

October 22, 2010

Ann Marshall Young, Chair
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dr. Alice C. Mignerey
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Dr. Gary S. Arnold
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

In the Matter of
Luminant Generation Co. LLC
(Comanche Peak Nuclear Power Plant, Units 3 and 4)
Docket Nos. 52-034 & 52-035

Dear Administrative Judges:

The computer program used to format the NRC Staff Answer to Luminant's Motion for Summary Disposition of Contention 18 and Alternatives Contention A, filed September 15, 2010, and the NRC Staff Response to Intervenors' New Contentions Based on the Draft Environmental Impact Statement, filed September 27, 2010, for electronic filing, identified the page numbering of these documents as "hidden code," and removed the page numbers from the documents. The source of this error has been identified and corrected. Attached please find copies of these documents that include page numbers.

I apologize for any inconvenience this may have caused.

Sincerely,

/Signed Electronically By/
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September 15, 2010

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

NRC STAFF ANSWER TO LUMINANT'S MOTION FOR SUMMARY DISPOSITION OF
CONTENTION 18 AND ALTERNATIVES CONTENTION A

INTRODUCTION

Pursuant to 10 C.F.R. § 2.1205(b) and Section II.E of the Atomic Safety and Licensing Board's (Board's) Initial Scheduling Order, dated October 28, 2009, the staff of the U.S. Nuclear Regulatory Commission (Staff) hereby answers the motion filed August 26, 2010, by Luminant Generation Company LLC and Comanche Peak Nuclear Power Company LLC (jointly Applicant), requesting summary disposition in favor of the Applicant on Contention 18 and Alternatives Contention A.¹ Luminant's Motion for Summary Disposition of Contention 18 and Alternatives Contention A; Statement of Material Facts on Which There is No Genuine Issue to

¹ While 10 C.F.R. § 51.104(a)(1) generally prevents the Staff from presenting its position on matters within the scope of the National Environmental Policy Act (NEPA) until the Final Environmental Impact Statement (FEIS) has been issued, the Commission has recognized that case-specific procedural orders can direct that hearings on the merits be held in advance of the FEIS. *Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), CLI-07-17, 65 NRC 392, 395-97 (2007). In the present case, the Board's Initial Scheduling Order requires that any motions for summary disposition regarding Contention 18 shall be filed no later than 30 days after issuance of the Draft Environmental Impact Statement (DEIS), and that responses to such motions shall be filed within 20 days after service of the motion. *Luminant Generation Co., LLC* (Comanche Peak Nuclear Power Plant, Units 3 & 4), at 6 (LBP Oct. 28, 2009) (unpublished order) (Initial Scheduling Order). The circumstance giving rise to the Applicant's motion is the issuance of the DEIS on August 6, 2010. NUREG-1943, *Environmental Impact Statement for the Combined Licenses (COLs) for Comanche Peak Nuclear Power Plant Units 3 and 4 – Draft Report for Comment* (Aug. 2010) (ADAMS Accession No. ML102170030).

Be Heard; Joint Affidavit of Donald R. Woodlan, John T. Conly, Ivan Zujovic, David J. Bean, John E. Forsythe, and Kevin Flanagan; and Exhibits A – E (Aug. 26, 2010) (collectively Applicant’s Motion for Summary Disposition). The NRC Staff agrees that Contention 18 and Alternatives Contention A are moot and that the Applicant is entitled to summary disposition on these contentions because there is no genuine issue of material fact.

BACKGROUND

On September 19, 2008, the Applicant, pursuant to the Atomic Energy Act of 1954, as amended (AEA) and the Commission’s regulations, submitted an application for combined licenses (COL) for two US-Advanced Pressurized Water Reactors (US-APWRs) to be located adjacent to the existing Comanche Peak Nuclear Power Plant, Units 1 and 2, near Glen Rose in Somervell County, Texas (Application). Luminant Generation Company, LLC; Notice of Receipt and Availability of Application for a Combined License, 73 Fed. Reg. 66,276 (Nov. 7, 2008). The Application references the standard design certification application for the US-APWR, including a design control document (DCD), submitted by Mitsubishi Heavy Industries, Ltd (MHI). The proposed units will be known as Comanche Peak Nuclear Power Plant, Units 3 & 4.

In response to the Notice of Hearing on the Application², published on February 5, 2009, the Sustainable Energy and Economic Development Coalition, Public Citizen, True Cost of Nukes, J. Nile Fisher, Nita O’Neal, Don Young, and Lon Burnam (collectively Intervenors) submitted a “Petition for Intervention and Request for Hearing” on April 6, 2009 (Petition), proposing several contentions, including the original Contention 18. Petition at 42. On August 6, 2009, the Board reformulated and admitted Contention 18. *Luminant Generation Co., LLC* (Comanche Peak Nuclear Power Plant, Units 3 & 4), LBP-09-17, 70 NRC __, __ (Aug. 6, 2009) (slip op. at 82, 85).

² 74 Fed. Reg. 6177 (Feb. 5, 2009).

On December 8, 2009, the Applicant notified the Board and the parties of an amendment to the Environmental Report (ER) relating to Contention 18. See Letter from Jon Rund, Counsel for Luminant, to Members of the Licensing Board, Notification of Filing Related to Contention 18, (Dec. 8, 2009) (Notification Letter). Attached to this letter was a copy of the Applicant's submission to the NRC, also dated December 8, 2009, of a supplement to the ER. See Attachment to Notification Letter, Letter from Rafael Flores, Luminant, to NRC Document Control Desk (Dec. 8, 2009) (Alternatives Submission). Subsequently, the Applicant filed a motion to dismiss Contention 18 as moot. Luminant's Motion to Dismiss Contention 18 as Moot (Dec. 14, 2009) (Motion to Dismiss). The Staff agreed with the Applicant that Contention 18 should be dismissed as moot. *Id.* at 6. The Intervenor's opposed the dismissal of Contention 18, and, in the alternative, proposed that Contention 18 be modified. Intervenor's Response Opposing Applicant's Motion to Dismiss Contention 18 as Moot (Jan. 4, 2010) (Motion Answer), at 7-9. In addition, on January 15, 2010, the Intervenor's filed six new contentions alleging omissions from and deficiencies in the Applicant's Alternatives Submission. Intervenor's Contentions Regarding the Applicant's Revisions to Environmental Report Concerning Alternatives to Nuclear Power (Jan. 15, 2010) (Intervenor's New Contentions). Both the Staff and the Applicant filed answers opposing Intervenor's new and amended alternatives contentions. Luminant's Answer Opposing New and Modified Contentions Regarding Alternative Energy Sources (February 10, 2010); NRC Staff Consolidated Response to Intervenor's Amended Contention 18 and Proposed Contentions Concerning Alternatives to Nuclear Power (February 4, 2010).

On June 25, 2010, a majority of the Board found Contention 18 moot in part based on the ER Update. *Luminant Generation Co., LLC* (Comanche Peak Nuclear Power Plant, Units 3 & 4), LBP-10-10, 71 NRC __, __ (June 25, 2010) (slip op. at 4, 86). The Board also admitted, in part, portions of the Intervenor's new alternatives contentions, ALT-1, ALT-2, and ALT-3, and reformulated the admitted portions of these contentions into one contention, which the Board

designated as Alternatives Contention A. *Id.* at 4, 74-75, 86. The Board admitted Alternative Contention A only with respect to the omission from the Applicant's ER of a potential alternative to the proposed action: a "four part" combination of solar, wind, storage, and natural gas supplementation that the Board admitted in Alternatives Contention A. *Comanche Peak*, LBP-10-10, 71 NRC at ___ (slip op. at 4, 11-13, 58, 62, 68 – 72). The Board stated that the remaining portion of Contention 18 that was retained and not moot is identical to admitted Alternatives Contention A, and the two would be adjudicated as one contention. *Id.* at 75, 87.

On August 6, 2010, the NRC issued a Draft Environmental Impact Statement (DEIS) for CPNPP Units 3 and 4. NUREG-1943, *Environmental Impact Statement for the Combined Licenses (COLs) for Comanche Peak Nuclear Power Plant Units 3 and 4 – Draft Report for Comment* (Aug. 2010) (ADAMS Accession No. ML102170030). Section 9.2 of the DEIS includes information related to the environmental impacts of alternative energy sources, including but not limited to wind, solar, and natural gas. DEIS at 9-3 through 9-33.

On August 26, 2010, the Applicant filed its Motion for Summary Disposition. The Applicant's Motion demonstrates that summary disposition of Contention 18 and Alternatives Contention A in favor of the Applicant is warranted because the material facts presented in the Applicant's Motion are consistent with the conclusions and underlying factual findings in the DEIS, and there is no genuine issue of material fact regarding Contention 18 and Alternatives Contention A. Additionally, Contention 18 and Alternative Contention A are now moot because the DEIS has been issued and the information that these contentions allege was omitted from the ER's alternatives analysis is included in the alternatives analysis in the DEIS.

DISCUSSION

I. LEGAL STANDARDS

A. Dismissal of Contentions of Omission

The Commission has determined that there is a "difference between contentions that merely allege an 'omission' of information and those that challenge substantively and

specifically how particular information has been discussed in a license application.” *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 382-83 (2002). “When a contention alleges the omission of particular information or an issue from an application, and the information is later supplied by the applicant or considered by the Staff in a draft EIS, the contention is moot.” *McGuire*, CLI-02-28, 56 NRC at 383 (citations omitted); *see also Duke Energy Corp.* (Catawba Nuclear Station, Units 1 and 2), LBP-04-7, 59 NRC 259 (2004) (holding that because the applicant’s response addressed the alleged omission which was the subject of the contention, albeit “minimally,” the motion was granted).

B. Summary Disposition

The Commission’s rules “contemplate merits rulings by licensing boards based on the parties’ written submissions and oral arguments, except where a board expressly finds that ‘accuracy’ demands a full-scale evidentiary hearing.” *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant), CLI-01-11, 53 NRC 370, 385 (2001). Subpart L of the Commission’s rules authorizes informal adjudicatory decision-making by a licensing board after receiving written submissions and hearing oral arguments. *Shearon Harris*, CLI-01-11, 53 NRC at 385 (citing 10 C.F.R. § 2.1201 *et seq.* (Subpart L)) (other citation omitted).

The standards for summary disposition under 10 C.F.R. § 2.1205 are the same as those under 10 C.F.R. § 2.710(d)(2). 10 C.F.R. § 2.1205(c) (“In ruling on motions for summary disposition, the presiding officer shall apply the standards for summary disposition set forth in subpart G of this part”). A party is entitled to summary disposition as to all or any part of the matters involved in the proceeding “if the filings in the proceeding, depositions, answers to interrogatories, and admissions on file, together with the statements of the parties and the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a decision as a matter of law.” 10 C.F.R. § 2.710(d)(2). “The standards are based upon those the federal courts apply to motions for summary judgment under Rule 56 of

the Federal Rules of Civil Procedure.” *Entergy Nuclear Generation Company and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC ___, ___ (Mar. 26, 2010) (slip op. at 11-12) (citing *Advanced Medical Systems, Inc.* (One Factory Row, Geneva, Ohio 44041), CLI-93-22, 38 NRC 98, 102 (1993)).

