 (2009).

363 16 U.S.C. §§ 1531-1544.

364 50 C.F.R. § 402.02.

365 *In re Operation of Mo. River Sys. Litig.*, 421 F.3d 618, 632 (8th Cir. 2005) (emphasis added).

River is attributable to VCS.[366] Obviously, such an assumption is insufficient to establish a genuine dispute of material fact.

Finally, while this contention generally references "fisheries" and "biodiversity," the whooping crane and its food resources are the only species of concern discussed in the contention. Because TSEP does not identify any other species of concern that might be adversely impacted by the operation of VCS, this contention should be rejected to the extent it alleges impacts to species other than the whooping crane.[367]

For the foregoing reasons, this contention does not demonstrate a genuine material dispute to the extent that it pertains to a comparison with "natural" conditions and to species others than the whooping crane. Therefore, the Board should reject these parts of this contention. The remaining part of the contention related to the bio-statistical study can be subsumed within a consolidated contention on the alleged impacts of VCS water use on whooping cranes, as discussed with respect to Contention TSEP-ENV-12.

17. TSEP-ENV-12 – Adverse Modification of Whooping Crane Designated Critical Habitat

Similar to Contention TSEP-ENV-11, this contention asserts that VCS water withdrawals "will have tremendous aquatic impacts" and "will result in more severe, more frequent, and longer lasting 'man-made' high salinity drought conditions in the San Antonio Bay system."[368] In addition to referencing NEPA, TSEP-ENV-12 also cites to the requirements in Section 7 of

366 *See* Petition, Ex. E-1, Trungale Report at 2-3.

367 *See Turkey Point*, LBP-01-6, 53 NRC at 156-57 (rejecting a contention alleging impacts to threatened and endangered species because the proposed contention failed to identify any particular species of concern).

368 Petition at 80.

the ESA and claims that these withdrawals "will adversely modify designated critical habitat" for the endangered whooping crane.[369]

As with Contention TSEP-ENV-11, this contention relies upon the Trungale Report.[370] For the reasons discussed in our response to TSEP-ENV-11, the methodology used in the Trungale Report for assessing the salinity of the San Antonio Bay does not comport with NEPA or the ESA and thus does not establish a genuine dispute of *material* fact. For the foregoing reasons, the Board should reject these parts of this contention.

However, Exelon does not oppose the parts of the contention related to the bio-statistical study discussed in Sections 5.2 and 5.11 of the ER Update. Based upon the Trungale Report, the contention states that there is almost no difference between the fresh water inflows assumed in the bio-statistical study and that the study "buried" the impacts of VCS in the baseline.[371] Following the submission of the Petition, Exelon re-evaluated the bio-statistical study and determined that the baseline hydrologic scenario in that study assumed full use of existing GBRA water rights under GBRA Certificate of Adjudication 18-5178. Since VCS might use that existing GBRA water right, the baseline hydrologic scenario used in the bio-statistical study impact analysis essentially accounts for VCS water use. Thus, there is relatively little difference between the first two hydrologic scenarios used in the bio-statistical study (*i.e.*, the Current Conditions Scenario (baseline scenario) and Scenario One that was intended to assess the impact

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369 *Id.* at 80-82.

370 *See id.* at 81-83.

371 *See id.* at 79, 83.

of VCS water use). Accordingly, Exelon has determined that the results of the bio-statistical study impact analysis should be re-evaluated, and Exelon will be revising its ER accordingly.[372]

As a result, Exelon does not object to admission of Contention TSEP-ENV-12 to the extent that it pertains to the bio-statistical study discussed in the ER Update. This part of the contention can be subsumed within and provides a basis for the consolidated contention discussed previously.

18. TSEP-ENV-13 – Monitoring Impacts to Whooping Crane Designated Critical Habitat

Contention TSEP-ENV-13 claims that "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."[373] Citing Sections 7 and 9 of the ESA, TSEP asserts that "Exelon's water withdrawing activities are a direct threat to the Whooping Crane habitat and may constitute a 'take' under the Endangered Species Act."[374] Thus, TSEP maintains that Exelon should have proposed provisions to monitor impacts on the whooping crane and its designated critical habitat in Aransas National Wildlife Refuge.[375]

First and foremost, this contention fails to raise a genuine dispute on a material issue because whooping cranes and their habitat at Aransas National Wildlife Refuge are already monitored. As the Whooping Crane Recovery Plan explains, FWS already is tasked with conducting "aerial surveys at ANWR to determine total population numbers, movements,

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372 *See* Letter from Marilyn C. Kray, Vice President, Nuclear Project Development, Exelon Nuclear Texas Holdings, to Document Control Desk, U.S. Nuclear Regulatory Commission (Feb. 15, 2011). A copy of this letter is provided as Attachment 1 to this Answer.

373 *Id.* at 84.

374 *Id.* at 84-86.

375 *Id.* at 86-87.

territories, habitat use, and mortality."[376] Furthermore, as the Recovery Plan also notes, monitoring is also performed of "food resources and salinities at Aransas and . . . energy budgets of the cranes and winter mortality."[377] Accordingly, given the information on existing monitoring as described in the Recovery Plan, any additional monitoring by Exelon would be unnecessary and duplicative.[378]

Second, TSEP's demand that Exelon propose whooping crane monitoring at the ESP stage is inconsistent with NRC precedent. In the *Hartsville* construction permit ("CP") proceeding, the Appeal Board held that, at the CP stage, it was "manifestly too early to develop the details of a monitoring program."[379] Thus, the Appeal Board rejected the need for endangered species environmental monitoring conditions, explaining:

> The commencement of plant operation remains years in the offing. It is reasonable to expect that, in the interim, significant additional information will be acquired respecting the characteristics of the mussel population. Moreover, changes in conditions affecting the mussels may well occur between now and then. Deferral of the adoption of a plant operation monitoring program until the time the facility is being considered for an operating license would allow resort to the most current information relating to the mussels and those environmental factors which might affect their continued existence. In this connection, there is nothing in the monitoring standards which intervenors propose for adoption at this time which could not be adopted later if then thought warranted. And, needless to say, the absence of operating level monitoring standards during the construction period could have no effect on the mussels—adverse or otherwise.[380]

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376 Petition, Ex. I, Recovery Plan at 44 (indicating that aerial surveys "are generally conducted weekly, fall to spring at Aransas").

377 *Id*. at 48 *See also* Petition, Ex. E, Trungale Report at 4 (explaining that Texas already has "perhaps the most comprehensive estuarine monitoring program ever created"), 16 (illustrating the location of salinity monitoring stations within the whooping crane designated critical habitat).

378 Any supporting material provided by TSEP, including those portions thereof not relied upon, is subject to Board scrutiny, "both for what it does and does not show." *Yankee*, LBP-96-2, 43 NRC at 90.

379 *Tenn. Valley Auth.* (Hartsville Nuclear Plant, Units 1A, 2A, 1B & 2B), ALAB-554, 10 NRC 15, 20 (1979).

380 *Id.* at 20-21.

Here, at the ESP stage, even earlier in the licensing process and prior to the initiation of NRC consultation with FWS, this demand for monitoring is all the more improper. Accordingly, the Board should reject this contention for failing to raise a genuine dispute on a material issue.

Finally, this contention fails to raise a genuine dispute on a material issue to the extent that it argues that NRC must consult with FWS or that any monitoring resulting from that consultation will be required. In this respect, this contention is similar to one rejected by the Licensing Board in the *Turkey Point* license renewal proceeding. As that Board explained:

> To the extent the focus of the contention is on the need for consultation by the NRC with FWS, [Petitioner] has not shown that there is a genuine dispute over a material issue of law or fact. As the Staff points out, it is currently engaged in the consultation process with FWS as required by the Endangered Species Act so it is premature to assert, as [Petitioner] does in the contention, that the NRC has not conducted the required consultation. Similarly, because the level of consultation between the NRC and FWS is dependent upon the type of impact on threatened and endangered species that is found, it is also premature to judge that issue until the process has been completed and the Staff conclusions are set forth in its SEIS. Thus, there is no genuine dispute at this time over any material issue about consultation between the NRC and FWS.[381]

Similarly, in this case, the ER identifies that the NRC will need to consult with FWS.[382] Therefore, there is no dispute that NRC will need to consult with FWS and any challenges regarding the substance of that consultation are not ripe.

For the foregoing reasons, this contention does not demonstrate that a genuine material dispute exists concerning whooping crane monitoring. Accordingly, the Board should reject Contention TSEP-ENV-13.

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381 *Turkey Point*, LBP-01-6, 53 NRC at 156 (citations omitted).

382 ER Table 1.2-1.

19. TSEP-ENV-14 – Compliance with the Endangered Species Act

Contention TSEP-ENV-14 argues that the ESP "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."[383] As discussed below, this proposed contention does not raise a genuine dispute of material fact and therefore does not satisfy 10 C.F.R. § 2.309(f)(1)(vi).

As an initial matter, this contention fails to raise a genuine dispute on a material issue to the extent that it argues that NRC must consult with FWS. As TSEP acknowledges, the ER identifies the need for NRC to consult with FWS.[384] In this respect, this contention is similar to one rejected by the Licensing Board in the *Turkey Point* license renewal proceeding.[385] Therefore, there is no dispute that NRC will need to consult with FWS and any challenges concerning this consultation are simply not ripe.

Furthermore, Section 7(a)(2) of the ESA states that Federal agencies must ensure that any action that it authorizes "is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species."[386] TSEP fails to provide any support for its claim that VCS water use will "jeopardize the continued existence" of the whooping cranes or "destroy or adversely modify" the habitat of the whooping cranes,[387] as those terms are defined in the implementing regulations for the ESA. Specifically, 50 C.F.R. § 402.02 defines those terms as follows:

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383 Petition at 87.

384 *Id.* at 90 (quoting ER Table 1.2-1).

385 *Turkey Point*, LBP-01-6, 53 NRC at 156 (citations omitted).

386 16 U.S.C. § 1536(a)(2).

387 Petition at 88.

> *Destruction or adverse modification* means a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.
>
> *Jeopardize the continued existence of* means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.

Thus, under the provisions of Section 7(a)(2) of the ESA, the NRC would be prohibited from issuing an ESP for VCS only if construction or operation of the plant would appreciably diminish or reduce the likelihood of "both the survival and recovery" of the whooping crane as a species, either directly or indirectly through impacts on its habitat. This is a high standard. As was discussed by the Appeal Board in *Hartsville*, Section 7 of the ESA does not prohibit the NRC from issuing a license for a nuclear power plant merely because the plant may have some "adverse effect" on an endangered or threatened species.[388]

With respect to VCS, TSEP has not provided any basis for arguing that VCS water use would appreciably diminish or reduce the likelihood of "both the survival and recovery" of the whooping crane as a species. TSEP has alleged that the natural drought conditions in 2008-2009 resulted in a reduction of less than 10% of population of the whooping cranes at Aransas National Wildlife Refuge. However, even the information provided by TSEP shows that the number of whooping cranes at Aransas National Wildlife Refuge has increased by a factor of fifteen over the last 60 years—from 16 birds in 1941 to 247 birds in 2009 (even accepting as accurate the 23 deaths alleged during the 2008-2009 drought).[389] Although TSEP has alleged

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[388] *Tenn. Valley Auth.* (Hartsville Nuclear Plant, Units 1A, 2A, 1B, & 2B), ALAB-463, 7 NRC 341, 360 (1978).

[389] *See* Petition, Ex. F-1, Sass Report at 6. *See also* Final Rule, Establishment of a Nonessential Experimental Population of Endangered Whooping Cranes in Southwestern Louisiana, 76 Fed. Reg. 6066, 6068 (Feb. 3,

that VCS water use will have an adverse incremental impact on the whooping cranes during future drought years, TSEP has not attempted to quantify such an impact. Furthermore, even accounting for drought years, there has been a steady increase in the population of whooping cranes at Aransas National Wildlife Refuge over the last 60 years. TSEP has provided no information that would indicate that VCS water use would reduce the likelihood of "both the survival and recovery" of the whooping crane as a species. As a result, TSEP has not provided sufficient information for a claim that issuance of an ESP for VCS would violate Section 7(a)(2) of the ESA.

For the foregoing reasons, this contention does not demonstrate a genuine material dispute regarding compliance with Section 7 of the ESA. Therefore, the Board should reject this contention in accordance with 10 C.F.R. § 2.309(f)(1)(vi).

20. TSEP-ENV-15 – Socioeconomic Impacts of Plugging Wells and of the Impacts on Mineral Rights Holders

Contention TSEP-ENV-15 alleges that the ER fails to address the economic impacts of plugging oil and gas wells.[390] TSEP also contends that Exelon failed to account for the impacts of the proposed facility on nearby mineral rights.[391] As demonstrated below, this contention should be dismissed because it presents an attack on the Commission's regulation in 10 C.F.R. § 51.50, which is precluded under 10 C.F.R. § 2.335(a), and is not within the scope of the proceeding, contrary to 10 C.F.R. § 2.309(f)(1)(iii).

TSEP's allegations regarding the economic impacts of the plugged wells and mineral rights constitute a collateral attack on NRC's regulation for environmental reports in 10 C.F.R.

2011) ("The population continues to grow with 247 cranes observed in the spring of 2009 and 263 in the spring of 2010. With 46 chicks fledging from a record high of 74 nests in August 2010, the flock size could reach a record level of around 285 whooping cranes in the spring of 2011.").

390 Petition at 92.

391 *Id.*

§ 51.50. The contention claims that discussions of economic issues, specifically the costs to Exelon of plugging wells and the cost of obtaining mineral rights, must be included in the ER submitted with the ESP application. Section 51.50(b)(2), however, explicitly allows ESP applicants to defer discussions of costs until the COL proceeding. The rule states, in pertinent part, that the "environmental report need not include an assessment of the economic . . . benefits . . . and costs of the proposed action."[392] Similar provisions are contained in 10 C.F.R. §§ 52.21 and 51.105(b).

Nonetheless, TSEP claims that such analysis is required under 10 C.F.R. § 51.45.[393] That regulation requires that an applicant discuss the "impact of the proposed action on the environment" in the ER.[394] It also requires that an ER "include an analysis that considers and balances the environmental effects of the proposed action" and "contain an analysis of the cumulative impacts of the activities to be authorized."[395] Those two provisions, however, only demand an assessment of *environmental* effects and do not mention *economic* costs. Furthermore, even if there were some ambiguity about whether Section 51.45 covered economic issues, the more specific requirements in Sections 51.50, 51.105, and 52.21 clearly indicate the Commission exempted an applicant from providing such information in an ESP proceeding.

In summary, TSEP's claim that the ER must include a discussion of the costs to Exelon of well plugging and the purchase of mineral rights is inconsistent with existing Commission rules and is prohibited by 10 C.F.R. § 2.335(a). As the Commission has held, "[a]bsent a waiver,

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392 10 C.F.R. § 51.50(b)(2).

393 Petition at 93.

394 10 C.F.R. § 51.45(b)(1).

395 *Id.* § 51.45(c).

parties are prohibited from collaterally attacking our regulations in an adjudication."[396] TSEP has neither requested such a waiver nor addressed the criteria upon which a waiver request could be based. Accordingly, the contention should be rejected.

Furthermore, for similar reasons, this contention is outside the scope of this proceeding. As explained above, an ESP applicant has the option of including cost information in its ER. As stated in Section 10.4 of the ER for the VCS ESP, Exelon has decided to defer the discussion of economic costs and benefits to the COL application. Accordingly, matters related to economic costs are beyond the scope of this proceeding and contrary to the requirement in 10 C.F.R. § 2.309(f)(1)(iii).

In summary, Contention TSEP-ENV-15 presents an impermissible challenge to the Commission's rules and is beyond the scope of this proceeding. Accordingly, for each of these reasons, the contention should be rejected.

21. TSEP-ENV-16 – Alternative Site at Matagorda County

Contention TSEP-ENV-16 alleges:

> 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.[397]

As demonstrated below, this proposed contention does not raise a genuine dispute of material fact or law and therefore does not satisfy 10 C.F.R. § 2.309(f)(1)(vi).

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396 *Tenn. Valley Auth.* (Bellefonte Nuclear Power Plant, Units 3 & 4), CLI-09-3, 69 NRC 68, 75 (2009) (citing 10 C.F.R. § 2.335).

397 Petition at 95.

This contention is an attempt by TSEP to bootstrap an alternative site contention onto its other contentions. This is shown by TSEP's statement that it "incorporates by reference its contentions relating to water, TSEP-ENV-2, 3, 4, and 5; aquatic impacts, TSEP-ENV-10, 11, and 12; whooping cranes, TSEP-ENV-7, 8, and 9."[398] For the reasons discussed in Exelon's responses to those contentions, this contention also fails.

As discussed in ER Section 9.3, Exelon undertook a detailed site selection process. Starting with a region of interest ("ROI") that encompasses the Electric Reliability Council of Texas ("ERCOT") region, Exelon first identified candidate areas based on exclusionary criteria such as water availability, transmission access, and electrical load.[399] Exelon then identified 22 potential sites within these candidate areas.[400] After applying various avoidance and suitability criteria, Exelon reduced the potential sites to five candidate sites.[401] Exelon further evaluated the candidate sites using a ratings process that considered factors such as environmental, socioeconomic, and engineering criteria.[402] Although all candidate sites were considered viable sites, the site selection process concluded: "The Matagorda County site was ranked as the primary site with all evaluation criteria, and the Buckeye and Victoria County sites as secondary sites, with scoring too close to differentiate one site over the other."[403] TSEP does not dispute the site selection process used by Exelon.