The movant bears the initial burden of showing that there is no genuine issue as to any material fact, which it attempts to do by means of a required statement of material facts not at issue and any supporting materials that accompany its dispositive motion. *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-99-23, 49 NRC 485, 491 (1999). If the opposing party fails to counter each adequately supported material fact with its own statement of material facts in dispute and supporting materials, the movant's facts will be deemed admitted. *Advanced Medical Systems*, CLI-93-22, 38 NRC at 102-03; see also 10 C.F.R. § 2.710(b) (“[A] party opposing the motion may not rest upon the mere allegations or denials of his answer,” but rather, “must set forth specific facts showing that there is a genuine issue of fact”). “[T]he mere existence of some alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment; the requirement is that there be no *genuine* issue of *material* fact.” *Anderson v. Liberty Lobby*, 477 U.S. 242, 247-48 (1986) (emphasis in original). “‘Only disputes over facts that might affect the outcome’ of a proceeding would preclude summary disposition.” *Pilgrim*, CLI-10-11, 71 NRC at ___ (slip op. at 12) (quoting *Liberty Lobby*, 477 U.S. at 248). In addition, the Commission will reject attempts to add new arguments in an answer to a summary disposition motion that could have been raised earlier. See *Pilgrim*, CLI-10-11, 71 NRC at ___ (slip op. at 29-31). In *Pilgrim*, the new arguments were rejected because they were not fairly encompassed by the contention at issue in the motion for summary disposition, as originally pled and admitted, and because the intervenor did not attempt to amend the contention to add the new arguments. *Id.* at ___ (slip op. at 31).

II. CONTENTION 18 AND ALTERNATIVE CONTENTION A ARE MOOT AND THERE IS NO GENUINE ISSUE OF MATERIAL FACT

To determine whether there is a genuine issue of material fact, it is important to first determine which issues are in dispute. Under NRC practice, the issues in dispute are determined by the scope of the admitted contention. See *Pilgrim*, CLI-10-11, 71 NRC at ___ (slip op. at 28). The scope of a contention is defined both by its terms and its bases. *Id.* The scope of an admitted contention is also based on the board's discussion of the contention when admitting it. See *id.* at ___ (slip op. at 13-16) (discussing the licensing board decision admitting the contention to determine the admitted contention's scope).

In this case, the Board admitted, in part, Contention 18 and Alternatives Contention A, and held that they would be adjudicated as one contention. *Comanche Peak*, LBP-10-10, 72 NRC at ___ (slip op. at 75, 87). The new, reformulated Contention 18 is as follows:

The Comanche Peak Environmental Report is inadequate because it fails to include consideration of alternatives to the proposed Comanche Peak Units 3 and 4, consisting of combinations of renewable energy sources such as wind and solar power, with technological advances in storage methods and supplemental use of natural gas, to create baseload power.

Comanche Peak, LBP-09-17, 70 NRC ___ (slip op. at 82, 85). The new, reformulated Alternatives Contention A, is as follows:

The Applicant has not considered the feasibility under NEPA of an alternative consisting of a combination of solar and wind energy, energy storage methods including CAES and molten salt storage, and natural gas supplementation, to produce baseload power, with specific regard to:

- (a) The reasonable availability of the four parts of such combination for consolidation into an integrated system to produce baseload power;
- (b) The feasibility of the use of such combination in the area of Texas served by the Comanche Peak plant;
- (c) The extent to which there may be efficiencies arising from overlapping uses of land for each of the four parts of the combination as well as for other reasonable purposes; and
- (d) If it is shown that such an alternative is environmentally preferable, the extent to which operation and maintenance costs of solar in such combination may be a comparative benefit.

Comanche Peak, LBP-10-10, 71 NRC ___ (slip op. at 74-75, 86-87). Contention 18 and Alternatives Contention A, as reformulated and admitted by the Board, raise issues concerning the Applicant's omission from the alternatives analysis in the ER of an evaluation of a four-part combination of alternatives consisting of wind and solar, energy storage methods such as CAES and molten salt, and supplemental natural gas. *Comanche Peak*, LBP-10-10, 71 NRC ___ (slip op. at 2, 6, 10, 13-14, 44, 50, 52-53, 58, 68).

Contention 18 and Alternatives Contention A, as contentions of omission, challenge the absence of a discussion in the Applicant's alternatives analysis of the feasibility of a four-part combination of alternatives consisting of wind, solar, technological advances in energy storage, and natural gas. Subsequent to the Board's ruling retaining part of Contention 18 and admitting a reformulated Alternatives Contention A, the NRC Staff issued the DEIS, in which the NRC staff considered a spectrum of energy alternatives that were reasonable for the ERCOT region, and developed for comparison with the proposed project a combination of wind and solar, each with storage; a combination of sources including biomass, municipal solid waste, and geothermal; and natural gas. DEIS at 9-28 through 9-33. The NRC staff determined that, given the purpose and need of the proposed project to produce 3200 MW(e) of additional baseload electrical power, an energy source such as coal or natural gas would have to be a significant contributor to any reasonable alternative energy combination. DEIS at 1-6, 9-28 through 9-33. The NRC staff concluded that combinations of alternative generation sources, supplemented by natural gas to produce baseload power comparable to the purpose and need of the proposed project, are not environmentally preferable to the proposed CPNPP Units 3 and 4. *Id.* at 9-32. As summarized in Table 9-5 of the DEIS, the NRC staff evaluated the environmental impacts of electric generation from nuclear, coal, natural gas, and a combination of alternatives, on land use, water use and quality, ecology, socioeconomics, waste management, environmental justice, historic and cultural resources, air quality, human health, and carbon dioxide (CO₂).

DEIS at 9-33. The NRC staff determined that there are no environmentally preferable, technically reasonable alternatives to the proposed CPNPP Units 3 and 4. DEIS at 9-32.

The NRC Staff, not the Applicant, is required under NEPA to prepare the DEIS and identify and discuss all reasonable alternatives, including a combination of alternatives that might compare with the proposed project. *Comanche Peak*, LBP-10-10, 71 NRC __ (slip op. at 14) (“the requirements of NEPA are directed to Federal agencies and the primary duties of NEPA accordingly fall on the NRC Staff in NRC proceedings”); *Progress Energy Florida, Inc.* (Combined License Application for Levy County Nuclear Power Plant, Units 1 and 2), LBP-09-10, 70 NRC __, __ (July 8, 2009) (slip op. at 26) (“Under NEPA, it is NRC, not the applicant, that must prepare the EIS and identify and discuss all reasonable alternatives.”) (citations omitted). The ER is not the EIS, and the regulations do not require the ER to be equivalent to the EIS. *Levy County*, LBP-09-10, 70 NRC __ (slip op. at 27-28). While the NRC requires a COL applicant to submit an ER that contains sufficient data and analysis, the purpose of that requirement is to aid the Commission in meeting its obligation under NEPA to develop an independent analysis in the EIS. *Levy County*, LBP-09-10, 70 NRC __ (slip op. at 27-28).

The DEIS prepared by the Staff to meet its obligations under NEPA includes a discussion of a combination of alternatives that includes the four-part combination of alternatives the Board found must be considered, as admitted in Contention 18 and Alternatives Contention A. *Exelon Generation Company, LLC* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 811 (2005) (quoting *Systems Energy Resources, Inc.* (Early Site Permit for Grand Gulf Site), CLI-05-4, 61 NRC 10, 13 (2005)). Because the DEIS alternatives analysis includes a combination alternative which includes the four parts upon which the admitted contentions are based (solar, wind, energy storage, and natural gas supplementation), the alternatives analysis no longer omits the combination alternative. Contention 18 and Alternatives Contention A, which challenge omissions from the Applicant’s ER, are now moot. *McGuire*, CLI-02-28, 56 NRC at 383 (citations omitted).

The NRC staff agrees with the material facts presented in the Applicant's Motion. Further, the material facts presented in the Applicant's Motion are consistent with and do not differ materially from the conclusions and underlying factual findings in the DEIS, and are also consistent with facts presented by the Intervenors. The material facts presented by the Applicant demonstrate that Contention 18 and Alternatives Contention A should be dismissed in their entirety because there exists no genuine issue of material fact and the Applicant is entitled to a decision as a matter of law. 10 C.F.R. § 2.710(d)(2); *see also Pilgrim*, CLI-10-11, 71 NRC at ___ (slip op. at 12) (stating that only disputes over facts with the potential to affect the outcome of the proceeding would preclude summary disposition).

CONCLUSION

Contention 18 and Alternatives Contention A, both contentions of omission, were rendered moot by the issuance of the NRC's DEIS, which includes a thorough analysis of the four-part combination of alternatives described in the contentions. The NRC staff also agrees that summary disposition of Contention 18 and Alternatives Contention A is warranted because there exists no genuine issue of material fact relevant to these contentions, and under applicable regulations, the Applicant is entitled to a decision as a matter of law.

/Signed (electronically) by/
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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

CERTIFICATE OF SERVICE

I hereby certify that copies of the NRC STAFF ANSWER IN TO LUMINANT'S MOTION FOR SUMMARY DISPOSITION ON CONTENTION 18 AND ALTERNATIVE CONTENTION A have been served upon the following persons by Electronic Information Exchange this 15th day of September, 2010:

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Dated at Rockville, Maryland
this 15th day of September, 2010

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

NRC STAFF RESPONSE TO INTERVENORS' NEW
CONTENTIONS BASED ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT

INTRODUCTION

Pursuant to the Atomic Safety and Licensing Board's (Board's) Order dated October 28, 2009, and 10 C.F.R. § 2.309(h)(1), the staff of the U.S. Nuclear Regulatory Commission (Staff) hereby answers the motion and the proposed new contentions in "Intervenors' Motion for Leave to File New Contentions Based on the Draft Environmental Impact Statement" (DEIS Contentions) filed on September 7, 2010, by Sustainable Energy and Economic Development Coalition (SEED), Nita O'Neal, Public Citizen, Don Young, True Cost of Nukes, J. Nile Fisher and Representative Lon Burnam (collectively Intervenors). For the reasons set forth below, the six new proposed contentions should be rejected for failure to comply with the contention admissibility requirements in 10 C.F.R. § 2.309(f)(1) and the requirements for new and amended contentions in 10 C.F.R. § 2.309(f)(2).

BACKGROUND

On September 19, 2008, Luminant Generation Company LLC and Comanche Peak Nuclear Power Company LLC (Applicant), pursuant to the Atomic Energy Act of 1954, as amended (AEA) and the Commission's regulations, submitted an application for combined licenses (COL) for two US-Advanced Pressurized Water Reactors (US-APWRs) to be located

adjacent to the existing Comanche Peak Nuclear Power Plant, Units 1 and 2, near Glen Rose in Somervell County, Texas (Application). Luminant Generation Company, LLC; Notice of Receipt and Availability of Application for a Combined License, 73 Fed. Reg. 66,276 (Nov. 7, 2008). The Application references the standard design certification application for the US-APWR, including a design control document (DCD), submitted by Mitsubishi Heavy Industries, Ltd. (MHI). Application, Section 1.0, at 7 (Rev. 01 Final (Public)) (Nov. 20, 2009). The proposed units will be known as Comanche Peak Nuclear Power Plant, Units 3 & 4. *Id.*

In response to the Notice of Hearing on the Application, published on February 5, 2009, Intervenor submitted a "Petition for Intervention and Request for Hearing" on April 6, 2009 (Petition), proposing several contentions. See 74 Fed. Reg. 6177 (Feb. 5, 2009). On August 6, 2009, the Licensing Board issued a Memorandum and Order admitting the Intervenor as parties to this proceeding and admitting two proposed contentions. *Luminant Generation Co., LLC* (Comanche Peak Nuclear Power Plant, Units 3 & 4), LBP-09-17, 70 NRC ___, (slip op.) (Aug. 6, 2009).