Upon further field work (including characterization of subsurface conditions), the VCS site scored better on geology/seismology, flooding, and engineering cost differential (among

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398 *Id.* at 97.

399 *See* ER at 9.3-1 to 9.3-3.

400 *See id.* at 9.3-3 to 9.3-5.

401 *See id.* at 9.3-5 to 9.3-10.

402 *See id.* at 9.3-10 to 9.3-11.

403 *Id.* at 9.3-11.

other factors), and Exelon determined that there was no significant difference in environmental impacts among the candidate sites (*i.e.*, that there was no environmentally preferable site among the candidates).[404] In particular, with respect to water use, aquatic impacts, and impacts on threatened and endangered species, both the VCS site and Matagorda County site were rated as having SMALL impacts.[405] For these reasons, the VCS site was selected as the proposed site, and the remaining candidate sites were determined to be alternative sites. ER Section 9.3.4 provides the following conclusion for the site selection process:

> The Victoria County site ranked higher than the four alternative sites based on the environmental criteria ratings (health and safety, environmental, and socioeconomic). A comparison of projected construction and operational impacts at the proposed and alternative sites demonstrates that there is no significant difference in environmental impact among the five candidate sites. For these reasons, there is no alternative site that is "environmentally preferable" to the Victoria County site.
>
> Tables 9.3-2 and 9.3-3 compare the environmental impacts of construction and operation of the proposed nuclear power plant at each of the alternatives sites with impacts at the VCS site. This site-by-site comparison did not result in identification of a site environmentally preferable to the proposed VCS site. Therefore, no additional analysis is required to determine whether the candidate sites are "obviously superior" to the proposed VCS site.

The contention states that the Matagorda County site represents an "obviously superior" site because of water availability, downstream impacts, endangered species, growth faults, oil and gas wells, oil and gas pipelines, and transmission lines.[406] TSEP does not dispute Exelon's

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404 *Id.* at 9.3-11 to 9.3-12. As explained in NRC's Environmental Standard Review Plan, the alternative sites evaluation involves determining whether "there are any alternative sites that are environmentally preferable to the proposed site," and if "one or more environmentally preferable alternative sites are identified, the scope of this review should be extended, using benefit-cost techniques and other procedures to determine if any environmentally preferable site can be shown to be obviously superior to the applicant's proposed site." NUREG-1555, Environmental Standard Review Plan, at 9.3-1 (Oct. 1999).

405 ER Tables 9.3-2, 9.3-3.

406 *See* Petition at 96-102.

characterization of the alternative sites, as summarized in ER Tables 9.3-2 and 9.3-3. Instead, at its heart, the contention pertains to the characterization of the VCS site. As discussed with respect to Contentions TSEP-ENV-2 through 14, TSEP's arguments with respect to environmental impacts do not raise a genuine dispute of material fact except for potential impacts on whooping cranes. Furthermore, as discussed with respect to Contentions TSEP-SAFETY-1 through 3, the growth faults and oil and gas wells at VCS do not pose a threat to the safety of the plant. Because Contention TSEP-ENV-16 is based upon other contentions related to VCS, and because those other contentions do not raise a genuine issue of material fact regarding the VCS site (except for certain allegations regarding impacts to whooping cranes, as previously discussed above), Contention TSEP-ENV-16 also does not raise a genuine issue of material fact related to VCS.

Furthermore, with respect to whooping cranes, there is no reason to admit Contention TSEP-ENV-16 pending or contingent upon the results of the litigation of a consolidated contention on whooping cranes. There are three possible results of such litigation:

- The Board could find that the impact of VCS water use on whooping cranes is SMALL. Such a finding would be consistent with the results of Exelon's alternative site analysis,[407] and therefore would not warrant any change in that analysis.

- The Board could find that the impact of VCS water use on whooping cranes is MODERATE or LARGE but would not violate Section 7(a)(2) of the ESA. However, as discussed in more detail below, a change in one of many factors in the alternative site analysis would not be sufficient to affect the conclusion that there are no obviously superior sites to the VCS site.[408]

- The Board could find that the impact of VCS water use on whooping cranes is LARGE and would violate Section 7(a)(2) of the ESA. In such an event, the NRC would be precluded from issuing an ESP for VCS under Section 7(a)(2) of the ESA

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407 *See* ER at 9.3-92.

408 For example, the ER concludes that there is no significant difference in environmental impact among the five candidate sites (*id.* at 9.3-86), even though one of the candidate sites (the Alpha site) was rated as having a LARGE impact on threatened and endangered species (*id.* 9.3-92).

> (thereby mooting any contention on alternative sites), or Exelon would need to implement mitigating measures to reduce the impacts to ensure compliance with the ESA.

In short, there is nothing in Contention TSEP-ENV-16 related to whooping cranes that warrants litigation beyond what will be litigated as part of a consolidated contention on whooping cranes.

TSEP also fails to challenge pertinent information in the ER itself. The alternative site evaluation in the ER directly compares the Matagorda County site to the VCS site.[409] The ER states that the VCS site scored better than the Matagorda County site in the following areas: (1) geology/seismology; (2) flooding; (3) groundwater radionuclide pathway; (4) transportation safety; (5) dewatering effects on adjacent wetlands; (6) dredging/disposal effects; and (7) engineering cost differential.[410] Except for geology/seismology, TSEP fails to challenge Exelon's conclusions on any of these topics. Therefore, TSEP fails to challenge the bases set forth in the ER for Exelon's selection of the VCS site as the proposed site. This is a fatal flaw for this contention. The Commission has stated that a petitioner must "read the pertinent portions of the license application . . . state the applicant's position and the petitioner's opposing view," and explain why it disagrees with the applicant.[411] TSEP has not done this, and therefore has not demonstrated a genuine dispute of material fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

Moreover, although TSEP argues that the Matagorda County site is "obviously superior" to the VCS site with respect to several individual factors,[412] TSEP misapplies this legal standard. The issue is not whether an alternative site is obviously superior on a single factor or group of factors; instead, the issue is whether the alternative site is obviously superior looking at all

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409 *See id.* at 9.3-11.

410 *Id.* at 9.3-11.

411 Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,170. *See also Millstone*, CLI-01-24, 54 NRC at 358.

412 *See* Petition at 97-102.

factors collectively. As the Commission has ruled, the fact that an alternative site is significantly better on some individual environmental factors such as population density or aquatic impacts does not mean that the alternative is obviously superior when evaluating the site as a whole.[413] Because TSEP's contention focuses on individual factors and does not address the sites as a whole, it does not provide a sufficient basis for claiming that the Matagorda County site is obviously superior.

TSEP also incorrectly equates "obviously superior" with having a better alternative site evaluation score. Specifically, TSEP states:

> Had Exelon adequately considered all of these factors and concerns, the alternatives analysis would have resulted in a different conclusion. Indeed, in its final ranking of alternative sites, the scores of the Matagorda and Victoria sites were very close: 3,839 for Matagorda, and 4,041. The Exelon ER does not describe the scoring methodology, but presumably if one or more [sic] the impacts at Victoria were elevated from "small" to "moderate" the small difference between the two scores might easily be reversed.[414]

TSEP implies that if the score for Matagorda County is better, then it must be obviously superior. This is incorrect.

The genesis of the "obviously superior" standard can be traced to an NRC adjudication involving the Seabrook power plant.[415] In *Seabrook*, the Commission stated: "[W]e think it appropriate that a licensing board refuse to take the proposed 'major Federal action,' *i.e.*, deny the requested license, not when some alternative site appears marginally 'better' but only when

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413 *See Pub. Serv. Co. of N.H.* (Seabrook Units 1 & 2), CLI-77-8, 5 NRC 503, 527 (1977), *aff'd sub nom.*, *New England Coalition of Nuclear Pollution v. NRC*, 582 F.2d 87 (1st Cir. 1978). *See also Rochester Gas & Elec. Corp.* (Sterling Power Project Nuclear Unit No. 1), ALAB-502, 8 NRC 383, 395 (1978), *aff'd*, CLI-80-23, 11 NRC 731 (1980) (holding that an alternative site is not obviously superior even though it is preferable in terms of number of acres of woodland that would be disturbed).

414 Petition at 103.

415 *See Seabrook*, CLI-77-8, 5 NRC at 528-29.

the alternative site is obviously superior."[416] The U.S. Court of Appeals for the First Circuit upheld the Commission's "obviously superior" standard, stating:

> The standard is designed to guarantee that a proposed site will not be rejected in favor of a substitute unless, on the basis of appropriate study, the Commission can be confident that such action is called for. Given the necessary imprecision of the cost-benefit analyses involved and the fact that the proposed site will inevitably have been subjected to far closer scrutiny than any alternative site, we cannot say that it is unreasonable to insist on a high degree of assurance that the extreme action of denying an application is appropriate. This is especially so since NEPA does not require that a plant be built on the single best site for environmental purposes. All that NEPA requires is that alternative sites be considered and that the effects on the environment of building the plant at the alternative sites be carefully studied and factored into the ultimate decision.[417]

The Commission also has upheld the Appeal Board's characterization of "obviously" superior as "clearly and substantially" superior and its determination that an alternative site is not "obviously superior" even though it is "marginally preferable" on environmental grounds.[418]

Using this standard, even if TSEP were correct that the various factors that it identifies are better at the Matagorda County site, this does not mean that this site is "obviously superior" to the VCS site.[419] As discussed above, Exelon identified numerous factors that were better at

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416 *Id.* at 530.

417 *New England Coalition*, 582 F.2d at 95.

418 *Sterling*, ALAB-502, 8 NRC at 394, 397.

419 In this regard, TSEP also misstates the impacts at the VCS and Matagorda sites. First, TSEP states that Exelon plans to leave the pipelines under the cooling pond in place. Petition at 101. This is incorrect. SSAR Section 2.2.2.3 explains that the natural gas transmission pipeline under the cooling basin will be relocated. *See* SSAR at 2.2-10, -62. Although there are also some natural gas gathering lines in the area designated for the cooling basin that will not be relocated, the wells for those lines will be plugged (ER at 4.2-12), and therefore those lines will not be used. Additionally, those lines are small, 4.5" in diameter, compared to the transmission lines that are up to 30" inches in diameter, and the hazards posed by the gathering system lines are bounded by the hazards from the transmission pipelines. SSAR at 2.2-11, -14, -15. Second, TSEP states that the Matagorda site would use a once-through cooling water system. Petition at 104. This is incorrect. The ER (at 9.3-17) explains that the Matagorda site would use cooling towers, and therefore would not utilize once-through cooling. Third, TSEP states that the Matagorda site transmission would only require 560 acres of land. Petition at 105. This is incorrect. ER Section 9.3.3.1.1 explains that in addition to the 560 acres for a new

the VCS site (*e.g.*, flooding, engineering cost differential) that have not been disputed by TSEP. TSEP has not alleged that the factors it identifies would outweigh the factors that favor the VCS site. Thus, TSEP has not provided a sufficient basis for claiming that the Matagorda County site is "clearly and substantially" superior to the VCS site when all relevant factors are considered as a whole (rather than looking at individual factors separately). For this reason as well, TSEP has not demonstrated a genuine dispute of material fact or law as required by 10 C.F.R. § 2.309(f)(1)(vi).

22. TSEP-ENV-17 – Reliance on Waste Confidence Rule

Contention TSEP-ENV-17 alleges that ER Section 5.7.1.6 relies on the Waste Confidence Decision to assert that a high-level waste ("HLW") repository will be built and that this assertion is not supported by an EIS in violation of NEPA.[420] TSEP contends that in issuing the Waste Confidence Decision, the NRC failed to issue an EIS as required by NEPA, and therefore an EIS must be prepared at the licensing stage. As demonstrated below, this contention should be dismissed because it challenges the Commission's Waste Confidence Rule set down in 10 C.F.R. § 51.23, which is precluded under 10 C.F.R. § 2.335(a), and is not within the scope of the proceeding, contrary to 10 C.F.R. § 2.309(f)(1)(iii).

This contention demands that an EIS be prepared examining "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."[421] On its face, this contention constitutes an attack upon the Waste Confidence Decision and Rule

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right-of-way, 1700 acres of established right-of-way also would be used. *See* ER at 9.3-14 to -15. These misstatements further demonstrate that this contention does not raise a genuine dispute of material fact.

420 Petition at 105.

421 *Id.* at 106.

in 10 C.F.R. § 51.23. The Waste Confidence Decision rejected the proposition that an EIS must be prepared for the Waste Confidence Rule in order to cover the cumulative impacts from disposal of radioactive waste, stating: "Individual licensees and applicants, or in the case of a HLW repository, DOE, will have to apply for and meet all of the NRC's safety and environmental requirements before the NRC will issue a license for storage or disposal."[422] The Rule further 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"[423] and that therefore "no discussion of any environmental impact of spent fuel storage in reactor facility storage pools or independent spent fuel storage installations (ISFSI) 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."[424] As the Board held in *Levy County*, "[w]hether this regulation is correct or not, it is binding on us."[425]

Contentions challenging rules and regulations of the Commission may not be admitted under 10 C.F.R. § 2.335(a) absent a petition seeking waiver as required by 10 C.F.R. § 2.335(b). A petition for waiver must include an affidavit describing the special circumstances warranting a waiver. In the present case, TSEP has not requested waiver or submitted the required affidavit. As the Commission recently ruled in rejecting a challenge to the Waste Confidence Decision in the *Shearon Harris* COL proceeding:

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422 Waste Confidence Decision Update, 75 Fed. Reg. 81,037, 81,041 (Dec. 23, 2010).

423 Final Rule, Consideration of Environmental Impacts of Temporary Storage of Spent Fuel After Cessation of Reactor Operation, 75 Fed. Reg. 81,032, 81,037 (Dec. 23, 2010) (codified at 10 C.F.R. § 51.23(a)).

424 10 C.F.R. § 51.23(b).

425 *Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 & 2), LBP-09-10, 70 NRC 51, 114 (2009) (citing 10 C.F.R. § 51.23(b)).

> However, [Petitioner] nevertheless asserts that the Board erred in "agreeing with the faulty premises behind the rule" and that the Commission should allow challenges to Commission rules on a case-by-case basis." This contention is an impermissible challenge to NRC regulations. [Petitioner] has not requested, nor has it demonstrated any supporting reasons for, a waiver of the Waste Confidence Rule under 10 C.F.R. § 2.335(b). Therefore the contention is inadmissible.[426]

Even if TSEP had submitted a request for waiver, it would be unable to meet the burden necessary for the Waste Confidence Rule to be waived. In the *Millstone* decision, the Commission set forth the four-factor test to determine if the standards for waiver under Section 2.335(b) had been met.[427] One of these factors is that the contention be "unique" to the facility at issue and not "common to a large class of facilities."[428] There perhaps is no issue involving new reactor licensing that is more generic than the impacts of a HLW disposal facility. The present contention would, by its terms, apply to all reactors in that the assessment is to cover "the cumulative impacts" of new reactors.[429] Therefore, even if TSEP had requested a waiver and submitted the required affidavit, its request for waiver could not be granted.

Second, this contention is outside the scope of the proceeding. This contention challenges the method by which the NRC updated its Waste Confidence Decision. In its statement of facts supporting the contention, TSEP specifically states that its criticisms are with the Waste Confidence Decision.[430] The Waste Confidence Decision was issued through agency rulemaking procedures, allowing for public participation prior to issuance. In fact, TSEP participated in the rulemaking, as it notes in the Petition, by submitting comments criticizing the

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426 *Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 & 3), CLI-10-9, 71 NRC __, slip op. at 38 (Mar. 11, 2010) (footnotes omitted).

427 *Millstone*, CLI-05-24, 62 NRC at 560.

428 *Id.*

429 Petition at 106.

430 *Id.* at 107.

lack of an EIS for the Waste Confidence Decision and Rule.[431] The Commission directly responded to TSEP's comments in the *Federal Register* notice of the final decision.[432] Specifically, the Commission rejected TSEP's comment, stating:

> The updates to the Waste Confidence Decision and Rule, as explained above, do not authorize any licensing or other Federal action. The rule does have the effect of removing from a reactor operating license proceeding, license renewal proceeding, or initial ISFSI licensing proceeding the issue of whether safe storage of SNF can be accomplished without any significant environmental impact for an additional 30 years beyond the 30 years provided by the current generic determination. The update to the Waste Confidence Decision explains and documents the Commission's continued reasonable assurance that this extended storage period will have no significant environmental impacts. Given this conclusion, a finding of no significant environmental impact (FONSI) may be made and preparation of an EIS is not required.[433]

A challenge to the Commission's conclusion and the method by which the Commission issued the Waste Confidence Decision is clearly beyond the scope of this ESP proceeding. Therefore, this contention should be denied pursuant to 10 C.F.R. § 2.309(f)(1)(iii).

Finally, to the extent that TSEP is challenging the environmental impact of disposal of spent fuel from VCS, such a claim represents an impermissible challenge to Table S-3 in 10 C.F.R. § 51.51, which is referenced in ER Section 5.7.1.6. As discussed more fully below with respect to TSEP-ENV-18, such a contention is also barred by 10 C.F.R. § 2.335(a).

In summary, Contention TSEP-ENV-17 presents an impermissible challenge to the Commission's rules and is beyond the scope of these proceedings. Accordingly, for each of these reasons, the contention should be rejected.

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431 *Id.* (citing 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 (February 6, 2009)).

432 *See* Waste Confidence Decision Update, 75 Fed. Reg. at 81,040-42.

433 *Id.* at 81,042.