The Environmental Protection Agency issued a notice of availability for NUREG-1943, "Environmental Impact Statement for Combined Licenses (COLs) for Comanche Peak Nuclear Power Plant Units 3 and 4 - Draft Report for Comment (NUREG-1943)" (DEIS) on August 13, 2010. Environmental Impacts Statements; Notice of Availability, 75 Fed. Reg. 49,486, 49,487 (Aug. 13, 2010). On September 7, 2010, Intervenor filed six new contentions regarding the DEIS. See DEIS Contentions. The DEIS Contentions were accompanied by a collection of attachments, including reports prepared by Tom Smith (Smith Report), David Power (Power Report), and Raymond H. Dean (Dean Report).

DISCUSSION

The Intervenor asserts that six new contentions based on the DEIS should be admitted in this proceeding. Each of the proposed new DEIS contentions fails to meet the contention

admissibility requirements in 10 C.F.R. § 2.309(f)(1) and (f)(2). For the reasons set forth below, each of the Intervenor's' new DEIS contentions should be dismissed.

I. LEGAL STANDARDS

A. Legal Standards for Admission of New, Amended, or Nontimely Contentions

The admissibility of new and amended contentions is governed by 10 C.F.R. § 2.309(f)(2) and 2.309(f)(1).

First, new or amended contentions regarding NEPA may be filed if there are data or conclusions in the NRC draft or final environmental impact statement, environmental assessment, or any supplements relating thereto, that differ significantly from the data or conclusions in the applicant's documents. 10 C.F.R. § 2.309(f)(2). Otherwise, new or amended contentions filed after the initial filing period may be admitted only with leave of the presiding officer if, in accordance with 10 C.F.R. § 2.309(f)(2), the contention meets the following requirements:

- (i) The information upon which the amended or new contention is based was not previously available;
- (ii) The information upon which the amended or new contention is based is materially different than information previously available; and
- (iii) The amended or new contention has been submitted in a timely fashion based on the availability of the subsequent information.

10 C.F.R. § 2.309(f)(2)(i)-(iii). Specifically, in this proceeding, the Board has stated that a motion and proposed new contention will be considered timely under 10 C.F.R. § 2.309(f)(2)(iii) if it is filed:

“[W]ithin thirty (30) days of the date when the new and material information on which it is based first becomes available. If filed thereafter, the motion and proposed contention shall be deemed non-timely under 10 C.F.R. § 2.309(c). If the movant is uncertain, it may file pursuant to both, and the motion should cover the three criteria of 10 C.F.R. § 2.309(f)(2) and the eight criteria of 10 C.F.R. § 2.309(c), as well as the six criteria of 10 C.F.R. § 2.309(f)(1).”

Luminant Generation Co., LLC (Comanche Peak Nuclear Power Plant, Units 3 and 4), at 5 (LBP Oct. 28, 2009) (unpublished order) (Initial Scheduling Order).

The section 2.309(f)(2) standard for new or amended contentions addresses two situations. For the first situation, section 2.309(f)(2) states that contentions may be filed on the DEIS where the DEIS differs significantly from the applicant's documents, which in this case is the Environmental Report (ER). Such new or amended environmental contentions "must be submitted promptly after the NRC's environmental documents are issued." Changes to Adjudicatory Process (Final Rule), 69 Fed. Reg. 2182, 2221 (Jan. 14, 2004). The second situation provides criteria for filing "all other new or amended contentions," making clear that the criteria in § 2.309(f)(2)(i) through (iii) must be satisfied for admission of a contention based on new information. *Id.* If new information arises related to the ER, then under the criteria of 2.309(f)(2)(i) through (iii), an intervenor must raise this new information in a timely fashion based on the availability of the subsequent information. A licensing board has recognized the two-fold application of the rule, but has pointed out that no significant difference exists between the standards for the two situations. *Exelon Generating Company, LLC* (Early Site Permit for Clinton ESP Site), LBP-05-19, 62 NRC 134, 160-64 (2005).

The status of the petitioner is the relevant factor in determining whether 10 C.F.R. § 2.309(f)(2) regarding new or amended petitions or 10 C.F.R. § 2.309(c) regarding untimely petitions is applied to determine the admissibility of new, amended, or untimely petitions. A new or amended contention filed by a previously admitted intervenor must be reviewed under the requirements of 10 C.F.R. 2.309(f)(2) rather than the provisions of 10 C.F.R. § 2.309(c). See *Pa'ina Hawaii, LLC* (Material License Application), CLI-10-18, 72 NRC __, __ (July 8, 2010) (slip op. at 40 .171). In either case, the new, amended, or untimely petition must meet the general contention admissibility requirements of 10 C.F.R. § 2.309 (f)(1). *Id.*

The Commission stated that "[t]here has been some discussion recently over the application of 10 C.F.R. § 2.309(f)(2) (governing new or amended contentions), and 10 C.F.R.

§ 2.309(c) (governing untimely petitions). See generally *Southern Nuclear Operating Co.* (Vogtle Electric Generating Plant, Units 3 and 4), LBP-10-1, 71 NRC __ (Jan. 8, 2010) (slip op.). Where, as here, the Intervenor had been admitted to this case as parties at the time they filed contentions against the DEIS, consideration of the admissibility of their DEIS contentions is governed by the provisions of § 2.309(f)(2), as well as the general contention admissibility requirements of § 2.309(f)(1). *Pa'ina*, CLI-10-18, 72 NRC at __ (slip op. at 40 n.171).¹

Second, amended and new contentions must comply with the general contention admissibility requirements set forth in 10 C.F.R. § 2.309(f)(1). In accordance with 10 C.F.R. § 2.309(f)(1), an admissible contention must:

- (i) provide a specific statement of the legal or factual issue sought to be raised;
- (ii) provide a brief explanation of the basis for the contention;
- (iii) demonstrate that the issue raised is within the scope of the proceeding;
- (iv) demonstrate that the issue raised is material to the findings the NRC must make to support the action that is involved in the proceeding;
- (v) provide a concise statement of the alleged facts or expert opinions, including references to specific sources and documents, that support the petitioner's position and upon which the petitioner intends to rely at the hearing;
- (vi) . . . provide sufficient information to show that a genuine dispute with the Applicant exists with regard to a material issue of law or fact, including references to specific portions of the application that the petitioner disputes, or in the case when the application is alleged to be deficient, the identification of such deficiencies and supporting reasons for this belief

10 C.F.R. § 2.309(f)(1). The Commission has emphasized that the rules on contention admissibility are "strict by design." *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001), *pet. for reconsideration*

¹ Even if 10 C.F.R. § 2.309(c) were to apply in this case, the Intervenor fails to address these requirements.

denied, CLI-02-01, 55 NRC 1 (2002). Failure to comply with any of these requirements is grounds for the dismissal of a contention. *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999). “Mere ‘notice pleading’ does not suffice.” *Amergen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 119 (2006) (internal quotation omitted). The general contention admissibility requirements apply to contentions on the DEIS as well. See, e.g., *Exelon Generating Company, LLC* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 808-09 (2005) (applying 10 C.F.R. § 2.309(f) standards to DEIS contentions).

II. INTERVENORS HAVE NOT SUBMITTED AN ADMISSIBLE NEW DEIS CONTENTION

The Intervenor propose six new contentions which allege deficiencies in the DEIS. Since none of these proposed new contentions meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1) and (f)(2) for new and amended contentions, each of the Intervenor’s proposed new contentions should be denied.

- A. Contention 1: The DEIS analysis of the need for power is flawed, incomplete and internally contradictory.

DEIS Contentions at 3. The Intervenor provide fourteen bases in support of proposed DEIS Contention 1. *Id.* at 3-6. For the reasons stated below, neither DEIS Contention 1, as a whole, nor any of its bases is admissible.²

1. Need for Power Assessments

The NRC Staff is allowed to rely on a state or regional authority need for power determination for its EIS analysis. As part of the NRC’s NEPA analysis associated with nuclear power plant licensing, the agency must include a balancing of costs and benefits. *United States*

² The Staff will respond to each of these bases individually because that is how the Intervenor organized DEIS Contention 1 and because the bases present distinct arguments that require individual treatment. However, the proposed DEIS Contention 1 is also inadmissible as a whole, even considering all of the bases together.

Energy Research and Development Administration (Clinch River Breeder Reactor Plant), CLI-76-13, 4 NRC 67, 76 (1976) (citing *Calvert Cliffs Coordinating Committee, Inc. v. AEC*, 449 F.2d 1109 (D.C. Cir. 1971)). The assessment of need for power has historically been equated “with the benefits of the proposed action” for the cost-benefit balance consideration. Nuclear Energy Institute; Denial of Petition for Rulemaking, 68 Fed. Reg. 55,905, 55,909 (Sept. 29, 2003) (NEI Rulemaking Petition Denial). While need for power assessments are required, they “should not involve burdensome attempts to precisely identify future conditions. Rather, it should be sufficient to reasonably characterize the costs and benefits associated with proposed licensing actions.” *South Carolina Electric & Gas Co. & South Carolina Public Service Authority (Also Referred to as Santee Cooper)* (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-01, 71 NRC __, __ (Jan. 7, 2010) (slip op. at 21) (quoting NEI Rulemaking Petition Denial, 68 Fed. Reg. at 55,910). The Commission has also recognized that long-range forecasts of need for power are especially uncertain because they depend on many factors, and many of these factors are, themselves, inherently uncertain. *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant, Units 1, 2, 3, and 4), CLI-79-5, 9 NRC 607, 609-10 (1979).

The Staff’s assessment of need for power is contained in Chapter 8 of the DEIS. In Chapter 8, the Staff examined whether there was a need for baseload power in the region of interest in the appropriate timeframe. DEIS 8-1 – 8-24. The Staff examined the State’s forecasts and documents created by (or for) the Electric Reliability Council of Texas (ERCOT) to determine if the ERCOT analysis was sufficient to reasonably characterize the costs and benefits associated with the proposed plant. In accordance with NRC guidance, the Staff determined that these forecasts and documents were (1) systematic, (2) comprehensive, (3) subject to confirmation, and (4) responsive to forecasting uncertainty. *Id.* at 8-2. The NRC staff may rely upon the state’s analysis for its need for power determination. “[T]he NRC does not supplant the States, which have traditionally been responsible for assessing the need for power generating facilities, their economic feasibility and for regulating rates and services . . .

[T]he NRC has acknowledged the primacy of State regulatory decisions regarding future energy options.” NEI Rulemaking Petition Denial, 68 Fed. Reg. 5,905 at 55,909 (Sept. 29, 2003).

After completing its assessment, the Staff reached the following conclusion regarding the ERCOT analysis:

The NRC staff has conducted a thorough and conservative analysis of the need for power in ERCOT for the future periods 2014, 2019, and 2024. The NRC staff has reviewed the Applicant’s ER and has concluded that while appropriate, it contained data that failed to reflect current economic and other conditions fully. The NRC staff has updated that analysis using the newest data available to the analysis. In both cases, the basis for analysis has been the body of integrated ERCOT analyses, which staff finds to be appropriate for this analysis by virtue of fulfilling the criteria of being systematic, comprehensive, subject to confirmation, and responsive to forecasting uncertainty.

DEIS at 8-22. The Appeal Board in *Shearon Harris* provides a detailed discussion where it concluded that a “body charged by law with the responsibility of providing up-to-date analyses of ... the probable future growth of the use of electricity” is “entitled to be given great weight” absent “some fundamental error” in its analysis. *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant, Units 1, 2, 3, & 4), ALAB-490, 8 NRC 234, 240 (1979). The Appeal Board explained that “no abdication of NRC responsibilities [under NEPA] results from according conclusive effect to [a utilities commission forecast].” *Id.* at 241. DEIS Contention 1 and its Bases A – N primarily constitute a challenge to the Staff’s reliance on the ERCOT analysis without alleging that the ERCOT analysis contains a fundamental error. Therefore, DEIS Contention 1 and its Bases A – N, overall, do not show that a genuine dispute exists with the DEIS on a material issue of law or fact, and are inadmissible. 10 C.F.R. 2.309(f)(1)(vi).

2. The Intervenors Do Not Provide Any Admissible Basis for Contention 1

As explained above, Contention 1, overall, does not meet the admissibility criteria of 10 C.F.R. § 2.309(f)(1)(vi), and each Basis does not meet the specific additional admissibility criteria described below.

BASIS A:

The DEIS fails to consider ERCOT information that call into question whether Comanche Peak Units 3 & 4 will produce adequate net revenue to justify the proposed project based on market conditions.

DEIS Contentions at 3.

The Intervenors question whether the proposed plant will produce adequate net revenue to justify the proposed project based on market conditions, but their arguments do not demonstrate that this issue is material to the findings the Staff must make. 10 C.F.R. § 2.309(f)(1)(iv). The Intervenors also do not show that a genuine dispute exists with the DEIS on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi). For the reasons explained below, DEIS Contention 1, Basis A, does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(iv) and (vi) and should be rejected.

The Intervenors cite the “Net Revenue Analysis The Ercot 2009 State of the Market Report by POTOMAC ECONOMICS, LTD” as support for Basis A. Motion at 3 (citing Power Report at 1 – 3). The Power Report focuses on whether the “net revenue” supports entry into the power generation market. Power Report at 3. However, the DEIS concludes that there is a need for power because “(1) there could become a shortage of power in the ERCOT region that could be at least partially addressed by construction of proposed Units 3 and 4 at the CPNPP site; (2) construction of Units 3 and 4 would reduce the likelihood of an electricity supply reliability crisis in Texas; and (3) construction of Units 3 and 4 would contribute to the new generation needed in the ERCOT region by 2019 to meet reserve targets.” DEIS at 8-22. The Intervenors do not identify a legal requirement that the Staff must determine that the Applicant will have a positive net revenue, or be profitable, in order to conclude that there is a need for power and therefore do not demonstrate a material dispute. 10 C.F.R. § 2.309(f)(1)(vi). Further, the business decision of the Applicant on whether to ultimately construct and operate the plant is not material to the findings the Staff must make. 10 C.F.R. § 2.309(f)(1)(iv). The Commission has held that such contentions can be “reasonably excluded ... on the basis that

the business decisions of licensees or applicants are beyond our purview.” *Summer*; CLI-10-01, 71 NRC __ (slip op. at 29). Thus, Basis A does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(iv) and (vi) and does not support the admissibility of DEIS Contention 1.

BASIS B:

The DEIS analysis does not address the ERCOT information that suggests energy to meet peak loads is needed more than baseload energy.

DEIS Contentions at 3.

The Intervenor does not demonstrate how the information in the DEIS upon which Basis B is based differs significantly from the information in the Applicant’s ER. 10 C.F.R. § 2.309(f)(2). Also, the Intervenor does not provide sufficient information to show that a genuine dispute exists with the DEIS on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi). For the reasons explained below, Basis B does not support the admissibility of DEIS Contention 1.

Contrary to the Intervenor’s assertion in Basis B, the DEIS does discuss the difference between peak loads and the need for baseload power in order to meet reserve margins. See DEIS at 8-6 lines 4 – 11. The Intervenor does not discuss or controvert the discussion in the DEIS of how peak load forecasts correlate to the need for baseload power in order to maintain reserve margin. The Intervenor has a duty to read the DEIS and base a proposed contention on a meaningful analysis rather than simply allege that the DEIS is deficient without specifying how it is deficient. See *Duke Energy Carolinas, LLC* (William States Lee III Nuclear Station, Units 1 and 2), LBP-08-17; 68 NRC 431, 450 (2008)(“A contention is not admissible where the Petitioner’s assertion that the application is deficient is simply based upon a failure to read or perform any meaningful analysis of the application.” (internal quotes omitted)); see also *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3) CLI-01-24, 54 NRC 349, 358 (2001)(citing Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,170-171 (Aug. 11, 1989)(“The Intervenor must do more than submit ‘bald or conclusory allegation[s]’ of a dispute

with the applicant. He or she must 'read the pertinent portions of the license application . . .and . . . state the applicant's position and the petitioner's opposing view.'). The Intervenor do not show through this basis that there is a genuine dispute of material fact or law. 10 C.F.R. 2.309(f)(1)(vi).

The Intervenor do not meet the requirement of 10 C.F.R. § 2.309(f)(2) to show that the information in the DEIS differs significantly from the data or conclusions in the ER. Similar to the DEIS at 8-6 lines 4-11, the Applicant determined in its ER at 8.4-9 that there is a need for *baseload* power based on ERCOT analysis, and the Intervenor do not show how the information in the DEIS differs significantly from the Applicant's ER. Because they have not alleged or shown that DEIS Contention 1, Basis B, is based on information that differs significantly from the ER, the Intervenor have failed to meet the requirement of 10 C.F.R. § 2.309(f)(2) for raising this issue now rather than in response to the Applicant's ER.

BASIS C:

The DEIS understates the continued growth of wind capacity in Texas and the ERCOT region.

DEIS Contentions at 3.

The Intervenor do not demonstrate how the information in the DEIS upon which Basis C is based differs significantly from the information in the Applicant's ER. 10 C.F.R. § 2.309(f)(2). Also, the Intervenor do not provide sufficient information to show that a genuine dispute exists with the DEIS on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi). For the reasons explained below, Basis C does not support the admissibility of DEIS Contention 1.

The Intervenor do not show how Basis C establishes a genuine dispute with the DEIS on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi). The Intervenor provide information in the Power Report that "Texas has now 'officially' exceeded the 10,000 MW of installed wind capacity threshold." Power Report at 3. However, the Intervenor do not explain how, even if their assertion is true, the currently installed generating sources in ERCOT,

including wind capacity, contradict the ERCOT analysis or the DEIS conclusion that there is a need for power. In order to challenge a need for power assessment, an intervenor must provide more than just statistical or anecdotal references. *Summer*; CLI-10-01, 71 NRC ___ (slip op. at 22 n.84). In *Summer*, the Commission agreed with the Board that sufficient information to establish a genuine dispute with the applicant was not provided by an expert who used statistical and anecdotal references to the economic downturn rather than quantifying the need for power or specifically challenging the applicant's analysis. *Id.* The DEIS Section 8.3 "Power Supply" describes the ERCOT analysis of the current power generation sources, and is not discussed by the Intervenor in Basis C. DEIS at 8-15 – 8-20; DEIS Contentions at 3 and Power Report at 3. Rather, the Intervenor cite to language from DEIS Chapter 9 "Environmental Impacts of Alternatives." The Intervenor have a duty to read the DEIS and base a proposed contention on a meaningful analysis rather than simply allege that the DEIS is deficient without specifying how it is deficient. See *William S. Lee*, LBP-08-17; 68 NRC at 450; see also, *Millstone*; CLI-01-24, 54 NRC at 358. Therefore, the Intervenor do not show a genuine dispute with the DEIS on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi).

The Intervenor do not meet the requirement of 10 C.F.R. § 2.309(f)(2) to show that the information in the DEIS differs significantly from the data or conclusions in the ER. The Intervenor do not show how the DEIS discussion of wind generation capacity in ERCOT at 8-17 and 8-18 differs significantly from the Applicant's discussion in the ER at 8.3-1 – 8.3-5. As a result, the Intervenor have failed to meet the requirement of 10 C.F.R. § 2.309(f)(2) for raising this issue now rather than in response to the Applicant's ER.

BASIS D:

The DEIS analysis does not account for increases in wind carrying capacity.

DEIS Contentions at 3.

The Intervenor's do not demonstrate how the information in the DEIS upon which Basis D is based differs significantly from the information in the Applicant's ER. 10 C.F.R. § 2.309(f)(2). Also, the Intervenor's do not provide sufficient information to show that a genuine dispute exists with the DEIS on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi). For the reasons explained below, Basis D does not support the admissibility of DEIS Contention 1.

The Intervenor's claim in Basis D and in the Power Report that the "DEIS analysis does not account for increases in wind carrying capacity." DEIS Contentions at 3 (citing Power Report at 4). However, the Intervenor's do not address the DEIS discussion of the electric load carrying capacity of wind found on page 8-19. DEIS at 8-19. The Intervenor's have a duty to read the DEIS and base a proposed contention on a meaningful analysis rather than simply allege that the DEIS is deficient without specifying how it is deficient. See *William S. Lee*, LBP-08-17; 68 NRC at 450; see also, *Millstone*; CLI-01-24, 54 NRC at 358. Without addressing how the DEIS discussion is deficient, the Intervenor's do not show a genuine dispute with the DEIS on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi). Further, even considering the estimated increases described in the Power Report to be accurate, the Intervenor's do not describe how that quantity of wind carrying capacity would affect the determination of the need for power. In order to challenge a need for power assessment, an intervenor must provide more than just statistical or anecdotal references. *Summer*; CLI-10-01, 71 NRC __ (slip op. at 22 n.84). Thus, the Intervenor's do not show how the wind carrying capacity information is material to the need for power determination. 10 C.F.R. § 2.309(f)(1)(vi).

The Intervenor's do not meet the requirement of 10 C.F.R. § 2.309(f)(2) to show that the information in the DEIS differs significantly from the data or conclusions in the ER. The Intervenor's do not show how the DEIS discussion of the load carrying capacity of wind at 8-19 differs significantly from the ER discussion at 8.4-3, 8.4-4, and 8.4-9. As a result, the Intervenor's have failed to meet the requirement of 10 C.F.R. § 2.309(f)(2) for raising this issue now rather than in response to the Applicant's ER.

BASIS E:

The DEIS does not account for more efficient deployment and dispatch that is expected from the transition to nodal deployment anticipated for December 2010.

DEIS Contentions at 3. To support Basis E, the Intervenor asserts that the Power Report provides that, “[w]ith more efficient deployment in December of 2010 there should be significant reductions in congestion based dispatch of generation resources.” *Id.* (citing Power Report at 4).

The Intervenor does not show how the information in the DEIS differs significantly from the information in the Applicant’s ER. 10 C.F.R. § 2.309(f)(2). Similarly, the Intervenor does not show that the DEIS information upon which Basis E is based was not previously available. 10 C.F.R. § 2.309(f)(2)(i). Additionally, the Intervenor has not provided sufficient information to show that DEIS Contention 1, Basis E, raises a genuine dispute with the DEIS on a material issue of fact or law. 10 C.F.R. § 2.309(f)(1)(vi). For the reasons explained below, Basis E does not support admissibility of DEIS Contention 1.

Contrary to the Intervenor’s assertion in Basis E, the DEIS includes a discussion of the current zonal power system and how it “results in inefficiencies.” DEIS 8-4 – 8-5. Further, the DEIS characterizes how “ERCOT is now planning to switch from this zonal system to a nodal system” which “provides incentives for more efficient behavior.” *Id.* Neither DEIS Contention 1, Basis E, nor the Power Report, cite or mention the DEIS discussion of the change to the nodal system. The Intervenor has a duty to read the DEIS and base a proposed contention on a meaningful analysis rather than simply allege that the DEIS is deficient without specifying how it is deficient. See *William S. Lee*, LBP-08-17; 68 NRC at 450; see also, *Millstone*; CLI-01-24, 54 NRC at 358. Also, in order to challenge a need for power assessment, an intervenor must provide more than just statistical or anecdotal references. *Summer*; CLI-10-01, 71 NRC ___ (slip op. at 22 n.84). Without addressing how the DEIS discussion is deficient, the Intervenor does not show a genuine dispute with the DEIS on a material issue of law or fact. 10 C.F.R.