23. TSEP-ENV-18 – Reliance on Table S-3

Contention TSEP-ENV-18 alleges that the ER Section 5.7 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.[434] TSEP contends that the assumptions on which Table S-3 is based are outdated.[435] As demonstrated below, this contention should be dismissed because it presents an impermissible attack on the adequacy of Table S-3, which is codified in the Commission's regulation in 10 C.F.R. § 51.51, and is not within the scope of the proceeding, contrary to 10 C.F.R. § 2.309(f)(1)(iii).

TSEP's allegations regarding Table S-3 constitute an attack on NRC's regulation for environmental reports set forth in 10 C.F.R. § 51.51(a). The Commission has generically considered the environmental impacts of radioactive waste disposal as part of its evaluation of the uranium fuel cycle. That regulation requires that an ER use Table S-3 for its discussion of the uranium fuel cycle.[436] In accordance with this regulation, ER Section 5.7.1.6 references Table 5.7-1, which repeats Table S-3 as the reference reactor data and, after applying a scaling factor, provides the plant-specific data. Based on application of Table S-3, the ER concludes that the environmental impacts of radioactive waste disposal are SMALL.[437] This contention focuses not on the ER but rather on the radiological effluent releases in Table S-3, which the ER must use.[438] As the Commission has held, in specific reference to an attack on Table S-3, "[a]bsent a waiver, parties are prohibited from collaterally attacking our regulations in an adjudication."[439]

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434 *See* Petition at 108.

435 *Id.*

436 10 C.F.R. § 51.51(a).

437 ER at 5.7-7 to -8.

438 10 C.F.R. § 51.51(a).

439 *Bellefonte*, CLI 09-3, 69 NRC at 75 (citing 10 C.F.R. § 2.335).

TSEP has neither requested such a waiver nor addressed the criteria upon which a waiver request might be based. Accordingly, the contention should be rejected pursuant to 10 C.F.R. § 2.335(a).

Additionally, this contention is outside the scope of this proceeding. In fact, TSEP agrees that "[t]his contention is not currently within the scope of the hearing because 10 C.F.R. § 51.51(b) permits Exelon to rely on Table S-3."[440] Thus, this contention should be dismissed for failure to comply with 10 C.F.R. § 2.309(f)(1)(iii).

In summary, Contention TSEP-ENV-18 presents an impermissible challenge to the Commission's rules and is beyond the scope of these proceedings. Accordingly, for each of these reasons, the contention should be rejected.

24. TSEP-MISC-1 – Coastal Zone Management Act Consistency Determination

Contention TSEP-MISC-1 alleges that Exelon failed to submit a certification of consistency with the Texas Coastal Management Program ("CMP"), as required by the Coastal Zone Management Act ("CZMA").[441] As discussed below, this contention should be dismissed pursuant to 10 C.F.R. § 2.309(f)(1)(vi), because Exelon's recent submission of request for a CMP consistency determination renders this contention moot.

TSEP claims that the ESP application does not contain a certification that the proposed activity is consistent with the Texas CMP. As a result, TSEP states that the ESP application violates the CZMA.[442] The CZMA provides, in pertinent part, as follows:

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440 Petition at 109.

441 *Id.* at 110.

442 *Id.* The Petition is not entirely consistent in the wording of this contention. In some places, the Petition states that the application should include a "consistency determination" from the Texas General Land Office (*id.* at 110, 113); at other places, the Petition states that the application should include a certification from Exelon that the proposed activity complies with the Texas CMP (*see, e.g.*, *id.* at 112, 113); and at still other places, the Petition appears to equate a consistency determination and a certification (*see, e.g.*, *id.* at 111). However, as is indicted by the passages from the CZMA and the regulations cited above and in the Petition at 111, the CZMA only requires that an application contain a certification from the applicant; it does not require that the

> [A]ny applicant for a required Federal license or permit to conduct an activity, in or outside of the coastal zone, affecting any land or water use or natural resource 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 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.[443]

These same requirements are reflected in the National Oceanic and Atmospheric Agency implementing regulations.[444]

This contention is a contention of omission, as TSEP claims that Exelon "does not include *any* certification" of compliance with Texas's CMP as required by the CZMA.[445] On January 25, 2011, Exelon submitted a certification of consistency with Texas CMP, along with necessary information and data, to the NRC and Texas's General Land Office.[446] The Commission has made clear that "where a contention alleges the omission of particular information or an issue from an application, and the information is later supplied by the applicant . . . the contention 'is moot.'"[447] This principle applies to proposed contentions as well as admitted contentions. Thus, as other Licensing Boards have held, when a proposed contention of

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application contain a consistency determination from the responsible state agency. Accordingly, to the extent that TSEP-MISC-1 is requesting that the VCS ESP application include a consistency determination from the GLO, as distinct from a certification from Exelon, the contention has no basis in the CZMA and should be dismissed as being contrary to law.

443 16 U.S.C. § 1456(c)(3)(A).

444 15 C.F.R. § 930.57(a).

445 Petition at 112 (emphasis added).

446 *See* Letter from Marilyn C. Kray, Vice President, Nuclear Project Development, Exelon Nuclear Texas Holdings, to Document Control Desk, U.S. Nuclear Regulatory Commission (Jan. 25, 2011), Enclosure 1 Letter from Marilyn C. Kray, Vice President, Nuclear Project Development, Exelon Nuclear Texas Holdings, to Kate Zultner, Coastal Resources Division, Texas General Land Office (Jan. 25, 2011). A copy of this letter is provided as Attachment 2 to this Answer.

447 *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-02-28, 56 NRC 373, 383 (2002).

omission becomes moot due to the later submission of the allegedly omitted information, the proposed contention should be dismissed as moot.[448]

In summary, Exelon has submitted the allegedly omitted information that is the subject of this contention. Therefore, this contention is moot and should be rejected because there is no longer a genuine dispute of material fact or law as required by 10 C.F.R. § 2.309(f)(1)(vi).

IV. TSEP HAS NOT REQUESTED USE OF SUBPART G HEARING PROCEDURES

The regulations in 10 C.F.R. Part 2 establish several hearing tracks. Of particular relevance to ESP proceedings, Subpart L establishes informal hearing procedures and Subpart G establishes formal hearing procedures. The selection of the appropriate hearing track depends upon the nature of the contentions. Specifically, 10 C.F.R. § 2.309(g) states that "[a] request for hearing and/or petition for leave to intervene may, except in a proceeding under 10 CFR 52.103, also address the selection of hearing procedures, taking into account the provisions of § 2.310." In turn, 10 C.F.R. § 2.310(d) presumes use of Subpart L unless the proceeding involves "resolution of issues of material fact relating to the occurrence of a past activity, where the credibility of an eyewitness may reasonably be expected to be at issue, and/or issues of motive or intent of the party or eyewitness material to the resolution of the contested matter."

When it issued these regulations, the Commission stated that given the provision in 10 C.F.R. § 2.310(d), "Subpart L procedures would be used, as a general matter, for hearings on power reactor construction permit and operating license applications under Parts 50 and 52."[449] TSEP has chosen not to address the selection of any hearing procedures in their Petition. Therefore, by default, this proceeding should be conducted under Subparts C and L.

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448 *See, e.g.*, *South Texas Project Nuclear Operating Co.* (South Texas Project, Units 3 & 4), LBP-09-21, 70 NRC 581, 594-96 (2009).

449 Changes to Adjudicatory Process, 69 Fed. Reg. at 2206. An ESP is a "partial construction permit" issued under 10 C.F.R. Part 52. 10 C.F.R. § 52.1.

Moreover, to the extent that TSEP raises factual issues that pertain to the VCS site, none of the proposed contentions, if admitted, would involve "issues relating to the occurrence of a past event material to the issue in controversy, where the credibility of an eyewitness (not an expert witness without first-hand knowledge) may reasonably be expected to be at issue, as well as issues of motive or intent of the party or eyewitness."[450] Therefore, under 10 C.F.R. § 2.310(d), there is no basis for applying the formal hearing procedures in 10 C.F.R. Part 2, Subpart G. Instead, the hearing procedures in 10 C.F.R. Part 2, Subpart C and L should be applied to this proceeding.

V. TSEP MAY NOT PARTICIPATE ON UNCONTESTED ISSUES

In the Petition, TSEP requests "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."[451] However, the Commission has held that an intervenor has no right to participate in the uncontested mandatory hearing for an ESP application.[452] Specifically, in the *Clinton* and *North Anna* ESP proceedings, the Commission explained:

> The 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. Our 2004 revisions to the Subpart L procedural rules permit intervenors (and other parties) to submit written testimony *only* on admitted *contentions* and to submit proposed findings of fact and conclusions of law relevant *only* to those *contentions* that were addressed in the oral hearing. Similarly, our 1989 amendments to the Subpart G procedural rules limited both an intervenor's proposed findings and its appeals to *only* those *contentions* that the intervenor had itself placed in controversy. Our purpose there was "to ensure that the parties and adjudicatory

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450 Changes to Adjudicatory Process, 69 Fed. Reg. at 2196.

451 Petition at 4.

452 *See Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-17, 62 NRC 5, 49-50 (2005).

> tribunals focus their interests and adjudicatory resources on the contested issues as presented and argued by the party with the primary interest in, and concerns over the issues." This same purpose likewise justifies our limiting the scope of intervenor participation in mandatory hearings.[453]

TSEP cites no exception to this Commission mandate and thus has no right to participate in the uncontested portion of this proceeding. Therefore, TSEP's participation in the hearing should be limited to the resolution of any admitted contentions.[454]

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[453] *Id.* (citation omitted).

[454] Regardless of the admission of any contentions in this proceeding, TSEP may of course participate on certain issues outside of the hearing process. *See, e.g.*, 10 C.F.R. §§ 51.28(a) (providing an opportunity to participate in the scoping process), 51.73 (providing an opportunity for public comment on a draft environmental impact statement).

VI. CONCLUSION

For the foregoing reasons, Exelon does not object to the standing of TSEP or to the admission of a consolidated contention related to the impacts of VCS water use on whooping cranes. However, the remaining contentions proposed by TSEP do not satisfy the criteria in 10 C.F.R. § 2.309(f)(1) and should be rejected.

Respectfully submitted,

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

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Counsel for Exelon Nuclear Texas Holdings, LLC

Dated in Washington, D.C.
this 15th day of February 2011

Attachment 1

Exelon Generation

NP-11-0008
February 15, 2011

10 CFR 52, Subpart A

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Subject: Exelon Nuclear Texas Holdings, LLC
Victoria County Station
Early Site Permit Application
Notification of Anticipated Environmental Report Revisions
Docket No. 52-042

References: (1) Exelon Nuclear Texas Holdings, LLC letter to USNRC, Application for Early Site Permit for Victoria County Station, dated March 25, 2010

(2) Exelon Nuclear Texas Holdings, LLC letter to USNRC, Environmental Report Revisions to Incorporate Additional Supporting Information, dated June 24, 2010

Exelon Nuclear Texas Holdings, LLC (Exelon) submitted an application for an early site permit (ESP) in Reference 1 for the Victoria County Station (VCS) site. That submittal consisted of six parts as described in the referenced letter.

Exelon subsequently completed an approximately year-long bio-statistical study evaluating the potential effects of proposed VCS water withdrawals from the Guadalupe River on the ecological health of the San Antonio Bay system. Exelon also reviewed additional information regarding the abnormal mortality reportedly experienced by the Aransas-Wood Buffalo population of whooping cranes during the 2008-2009 overwintering period at the Aransas National Wildlife Refuge. Part 3 of the ESP application, the Environmental Report (ER), was updated (Reference 2) in June 2010 to reflect this additional information.

Exelon has reevaluated the bio-statistical study and determined that the baseline hydrologic scenario in that study inadvertently included nearly full use of existing GBRA certificate of adjudication (CA) 18-5178. Since the bio-statistical study assumed that VCS would withdraw water from the Guadalupe River under CA 18-5178, the baseline hydrologic scenario in the impact evaluation portion of the study essentially accounts for VCS water use. Thus, there is relatively little difference between the baseline hydrologic scenario (i.e., the Current Conditions Scenario) and the “with project” hydrologic scenario (i.e., Comparative Scenario One) that assessed the impact of VCS water use. Accordingly, Exelon has determined that the results of the bio-statistical study should be

reevaluated. The ER will be revised to reflect changes resulting from reevaluation of the study, as applicable.

Exelon expects to transmit ER revisions stemming from reevaluation of the bio-statistical study results by May 13, 2011. Regulatory commitments established in this submittal are identified in Enclosure 1.

If additional information is required, please contact Joshua Trembley at (610) 765-5345.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 15th day of February, 2011.

Respectfully,

Marilyn C. Kray
Vice President, Nuclear Project Development

Enclosures: (1) Summary of Regulatory Commitments

cc: USNRC, Director, Office of New Reactors/NRLPO (w/enclosures)
USNRC, Project Manager, VCS, Division of New Reactor Licensing (w/enclosures)
USNRC, Environmental Project Manager, VCS, Division of New Reactor Licensing (w/enclosures)
USNRC Region IV, Regional Administrator (w/enclosures)

ENCLOSURE 1

SUMMARY OF REGULATORY COMMITMENTS

(Exelon Letter to USNRC No. NP-11-0008, dated February 15, 2011)

The following table identifies commitments made in this document. (Any other actions discussed in the submittal represent intended or planned actions. They are described to the NRC for the NRC's information and are not regulatory commitments.)

COMMITMENT	COMMITTED DATE	COMMITMENT TYPE	
		ONE-TIME ACTION (Yes/No)	Programmatic (Yes/No)
The ER will be revised to reflect changes stemming from reevaluation of the San Antonio Bay Bio-statistical Study results, as applicable.	May 13, 2011	Yes	No

Attachment 2

Exelon Generation

NP-11-0005
January 25, 2011 10 CFR 52, Subpart A

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Subject: Exelon Nuclear Texas Holdings, LLC
Victoria County Station
Early Site Permit Application
Transmittal of Texas Coastal Management Program Consistency Statement and Determination Request
Docket No. 52-042

References: (1) Exelon Nuclear Texas Holdings, LLC letter to USNRC, Application for Early Site Permit for Victoria County Station, dated March 25, 2010

(2) Exelon Nuclear Texas Holdings, LLC letter to Texas General Land Office, Exelon Victoria County Station Site - Request for Coastal Zone Management Act Consistency Review Applicability Determination, dated December 21, 2009

Exelon Nuclear Texas Holdings, LLC (Exelon) submitted an application for an early site permit (ESP) in Reference 1 for the Victoria County Station (VCS) site. That submittal consisted of six parts as described in the referenced letter.

In support of nuclear licensing activities for the VCS site, Exelon met with the Texas General Land Office (GLO) on April 15, 2008. Recognizing that an ESP (if issued) would not authorize any activities within the jurisdiction of the NRC, Exelon subsequently requested (in Reference 2) a determination from the GLO regarding the applicability of the Coastal Management Program (CMP) consistency determination requirements at 31 TAC 506 to the NRC action of issuing an ESP. The letter in Reference 2 was provided to the NRC in Appendix A of the ESP application (ESPA) Environmental Report (ER).

Although the GLO did not formally respond to Exelon's applicability request, follow-on discussions with GLO staff indicated that it is unclear as to whether a consistency determination is required in conjunction with the issuance of an ESP. However, given that an ESP constitutes a Nuclear Regulatory Commission License under Section 103 of the Atomic Energy Act of 1954 and is therefore a "listed" federal action under 31 TAC 506.12, GLO staff recommended in December 2010 that Exelon submit a consistency determination request for the proposed VCS project.

Accordingly, Exelon submitted its signed affirmation to the Texas GLO that the VCS project would comply with the goals and policies of the Texas CMP and requested a CMP consistency determination for the VCS project. Exelon is providing a copy of our GLO submittal to the NRC as Enclosure 1, consistent with the requirements at 15 CFR 930.57(a).

ER Appendix A will be revised to include the Texas CMP consistency statement and determination request letter provided in Enclosure 1. This ER revision will be included in the next periodic ESPA update.

Regulatory commitments established in this submittal are identified in Enclosure 2. If additional information is required, please contact Joshua Trembley at (610) 765-5345.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 25th day of January, 2011.

Respectfully,

Marilyn C. Kray
Vice President, Nuclear Project Development

Enclosures:
(1) Exelon Letter to the Texas General Land Office, Exelon Victoria County Station Site – Statement of Coastal Management Program Consistency and Request for Consistency Determination, dated January 25, 2011.

(2) Summary of Regulatory Commitments

cc:
USNRC, Director, Office of New Reactors/NRLPO (w/enclosures except Enclosure 1, Attachment 4)
USNRC, Project Manager, VCS, Division of New Reactor Licensing (w/enclosures except Enclosure 1, Attachment 4)
USNRC, Environmental Project Manager, VCS, Division of New Reactor Licensing (w/enclosures except Enclosure 1, Attachment 4)
USNRC Region IV, Regional Administrator (w/enclosures except Enclosure 1, Attachment 4)

ENCLOSURE 1

Exelon Letter to the Texas General Land Office, Exelon Victoria County Station Site – Statement of Coastal Management Program Consistency and Request for Consistency Determination, dated January 25, 2011

Exelon Generation

NP-11-0002

January 25, 2011

Ms. Kate Zultner
Texas General Land Office
Coastal Resources Division
1700 North Congress Avenue, Room 620
Austin, Texas 78701-1495

Subject: Exelon Victoria County Station Site – Statement of Coastal Management Program Consistency and Request for Consistency Determination

References: (1) Exelon Nuclear Texas Holdings, LLC letter to USNRC, Application for Early Site Permit for Victoria County Station, dated March 25, 2010

(2) Exelon Nuclear Texas Holdings, LLC letter to Texas General Land Office, Exelon Victoria County Station Site - Request for Coastal Zone Management Act Consistency Review Applicability Determination, dated December 21, 2009

Dear Ms. Zultner:

Exelon Generation Company, LLC (Exelon), met with the General Land Office (GLO) on April 15, 2008, regarding nuclear licensing activities associated with a site in Victoria County. On September 2, 2008, Exelon submitted a Combined License (COL) application to the U.S. Nuclear Regulatory Commission (NRC) seeking authorization to construct and operate a nuclear power plant at the referenced site (known as the Victoria County Station (VCS) site). Exelon subsequently withdrew the COL and informed the NRC of our intent to seek an Early Site Permit (ESP) in lieu of a COL, citing the need to take a longer term approach to new nuclear development.