§ 2.309(f)(1)(vi). Further, because the switch to the nodal system will occur in December 2010 as the Power Report states, any energy savings can only be estimated at this time, and can not be quantified. See Power Report at 4. The Power Report itself does not quantify the energy savings from the planned change to the nodal system, and states only that the “changes *should* help increase the economic and reliable utilization of scarce transmission resources.” *Id* (emphasis added). Thus, Basis E does not show a genuine dispute with the DEIS on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi).

The Intervenors do not show how the information in the DEIS need for power discussion differs significantly from the Applicant’s ER, which is required under 10 C.F.R. § 2.309(f)(2), in order to support raising this issue now, rather than in response to the Applicant’s ER. Similar to the discussion in the DEIS at 8-4 to 8-5, the Applicant’s ER did not adjust its need for power analysis based on the planned switch by ERCOT to the nodal distribution system. See *generally*, ER chapter 8. Likewise, according to the ERCOT website, “[i]n September 2003, as part of Project 26376, the Public Utility Commission of Texas (PUCT) ordered ERCOT to develop a nodal wholesale market design.”³ Therefore, the information regarding the transition to the nodal system was previously available. Thus, the Intervenors have not shown that the information upon which DEIS Contention 1 is based, either shows that the DEIS differs significantly from the ER or was not previously available, as required under 10 C.F.R. § 2.309(f)(2) or (f)(2)(i).

BASIS F:

The DEIS does not account for increases in responsive reserve power sources. DEIS Contentions at 4. In support of DEIS Contention 1, Basis F, the Intervenors cite to page 4 of the Power Report. *Id*. The Power Report’s discussion of this issue is limited to: “[t]he increase of responsive reserves: Ercot currently acquires 1,150 MW of load acting as a

³ <http://nodal.ercot.com/about/index.html>

responsive reserve (LaaRs) but as of December 2009, over 2,200 MW of capability were qualified as LaaRs.[*citing 2009_ERCOT_SOM_Report_Final.pdf*].” *Id.* (citing Power Report at 4).

The Intervenor do not show how the information in the DEIS differs significantly from the information in the Applicant’s ER. 10 C.F.R. § 2.309(f)(2). Additionally, the Intervenor have not provided sufficient information to show that DEIS Contention 1, Basis F, raises a genuine dispute with the DEIS on a material issue of fact or law. 10 C.F.R. § 2.309(f)(1)(vi). For the reasons explained below, Basis F does not support admissibility of DEIS Contention 1.

Neither DEIS Contention 1, Basis F, nor the Power Report provide any explanation for how the stated increase in responsive reserve affects the overall DEIS determination of a need for power. Intervenor simply note, based on the Power Report, that there is an increase responsive reserve. Power Report at 4. In order to challenge a need for power assessment, an intervenor must provide more than just statistical or anecdotal references. *Summer*; CLI-10-01, 71 NRC ___ (slip op. at 22 n.84). As such, Basis F is insufficient to support the admissibility of DEIS Contention 1 because it does not show a genuine dispute with the DEIS on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi).

The Intervenor do not meet the requirement of 10 C.F.R. § 2.309(f)(2) to show that the information in the DEIS differs significantly from the data or conclusions in the ER. The Intervenor do not show how the DEIS discussion of the responsive reserve at 8-12 differs significantly from the ER discussion at 8.4-5 to 8.4-6. As a result, the Intervenor have failed to meet the requirement of 10 C.F.R. § 2.309(f)(2) for raising this issue now rather than in response to the Applicant’s ER.

BASIS G:

The DEIS does not account for the ability of natural gas generation to increase generation capacity in a cost-effective manner.

DEIS Contentions at 4. In support of DEIS Contention 1, Basis G, the Intervenor provide the Power Report. *Id.* The Power Report states that natural gas turbines experience a decrease in energy output based on an “increase in inlet air temperature.” Power Report at 4. The Power Report, citing a “TICA WhitePaper,” suggests that “[a]dding Turbine inlet cooling (TIC) can provide significant increase in energy during the peak load months.” *Id.* at 5.

The Intervenor do not show how the information in the DEIS differs significantly from the information in the Applicant’s ER. 10 C.F.R. § 2.309(f)(2). Additionally, the Intervenor have not provided sufficient information to show that DEIS Contention 1, Basis G, raises a genuine dispute with the DEIS on a material issue of fact or law. 10 C.F.R. § 2.309(f)(1)(vi). For the reasons explained below, Basis G does not support admissibility of DEIS Contention 1.

The Intervenor do not explain how the modification of natural gas turbine facilities in Texas could materially affect the need for power assessment in the DEIS. In order to challenge a need for power assessment, an intervenor must provide more than just statistical or anecdotal references. *Sumner*, CLI-10-01, 71 NRC __ (slip op. at 22 n.84). The Intervenor here, without any analysis, assert that the DEIS need for power assessment is deficient unless it specifically accounts for the *possible* installation of turbine inlet cooling systems at Texas natural gas turbine facilities. This assertion, without further analysis, is insufficient to support the contention. Therefore, Basis G does not provide an admissible basis for DEIS Contention 1 because it does not show a genuine dispute with the DEIS on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi).

The Intervenor do not meet the requirement of 10 C.F.R. § 2.309(f)(2) to show that the information in the DEIS differs significantly from the data or conclusions in the ER. The Intervenor do not show how the DEIS discussion of the Inatural gas generation capacity at 8-15 to 8-17 differs significantly from the ER discussion at 8.3-1to 8.3-2. As a result, the Intervenor have failed to meet the requirement of 10 C.F.R. § 2.309(f)(2) for raising this issue now rather than in response to the Applicant’s ER.

BASIS H:

The DEIS does not fully account for reduced demand caused by the adoption of energy efficiency programs. The DEIS's attenuated consideration of the effects of energy efficiency/demand side management (DSM) programs has the effect of overstating the Applicant's need for power. Additionally, the assumption in the DEIS that the contribution to load reduction from DSM will remain static at 242 MW through 2024 is not reasonable in light of on-going efforts to reduce loads through DSM.

DEIS Contentions at 4. The Intervenor provides the Power Report as the support for DEIS Contention 1, Basis H. *Id.* (citing Power Report at 5 – 6). The Power Report claims that the City of San Antonio municipal electric utility (CPS) “achieved a reduction of 44.7 MW of peak energy” through its energy efficiency program. Power Report at 5. The Power Report also notes that the Texas Public Utility Commission (PUC) has issued a proposed rule to modify the state's energy efficiency incentive program. *Id.* The Power Report adds that other demand side management programs “will all have an effect of reducing the need for new generation.” *Id.* at 6.

The Intervenor does not show how the information in the DEIS differs significantly from the information in the Applicant's ER and do not show that the DEIS information upon which Basis H is based, was not previously available. 10 C.F.R. § 2.309(f)(2). Additionally, the Intervenor has not provided sufficient information to show that DEIS Contention 1, Basis H, raises a genuine dispute with the DEIS on a material issue of fact or law. 10 C.F.R. § 2.309(f)(1)(vi). For the reasons explained below, Basis H does not support admissibility of DEIS Contention 1.

In support of Basis H, the Intervenor provides an account of CPS energy efficiency program without explaining its significance to the ERCOT need for power analysis. Specifically, the Power Report states that “CPS should continue planning for the resources necessary to support large-scale deployment of DSM [demand side management] program portfolio and to achieve both short-term and long-term goals.” Power Report at 5. Although the Intervenor

provide this account of CPS's energy efficiency goals, they do not explain how it relates to the ERCOT need for power analysis. The anecdotal energy efficiency and demand side management program information cited by the Intervenor in the Power Report is insufficient to demonstrate a material dispute with a need for power analysis. In order to challenge a need for power assessment, an intervenor must provide more than just statistical or anecdotal references. *Sumner*, CLI-10-01, 71 NRC ___ (slip op. at 22 n.84). The Intervenor here, without any analysis, asserts that the DEIS need for power assessment is deficient unless it specifically accounts for the CPS energy efficiency program, a proposed Texas PUC regulation, and other municipal energy efficiency programs. DEIS Contentions at 4 (citing Power Report at 5-6). However, the Intervenor's own Power Report qualifies these measures as "*reducing* the need for new generation", and does not suggest that these measures *eliminate* the need for power determination made by the DEIS. Power Report at 6 (emphasis added). Therefore, Basis H does not provide an admissible basis to support DEIS Contention 1 because it does not show a genuine dispute with the DEIS on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi).

The Intervenor does not meet the requirement of 10 C.F.R. § 2.309(f)(2) to show that the information in the DEIS differs significantly from the data or conclusions in the ER. The Intervenor does not show how the DEIS discussion of energy efficiency or demand side management at 8-14 to 8-15 and 8-21 to 8-22 differs significantly from the ER discussion at 8.2-4 and 8.4-5 to 8.4-6. As a result, the Intervenor has failed to meet the requirement of 10 C.F.R. § 2.309(f)(2) for raising this issue now rather than in response to the Applicant's ER.

BASIS I:

The DEIS does not account for the additional capacity anticipated from the Texas mandate to include non-wind in the renewable portfolio standard.

DEIS Contentions at 4. The Intervenor cites the Power Report as support for DEIS Contention 1, Basis I. *Id.* In its entirety, the support in the Power Report for DEIS Contention 1, Basis I, states:

Texas Non-wind RPS: The PUC is considering adding an additional renewable energy mandate to the state's existing Renewable Portfolio Standard. This has been assigned a project #35792 and a straw-man has been issued.^[fn] This would provide an additional 500 MW of generating capacity in the ERCOT market. [FN] The hearing on this rule was held 4/30/2010, final comments were filed 5/11/2010, rule would apply starting in 2011 at 100MW and ramp up to 500 MW by 2015.

Power Report at 6.

The Intervenor do not show how the information in the DEIS differs significantly from the information in the Applicant's ER. 10 C.F.R. § 2.309(f)(2). Additionally, the Intervenor have not provided sufficient information to show that DEIS Contention 1, Basis I, raises a genuine dispute with the DEIS on a material issue of fact or law. 10 C.F.R. § 2.309(f)(1)(vi). For the reasons explained below, Basis I does not support admissibility of DEIS Contention 1.

First, the Intervenor do not explain why the DEIS is legally required to account for this proposed regulation. Although 10 C.F.R. § 2.309(f)(1)(vi) requires contentions of omission to provide supporting reasons for why the omitted information is required, the Intervenor fail to do so. In the need for power context, it is reasonable not to account for regulatory proposals that have not been issued, and reasonableness is all that is required by NEPA. *Summer*; CLI-10-01, 71 NRC __ (slip op. at 21); *see also Duke Power Co. (Catawba Nuclear Station, Units 1 and 2)*, ALAB-355, 4 NRC 397, 410 (1976)(conservative need for power forecasts are not automatically suspect); *Louisiana Energy Services, L.P. (National Enrichment Facility)*, CLI-05-20, 62 NRC 523, 536 (2005) ("NEPA does not call for certainty or precision, but an estimate of anticipated (not unduly speculative) impacts").