Exelon submitted the ESP application to the NRC on March 25, 2010. The site referenced in the application, the VCS site, is located approximately 13 miles south of the City of Victoria in Victoria County. If the ESP application were to be approved, the NRC would be concluding that the VCS site satisfies its criteria for certain site safety considerations, environmental impacts, and emergency planning. As described in 10 CFR 52, Subpart A, the ESP could later be used to support an application for a construction permit or COL to construct and operate such a plant. An ESP is valid for 10 to 20 years from the date of issuance and can be renewed for an additional 10 to 20 years.

Recognizing that an ESP (if issued) would not authorize any activities within the jurisdiction of the NRC, Exelon requested (in Reference 2) a determination from the GLO regarding the applicability of the Coastal Management Program (CMP)

consistency determination requirements at 31 TAC 506 to the NRC action of issuing an ESP. Subsequent discussions with GLO staff indicated that it is unclear as to whether a consistency determination is required in conjunction with the issuance of an ESP. However, given that an ESP constitutes a Nuclear Regulatory Commission License under Section 103 of the Atomic Energy Act of 1954 and is therefore a "listed" federal action under 31 TAC 506.12, GLO staff recommended that Exelon submit a consistency determination request for the proposed VCS project.

The purpose of this correspondence is to provide Exelon's signed affirmation that the VCS project would comply with the goals and policies of the Texas CMP and request a CMP consistency determination from the GLO. Consistent with 31 TAC 506.30(b)(1), Exelon is providing the ESP application (Reference 1) as the basis for the consistency determination request. Enclosure 1 provides the ESP application (Enclosure 1, Attachment 4) and additional supporting information, as follows:

Enclosure 1: Completed and signed form titled "Consistency with the Texas Coastal Management Program", including the following attachments:

Attachment 1 – Supporting Notes

Attachment 2 – Project Description

Attachment 3 – Annotated Figure, Bloomington SW, CMP Atlas (Middle Texas Coast)

Attachment 4 – Two compact discs containing four of the six parts of the VCS ESP application submitted to the NRC on March 25, 2010. Disc 1 contains Part 1 – Administrative Information and Part 2 – Site Safety Analysis Report (SSAR). Disc 2 contains Part 3 – Environmental Report (ER) and Part 4 – Emergency Plan (NRC public version). The VCS ESP application is being provided consistent with the requirements at 31 TAC 506.30(b)(1).

Two portions of the VCS ESP application are not being transmitted as part of this request. Part 5, Enclosures, contains field logs from the site subsurface geotechnical investigation. Although Part 5 is not included, the information therein is publicly available on the NRC website (http://www.nrc.gov/reactors/new-reactors/esp/victoria.html) or upon request. Part 6 – Proprietary Information, has also been withheld, consistent with the public version of the application available on the NRC website.

The enclosed version of the application does not contain sensitive information with respect to nuclear safety or security.

Attachment 5 – ESP application ER Table of Contents

Attachment 6 – Explanation of Consistency with Enforceable Policies at 31 TAC 501

Additional Authorizations Applicable to the Texas CMP

The NRC regulations at 10 CFR 50.10(c) define the requirements for a person wishing to conduct nuclear construction:

> *No person may begin the construction of a production or utilization facility on a site on which the facility is to be operated until that person has been issued either a construction permit under this part, a combined license under part 52 of this chapter, an early site permit authorizing the activities under paragraph (d) of this section, or a limited work authorization under paragraph (d) of this section.*

At this time, Exelon does not intend to seek authorization (i.e., via a limited work authorization or ESP authorizing the activities described at 10 CFR 50.10(d), as referenced in the above citation) to initiate nuclear construction activities at the VCS site prior to the issuance of a COL or construction permit (CP). Accordingly, if an ESP is approved for the VCS site, a CP or COL would later be required from the NRC prior to the initiation of nuclear construction activities. In addition to the CP or COL, numerous Federal, Texas, and local permits could be required to support the construction and operation of VCS[1], as summarized in Tables 1.2-1 and 1.2-2 of the ESP application ER (see Enclosure 1, Attachment 4).

A CP or COL, like an ESP, would constitute an NRC license issued under Section 103 of the Atomic Energy Act. As a result, it is apparent that a second NRC action listed at 31 TAC 506.12 would be required to authorize the construction of nuclear facilities at VCS. Additionally, several of the non-NRC authorizations anticipated to be required to support facility construction and / or operation are included in either the list of federal actions requiring CMP consistency determinations located at 31 TAC 506.12 (e.g., U.S. Army Corps of Engineers (USACE) dredge / fill permit) or the list of applicable state agency actions found at 31 TAC 505.11 (e.g., Texas Commission on Environmental Quality (TCEQ) wastewater discharge permit).

Given the likely redundancy in the need for CMP consistency determinations, and consistent with the regulations at 31 TAC 505.11(e)(1) and (2) and 506.30(c), Exelon requests that the GLO consolidate its CMP consistency determination reviews for the applicable permits / authorizations associated with the VCS project to the extent practicable. Since Exelon is not currently seeking Federal, Texas, or local authorizations beyond the ESP, Exelon believes that it would be appropriate to

[1] Note that the reactor technology selected for the site, the regulations in place at the time of application, and other factors could affect which of the authorizations summarized in the referenced tables are ultimately required in conjunction with the VCS project.

generally recognize the need for additional authorizations, as well the likely requirement for one or more additional Texas CMP consistency determinations, in any statement of CMP consistency for the currently proposed federal action (i.e., NRC issuance of an ESP for the VCS site).

It should be noted that the NRC does not have authority to regulate all of the activities that could be required to develop the VCS site. The NRC regulations at 10 CFR 50.10(a)(2) identify activities (informally known as "pre-construction" activities) that are not related to nuclear safety and, therefore, fall beyond the scope of NRC jurisdiction. Examples of "preconstruction" activities include site grading, monitoring well installation, and the erection of support structures. Such activities may be undertaken by an applicant prior to issuance of an NRC license or permit, subject to compliance with other applicable laws and regulations. Should Exelon choose to initiate pre-construction activities at the VCS site prior to pursuing an NRC CP or COL, we would coordinate with the GLO to determine the need for an additional or updated consistency determination in conjunction with the permits required for the applicable activities.

Please address correspondence regarding this matter to:

Exelon Generation Company, LLC
Attn: Mr. Joshua Trembley
200 Exelon Way, KSA1-E
Kennett Square, PA 19348

If you have questions or require additional information, please contact Mr. Joshua Trembley at 610-765-5345.

Note that this correspondence is concurrently being transmitted to the NRC under a separate cover letter. The NRC's Environmental Project Manager for VCS is Tomeka Terry. Ms. Terry can be reached at 301-415-1488.

Respectfully,

Marilyn Kray

Marilyn Kray
Vice-President, Nuclear Project Development

Enclosures: (1) Completed and signed form titled "Consistency with the Texas Coastal Management Program", with six attachments

cc: Mr. Tony Williams, Texas General Land Office (w/enclosures)

Enclosure 1

Completed and signed form titled
“Consistency with the Texas Coastal Management Program”

THE APPLICANT SHOULD SIGN THIS STATEMENT AND RETURN WITH APPLICATION PACKET TO:

COASTAL PERMIT SERVICE CENTER
TAMU-GALVESTON
P.O. BOX 1675
GALVESTON, TX 77553-1675
FAX: (409) 741-4010

FOR USACE USE ONLY:

PERMIT #:_____

PROJECT MGR._____

APPLICANT'S NAME AND ADDRESS (PLEASE PRINT):

Exelon Generation Company, LLC
c/o Mr. Joshua Trembley
200 Exelon Way, KSA1-E
Kennett Square, PA 19348

The Texas Coastal Management Program (CMP) coordinates state, local, and federal programs for the management of Texas coastal resources. Activities within the CMP boundary must comply with the enforceable policies of the Texas Coastal Management Program and be conducted in a manner consistent with those policies. The boundary definition is contained in the CMP rules (31 TAC §503.1).

- To determine whether your proposed activity lies within the CMP boundary, please find the project location using the following link: http://www.glo.state.tx.us/coastal/maps/cmp/index.html.

PROJECT DESCRIPTION:

Is the proposed activity at a waterfront site or within coastal, tidal, or navigable waters? √ **Yes**

(Note that the NRC's issuance of an Early Site Permit (ESP) would not authorize nuclear construction activities at the VCS Site. See Attachment 1, Note 1 for additional detail)

If Yes, name affected coastal, tidal, or navigable waters: **Guadalupe River**

Is the proposed activity water dependent? (31 TAC §501.3(a)(14)) ☐ Yes √ **No**

http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=31&pt=16&ch=501&rl=3

If yes, please describe how project is water dependent: **NA**

Please briefly describe the project and all possible effects on coastal resources:

Please see Attachment 2.

Indicate area of impact:

The Nuclear Regulatory Commission's (NRC) decision on whether to grant an Early Site Permit (ESP) for the proposed Victoria County Station (VCS) site constitutes an NRC License, as identified at TAC 506.12(a)(2)(F). Although the ESP, if issued, could later be used to support an application for a construction permit or Combined License (COL) to construct and operate one or more nuclear facilities, the ESP alone would not authorize nuclear construction activities at the VCS site or within the CMP boundary.

Attachment 1, Notes 2 and 3, provide estimates of the potential land disturbances within the CMP boundary that could be realized if Exelon were to pursue the project in the future, after obtaining the applicable Federal, Texas, and local authorizations. Note that several of the potentially needed permits would require CMP consistency determinations.

ADDITIONAL PERMITS/AUTHORIZATIONS REQUIRED:

☐ Coastal Easement – Date application submitted _____
☐ Coastal Lease – Date application submitted _____
√ Stormwater Permit – Date application submitted See Attachment 1, Note 4
√ Water Quality Certification – Date application submitted: See Attachment 1, Note 5
Other state/federal/local permits/authorizations required: ER Section 1.2 discusses the Federal, Texas, and local authorizations that are anticipated to be required to support construction and operation of the proposed VCS. See Attachment 1, Note 4.

The proposed activity must not adversely affect coastal natural resource areas (CNRAs).

PLEASE CHECK ALL COASTAL NATURAL RESOURCE AREAS THAT MAY BE AFFECTED:

☐ Coastal Barriers ☐ Coastal Historic Areas ☐ Coastal Preserves ☐ Coastal Shore Areas
☐ Coastal Wetlands ☐ Critical Dune Areas ☐ Critical Erosion Areas ☐ Gulf Beaches
☐ Hard Substrate Reefs ☐ Oyster Reefs ☐ Special Hazard Areas
☐ Submerged Lands ☐ Submerged Aquatic Vegetation
☐ Tidal Sand Or Mud Flats ☐ Waters of Gulf of Mexico
√ Waters Under Tidal Influence. **(See Attachment 1, Note 6)**

The applicant affirms that the proposed activity, its associated facilities, and their probable effects comply with the relevant enforceable policies of the CMP, and that the proposed activity will be conducted in a manner consistent with such policies.

PLEASE CHECK ALL APPLICABLE ENFORCEABLE POLICIES:

AFFECTED	ENFORCEABLE POLICY
x	§501.15 Policy for Major Actions
x	§501.16 Policies for Construction of Electric Generating and Transmission Facilities
	§501.17 Policies for Construction, Operation, and Maintenance of Oil and Gas Exploration and Production Facilities
	§501.18 Policies for Discharges of Wastewater and Disposal of Waste from Oil and Gas Exploration and Production Activities
	§501.19 Policies for Construction and Operation of Solid Waste Treatment, Storage, and Disposal Facilities
	§501.20 Policies for Prevention, Response and Remediation of Oil Spills
	§501.21 Policies for Discharge of Municipal and Industrial Wastewater to Coastal Waters
x	§501.22 Policies for Nonpoint Source (NPS) Water Pollution
	§501.23 Policies for Development in Critical Areas
x	§501.24 Policies for Construction of Waterfront Facilities and Other Structures on Submerged Lands
x	§501.25 Policies for Dredging and Dredged Material Disposal and Placement
	§501.26 Policies for Construction in the Beach/Dune System
	§501.27 Policies for Development in Coastal Hazard Areas
	§501.28 Policies for Development Within Coastal Barrier Resource System Units and Otherwise Protected Areas on Coastal Barriers
	§501.29 Policies for Development in State Parks, Wildlife Management Areas or Preserves
	§501.30 Policies for Alteration of Coastal Historic Areas
	§501.31 Policies for Transportation Projects
	§501.32 Policies for Emission of Air Pollutants
x	§501.33 Policies for Appropriations of Water
	§501.34 Policies for Levee and Flood Control Projects

Please explain how the proposed project is consistent with the applicable enforceable policies identified above. Please use additional sheets if necessary. *For example: If you are constructing a pier with a covered boathouse, then the applicable enforceable policy is: §501.24 Policies for Construction of Waterfront Facilities and Other Structures on Submerged Lands. The project is consistent because it will not interfere with navigation, natural coastal processes, and avoids/minimizes shading.*

Please see Attachment 6.

BY SIGNING THIS STATEMENT, THE APPLICANT IS STATING THAT THE PROPOSED ACTIVITY COMPLIES WITH THE TEXAS COASTAL MANAGEMENT PROGRAM AND WILL BE CONDUCTED IN A MANNER CONSISTENT WITH SUCH PROGRAM

DATE: 1/25/11 **SIGNATURE:** Marilyn Kraus

Any questions regarding the Texas Coastal Management Program should be referred to:

Jesse Solis
Permitting Assistance Coordinator
6300 Ocean Drive
TAMU-CC Natural Resource Center Ste. 2800
Corpus Christi, Texas 78412-5599
Phone: (361) 825-3050
Fax: (361) 825-3465
Toll Free: 1-866-894-3578
permitting.assistance@glo.state.tx.us

Kate Zultner
Texas General Land Office
Coastal Resources Division
1700 North Congress Avenue, Room 620
Austin, Texas 78701-1495
Phone: (512) 936-9581
Fax: (512) 463-5233
Toll Free: 1-800-998-4GLO
kate.zultner@glo.state.tx.us

Enclosure 1, Attachment 1

Supporting Notes

ATTACHMENT 1

Supporting Notes

1. Note 1: The Nuclear Regulatory Commission's (NRC) decision on whether to grant an Early Site Permit (ESP) for the proposed Victoria County Station (VCS) site constitutes an NRC License, as identified at 31 TAC 506.12(a)(2)(F). By issuing an ESP for the VCS site, the NRC would be concluding that the VCS site satisfies its criteria for certain site safety considerations, environmental impacts, and emergency planning. The ESP could later be used to support an application for a construction permit (CP) or Combined License (COL) to construct and operate such a plant. Note that an ESP alone would not authorize nuclear construction activities at the VCS site or within the CMP boundary.

   The proposed Victoria County Station (VCS) site is located outside of the Coastal Management Program (CMP) boundary. However, the facility's raw water makeup (RWMU) system intake canal and pumphouse, as well as a portion of the associated pipeline that would convey water to a cooling basin on the VCS site, would be located adjacent to the Guadalupe River within the coastal zone (see the figure provided as Attachment 3). Three potential routes for the RWMU system conveyance pipeline are evaluated in Environmental Report (ER) Subsection 2.2.2.4 and presented in ER Figure 2.2-5.

   Additionally, as discussed in ER Section 3.7, several new transmission lines would be required in conjunction with the proposed VCS. The regional transmission service provider (TSP) would be expected to plan, permit, construct, and operate the new transmission lines, a portion of which are anticipated to be located within the coastal zone (see the ER Figure 3.7-1 for a general depiction of the required routes). As discussed in greater detail in the ER and in Note 3 below, the final routes of the transmission lines would likely not be known until the Combined License (COL) stage of the project. The TSP's obligation to obtain a certificate of convenience and necessity from the Public Utility Commission of Texas (PUCT) prior to constructing the new transmission lines is described in ER Subsection 2.2.2.1.

2. Note 2: The NRC's decision on whether to grant an ESP for the proposed VCS site constitutes an NRC License, as identified at 31 TAC 506.12(a)(2)(F). By issuing an ESP for the VCS site, the NRC would be concluding that the VCS site satisfies its criteria for certain site safety considerations, environmental impacts, and emergency planning. The ESP could later be used to support an application for a CP or COL to construct and operate such a plant. Note that an ESP alone would not authorize nuclear construction activities at the VCS site or within the CMP boundary.

The total disturbed area associated with construction of the proposed VCS is presented in Subsection 4.1.1.1. The disturbed area resulting from construction of the makeup water conveyance pipeline is discussed in ER Subsections 2.2.2.4 and 4.1.2.4.

The potential land disturbance within the CMP boundary that could be realized if Exelon were to pursue construction of VCS in the future (after obtaining the applicable Federal, Texas, and local authorizations) was not summarized in the ESP application ER. Accordingly, the following general estimate of potential impacts associated with constructing the proposed VCS RWMU system infrastructure is provided in support of the CMP consistency determination request:

> Temporarily disturbed area within the CMP boundary (intake canal, fish return sluiceway, intake basin, pumphouse): approximately 39 acres (ER Subsection 2.2.2.5). The permanent CMP disturbance associated with the RWMU system infrastructure would be less than or equal to 39 acres.
>
> Temporary disturbance associated with the installation of the raw water conveyance pipeline within the CMP boundary: approximately 14.5 acres. The permanent pipeline easement within the CMP boundary would total approximately 6 acres.
>
> Thus, the total temporarily disturbed area within the CMP boundary associated with RWMU system infrastructure construction is estimated to be approximately 53.5 acres. A portion of the disturbance associated with pipeline construction would be temporary, resulting in a total permanent disturbance of less than or equal to 45 acres.
>
> Additionally, there would be linear bed and bank disturbance to the western shore of the Guadalupe River, immediately upstream of the existing Guadalupe Blanco River Authority (GBRA) saltwater barrier. The temporary and permanent disturbances are estimated to be approximately 400 and 350 linear feet, respectively.

3. Note 3: The NRC's decision on whether to grant an ESP for the proposed VCS site constitutes an NRC License, as identified at 31 TAC 506.12(a)(2)(F). By issuing an ESP for the VCS site, the NRC would be concluding that the VCS site satisfies its criteria for certain site safety considerations, environmental impacts, and emergency planning. The ESP could later be used to support an application for a CP or COL to construct and operate such a plant. Note that an ESP alone would not authorize nuclear construction activities at the VCS site or within the CMP boundary.

The total disturbed area associated with construction of the proposed VCS is presented in ER Subsection 4.1.1.1. Transmission infrastructure anticipated to be required in conjunction with VCS is described in ER Section 3.7. Although the final locations of the proposed transmission lines will likely not be determined by the TSP until the COL stage of the project, Exelon used a macro-corridor methodology that considered land use and sensitive areas to identify a preferable corridor for transmission line construction (ER Subsection 2.2.2.1). Land uses and acreages associated with the identified 2-3 mile wide macro-corridor and a 200-ft wide representative corridor are discussed ER Subsections 2.2.2.4 and 4.1.2.4 and summarized in ER Table 2.2-2.

The potential land disturbance within the CMP boundary that could be realized if Exelon were to pursue construction of VCS in the future (after obtaining the applicable Federal, Texas, and local authorizations) was not summarized in the ESP application ER. Accordingly, the following paragraphs provide a general estimate of potential impacts associated with constructing the proposed transmission system infrastructure.

ER Figure 3.7-1 provides a general depiction of the new transmission infrastructure that is anticipated to be required to support VCS. ER Figure 2.2-3 presents the aforementioned 2-3 mile wide macro-corridor identified by Exelon as preferable for transmission line construction. From inspection of Figure 2.2-3 and the Texas Coastal Management Program Atlas (Middle Texas Coast), it can be seen that a portion of the identified macro-corridor overlaps the CMP boundary. Conservatively assuming that the final transmission line route would fall within the portion of the macro-corridor overlapping the CMP boundary, the following estimates are made for disturbed area within coastal zone:

VCS Site “WHY” Substation to Existing Blessing Substation / “WHY” Substation to Existing Hillje Substation: Approximately 1,820 acres over roughly 51 miles (assumes a 250-ft wide corridor shared by the referenced transmission lines);

VCS Site “WHY” Substation to Existing Whitepoint Substation: Approximately 75 acres over about 3 miles (assumes a 200-ft wide corridor).

Thus, the total disturbed area within the CMP boundary associated with transmission line construction is conservatively estimated to be approximately 1,900 acres. Recognizing that the land uses for the corridors would likely consist primarily of pasture and cropland (ER Table 2.2-2), which would be permanently affected mainly within the footprint of the transmission tower foundations, it is anticipated that

the permanent land disturbance associated with new transmission line construction would be considerably less than 1,900 acres. Additionally, as discussed earlier under Note 3, it is possible that the all or a portion of the transmission lines assumed to be constructed in the coastal zone to be conservative herein would be constructed beyond the CMP boundary.

4. Note 4: The NRC's decision on whether to grant an ESP for the proposed VCS site constitutes an NRC License, as identified at 31 TAC 506.12(a)(2)(F). By issuing an ESP for the VCS site, the NRC would be concluding that the VCS site satisfies its criteria for certain site safety considerations, environmental impacts, and emergency planning. The ESP could later be used to support an application for a CP or COL to construct and operate such a plant. Note that an ESP alone would not authorize nuclear construction activities at the VCS site or within the CMP boundary.

   Exelon has not made a decision to initiate construction activities at the VCS site, and is therefore not seeking Federal, Texas, or local authorizations beyond the ESP at this time. As indicated in ER Section 1.2, Table 1.2-1, Note "a", authorizations would be sought at the appropriate time to support the applicable work, which might not be until Exelon pursues a COL from the NRC to construct and operate nuclear facilities at the VCS site.

5. Note 5: The NRC's decision on whether to grant an ESP for the proposed VCS site constitutes an NRC License, as identified at 31 TAC 506.12(a)(2)(F). By issuing an ESP for the VCS site, the NRC would be concluding that the VCS site satisfies its criteria for certain site safety considerations, environmental impacts, and emergency planning. The ESP could later be used to support an application for a CP or COL to construct and operate such a plant. Note that an ESP alone would not authorize nuclear construction activities at the VCS site or within the CMP boundary.

   Exelon submitted an application to the TCEQ for a Clean Water Act (CWA) Section 401 Water Quality Certification on September 9, 2010. The TCEQ responded via letter dated October 20, 2010, waiving their authority under Title 30, Texas Administrative Code (TAC), Chapter 279.2(b)(4) to act on Exelon's request for a water quality certification in conjunction with the NRC's proposed federal action (i.e., the decision to grant Exelon an ESP for the VCS site).

6. Note 6: The NRC's decision on whether to grant an ESP for the proposed VCS site constitutes an NRC License, as identified at 31 TAC 506.12(a)(2)(F). By issuing an ESP for the VCS site, the NRC would be concluding that the VCS site satisfies its criteria for certain site safety considerations, environmental impacts, and emergency planning. The ESP could later be

used to support an application for a CP or COL to construct and operate such a plant. Note that an ESP alone would not authorize nuclear construction activities at the VCS site or within the CMP boundary.

As discussed in Note 1, the facility's RWMU system intake canal and pumphouse, as well as a portion of the associated pipeline that would convey water to the cooling basin on the VCS site, would be located adjacent to the Guadalupe River within the coastal zone (see the figure provided as Attachment 3). Although the Guadalupe River is subject to tidal influence, note that the proposed VCS intake canal would be located upstream of the Guadalupe Blanco River Authority (GBRA) Guadalupe River saltwater barrier, which affects the extent of tidal influence when inflated.

Enclosure 1, Attachment 2

Project Description

ATTACHMENT 2

Project Description

Exelon submitted an Early Site Permit (ESP) application to the U.S. Nuclear Regulatory Commission (NRC) on March 25, 2010. The site referenced in the application, the Victoria County Station (VCS) site, is located approximately 13 miles south of the City of Victoria in Victoria County. If the ESP application were to be approved, the NRC would be concluding that the VCS site satisfies its criteria for certain site safety considerations, environmental impacts, and emergency planning. As described in 10 CFR 52, Subpart A, the ESP could later be used to support an application for a construction permit (CP) or Combined License (COL) to construct and operate such a plant. An ESP is valid for 10 to 20 years from the date of issuance and can be renewed for up to an additional 20 years. Note that an ESP alone does not authorize the commencement of nuclear construction activities at the site.

The proposed VCS site is located outside of the CMP boundary. However, the facility's makeup water intake canal and pumphouse, as well as a portion of the associated conveyance pipeline, would be located within the coastal zone, as indicated in Attachment 3. Additionally, several new transmission lines would be required in conjunction with the proposed VCS. The regional transmission service provider (TSP) would be expected to plan, permit, construct, and operate the new transmission lines, a portion of which could be located within the coastal zone (see Attachment 1, Note 1). The final routes of the proposed new transmission lines would likely not be determined by the TSP until the COL stage of the project (see Attachment 1, Note 3).

In accordance with 31 TAC 506.30(b)(1), the ESP application (ESPA) submitted to the NRC is being provided (Enclosure 1, Attachment 4) in support of Exelon's CMP consistency determination request for the proposed VCS project. Part 3 of the VCS ESP application, the Environmental Report (ER), is of primary interest to the CMP consistency determination request. ER Chapter 1 provides a brief description of the proposed VCS project and the likely authorizations required to construct and operate the plant, satisfying the requirement at 31 TAC 506.30(b)(2). The remainder of the document describes the existing environment and the proposed project in detail and evaluates the potential impacts associated with the construction and operation of VCS, taking into account available alternatives and measures to avoid and / or mitigate reasonably foreseeable impacts. Attachment 5, the ER Table of Contents, has been included to facilitate the GLO's review. Attachment 6 directs the reviewer to the ER evaluations applicable to the CMP enforceable policies and demonstrates consistency with the those policies (31 TAC 506.30(b)(3) and (4)).

<u>Authorizations Applicable to the Texas CMP</u>

The Nuclear Regulatory Commission's (NRC) decision on whether to grant an Early Site Permit (ESP) for the proposed VCS site constitutes an NRC License, as identified at 31 TAC 506.12(a)(2)(F). Accordingly, the current application seeks a consistency

determination in association with NRC action of issuing the ESP; however, an ESP alone would not authorize nuclear construction activities at the VCS site or within the CMP boundary.

As noted above, the ESP (if issued), could later be used to support an application for a CP or COL to construct and operate one or more nuclear facilities at the VCS site. A CP or COL, like an ESP, would constitute an NRC license issued under Section 103 of the Atomic Energy Act. As a result, it is apparent that a second NRC action listed at 31 TAC 506.12 would be required to authorize the construction of nuclear facilities at VCS, necessitating additional coordination with the GLO prior to commencing the applicable activities.

In addition to a future NRC approval, several of the non-NRC authorizations anticipated to be required to support facility construction and / or operation are included in either the list of federal actions requiring CMP consistency determinations located at 31 TAC 506.12 (e.g., U.S. Army Corps of Engineers (USACE) dredge / fill permit) or the list of applicable state agency actions found at 31 TAC 505.11 (e.g., Texas Commission on Environmental Quality (TCEQ) wastewater discharge permit). Note that Exelon is not currently seeking Federal, Texas, or local authorizations beyond the ESP.

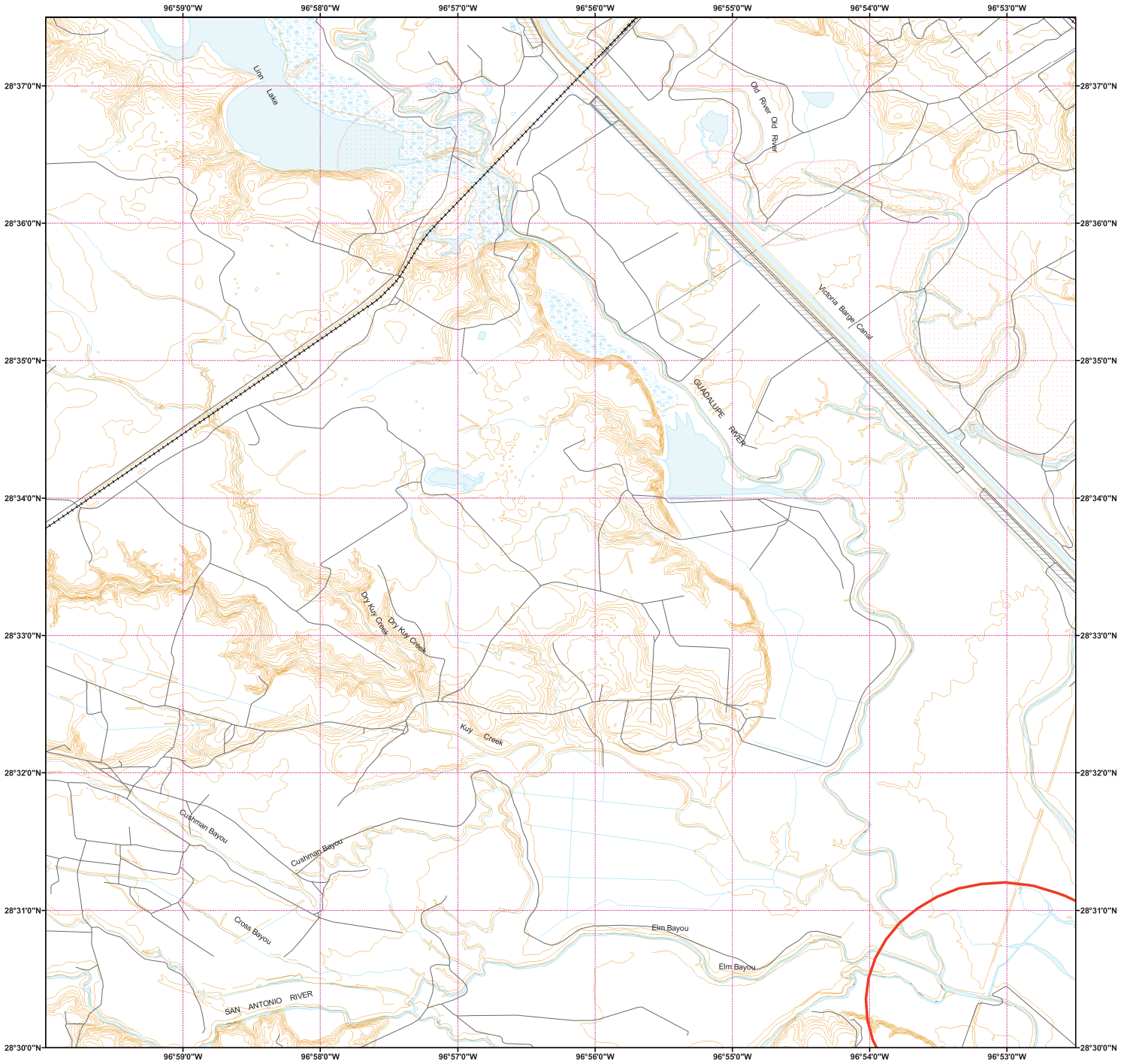
Although a CP or COL would be required to initiate nuclear construction activities, the NRC does not have authority to regulate all of the activities that could be required to develop the VCS site. The NRC regulations at 10 CFR 50.10(a)(2) identify activities (informally known as "preconstruction" activities) that are not related to nuclear safety and, therefore, fall beyond the scope of NRC jurisdiction. Examples of "pre-construction" activities include site grading, monitoring well installation, and the erection of support structures. While such activities may be undertaken by an applicant prior to issuance of an NRC license or permit, they are subject to compliance with other applicable laws and regulations. Thus, if Exelon were to choose to initiate "preconstruction" activities, Exelon would be required to obtain Federal, Texas, and / or local authorizations for applicable "preconstruction" activities. As discussed above, one or more of the non-NRC authorizations could require additional coordination with the GLO.

Enclosure 1, Attachment 3

Annotated Figure
Bloomington SW, CMP Atlas (Middle Texas Coast)

BLOOMINGTON SW

CMP Atlas



	BLOOMINGTON	PLACEDO	KAMEY
	BLOOMINGTON SW	GREEN LAKE	
	TIVOLI	AUSTWELL	

Compiled by GIS Lab
Financial & Technical Services
Coastal Resources Program
Texas General Land Office

Jul 09, 2003

The Texas General Land Office makes no representation or warranties regarding the accuracies of completeness of the information depicted on this map or the data from which it was produced. This map is NOT suitable for navigational purposes and does not purport to depict or establish boundaries between public and private land.

0 1,400 2,800 5,600 Feet
0 0.25 0.5 1 Miles
0 0.25 0.5 1 Nautical Miles
0 0.5 1 2 Kilometers

- Inundated Area
- Wetland
- Mangrove
- Flat
- Water
- Beach
- Dune
- Intermittent Water Body
- Seagrass
- CMP Project (Construction Only)
- CEPRA Project
- Heliport
- Boat Ramp
- Marina
- Dredged Material Placement Area
- Audubon Sanctuary
- Wildlife Refuge
- State Park
- County Park
- National Park
- Bird Rookery
- Oyster Reef
- Oyster Reef
- Oyster Lease
- Coastal Management Program Boundary
- Bathymetry
- Railroad
- Hypsography
- Ship Channel / Intercoastal Waterway
- Shipping Fairway

Enclosure 1, Attachment 4

Parts 1 – 4 of the publicly available version of the
VCS ESP application, as submitted to the NRC on March 25, 2010:

Disc 1

PART 1 – Administrative Information
PART 2 – Site Safety Analysis Report

Disc 2

PART 3 – Environmental Report
PART 4 – Emergency Plan (NRC Public Version)

Enclosure 1, Attachment 5

Table of Contents

ESP Application Part 3 – Environmental Report

(See Enclosure 1, Attachment 4, Disc 2, for the full ESP Application ER)

ESP ER Overall Table of Contents

Section	Title	Page
Chapter 1	**Introduction**	**1.1-1**
1.0	Introduction	1.1-1
1.1	The Proposed Project	1.1-1
1.1.1	The Applicant and Owner	1.1-1
1.1.2	Site Location	1.1-1
1.1.3	Reactor Information	1.1-2
1.1.4	Cooling System Information	1.1-2
1.1.5	Transmission System Information	1.1-3
1.1.6	Pre-application Public Involvement	1.1-3
1.1.7	Proposed Dates for Major Activities	1.1-4
1.1.8	References	1.1-4
1.2	Status of Reviews, Approvals, and Consultations	1.2-1
Chapter 2	**Environmental Description**	**2.1-1**
2.1	Site Location	2.1-1
2.1.1	References	2.1-3
2.2	Land Use and Transmission	2.2-1
2.2.1	The Site and Vicinity	2.2-1
2.2.1.1	The Site	2.2-1
2.2.1.2	The Vicinity	2.2-2
2.2.2	Transmission Corridors and Offsite Areas	2.2-3
2.2.2.1	Proposed Transmission Corridors	2.2-3
2.2.2.2	Cooling Basin Blowdown Line and VCND Transportation Corridor	2.2-5
2.2.2.3	Rail Spur Connection	2.2-6
2.2.2.4	Raw Water Makeup System and Intake Structure	2.2-6
2.2.2.5	Emergency Operations Facility	2.2-7
2.2.3	The Region	2.2-7
2.2.3.1	Victoria County	2.2-8
2.2.3.2	Calhoun County	2.2-9
2.2.3.3	DeWitt County	2.2-9
2.2.3.4	Goliad County	2.2-10
2.2.3.5	Jackson County	2.2-11
2.2.3.6	Refugio County	2.2-12
2.2.4	References	2.2-13
2.3	Water	2.3-1
2.3.1	Hydrology	2.3-1
2.3.1.1	Surface Water	2.3-2
2.3.1.2	Groundwater	2.3-40
2.3.2	Water Use	2.3-121
2.3.2.1	Water Resources Planning and Appropriation	2.3-121
2.3.2.2	Groundwater Use	2.3-123
2.3.2.3	Surface Water Use	2.3-127
2.3.2.4	References	2.3-135
2.3.3	Water Quality	2.3-160

ESP ER Overall Table of Contents (Cont.)