Second, the Intervenor do not explain how 500 MW of unspecified non-wind renewable capacity would materially alter the DEIS assessment that concluded that "there is a justified need for new baseload generating capacity in Texas in excess of the planned output of proposed Units 3 and 4." DEIS at 8-22. This is especially so since power demand in the ERCOT region is projected to increase. *See* DEIS at 8-11, 8-15. The Intervenor have not explained how the additional capacity from the proposed units would not be needed if an

additional 500 MW of non-baseload renewable generation comes online or otherwise explained how the DEIS conclusions would be materially altered.

Third, it is not clear that the proposed Texas PUC regulation will result in an additional 500 MW of capacity even if it is issued in current form. The PUC “Staff Strawman Rule” for this proposal would only amend existing PUC regulations. See Staff Strawman Rule, Project No. 35792 at 1 (Dec. 2009), *available at* http://www.puc.state.tx.us/rules/rulemake/35792/Strawman_122009.pdf. While changes are being proposed in 16 Tex. Admin. Code § 25.173(h) that would explicitly add yearly goals for *non-wind* renewable generation that would increase from 100 MW to 500 MW, the overall renewable capacity goals remain unchanged for the years 2009 to 2014 and for beyond 2014. See Staff Strawman Rule at 10-11 *and* 16 Tex. Admin. Code § 25.173(h) (2010) (current regulation).⁴ The Intervenor do not explain how the proposed regulation would result in different outcomes that could materially alter the DEIS conclusions. To be admissible, environmental contentions must focus on “significant inaccuracies or omissions” in the DEIS. *System Energy Resources, Inc.* (Early Site Permit for Grand Gulf ESP Site), CLI-05-4, 61 NRC 10, 13 (2005). For the foregoing reasons, Basis I fails to show that a genuine dispute with the DEIS need for power assessment. 10 C.F.R. § 2.309(f)(1)(vi). Thus, DEIS Contention 1, Basis I, is inadmissible.

The Intervenor do not meet the requirement of 10 C.F.R. § 2.309(f)(2) to show that the information in the DEIS differs significantly from the data or conclusions in the ER. The Intervenor do not show how the DEIS discussion of the future generation profile at 8-18 differs significantly from the ER discussion at 8.3-2 to 8.3-3 and 8.3-5. As a result, the Intervenor

⁴ The Staff also notes that the 500 MW non-wind renewable capacity goal is also reflected in unchanged text in § 25.173(a)(1). See Staff Strawman Rule at 3 *and* 16 Tex. Admin. Code § 25.173(a)(1) (2010) (current regulation).

have failed to meet the requirement of 10 C.F.R. § 2.309(f)(2) for raising this issue now rather than in response to the Applicant's ER.

BASIS J:

The DEIS fails to account for new building codes that are expected to reduce demand.

DEIS Contentions at 4. In support of DEIS Contention 1, Basis J, the Intervenor's cite the Power Report, which states that the Texas State Energy Conservation Office "has announced that the state will be adopting the IECC [International Energy Conservation Code] 2009 building code." *Id.* (citing Power Report at 6). The Power Report asserts that the "2009 IECC is expected to result in significant energy savings" estimated at "10,533 kilowatt hours of electricity annually and 2,362 megawatts annually of peak summer demand by 2023." *Id.*

The Intervenor's do not show how the information in the DEIS differs significantly from the information in the Applicant's ER. 10 C.F.R. § 2.309(f)(2). Likewise, the Intervenor's do not show that the American Council for an Energy efficient Economy (ACEEE Report) and IECC information upon which Basis J is based, was not previously available. 10 C.F.R. § 2.309(f)(2)(i). Additionally, the Intervenor's have not provided sufficient information to show that DEIS Contention 1, Basis J, raises a genuine dispute with the DEIS on a material issue of fact or law. 10 C.F.R. § 2.309(f)(1)(vi). For the reasons explained below, Basis J does not support admissibility of DEIS Contention 1.

First, an examination of Intervenor's supporting documents reveals that application of the ACEEE Report relies on some basic assumption that the Intervenor's do not address regarding how the ACEE Report peak demand reduction relates to the DEIS need for power assessment. Specifically, the ACEEE Report values for peak summer demand are based on implementation of "[m]ore stringent building codes" in 2009. See ACEEE Report at 48

(Table A-2).⁵ However, the 2009 IECC Code will not apply in Texas until April 2011. See Final Rule; 34 Tex. Admin. Code § 19.53, 35 Tex. Reg. 4727, 4729 (June 4, 2010) (stating new 34 Tex. Admin. Code § 19.53(b)). The ACEEE Report, in its calculation of the reduction in peak demand, assumes that the IECC more stringent building codes were in-place in 2009. ACEEE Report at 48. The Intervenor do not address the implications of applying a value premised on implementation in 2009 to a situation in which implementation occurs in 2011.⁶ Examining Intervenor's sources is proper because a petitioner's documents may be examined both for statements that support and oppose its position. See *Virginia Electric and Power Co.* (North Anna Power Station, Unit 3), LBP-08-15, 68 NRC 294, 334 n.207 (2008). Second, even if the ACEEE value could be straightforwardly applied to the DEIS assessment, the Intervenor do not explain how a *summer peak power demand value for 2023* would materially alter any DEIS conclusions regarding the "need for power in ERCOT for the future periods 2014, 2019, and 2024." DEIS at 8-22 (emphases added). Because the Intervenor fail to meaningfully engage the DEIS need for power analysis, they do not show a genuine dispute with the DEIS on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi).

The Intervenor do not meet the requirement of 10 C.F.R. § 2.309(f)(2) to show that the information in the DEIS differs significantly from the data or conclusions in the ER. The Intervenor do not show how the DEIS discussion of energy efficiency or demand side management at 8-14 to 8-15 and 8-21 to 8-22 differs significantly from the ER discussion at 8.2-4 and 8.4-5 to 8.4-6. As a result, the Intervenor have failed to meet the requirement of 10 C.F.R. § 2.309(f)(2) for raising this issue now rather than in response to the Applicant's ER.

⁵ Although the Intervenor have not provided a copy of the ACEEE report or a sufficient reference to locate it, the Staff accessed the report from the South Texas Project docket (COL-052-012 and 013), where the report was filed. For the preparation of contention responses, the Staff assumes this is the correct report, however, any references to specific sources or documents on which the Intervenor intend to rely must be provided pursuant to 10 C.F.R. § 2.309(f)(1)(v).

⁶ The Staff also notes that although the ACEEE Report is being cited for savings due to the 2009 IECC, the ACEEE Report was issued in March 2007 and generally speaks about more stringent building codes without specifically mentioning the IECC.

Additionally, the ACEEE report relied on by the Intervenor is from 2007 and the Texas regulation regarding the IECC Code was published in final form June 4, 2010. The Intervenor has not shown that the information upon which DEIS Contention 1, Basis J, is based, was not previously available. 10 C.F.R. § 2.309(f)(2)(i). Because they have failed to make this showing, the Intervenor has not met the requirements of 10 C.F.R. § 2.309(f)(2)(i), which they must do to support raising this issue now, rather than in response to the publication of the Texas regulation or in response to the Applicant's ER, respectively.

BASIS K:

The DEIS does not acknowledge that energy efficiency is expected to reduce the number of new power plants needed in the future.

DEIS Contentions at 5. The Intervenor cites the Power Report for support for DEIS Contention 1, Basis K. *Id.* To support Basis K, the Power Report repeats nearly verbatim a statement from the Executive Summary from the *Energy Efficiency in the South*, a study cited by the Power Report.⁷ The Power Report asserts that nine energy efficiency policies would allow the retirement of "25 GW of older power plants" and, over the next twenty years, avoid the "need to construct 49 GW of new plants." Power Report at 7.

The Intervenor does not show how the information in the DEIS differs significantly from the information in the Applicant's ER. 10 C.F.R. § 2.309(f)(2). Likewise, the Intervenor does not show that the DEIS information upon which Basis K is based, was not previously available. 10 C.F.R. § 2.309(f)(2)(i). Additionally, the Intervenor has not provided sufficient information to

⁷ The Power Report appears to be quoting the Executive Summary of the *Energy Efficiency in the South* study page vi, a copy of which is filed in the South Texas Project docket (COL-052-012 and -013). "Our analysis of nine illustrative policies shows the ability to retire almost 25 GW of older power plants – approximately 10 GW more than in the reference case. The nine policies would also avoid over the next twenty years the need to construct 49 GW of new plants to meet a growing electricity demand from the RCI sectors." Brown, Marilyn A., *et. al.* *Energy Efficiency in the South* vi, (Southeast Energy Efficiency Alliance; April 12, 2010). For the preparation of contention responses, the Staff assumes this is the correct study, however, any references to specific sources or documents on which the Intervenor intends to rely must be provided pursuant to 10 C.F.R. § 2.309(f)(1)(v).

show that DEIS Contention 1, Basis K, raises a genuine dispute with the DEIS on a material issue of fact or law. 10 C.F.R. § 2.309(f)(1)(vi). For the reasons explained below, Basis K does not support admissibility of DEIS Contention 1.

Neither DEIS Contention 1, Basis K, nor the Power Report provided in support of Basis K, provide any information to controvert the need for power assessment contained in the DEIS. The Power Report relies on the *Energy Efficiency in the South* study to support Basis K. Power Report at 7. Examining this reference both for information that supports and opposes the Intervenor's position reveals that it fails to provide any information regarding a need for power in the ERCOT region. See *North Anna*, LBP-08-15, 68 NRC at 334 n.207. In fact, the study focuses on a specifically defined "southern region" rather than ERCOT and *assumes* the implementation of nine energy efficiency policies. See *Energy Efficiency in the South* at 4 and 21. However, the Intervenor does not show how the speculative enactment of the nine energy efficiency policies in the South materially disputes the DEIS assessment of the need for power in the ERCOT region. In order to challenge a need for power assessment, an intervenor must provide more than just statistical or anecdotal references. *Summer*, CLI-10-01, 71 NRC ___ (slip op. at 22 n.84). Therefore, because the Intervenor does not provide the requisite analysis, the Intervenor does not show a genuine dispute with the DEIS on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi).

The Energy Efficiency in the South study relied on by the Intervenor in the Power Report is from April 2010, and the Intervenor has not shown that this information was not previously available. 10 C.F.R. § 2.309(f)(2)(i). Similarly, the Intervenor does not meet the requirement of 10 C.F.R. § 2.309(f)(2) to show that the information in the DEIS differs significantly from the data or conclusions in the ER. The Intervenor does not show how the DEIS discussion of energy efficiency or demand side management at 8-14 to 8-15 and 8-21 to 8-22 differs significantly from the ER discussion at 8.2-4 and 8.4-5 to 8.4-6. As a result, the

Intervenors have failed to meet the requirement of 10 C.F.R. § 2.309(f)(2) for raising this issue now rather than in response to the Applicant's ER.

BASIS L:

The DEIS does not account for all government funds available and reasonably expected for energy efficiency applications.

DEIS Contentions at 5. In support of DEIS Contention 1, Basis L, the Intervenors reference the Power Report which, for Basis L, states in its entirety:

Additional Federal Incentives: In addition to the \$218 million in funding from the American Recovery and Reinvestment Act, additional federal incentives for energy efficiency programs recently passed in the House of Representatives in HB5019 and would provide over \$6 billion in energy efficiency retrofit incentives further reducing the need for new generation.

Id. (citing Power Report at 7).

The Intervenors do not show how the information in the DEIS differs significantly from the information in the Applicant's ER and do not show that the DEIS information upon which Basis L is based, was not previously available. 10 C.F.R. § 2.309(f)(2). Additionally, the Intervenors have not provided sufficient information to show that DEIS Contention 1, Basis L, raises a genuine dispute with the DEIS on a material issue of fact or law. 10 C.F.R. § 2.309(f)(1)(vi). For the reasons explained below, Basis L does not support admissibility of DEIS Contention 1.