Section	Title	Page
2.3.3.1	Groundwater	2.3-160
2.3.3.2	Surface Water	2.3-162
2.3.3.3	References	2.3-167
2.4	Ecology	2.4-1
2.4.1	Terrestrial EcologyR	2.4-1
2.4.1.1	Regional Landscape	2.4-1
2.4.1.2	General Site Description	2.4-2
2.4.1.3	Offsite Areas	2.4-4
2.4.1.4	Terrestrial Wildlife	2.4-5
2.4.1.5	Threatened and Endangered Species	2.4-8
2.4.1.6	Other Important Species and Habitats	2.4-13
2.4.1.7	Transmission Line Corridor Habitats and Communities	2.4-15
2.4.2	Aquatic Ecology	2.4-16
2.4.2.1	Aquatic Communities	2.4-16
2.4.2.2	Important Aquatic Resources	2.4-31
2.4.2.3	Nuisance Species	2.4-36
2.4.2.4	Preexisting Environmental Stresses	2.4-37
2.4.2.5	References	2.4-38
2.5	Socioeconomics	2.5-1
2.5.1	Demography	2.5-1
2.5.1.1	Population Data by Sector	2.5-1
2.5.1.2	Population Data by Political Jurisdiction	2.5-3
2.5.1.3	Transient Populations	2.5-5
2.5.1.4	References	2.5-6
2.5.2	Community Characteristics	2.5-23
2.5.2.1	Economy	2.5-23
2.5.2.2	Transportation	2.5-26
2.5.2.3	Taxes	2.5-29
2.5.2.4	Land Use	2.5-37
2.5.2.5	Aesthetics and Recreation	2.5-42
2.5.2.6	Housing	2.5-47
2.5.2.7	Public Services and Community Infrastructure	2.5-49
2.5.2.8	Schools	2.5-54
2.5.2.9	References	2.5-62
2.5.3	Historic Properties	2.5-147
2.5.3.1	Applicable Federal and State Historic Preservation Regulations	2.5-147
2.5.3.2	Consultation with the Texas Historical Commission	2.5-147
2.5.3.3	Cultural Resource Investigations	2.5-148
2.5.3.4	Cultural Resources in the Two VCS Site APEs	2.5-151
2.5.3.5	Cultural Resources in the Offsite Areas	2.5-152
2.5.3.6	Native American Consultation	2.5-152
2.5.3.7	Significant Cultural Resources within 10 Miles of the VCS Site	2.5-152
2.5.3.8	Significant Cultural Resources within 1.2 Miles of the Offsite Areas	2.5-153
2.5.3.9	Cultural Resources in the Transmission Line Study Area	2.5-153
2.5.3.10	References	2.5-156

ESP ER Overall Table of Contents (Cont.)

Section	Title	Page
2.5.4	Environmental Justice	2.5-162
2.5.4.1	Methodology	2.5-162
2.5.4.2	Minority Populations	2.5-163
2.5.4.3	Low-Income Populations	2.5-164
2.5.4.4	Potential for Disproportionate Impacts	2.5-164
2.5.4.5	References	2.5-165
2.6	Geology	2.6-1
2.6.1	Geological Conditions	2.6-1
2.6.1.1	Physiography	2.6-1
2.6.1.2	Stratigraphy	2.6-2
2.6.2	Geological Impacts	2.6-2
2.6.3	References	2.6-4
2.7	Meteorology, Air Quality, and Noise	2.7-1
2.7.1	Regional Climatology	2.7-1
2.7.1.1	Data Sources	2.7-1
2.7.1.2	General Climate	2.7-3
2.7.1.3	Normal, Mean, and Extreme Climatological Conditions	2.7-5
2.7.2	Air Quality	2.7-8
2.7.2.1	Regional Air Quality Conditions	2.7-8
2.7.2.2	Projected Air Quality Conditions	2.7-9
2.7.2.3	Restrictive Dispersion Conditions	2.7-9
2.7.3	Severe Weather	2.7-11
2.7.3.1	Thunderstorms and Lightning	2.7-12
2.7.3.2	Extreme Winds	2.7-12
2.7.3.3	Tornadoes	2.7-13
2.7.3.4	Hail, Snowstorms, and Ice Storms	2.7-15
2.7.3.5	Tropical Cyclones	2.7-17
2.7.3.6	Droughts and Dust (Sand) Storms	2.7-19
2.7.4	Local Meteorology	2.7-19
2.7.4.1	Normal, Mean, and Extreme Values	2.7-20
2.7.4.2	Average Wind Direction and Wind Speed Conditions	2.7-23
2.7.4.3	Wind Direction Persistence	2.7-25
2.7.4.4	Atmospheric Stability	2.7-26
2.7.4.5	Topographic Description and Potential Modifications to Meteorological Conditions	2.7-27
2.7.5	Short-Term Diffusion Estimates	2.7-28
2.7.5.1	Regulatory Basis and Technical Approach	2.7-28
2.7.5.2	PAVAN Modeling Results	2.7-30
2.7.6	Long-Term (Routine) Diffusion Estimates	2.7-31
2.7.6.1	Regulatory Basis and Technical Approach	2.7-31
2.7.6.2	XOQDOQ Modeling Results	2.7-33
2.7.7	Noise	2.7-34
2.7.8	References	2.7-36
2.8	Related Federal Project Activities	2.8-1
2.8.1	Overview	2.8-1

ESP ER Overall Table of Contents (Cont.)

Section	Title	Page
2.8.2	Acquisition of Land and Use of Transmission Corridors	2.8-2
2.8.2.1	Federal Actions Associated With Land Acquisition and/or Use	2.8-2
2.8.2.2	Federal Actions Associated With Land Acquisition for Transmission Corridors	2.8-2
2.8.3	Cooling Water Source and Supply	2.8-3
2.8.4	Other Federal Actions Affecting Construction or Operation	2.8-3
2.8.5	Planned Federal Projects Contingent on Plant Construction or Operation	2.8-4
2.8.6	Cooperating Agencies	2.8-4
2.8.7	References	2.8-4
Chapter 3	**Plant Description**	**3.1-1**
3.1	External Appearance and Plant Layout	3.1-1
3.1.1	Site Description	3.1-1
3.1.2	Power Plant Design	3.1-1
3.1.3	ER Design Parameters	3.1-3
3.1.4	Plant Appearance	3.1-3
3.1.5	Site Development and Improvements	3.1-4
3.2	Reactor Power Conversion System	3.2-1
3.2.1	Reactor Description	3.2-1
3.2.2	Engineered Safety Features	3.2-2
3.2.3	Power Conversion Systems	3.2-2
3.3	Plant Water Use	3.3-1
3.3.1	Water Consumption	3.3-1
3.3.1.1	Plant Water Use	3.3-1
3.3.1.2	Plant Water Releases	3.3-2
3.3.2	Water Treatment	3.3-2
3.3.2.1	Surface Water	3.3-2
3.3.2.2	Groundwater	3.3-3
3.4	Cooling System	3.4-1
3.4.1	Description and Operational Modes	3.4-1
3.4.1.1	Normal Plant Condenser Cooling	3.4-1
3.4.1.2	Safety-Related and NonSafety-Related Service Water Systems	3.4-2
3.4.1.3	Other Operational Modes	3.4-3
3.4.2	Component Descriptions	3.4-4
3.4.2.1	RWMU System Intake Structure	3.4-4
3.4.2.2	Plant Discharge	3.4-5
3.4.2.3	Cooling Basin CWS Intake Structure and Discharge Outfall	3.4-7
3.4.2.4	Heat Dissipation System	3.4-7
3.4.3	References	3.4-13
3.5	Radioactive Waste Management System	3.5-1
3.5.1	Source Terms	3.5-1
3.5.2	Liquid Radioactive Waste Management System	3.5-1
3.5.3	Gaseous Radioactive Waste Management System	3.5-2
3.5.4	Solid Radioactive Waste Management System	3.5-2
3.6	Nonradioactive Waste Systems	3.6-1

ESP ER Overall Table of Contents (Cont.)

Section	Title	Page
3.6.1	Effluents Containing Chemicals or Biocides	3.6-1
3.6.2	Sanitary System Effluents	3.6-2
3.6.3	Other Effluents	3.6-2
3.6.3.1	Gaseous Effluents	3.6-3
3.6.3.2	Liquid Effluents	3.6-3
3.6.3.3	Solid Effluents	3.6-3
3.6.3.4	Hazardous Wastes	3.6-4
3.7	Power Transmission System	3.7-1
3.7.1	Switchyard and Substation Interfaces	3.7-1
3.7.2	Transmission System	3.7-2
3.7.3	Transmission Line Rights-of-Way (Corridors)	3.7-7
3.7.3.1	Transmission Line Rights-of-Way Ecological and Cultural Surveys	3.7-8
3.7.3.2	Transmission Corridor Maintenance	3.7-8
3.7.3.3	Transmission System Operation	3.7-8
3.7.3.4	Noise	3.7-9
3.7.3.5	Transmission Line Design and Methods of Construction	3.7-9
3.7.4	References	3.7-11
3.8	Transportation of Radioactive Materials	3.8-1
3.8.1	Transportation of Unirradiated Fuel	3.8-1
3.8.2	Transportation of Irradiated Fuel	3.8-1
3.8.3	Transportation of Radioactive Waste	3.8-2
3.8.4	References	3.8-2
3.9	Construction Activities	3.9-1
3.9.1	Preconstruction and Site Preparation Activities	3.9-1
3.9.1.1	Installation and Establishment of Environmental Controls	3.9-2
3.9.1.2	Clearing, Grubbing, and Grading	3.9-2
3.9.1.3	Road, Rail, and Barge Facility Construction	3.9-3
3.9.1.4	Construction Security Program Implementation	3.9-4
3.9.1.5	Temporary Utilities Construction	3.9-4
3.9.1.6	Temporary Construction Facilities Construction	3.9-5
3.9.1.7	Laydown, Fabrication, and Shop Area Preparation	3.9-5
3.9.1.8	Cooling Basin Construction	3.9-5
3.9.1.9	Cooling Basin Intake and Discharge Structure Installation	3.9-6
3.9.1.10	Blowdown Discharge Line Installation	3.9-6
3.9.1.11	Raw Water Makeup System Pump Station and Pipeline Installation	3.9-7
3.9.1.12	Power Block Area Excavation	3.9-8
3.9.1.13	Module Assembly	3.9-8
3.9.2	Construction Activities	3.9-9
3.9.2.1	Power Block Area Backfill	3.9-9
3.9.2.2	Reactor Building Basemat Foundation	3.9-9
3.9.2.3	Power Block Area Construction	3.9-10
3.9.2.4	Construction of Other Facilities	3.9-10
3.9.3	Other Activities Associated with Construction	3.9-11
3.9.4	Construction Procedures and Processes	3.9-11
3.9.5	Environmental Procedures	3.9-12

ESP ER Overall Table of Contents (Cont.)

Section	Title	Page
3.9.5.1	Noise and Vibration	3.9-12
3.9.5.2	Air Quality (Fugitive and Vehicular Emissions)	3.9-12
3.9.5.3	Erosion and Sediment Control	3.9-13
3.9.5.4	Construction Water Management	3.9-13
3.9.5.5	Protection of Sensitive Resources	3.9-14
3.9.5.6	Unanticipated Discoveries	3.9-16
3.9.5.7	Hazardous Materials and Petroleum Management	3.9-16
3.9.5.8	Solid Waste Management (Hazardous/Nonhazardous Wastes)	3.9-17
3.9.5.9	Asbestos and Lead-Based Paint	3.9-17
3.9.5.10	Spill Prevention and Response	3.9-17
3.9.5.11	Cleanup and Restoration	3.9-17
3.9.6	References	3.9-18
3.10	Workforce Characterization	3.10-1
3.10.1	Construction Workforce	3.10-1
3.10.2	Workers Relocation and Commuting	3.10-2
3.10.3	Operations Workforce	3.10-2
3.10.4	Total Construction and Operations Workforce	3.10-2
3.10.5	Outage Workforce	3.10-2
Chapter 4	**Impacts of Construction**	**4.1-1**
4.1	Land-Use Impacts	4.1-1
4.1.1	The Site and Vicinity	4.1-1
4.1.1.1	The Site	4.1-1
4.1.1.2	The Vicinity	4.1-3
4.1.2	Transmission Corridors and Offsite Areas	4.1-3
4.1.2.1	Proposed Transmission Corridors	4.1-3
4.1.2.2	Blowdown Piping	4.1-4
4.1.2.3	Rail Spur Connection	4.1-5
4.1.2.4	Raw Water Makeup System and Intake Structure	4.1-5
4.1.2.5	Emergency Operations Facilities	4.1-5
4.1.3	Historic Properties	4.1-6
4.1.4	References	4.1-8
4.2	Water-Related Impacts	4.2-1
4.2.1	Hydrologic Alterations	4.2-1
4.2.1.1	Surface Water	4.2-2
4.2.1.2	Groundwater	4.2-6
4.2.2	Water Use Impacts	4.2-8
4.2.2.1	Surface Water	4.2-8
4.2.2.2	Groundwater	4.2-9
4.2.3	Water Quality Impacts	4.2-10
4.2.3.1	Surface Water	4.2-10
4.2.3.2	Groundwater	4.2-11
4.2.4	References	4.2-12
4.3	Ecological Impacts	4.3-1
4.3.1	Terrestrial Ecosystems	4.3-1

ESP ER Overall Table of Contents (Cont.)

Section	Title	Page
4.3.1.1	The Site and Vicinity	4.3-1
4.3.1.2	RWMU System Pipeline	4.3-6
4.3.1.3	Transmission Corridors	4.3-7
4.3.2	Aquatic Ecosystems	4.3-9
4.3.2.1	Construction of Cooling Basin	4.3-11
4.3.2.2	Construction of Heavy Haul Road and Blowdown Line	4.3-12
4.3.2.3	Construction of RWMU Pump Station, Intake Canal, and RWMU Pipeline	4.3-13
4.3.2.4	Transmission Corridors	4.3-17
4.3.3	References	4.3-18
4.4	Socioeconomic Impacts	4.4-1
4.4.1	Physical Impacts of Station Construction	4.4-1
4.4.1.1	Groups or Physical Features Vulnerable to Physical Impacts	4.4-1
4.4.1.2	Predicted Noise Levels	4.4-4
4.4.1.3	Air Quality	4.4-5
4.4.1.4	Aesthetics	4.4-7
4.4.1.5	Occupational Health	4.4-8
4.4.1.6	Conclusion	4.4-9
4.4.2	Social and Economic Impacts	4.4-9
4.4.2.1	Demography	4.4-10
4.4.2.2	Impacts to the Community	4.4-14
4.4.3	Environmental Justice	4.4-63
4.4.3.1	Health and Environmental Impacts	4.4-64
4.4.3.2	Socioeconomic Impacts	4.4-65
4.4.4	References	4.4-68
4.5	Radiation Exposure to Construction Workers	4.5-1
4.5.1	Site Layout	4.5-1
4.5.2	Radiation Sources	4.5-1
4.5.3	Construction Worker Doses	4.5-2
4.5.3.1	Gaseous Effluent Doses	4.5-2
4.5.3.2	Direct Radiation Doses	4.5-2
4.5.3.3	Total Doses	4.5-3
4.5.4	References	4.5-3
4.6	Measures and Controls to Limit Adverse Impacts during Construction	4.6-1
4.7	Cumulative Impacts	4.7-1
4.7.1	Land Use	4.7-5
4.7.2	Hydrology and Water Use	4.7-7
4.7.2.1	Surface Water	4.7-7
4.7.2.2	Groundwater	4.7-9
4.7.2.3	Water Quality	4.7-9
4.7.3	Ecology (Terrestrial and Aquatic)	4.7-10
4.7.3.1	Terrestrial	4.7-10
4.7.3.2	Aquatic	4.7-10
4.7.4	Socioeconomic Resources	4.7-11
4.7.5	Summary	4.7-14

ESP ER Overall Table of Contents (Cont.)