The Intervenors first suggest that the DEIS must account for the American Recovery and Reinvestment Act (ARRA), but the Intervenors do not explain how \$218 million of stimulus funds could materially affect the DEIS assessment of the need for baseload power in the ERCOT region. Specifically, the Intervenors do not equate the dollar value of stimulus funds to the expected energy savings from efficiency and how that affects the determination of a need for baseload power. In order to challenge a need for power assessment, an intervenor must provide more than just statistical or anecdotal references. *Summer*, CLI-10-01, 71 NRC __ (slip op. at 22 n.84). The Intervenors also present an argument based on a bill recently passed by

the House of Representatives.⁸ As with their ARRA arguments, the Intervenors do not meaningfully engage the need for power analysis, but only provide a dollar figure associated with a proposed bill and assert that the DEIS needs to account for it. This is insufficient support for a need for power contention and does not demonstrate a genuine, material dispute with the DEIS. *Summer*, CLI-10-01, 71 NRC ___ (slip op. at 22 n.84). Further, the Intervenors do not fulfill their obligation under 10 C.F.R. § 2.309(f)(1)(vi) to explain why the DEIS is legally required to account for such proposed legislation. Proposed legislation has no force of law, and the Intervenors do not provide legal support for the proposition that need for power assessments must rely on legislative proposals that may or may not come to fruition. Therefore, Basis L does not provide a basis to support the admissibility of DEIS Contention 1 because it does not show a genuine dispute with the DEIS on a material issue of law or fact, and the Intervenors have not provided a legal basis for why the DEIS must include an analysis of the ARRA or H.R. 5019 in its need for power assessment. 10 C.F.R. § 2.309(f)(1)(vi).

The Intervenors do not meet the requirement of 10 C.F.R. § 2.309(f)(2) to show that the information in the DEIS differs significantly from the data or conclusions in the ER. Neither the ER nor the DEIS specifically account for increases in government funding for energy efficiency measures, but the Intervenors do not explain why they waited until the issuance of the DEIS to raise this issue. The Intervenors do not show how the information in the DEIS need for power discussion differs significantly from the Applicant's ER. As a result, the Intervenors have failed to meet the requirement of 10 C.F.R. § 2.309(f)(2) for raising this issue now rather than in response to the Applicant's ER.

⁸ Intervenors' Power Report cites "HB5019" but the Staff believes the Intervenors intended to refer to H.R. 5019 available at <http://hdl.loc.gov/loc.uscongress/legislation.111hr5019>. For the preparation of contention responses, the Staff assumes this is the correct legislation, however, any references to specific sources or documents on which the Intervenors intend to rely must be provided pursuant to 10 C.F.R. § 2.309(f)(1)(v).

BASIS M:

The DEIS does not fully account for CAES capacity reasonably available in Texas and ERCOT.

DEIS Contentions at 5. The Intervenor reference the Power Report in support of Basis M, which contains a discussion of the Shell WindEnergy Inc. and Luminant Brisco County wind project in which they will “explore the use of compressed air storage.” *Id.* (citing Power Report at 7).

The Intervenor does not show how the information in the DEIS differs significantly from the information in the Applicant’s ER. 10 C.F.R. § 2.309(f)(2). Additionally, the Intervenor has not provided sufficient information to show that DEIS Contention 1, Basis M, raises a genuine dispute with the DEIS on a material issue of fact or law. 10 C.F.R. § 2.309(f)(1)(vi). For the reasons explained below, Basis M does not support admissibility of DEIS Contention 1.

The Intervenor’s assertion that the DEIS need for power assessment must account for compressed air energy storage (CAES) capacity in Texas, relies solely on the anecdotal reference in the Power Report to the Shell and Luminant joint wind project that will “explore the use of compressed air storage.” DEIS Contentions at 5 (citing Power Report at 7). In order to challenge a need for power assessment, an intervenor must provide more than just statistical or anecdotal references. *Sumner*, CLI-10-01, 71 NRC ___ (slip op. at 22 n.84). The Intervenor does not provide any explanation for how the joint Shell/Luminant project affects the DEIS assessment of need for power. Therefore, DEIS Contention 1, Basis M, does not show a genuine dispute with the DEIS on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi).

The Intervenor does not meet the requirement of 10 C.F.R. § 2.309(f)(2) to show that the information in the DEIS differs significantly from the data or conclusions in the ER. Neither the ER nor the DEIS specifically accounts for delay in energy consumption due to energy storage, but the Intervenor does not explain why they waited until the issuance of the DEIS to raise this

issue. As a result, the Intervenor's have failed to meet the requirement of 10 C.F.R. § 2.309(f)(2) for raising this issue now rather than in response to the Applicant's ER.

BASIS N:

The DEIS acknowledges that ERCOT's high-wind generation case does not assume the addition of any new Comanche Peak Units 3 & 4 capacity and a reserve margin of 12.5% is still maintained. Despite this finding the DEIS still concludes that Comanche Peak Units 3 & 4 are needed to meet reserve targets. The DEIS makes no attempt to reconcile these contradictory conclusions nor does it address why the ERCOT high-wind scenario that excludes Comanche Peak Units 3 & 4 should not be relied upon.

DEIS Contentions at 5 (footnotes omitted).

The Intervenor's do not show how the information in the DEIS differs significantly from the information in the Applicant's ER. 10 C.F.R. § 2.309(f)(2). Additionally, the Intervenor's have not provided sufficient information to show that DEIS Contention 1, Basis N, raises a genuine dispute with the DEIS on a material issue of fact or law. 10 C.F.R. § 2.309(f)(1)(vi). For the reasons explained below, Basis N, does not support admissibility of DEIS Contention 1.

Although the Intervenor's correctly point out that the ERCOT report's high-wind scenario does not include the proposed units at Comanche Peak, they do not provide any analysis as to how that is material to the DEIS assessment of need for power. In order to challenge a need for power assessment, an intervenor must provide more than just statistical or anecdotal references. *Summer*, CLI-10-01, 71 NRC ___ (slip op. at 22 n.84).

The ERCOT report states that "[t]o achieve the target reserve margin for ERCOT, two nuclear units totaling 2,724 MW at the South Texas Project were added, as were 3,295 MW of combustion gas turbines at buses across the system, mostly at sites with existing thermal plants and at new CREZ buses in west Texas."⁹ As shown, the high-wind scenario does include new

⁹ http://www.ercot.com/content/news/presentations/2008/ERCOT_Long-term_System_Assmt_Dec_2008.pdf at 33.

nuclear generating capacity from the proposed South Texas Project units. The Staff's treatment of planned capacity additions is described in the DEIS:

Moreover, the NRC staff has used a very strict definition of planned capacity additions, and have not factored in, for example, the new capacity represented by requests for screening studies, as shown on Table 8-4. These two assumptions allow the analysis to be grounded in the most firm data publicly available, and have reduced reliance on scenario driven analysis to calculate future reserve margins.

DEIS at 8-20. As described in the DEIS treatment of planned capacity, the proposed South Texas Project units would not be included as planned capacity, so the high-wind scenario would not exclude the proposed Comanche Peak units. Based on the inclusion of additional nuclear generating capacity in the high-wind scenario and the DEIS description of the methodology for defining planned capacity additions, the Intervenor's *perceived* contradictory conclusions are not supported and do not show a genuine dispute with the DEIS on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi).

The Intervenor does not meet the requirement of 10 C.F.R. § 2.309(f)(2) to show that the information in the DEIS differs significantly from the data or conclusions in the ER. The Intervenor does not show how the DEIS discussion of planned generation capacity at 8-15 to 8-18 differs significantly from the ER discussion at 8.3-1 to 8.3-3. As a result, the Intervenor has failed to meet the requirement of 10 C.F.R. § 2.309(f)(2) for raising this issue now rather than in response to the Applicant's ER.

3. Contention 2:

The DEIS distorts the CO₂ emissions in the comparison of nuclear power and the combination of alternatives.

DEIS Contentions at 6. The Intervenor argues that the DEIS distorts the carbon dioxide (CO₂) emissions in the comparison of nuclear power and the combination of alternatives by adding CO₂ emissions to CAES and omitting CO₂ emissions for workforce transportation, construction and decommissioning for nuclear power. DEIS Contentions at 7 (citing DEIS at 9-30). The

Intervenors argue that the DEIS addresses compressed air energy storage (CAES) as an alternative to the proposed project and that a CAES project planned for Texas by ConocoPhillips/General Compression will be available for baseload capacity. *Id.* at 6. The Intervenors appear to argue that since this CAES project will utilize “near-isothermal technology that will have little or no [greenhouse gas] GHG emissions,” and will not utilize natural gas for combustion, the DEIS erroneously attributes 180,000,000 metric tons of CO₂ from CAES to the combination of alternatives in its comparison of CO₂ emissions for energy alternatives, and thereby distorts the relative GHG “burdens” attributable to nuclear power and CAES. *Id.* at 7 (citing DEIS, Table 9-6, p. 33; §9.2.3.1, pp.9-21- 22; §9.2.4, p.9-28). The Intervenors further argue that if the use of isothermal technologies is assumed for CAES, a comparison of the CO₂ emissions of alternatives would no longer favor nuclear power. DEIS Contentions at 7 (citing DEIS Table 9-6, p. 9-33).

This contention is inadmissible because the Intervenors have failed to provide sufficient information to show that a genuine dispute with the DEIS exists with regard to a material issue of fact or law. 10 C.F.R. § 2.309(f)(1)(vi). Because the Intervenors cite only to the DEIS as support for this contention, and appear to have misread the portions of the DEIS that they have cited, they have not provided a concise statement of the alleged facts or expert opinions, including references to specific sources and documents that support the Intervenors’ position and upon which the Intervenors intend to rely at the hearing. 10 C.F.R. § 2.309(f)(1)(v).

The DEIS attributes no CO₂ emissions from CAES to the combination of alternatives in its comparison of CO₂ emissions for energy alternatives. In Section 9.2.4, the DEIS evaluated a reasonable combination of alternative energy sources that included wind power generation with storage such as CAES involving caverns or salt domes; a combination of biomass, municipal solid waste, geothermal, and solar energy with storage; and natural gas. *Id.* at 9-28. In order to develop a combination of alternatives that would be capable of producing baseload power at a

level that approximated the purpose and need of the proposed project, the review team¹⁰ assumed that 2120 net MW(e) of the 3040 net MW(e) produced by the combination alternative would be provided by natural gas, and that the environmental effects from that portion of the combination alternative would be scaled to about 2/3 of the natural gas-fired alternative discussed in Section 9.2.2.2. *Id.* at 9-29. The DEIS states that the CO₂ emission comparison assumes “only natural gas generation has significant CO₂ emissions.” DEIS at 9-33, Table 9-6 n. (d). Thus, Intervenor’s assertion that CO₂ emissions attributable to CAES were included in the DEIS’s comparison of CO₂ emissions for energy alternatives is incorrect.

The Intervenor’s argument that the DEIS omits CO₂ emissions for workforce transportation, construction and decommissioning for nuclear power is also incorrect. In Table 9-6, the DEIS review team compared the CO₂ emissions from 40 years of operation of the proposed project to the technically reasonable and commercially viable alternatives; i.e., the coal alternative, the natural gas alternative, and the combination of energy sources alternative. DEIS at 9-33.¹¹ In Footnote (d) to Table 9-6, the review team indicated that it had assumed that

¹⁰ The NRC Staff, its contractors, Oak Ridge National Laboratory (ORNL) and Information Systems Laboratories, Inc. (ISL), and the United States Army Corps of Engineers (Corps or USACE) compose the review team for the DEIS. DEIS at xxix – xxx, 1-1, and 1-3 – 1-5.