Section	Title	Page
4.7.6	References	4.7-14
Chapter 5	**Environmental Impacts of Station Operation**	**5.0-1**
5.1	Land Use Impacts	5.1-1
5.1.1	The Site and Vicinity	5.1-1
5.1.1.1	The Site	5.1-1
5.1.1.2	The Vicinity	5.1-2
5.1.2	Transmission Corridors and Offsite Areas	5.1-2
5.1.2.1	Transmission Corridors	5.1-2
5.1.2.2	Cooling Basin Blowdown Line and Transportation Corridor	5.1-3
5.1.2.3	Rail Spur Connection	5.1-3
5.1.2.4	RWMU System and Intake Structure	5.1-4
5.1.2.5	Emergency Operations Facilities	5.1-4
5.1.2.6	Waste Disposal	5.1-4
5.1.3	Historic Properties and Cultural Resources	5.1-5
5.2	Water-Related Impacts	5.2-1
5.2.1	Hydrologic Alterations and Plant Water Supply	5.2-1
5.2.1.1	Surface Water	5.2-1
5.2.1.2	Groundwater	5.2-2
5.2.1.3	Summary of Hydrologic Alterations	5.2-9
5.2.2	Water-Use Impacts	5.2-10
5.2.2.1	Surface Water	5.2-10
5.2.2.2	Groundwater	5.2-14
5.2.3	Water Quality Impacts	5.2-16
5.2.3.1	Surface Water	5.2-16
5.2.3.2	Groundwater	5.2-18
5.2.4	References	5.2-19
5.3	Cooling System Impacts	5.3-1
5.3.1	Intake System	5.3-1
5.3.1.1	Hydrological Descriptions and Physical Impacts	5.3-1
5.3.1.2	Aquatic Ecosystems	5.3-2
5.3.1.3	References	5.3-12
5.3.2	Discharge Systems	5.3-19
5.3.2.1	Thermal Discharges and Other Physical Impacts	5.3-20
5.3.2.2	Aquatic Ecosystems	5.3-22
5.3.2.3	References	5.3-25
5.3.3	Heat Dissipation Systems	5.3-30
5.3.3.1	Heat Dissipation to the Atmosphere	5.3-30
5.3.3.2	Terrestrial Ecosystems	5.3-36
5.3.3.3	References	5.3-38
5.3.4	Impacts to Members of the Public	5.3-40
5.3.4.1	Etiological Agent Impacts	5.3-40
5.3.4.2	Noise Impacts	5.3-42
5.3.4.3	References	5.3-43
5.4	Radiological Impacts of Normal Operation	5.4-1

ESP ER Overall Table of Contents (Cont.)

Section	Title	Page
5.4.1	Exposure Pathways	5.4-1
5.4.1.1	Liquid Pathways	5.4-1
5.4.1.2	Gaseous Pathways	5.4-2
5.4.1.3	Direct Radiation	5.4-3
5.4.2	Radiation Doses to Members of the Public	5.4-3
5.4.2.1	Liquid Pathway Doses	5.4-3
5.4.2.2	Gaseous Pathway Doses	5.4-3
5.4.3	Impacts to Members of the Public	5.4-4
5.4.4	Impacts to Biota Other than Members of the Public	5.4-4
5.4.4.1	Liquid Pathway	5.4-4
5.4.4.2	Gaseous Pathway	5.4-5
5.4.4.3	Biota Doses	5.4-5
5.4.5	Occupational Doses	5.4-6
5.4.6	References	5.4-6
5.5	Environmental Impacts of Waste	5.5-1
5.5.1	Nonradioactive Waste System Impacts	5.5-1
5.5.1.1	Impacts of Discharges to Water	5.5-2
5.5.1.2	Impacts of Discharges to Land	5.5-2
5.5.1.3	Impacts of Discharges to Air	5.5-4
5.5.1.4	Sanitary Waste Impacts	5.5-4
5.5.1.5	Impacts of Dredging and Disposal	5.5-4
5.5.2	Mixed Waste Impacts	5.5-5
5.5.2.1	Plant Systems Producing Mixed Waste	5.5-5
5.5.2.2	Mixed Waste Storage and Disposal Plans	5.5-6
5.5.2.3	Waste Minimization Plan	5.5-6
5.5.2.4	Environmental Impacts of Mixed Waste	5.5-7
5.5.3	Conclusions	5.5-8
5.5.4	References	5.5-8
5.6	Environmental Impacts of Transmission Systems	5.6-1
5.6.1	Terrestrial Ecosystems	5.6-1
5.6.2	Aquatic Ecosystems	5.6-3
5.6.2.1	Important Habitats	5.6-3
5.6.2.2	Important Species	5.6-4
5.6.3	Impacts to Members of the Public	5.6-5
5.6.3.1	Visual Impacts	5.6-6
5.6.3.2	Electric Shock	5.6-6
5.6.3.3	Electromagnetic Field Exposure	5.6-7
5.6.3.4	Noise	5.6-8
5.6.3.5	Radio and Television Interference	5.6-9
5.6.4	References	5.6-9
5.7	Uranium Fuel Cycle and Transportation Impacts	5.7-1
5.7.1	Uranium Fuel Cycle Impacts	5.7-1
5.7.1.1	Land Use	5.7-3
5.7.1.2	Water Use	5.7-3
5.7.1.3	Fossil Fuel Impacts	5.7-4

ESP ER Overall Table of Contents (Cont.)

Section	Title	Page
5.7.1.4	Chemical Effluents	5.7-4
5.7.1.5	Radioactive Effluents	5.7-5
5.7.1.6	Radioactive Waste	5.7-7
5.7.1.7	Occupational Dose	5.7-7
5.7.1.8	Transportation	5.7-7
5.7.1.9	Summary	5.7-8
5.7.2	Transportation of Radioactive Materials	5.7-8
5.7.2.1	Transportation Assessment	5.7-8
5.7.2.2	Incident-Free Transportation Impacts Analysis	5.7-14
5.7.2.3	Conclusion	5.7-19
5.7.2.4	References	5.7-20
5.8	Socioeconomic Impacts	5.8-1
5.8.1	Physical Impacts of Station Operation	5.8-1
5.8.1.1	Noise	5.8-1
5.8.1.2	Air Quality	5.8-2
5.8.1.3	Aesthetics	5.8-4
5.8.1.4	Traffic	5.8-4
5.8.1.5	Occupational Health	5.8-5
5.8.1.6	Other Impacts	5.8-6
5.8.1.7	Conclusion	5.8-6
5.8.2	Social and Economic Impacts	5.8-6
5.8.2.1	Demography	5.8-7
5.8.2.2	Impacts to the Community	5.8-10
5.8.3	Environmental Justice	5.8-41
5.8.3.1	Health and Environmental Impacts	5.8-42
5.8.3.2	Socioeconomic Impacts	5.8-44
5.8.3.3	References	5.8-46
5.9	Decommissioning	5.9-1
5.9.1	NRC GEIS Regarding Decommissioning	5.9-1
5.9.2	DOE-Funded Study on Decommissioning Costs	5.9-3
5.9.3	Plant Design Features for Decommissioning	5.9-5
5.9.4	Conclusions	5.9-5
5.9.5	References	5.9-6
5.10	Measures and Controls to Limit Adverse Impacts During Operations	5.10-1
5.11	Cumulative Impacts	5.11-1
5.11.1	Land Use	5.11-3
5.11.2	Hydrology and Water Use	5.11-3
5.11.2.1	Groundwater	5.11-5
5.11.3	Ecology (Terrestrial and Aquatic)	5.11-5
5.11.3.1	Terrestrial	5.11-5
5.11.3.2	Aquatic	5.11-8
5.11.4	Socioeconomic Resources	5.11-11
5.11.5	Atmospheric and Meteorological	5.11-12
5.11.6	Radiological	5.11-12
5.11.7	Summary	5.11-13

ESP ER Overall Table of Contents (Cont.)

Section	Title	Page
5.11.8	References	5.11-13
Chapter 6	**Environmental Measurements and Monitoring Programs**	**6.0-1**
6.1	Thermal Monitoring	6.1-1
6.1.1	Pre-Application Monitoring	6.1-1
6.1.2	Construction Monitoring	6.1-1
6.1.3	Preoperational and Operational Monitoring	6.1-2
6.2	Radiological Monitoring	6.2-1
6.2.1	Radiological Environmental Monitoring Program Basis	6.2-1
6.2.2	Radiological Environmental Monitoring Program Contents	6.2-1
6.2.2.1	Pathways Monitored	6.2-2
6.2.2.2	Land Use Census	6.2-3
6.2.2.3	Quality Assurance Program	6.2-4
6.2.3	References	6.2-4
6.3	Hydrological Monitoring	6.3-1
6.3.1	Pre-Application Monitoring	6.3-1
6.3.1.1	Surface Water	6.3-2
6.3.1.2	Groundwater	6.3-2
6.3.2	Construction and Preoperational Monitoring	6.3-3
6.3.2.1	Surface Water	6.3-3
6.3.2.2	Groundwater	6.3-3
6.3.3	Operational Monitoring	6.3-4
6.3.3.1	Surface Water Hydrologic Monitoring	6.3-4
6.3.3.2	Groundwater Hydrologic Monitoring	6.3-4
6.3.4	References	6.3-4
6.4	Meteorological Monitoring	6.4-1
6.4.1	General Monitoring Program Description	6.4-2
6.4.2	Meteorological Tower and Instrument Siting	6.4-3
6.4.2.1	Site Description and Topographic Features of the Site Area	6.4-3
6.4.2.2	Meteorological Tower Exposure	6.4-4
6.4.2.3	Potential Airflow Alteration	6.4-4
6.4.2.4	Heat and Moisture Sources Influence	6.4-5
6.4.2.5	Potential Changes on Site Diffusion Climate	6.4-6
6.4.2.6	Instrument Siting	6.4-7
6.4.3	Pre-Application Monitoring Phase	6.4-7
6.4.3.1	Meteorological Parameters Measured	6.4-8
6.4.3.2	Meteorological Sensors Used	6.4-9
6.4.3.3	Data Recording and Storage	6.4-9
6.4.3.4	Data Reduction and Reporting	6.4-10
6.4.3.5	Instrumentation Surveillance	6.4-13
6.4.3.6	System Accuracy	6.4-14
6.4.4	Preoperational Monitoring Phase	6.4-15
6.4.4.1	Meteorological Parameters Measured	6.4-15
6.4.4.2	Data Collection System	6.4-15
6.4.5	Operational Monitoring Phase	6.4-15

ESP ER Overall Table of Contents (Cont.)

Section	Title	Page
6.4.5.1	Description of Monitoring Program	6.4-16
6.4.5.2	Emergency Preparedness Support	6.4-17
6.4.6	Meteorological Data	6.4-17
6.4.6.1	Representativeness and Adequacy of Meteorological Data	6.4-17
6.4.6.2	Long-Term and Climatological Conditions	6.4-18
6.4.6.3	Need for Additional Data Sources for Airflow Trajectories	6.4-22
6.4.6.4	Supplemental Data for Environmental Impact Evaluation	6.4-23
6.4.6.5	Period of Data and Data Used to Support the Application	6.4-23
6.4.7	References	6.4-24
6.5	Ecological Monitoring	6.5-1
6.5.1	Terrestrial Ecology and Land Use	6.5-1
6.5.1.1	Pre-Application Terrestrial Ecological Monitoring	6.5-1
6.5.1.2	Construction, Preoperational, and Operational Monitoring	6.5-2
6.5.2	Aquatic Ecology	6.5-4
6.5.2.1	Pre-Application Monitoring	6.5-4
6.5.2.2	Construction Monitoring	6.5-7
6.5.2.3	Preoperational and Operational Monitoring	6.5-8
6.5.3	References	6.5-8
6.6	Chemical Monitoring	6.6-1
6.6.1	Pre-Application Monitoring	6.6-1
6.6.1.1	Surface Water Monitoring	6.6-2
6.6.1.2	Groundwater Monitoring	6.6-3
6.6.2	Construction and Preoperational Monitoring	6.6-3
6.6.2.1	Surface Water Monitoring	6.6-3
6.6.2.2	Groundwater Monitoring	6.6-4
6.6.3	Operational Monitoring	6.6-4
6.6.3.1	Surface Water Monitoring	6.6-5
6.6.3.2	Groundwater Monitoring	6.6-5
6.6.4	References	6.6-6
6.7	Summary of Monitoring Programs	6.7-1
6.7.1	Pre-Application Monitoring	6.7-1
6.7.2	Preconstruction/Construction Monitoring	6.7-1
6.7.3	Preoperational Monitoring	6.7-2
6.7.4	Operational Monitoring	6.7-2
Chapter 7	**Environmental Impacts of Postulated Accidents Involving Radioactive Materials**	**7.1-1**
7.1	Design Basis Accidents	7.1-1
7.1.1	Selection of Accidents	7.1-1
7.1.2	Evaluation Methodology	7.1-2
7.1.3	Source Terms	7.1-3
7.1.4	Radiological Consequences	7.1-3
7.1.5	References	7.1-4
7.2	Severe Accidents	7.2-1
7.2.1	ESBWR and ABWR Reactor Vendor Methodology	7.2-2

ESP ER Overall Table of Contents (Cont.)

Section	Title	Page
7.2.2	Exelon Methodology	7.2-5
7.2.3	Consequences to Population Groups	7.2-7
7.2.3.1	Air Pathways	7.2-7
7.2.3.2	Surface Water Pathways	7.2-8
7.2.3.3	Groundwater Pathways	7.2-8
7.2.4	Comparison to NRC Safety Goals	7.2-9
7.2.4.1	Individual Risk Goal	7.2-9
7.2.4.2	Societal Risk Goal	7.2-9
7.2.5	Conclusions	7.2-10
7.2.6	References	7.2-11
7.3	Severe Accident Mitigation Alternatives	7.3-1
7.4	Transportation Accidents	7.4-1
7.4.1	Radiological Impacts of Transportation Accidents	7.4-1
7.4.1.1	Transportation of Unirradiated Fuel	7.4-1
7.4.1.2	Transportation of Spent Fuel	7.4-1
7.4.2	Nonradiological Impacts of Transportation Accidents	7.4-4
7.4.2.1	Transportation of Unirradiated Fuel	7.4-4
7.4.2.2	Transportation of Spent Fuel	7.4-4
7.4.2.3	Transportation of Radioactive Waste	7.4-5
7.4.3	Conclusion	7.4-5
7.4.4	References	7.4-5
Chapter 8	**Need for Power**	**8.0-1**
Chapter 9	**Alternatives to the Proposed Action**	**9.0-1**
9.0.1	References	9.0-1
9.1	No-Action Alternative	9.1-1
9.2	Energy Alternatives	9.2-1
9.3	Site Selection Process	9.3-1
9.3.1	Introduction	9.3-1
9.3.2	Overview of Site Selection Process	9.3-1
9.3.2.1	Region of Interest	9.3-2
9.3.2.2	Process for Identifying Candidate Areas	9.3-2
9.3.2.3	Identification and Screening of Potential Sites	9.3-3
9.3.2.4	Screening Process to Identify Candidate Sites	9.3-5
9.3.2.5	Candidate Site Evaluation and Conclusion	9.3-10
9.3.3	Alternative Site Review	9.3-12
9.3.3.1	Evaluation of the Matagorda County Site	9.3-13
9.3.3.2	Evaluation of the Buckeye Site	9.3-34
9.3.3.3	Evaluation of the Alpha Site	9.3-53
9.3.3.4	Evaluation of the Bravo Site	9.3-70
9.3.4	Summary and Conclusions	9.3-86
9.3.5	References	9.3-87
9.4	Alternative Plant and Transmission Systems	9.4-1
9.4.1	Heat Dissipation Systems	9.4-1

ESP ER Overall Table of Contents (Cont.)

Section	Title	Page
9.4.1.1	Screening of Alternative Heat Dissipation Systems	9.4-1
9.4.1.2	Analysis of Recommended Cooling Tower Alternative	9.4-4
9.4.1.3	Summary	9.4-7
9.4.2	Circulating Water Systems	9.4-7
9.4.2.1	Intake Systems	9.4-8
9.4.2.2	Discharge Systems	9.4-12
9.4.2.3	Water Supply	9.4-14
9.4.2.4	Water Treatment	9.4-21
9.4.3	Transmission Systems	9.4-22
9.4.3.1	Alternative Corridor Routes	9.4-22
9.4.3.2	Alternatives to the Proposed Transmission System Design	9.4-23
9.4.4	References	9.4-24
Chapter 10	**Proposed Action Consequences**	**10.0-1**
10.0	Environmental Consequences of the Proposed Action	10.0-1
10.1	Unavoidable Adverse Environmental Impacts	10.1-1
10.1.1	Unavoidable Adverse Environmental Impacts of VCS Construction	10.1-1
10.1.2	Unavoidable Adverse Environmental Impacts of VCS Operation	10.1-3
10.2	Irreversible and Irretrievable Commitments of Resources	10.2-1
10.2.1	Irreversible Commitments of Environmental Resources	10.2-1
10.2.1.1	Land Use Commitments	10.2-1
10.2.1.2	Hydrology and Water Use Commitments	10.2-2
10.2.1.3	Ecological Commitments (Terrestrial and Aquatic)	10.2-2
10.2.1.4	Socioeconomics	10.2-3
10.2.1.5	Radiological Releases	10.2-3
10.2.1.6	Air Emissions and Meteorological Changes	10.2-3
10.2.2	Irretrievable Commitments of Material Resources	10.2-4
10.2.3	References	10.2-5
10.3	Relationship Between Short-Term Uses and Long-Term Productivity of the Human Environment	10.3-1
10.3.1	Construction of VCS and Short-Term Uses	10.3-1
10.3.2	Operation of VCS and Long-Term Productivity	10.3-2
10.3.3	Summary of Relationship Between Short-Term Uses and Long-Term Productivity	10.3-3
10.4	Benefit-Cost Balance	10.4-1
Appendix A	**Consultation Letters**	**1**

Enclosure 1, Attachment 6

Explanation of Consistency with the Enforceable Policies at
31 TAC 501

ATTACHMENT 6

Explanation of Consistency with Enforceable Policies at 31 TAC 501

Notes: (1) Attachment 6, in concert with the ESPA ER, is provided to address the requirements at 31 TAC 506.30(b)(3) and (4).

(2) Only those policies identified as applicable to the proposed VCS project on the form titled "Consistency with the Texas Coastal Management Program" are discussed below.

§501.15 Policy for Major Actions

Applicability: The Nuclear Regulatory Commission's (NRC) decision on whether to grant an Early Site Permit (ESP) for the proposed Victoria County Station (VCS) site constitutes an NRC License, as identified at 31 TAC 506.12(a)(2)(F). By issuing an ESP for the VCS site, the NRC would be concluding that the VCS site satisfies its criteria for certain site safety considerations, environmental impacts, and emergency planning. The ESP could later be used to support an application for a construction permit (CP) or Combined License (COL) to construct and operate such a plant. Note that an ESP alone would not authorize nuclear construction activities at the VCS site or within the CMP boundary.

Consistency: In accordance with 31 TAC 506.30(b)(1), the ESP application (ESPA) submitted to the NRC is being provided (Enclosure 1, Attachment 4) in support of Exelon's Coastal Management Program (CMP) consistency determination request for the proposed VCS project. Part 3 of the ESP application (ESPA), the Environmental Report (ER), describes the existing environment and the proposed project in detail and evaluates the potential impacts associated with the construction and operation of VCS, taking into account available alternatives and measures to avoid and / or mitigate reasonably foreseeable impacts.

As summarized in ER Section 9.3, Tables 9.3-2 and 9.3-3, with the exception of potential construction impacts to terrestrial ecosystems, the evaluations presented in the ER conclude that the reasonably foreseeable VCS construction and operation impacts would result in SMALL impacts in the areas of land use, water-related impacts, and terrestrial and aquatic ecology. The MODERATE determination for potential construction impacts to terrestrial ecosystems is associated with construction of the proposed 4,900-acre onsite cooling basin, which is located approximately 6 miles outside of the CMP boundary. Accordingly, based on the results of the referenced ER evaluations, the proposed VCS project would be

consistent with the CMP policy at 31 TAC 501.15 and the other applicable enforceable policies of the CMP.

The potential for the proposed project to affect coastal natural resource areas (CNRAs) is discussed in greater detail the following paragraphs. The discussion identifies relevant ESPA ER impact evaluations (31 TAC 506.30(b)(3)), the results of which demonstrate that the VCS project would be consistent with the applicable CMP policies (31 TAC 506.30(b)(4)). In general, the ER impact evaluations adequately discuss impacts that could be realized both within and beyond the CMP boundary; however, where applicable, additional detail has been provided to address potential impacts specific to the coastal zone.

§501.16 Policies for Construction of Electric Generating and Transmission Facilities

Applicability: The NRC's decision on whether to grant an ESP for the proposed VCS site constitutes an NRC License, as identified at 31 TAC 506.12(a)(2)(F). By issuing an ESP for the VCS site, the NRC would be concluding that the VCS site satisfies its criteria for certain site safety considerations, environmental impacts, and emergency planning. The ESP could later be used to support an application for a CP or COL to construct and operate such a plant. Note that an ESP alone would not authorize nuclear construction activities at the VCS site or within the CMP boundary.

The proposed VCS site is located outside of the CMP boundary; however, the facility's raw water makeup (RWMU) system intake canal, the intake pumphouse, and a portion of the conveyance pipeline would be located within the coastal zone, as indicated on the figure provided as Attachment 3. Additionally, new transmission lines are anticipated to be required in conjunction with VCS, a portion of which could potentially be located within the coastal zone.

Consistency: (a)(1): A detailed discussion of the site selection process is presented in ESPA ER Section 9.3. The evaluation presented in ER Section 9.3.3 concludes that none of the identified alternative sites would be environmentally preferable to the VCS site.

(a)(2) and (3): The proposed facility cooling system is described in ER Subsection 3.4.2. Potential impacts to aquatic species and habitats associated with construction and operation of the proposed intake infrastructure are discussed in ER Subsections 4.3.2.3 and 5.3.1, respectively.

The potential land disturbance within the CMP boundary was not summarized in the ER. As described in additional detail in Attachment 1, Note 2, it is estimated that approximately 53.5 acres within the CMP

boundary would be disturbed to accommodate the construction of the cooling water intake canal, pumphouse, and conveyance pipeline. A portion of the disturbance associated with pipeline construction would be temporary, resulting in permanent impacts estimated to be equal or less than 45 acres. Additionally, there would be linear bed and bank disturbance to the western shore of the Guadalupe River, immediately upstream of the Guadalupe Blanco River Authority (GBRA) Guadalupe River saltwater barrier. The temporary and permanent disturbances are estimated to be approximately 400 and 350 linear feet, respectively (i.e., the estimated 350 linear feet of permanent disturbance is a subset of the potential 400 linear feet of temporary impacts).

Considering the best management practices (BMP) for impact avoidance and mitigation described in ER Subsections 4.3.2.3 and 5.3.1, and consistent with the results of the impact evaluations presented in those sections, potential impacts associated with constructing cooling system intake and conveyance infrastructure within the CMP boundary would be SMALL.

(a)(4): Transmission lines are described in ER Subsection 2.2.2.1 and Section 3.7. As noted therein, the final locations of transmission corridors will be determined by the regional transmission service provider (TSP) in coordination with the Public Utility Commission of Texas (PUCT) at the COL stage of the project. Accordingly, Exelon utilized a macro-corridor approach to identify and evaluate likely transmission corridors. Potential impacts to terrestrial and aquatic species / habitats associated with construction of transmission infrastructure are discussed in ER Subsections 4.3.1.3 and 4.3.2.4, respectively. Potential impacts associated with transmission line operation are described in ER Section 5.6.

The potential land disturbance within the CMP boundary was not summarized in the ER. As described in additional detail in Attachment 1, Note 3, it is estimated that approximately 1,900 acres could be temporarily impacted within the coastal zone for new transmission line construction. Recognizing that the land uses for the corridors would likely consist primarily of pasture and cropland (ER Table 2.2-2), which would be permanently affected mainly within the footprint of the transmission tower foundations, it is anticipated that the permanent land disturbance associated with new transmission line construction would be significantly less than 1,900 acres. Additionally, as discussed under Attachment 1, Note 3, it is possible that the all or a portion of the transmission lines assumed to be constructed in the coastal zone to be conservative herein would be constructed beyond the CMP boundary. Considering the best management practices (BMP) for impact avoidance and mitigation described in ER Subsections 4.3.1.3, 4.3.2.4, and 5.6, and consistent with the results of the impact evaluations presented in those sections, potential

impacts from new transmission line construction within the CMP boundary would be SMALL.

Based on the results of the referenced ER evaluations and the additional information provided above, the proposed VCS project would be consistent with the CMP policy at 31 TAC 501.16.

§501.22 Policies for Nonpoint Source (NPS) Water Pollution

Applicability: The NRC's decision on whether to grant an ESP for the proposed VCS site constitutes an NRC License, as identified at 31 TAC 506.12(a)(2)(F). By issuing an ESP for the VCS site, the NRC would be concluding that the VCS site satisfies its criteria for certain site safety considerations, environmental impacts, and emergency planning. The ESP could later be used to support an application for a CP or COL to construct and operate such a plant. Note that an ESP alone would not authorize nuclear construction activities at the VCS site or within the CMP boundary.

Stormwater runoff and / or potential leaks or spills from construction activities within and beyond the CMP boundary could potentially affect water quality and ecosystems within the coastal zone.

Consistency: Potential impacts to water quality and aquatic / terrestrial ecosystems resulting from facility construction are evaluated in ER Sections 4.2 and 4.3, respectively. Potential water-related impacts derived from facility operation are discussed in ER Section 5.2. Environmental controls and measures to limit the adverse impacts of construction are discussed in Subsection 3.9.5 and Section 4.6, respectively.

As presented in ER Section 1.2, Table 1.2-1, Item 1.17, it is anticipated that a Texas Pollutant Discharge Elimination System (TPDES) General Permit for Stormwater Discharges Associated with Construction Activities would be required prior to the initiation of earth disturbing project activities. Additionally, coverage would be sought under the TPDES multi-sector general permit for stormwater discharges associated with industrial activity (Table 1.2-2, Item 2.10). Note that Exelon is not currently pursuing Federal, Texas, or local authorizations beyond the ESP; such approvals would be sought prior to initiating the applicable activities, potentially not until the COL stage of the project.

Based on the results of the referenced ER evaluations and the additional information provided above, the proposed VCS project would be consistent with the CMP policy at 31 TAC 501.22.

§501.24 Policies for Construction of Waterfront Facilities and Other Structures on Submerged Lands

Applicability: The NRC's decision on whether to grant an ESP for the proposed VCS site constitutes an NRC License, as identified at 31 TAC 506.12(a)(2)(F). By issuing an ESP for the VCS site, the NRC would be concluding that the VCS site satisfies its criteria for certain site safety considerations, environmental impacts, and emergency planning. The ESP could later be used to support an application for a CP or COL to construct and operate such a plant. Note that an ESP alone would not authorize nuclear construction activities at the VCS site or within the CMP boundary.

The proposed VCS site is located outside of the CMP boundary; however, the facility's RWMU system intake canal, the intake pumphouse, and a portion of the conveyance pipeline would be located adjacent to the Guadalupe River within the coastal zone, as indicated on the figure provided as Attachment 3. Additionally, new transmission lines are anticipated to be required in conjunction with VCS, a portion of which could potentially be located within the coastal zone.

Consistency: (a)(7) and (8): The proposed RWMU intake canal, pumphouse, and conveyance pipeline and the associated construction activities are described in ER Subsections 3.4.2.1, 3.9.1.11, 4.2.3.1, 4.3.1.2, and 4.3.2.3. Environmental controls and measures to limit the adverse impacts of construction are discussed in ER Subsection 3.9.5 and Section 4.6, respectively.

As discussed previously, the potential land disturbance within the CMP boundary was not summarized in the ER. As described in additional detail in Attachment 1, Note 2, it is estimated that approximately 53.5 acres within the CMP boundary would be disturbed to accommodate the construction of the cooling water intake canal, pumphouse, and conveyance pipeline. A portion of the disturbance associated with pipeline construction would be temporary, resulting in permanent impacts estimated to be equal or less than 45 acres. Additionally, there would be linear bed and bank disturbance to the western shore of the Guadalupe River, immediately upstream of the Guadalupe Blanco River Authority (GBRA) Guadalupe River saltwater barrier. The temporary and permanent disturbances are estimated to be approximately 400 and 350 linear feet, respectively (i.e., the estimated 350 linear feet of permanent disturbance is a subset of the potential 400 linear feet of temporary impacts).

Considering the best management practices (BMP) for impact avoidance and mitigation described in ER Subsections 4.3.2.3 and 5.3.1, and consistent with the results of the impact evaluations presented in those

sections, potential impacts associated with constructing cooling system intake and conveyance infrastructure within the CMP boundary would be SMALL.

Based on the results of the referenced ER evaluations and the additional information provided above, the proposed VCS project would be consistent with the CMP policy at 31 TAC 501.24.

§501.25 Policies for Dredging and Dredged Material Disposal and Placement

Applicability: The NRC's decision on whether to grant an ESP for the proposed VCS site constitutes an NRC License, as identified at 31 TAC 506.12(a)(2)(F). By issuing an ESP for the VCS site, the NRC would be concluding that the VCS site satisfies its criteria for certain site safety considerations, environmental impacts, and emergency planning. The ESP could later be used to support an application for a CP or COL to construct and operate such a plant. Note that an ESP alone would not authorize nuclear construction activities at the VCS site or within the CMP boundary.

The proposed VCS site is located outside of the CMP boundary; however, the facility's RWMU system intake canal, the intake pumphouse, and a portion of the conveyance pipeline would be located within the coastal zone, as indicated on the figure provided as Attachment 3. Minor Guadalupe River bed and bank impacts would result during construction of the proposed intake canal.

Consistency: The proposed RWMU intake canal, pumphouse, and conveyance pipeline and the associated construction activities are described in ER Subsections 3.4.2.1, 3.9.1.11, 4.2.3.1, 4.3.1.2, and 4.3.2.3. Environmental controls and measures to limit the adverse impacts of construction are discussed in ER Subsection 3.9.5 and Section 4.6, respectively.

Additionally, as presented in ER Section 1.2, Table 1.2-1, Item 1.7, it is anticipated that a Department of Army permit (Clean Water Act Section 404 / Rivers and Harbors Act Section 10) would be required from the US Army Corps of Engineers to authorize applicable activities, including the potential Guadalupe River bed / bank impacts and dredge spoils disposal associated with construction of the proposed RWMU intake canal.

Based on the results of the referenced ER evaluations and the additional information provided above, the proposed VCS project would be consistent with the CMP policy at 31 TAC 501.25.

§501.33 Policies for Appropriations of Water

Applicability: The NRC's decision on whether to grant an ESP for the proposed VCS site constitutes an NRC License, as identified at 31 TAC 506.12(a)(2)(F). By issuing an ESP for the VCS site, the NRC would be concluding that the VCS site satisfies its criteria for certain site safety considerations, environmental impacts, and emergency planning. The ESP could later be used to support an application for a CP or COL to construct and operate such a plant. Note that an ESP alone would not authorize nuclear construction activities at the VCS site or within the CMP boundary.

As discussed in ER Subsection 5.2.2, the Guadalupe River would be the source of makeup cooling water to an approximately 4,900-acre onsite cooling water reservoir (a closed-cycle cooling system). Up to 75,000 acre-feet would be withdrawn from the river annually to makeup for water lost to evaporation, seepage, and blowdown. The water would be withdrawn under new or existing water rights, which would be obtained via acquisition or contract.

Consistency: Evaluations of the potential individual and cumulative impacts associated with the proposed VCS water withdrawals are presented in ER Sections 4.2, 5.2, and 5.11.

Based on the results of the referenced ER evaluations, the proposed VCS project would be consistent with the CMP policy at 31 TAC 501.33.

ENCLOSURE 2

SUMMARY OF REGULATORY COMMITMENTS

(Exelon Letter to USNRC No. NP-11-0005, dated January 25, 2011)

The following table identifies commitments made in this document. (Any other actions discussed in the submittal represent intended or planned actions. They are described to the NRC for the NRC's information and are not regulatory commitments.)

COMMITMENT	COMMITTED DATE	COMMITMENT TYPE	
		ONE-TIME ACTION (Yes/No)	Programmatic (Yes/No)
ER Appendix A will be revised to include the Texas CMP consistency statement and determination request letter provided in Enclosure 1. This ER revision will be included in the next periodic ESPA update.	Revision 1 of the ESPA Environmental Report planned for no later than March 31, 2012	Yes	No

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	Docket No. 52-042-ESP
EXELON NUCLEAR TEXAS HOLDINGS, LLC	)	
	)	
(Early Site Permit for Victoria County Station Site)	)	February 15, 2011

NOTICE OF APPEARANCE OF JONATHAN M. RUND

The undersigned, being an attorney at law in good standing admitted to practice before the courts of the District of Columbia and the Commonwealth of Virginia, hereby enters his appearance in the above-captioned matter as counsel for Exelon Nuclear Texas Holdings, LLC.

Respectfully submitted,

Signed (electronically) by Jonathan M. Rund

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	Docket No. 52-042-ESP
EXELON NUCLEAR TEXAS HOLDINGS, LLC	)	
	)	
(Early Site Permit for Victoria County Station Site)	)	February 15, 2011

NOTICE OF APPEARANCE OF STEPHEN J. BURDICK

The undersigned, being an attorney at law in good standing admitted to practice before the courts of the District of Columbia and the State of California, hereby enters his appearance in the above-captioned matter as counsel for Exelon Nuclear Texas Holdings, LLC.

Respectfully submitted,

Executed in Accord with 10 C.F.R. § 2.304(d)
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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	Docket No. 52-042-ESP
EXELON NUCLEAR TEXAS HOLDINGS, LLC	)	
	)	
(Early Site Permit for Victoria County Station Site)	)	February 15, 2011

NOTICE OF APPEARANCE OF JOSEPH B. FRAY

The undersigned, being an attorney at law in good standing admitted to practice before the courts of the District of Columbia and the State of New York, hereby enters his appearance in the above-captioned matter as counsel for Exelon Nuclear Texas Holdings, LLC.

Respectfully submitted,

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	Docket No. 52-042-ESP
EXELON NUCLEAR TEXAS HOLDINGS, LLC	)	
	)	
(Early Site Permit for Victoria County Station Site)	)	February 15, 2011

CERTIFICATE OF SERVICE

I certify that on February 15, 2011 a copy of "Exelon Nuclear Texas Holdings, LLC's Answer to Petition for Intervention and Contentions" and Notices of Appearance for Jonathan M. Rund, Stephen J. Burdick, and Joseph B. Fray were served by the Electronic Information Exchange on the following recipients:

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