¹¹ The Staff notes that there are errors in the estimated calculations in Table 9-6, which stem, in part, from an error in Table J-3. DEIS, Table 9-6 at 9-33; Appendix J, Table J-3, at J-3. First, in Table J-3, “1000 MW(e) LWR Lifetime Carbon Dioxide Footprint,” the total emissions for the Uranium Fuel Cycle (UFC) should be 1.7×10^7 metric tons (not 1.4×10^7), and the total should be 1.8×10^7 metric tons (not 1.5×10^7). In Section 6.1.3, the reference to the carbon footprint of the Uranium Fuel Cycle for a 1000-MW(e) LWR for a 40-year life should be 1.7×10^7 MT of CO₂ (same as the U fuel cycle number in J-3), rather than the 1.8×10^7 MT of CO₂, as shown. Later in the same paragraph, this number is multiplied by the scaling factor. For Comanche Peak, the scaling factor is 4.00, so the fuel cycle emissions would be 6.8×10^7 metric tons of CO₂, not 7.2×10^7 , as shown. As a result, in Section 9.2.5, the value for CO₂ emissions for Nuclear Power in Table 9-6 should be revised to show 190,000 metric tons per 1000 MW(e) X 4 to approximate 3200 MW(e) for the proposed project, or 764,000, which is the same number shown in Table J-3 for Plant Operations, rather than the 20,000 shown in Table 9-6. The last sentence of the second paragraph of Section 9.2.5, will be revised to state that when transportation emissions from the nuclear plant workforce and fuel cycle emissions are added in, the emissions from plant operation over a 40-yr period would be approximately 69,000,000 metric tons, not 45,000,000. From Table J-3, the sum of Plant Operations at 1.9×10^5 + Operations Workforce (transportation emissions from commuting workforce) at 1.3×10^5 + Uranium Fuel Cycle at 1.7×10^7 is 17,320,000. When this value is multiplied by the scaling factor of 4 for Comanche Peak, the total is approximately 69,280,000 metric tons. As a result, once these mathematical errors are corrected, the CO₂ emissions from nuclear power generation in the

in the combination of energy sources alternative, only natural gas would have significant CO₂ emissions, and the natural gas portion of the combination of alternative energy sources was the principal contributor of the CO₂ emissions over 40 years of operation, not wind power or CAES. DEIS at 9-33, Table 9-6. The CO₂ emissions from the reasonable energy alternatives are compared to those of the nuclear power plant, and each of the reasonable alternatives would exceed 150,000,000 metric tons of CO₂ emissions, far in excess of the CO₂ emissions from stationary onsite sources of power generation for 40 years of operation of the proposed new nuclear units. *Id.* Even with the addition of CO₂ emissions from transportation, the nuclear plant workforce, and the fuel cycle, which the DEIS includes in the CO₂ emissions for nuclear power, the proposed Comanche Peak Units 3 and 4 would still result in emissions that are still significantly lower than the emissions for the reasonable alternatives. *Id.* at 9-30.

Environmental contentions must focus on “significant inaccuracies or omissions” in the DEIS to be admissible. *System Energy Resources, Inc.* (Early Site Permit for Grand Gulf ESP Site), CLI-05-4, 61 NRC 10, 13 (2005). When the Commission amended its hearing regulations in 1989 to strengthen the standards for contention admissibility, the Commission explained that a dispute would not be considered “material” under former 10 C.F.R. § 2.714(b)(2)(iii) unless “the resolution of the dispute would make a difference in the outcome of the licensing proceeding.” Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,172 (Aug. 11, 1989). Because the arguments Intervenors raise would not lead to different conclusions regarding the environmental impacts of the reasonable alternatives to the proposed action, the Intervenors have failed to demonstrate a significant or material dispute with the DEIS, and

proposed project increase slightly from just under 5% of Coal's CO₂ emissions to 7%; from 18% to 28% for natural gas; and 25% to 38% for the combination alternative. These errors, which will be corrected in the FEIS, are not material because they do not change the conclusions summarized in Tables 9-5 or 9-6 of the DEIS regarding land use, aesthetics, or CO₂ emissions, or the DEIS conclusion that there are no environmentally preferable, technically reasonable alternatives to baseload nuclear power. DEIS at 9-32 – 9-33. The Commission has held that there may be “mistakes in the DEIS, but in an NRC adjudication, it is Intervenors’ burden to show their significance and materiality.” *Exelon Generation Company, LLC* (Early Site Permit for the Clinton ESP Site), CLI-05-29, 62 NRC 809, 810 (2005). Because Intervenors have not met that burden here, this contention is inadmissible. 10 C.F.R. § 2.309(f)(1)(vi).

Contention 2 should be rejected. 10 C.F.R. § 2.309(f)(1)(vi).

The Intervenors cite only to the DEIS as support for this contention, but they appear to have misread the DEIS because it does not provide support for their arguments. As a result, the Intervenors have not provided a concise statement of the alleged facts or expert opinions, including references to specific sources and documents that support the Intervenors' position and upon which the Intervenors intend to rely at the hearing. 10 C.F.R. § 2.309(f)(1)(v).

The Intervenors' statement that the DEIS addresses a CAES project planned for Texas by Conoco Phillips/General Compression, that will be available for baseload capacity as an independent reasonable alternative to the proposed action, appears to be based on a misreading of the DEIS. The DEIS did not consider CAES independently, but rather as a means of improving the availability of wind for the purpose of generating baseload power, and as part of a combination of alternatives. DEIS at 9-21 – 9-22, 9-28 – 9-29. The comparison of CO₂ emissions for energy alternatives, in evaluating the combination of alternatives, does not include CO₂ emissions for CAES or any portion of the combination other than natural gas. DEIS Table 9-6 at 9-33. Contentions based on an imprecise reading of the DEIS cannot serve to generate a genuine issue suitable for litigation. *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 300 (1995) (rejecting a contention based on a mistaken reading of the SAR), *rev'd in part on other grounds*, CLI-95-10, 42 NRC 1 (1995). In DEIS Section 9.2.3.1, the review team concluded that wind power (with or without CAES) generation would not be a reasonable alternative to the proposed project. DEIS at 9-24. The DEIS review team indicated that new technologies, such as the Conoco-Phillips General Compression venture may use compressed air storage directly, without the combustion of fuel such as natural gas, which would increase the efficiency of wind power above the 25 to 45 percent capacity factor; the review did not, however, indicate that the venture "... will be available for baseload capacity." *Id.* at 9-21. Thus, the DEIS did not consider compressed air storage as a reasonable alternative to the proposed action and did not attribute CO₂ emissions

to CAES in the combination of alternatives. Because the Intervenor appear to have misread the DEIS and have not provided any other support for their arguments, DEIS Contention 2 should be rejected. 10 C.F.R. § 2.309(f)(1)(v).

A. Contention 3:

The DEIS understates the effect of global warming on the cumulative impacts of Comanche Peak Units 3 & 4.

DEIS Contentions at 8. This contention is divided into two bases, neither of which supports admissibility of this contention. The Staff will address each basis individually.

BASIS A:

The DEIS conclusion that cumulative effects of greenhouse gas emissions are projected to be “noticeable but not destabilizing” is contradicted by the EPA’s April 27, 2010 report “Climate Change Indicators in the United States”. *Inter alia*, the EPA report finds compelling evidence that composition of the atmosphere and many fundamental measures of climate are changing. However, by understating the effects of climate change the DEIS effectively minimizes the contributions to the GHG inventory attributable to construction and operation of Comanche Peak Units 3&4. This has the further effect of marginalizing the importance of selecting the lowest GHG alternatives to generate electricity. A full accounting for all stages of the UFC shows that nuclear power has significantly greater GHG burdens than wind, solar power or geothermal. The DEIS comparison of GHG emissions is incomplete and distorted. For example, while Table 9-6 states that the CO2 emissions for nuclear plant operations is 20,000 metric tons the text at section 9.2.5 states that the CO2 emissions are 45 million metric tons and this still does not account for construction or decommissioning emissions. This omission calls into question whether the DEIS has been prepared in a systematic and comprehensive manner as required by NUREG 1555.

DEIS Contentions at 8-9 (internal footnotes omitted). The Intervenor cite to the following sources in Contention 3A: DEIS at 7-25 to 7-26; Environmental Protection Agency, “Climate Change Indicators in the United States” (2010) at 1, 4; Kristin Shrader-Frechette, “Greenhouse Emissions and Nuclear Energy,” *Modern Energy Review*, August 2009, at 54-57 (herein, “Shrader-Frechette Report”). *Id.* Specifically, the Intervenor raise a concern regarding the conclusion in the DEIS that “the cumulative impacts would be noticeable but not destabilizing,

with or without the greenhouse gas emissions of the proposed project.” *Id.* (quoting DEIS at 7-26). The Intervenors rely on portions of an April 27, 2010, report by EPA entitled “Climate Change Indicators in the United States” (herein, “EPA report”) to present “compelling evidence” that climate change in the United States is affecting the environment. DEIS Contentions at 8.

The Intervenors do not provide alleged facts or expert opinions, together with references to the specific sources and documents upon which they intend to rely, to support this contention. 10 C.F.R. § 2.309(f)(1)(v). The Intervenors also fail to provide sufficient information to show that a genuine dispute with the DEIS exists on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi). The Intervenors have also failed to demonstrate that this contention raises any conclusions or data in the DEIS that differ significantly from data or conclusions in the ER. 10 C.F.R. § 2.309(f)(2). Furthermore, none of the reports they reference are new or materially different from previously available information. 10 C.F.R. § 2.309(f)(2)(i)-(iii). For the reasons explained below, DEIS Contention 3 should be rejected.

The Intervenors contend that the DEIS is flawed in its conclusion that the national and global cumulative impacts of greenhouse gas emissions are “noticeable but not destabilizing.” DEIS at 7-26. In accordance with 10 C.F.R. Part 51, Subpart A, Appendix B, Footnote 3, the impact findings in the DEIS are based on three significance levels: small, moderate, and large. The review team chose to use the “moderate” significance level – in which the environmental effects are sufficient to alter noticeably, but not to destabilize, important attributes of the resource -- to describe its assessment of the national and global cumulative impacts of greenhouse gas emissions. In its selection of the “moderate” significance level, the review team acknowledged that climate change appears to be occurring and will continue to occur, and though it is, to a large extent, related to greenhouse gas emissions, it is not destabilizing the affected resources on a “national and worldwide” scale. DEIS at 7-26. As explained below, the Intervenors have not demonstrated a genuine dispute with the DEIS conclusion. 10 C.F.R. § 2.309(f)(1)(vi).

To be material, environmental contentions must focus on “significant inaccuracies or omissions” in the DEIS. *System Energy Resources, Inc.* (Early Site Permit for Grand Gulf ESP Site), CLI-05-4, 61 NRC 10, 13 (2005). The Intervenor asserts that the DEIS “excuses the projected quantities of GHG from the Units 3 & 4 because their proportionate contribution is relatively small,” but contends that the “contributions are cumulative and...that the accumulation of GHG is the primary cause of anthropomorphic climate change.” DEIS Contentions at 8 n.26. The Intervenor does not directly dispute the fundamentally relevant conclusion made by the review team in the DEIS, that “cumulative impacts [of greenhouse gas emissions] would be noticeable but not destabilizing, *with or without the greenhouse gas emissions of the proposed project.*” *Id.* (emphasis added).

The Intervenor’s dispute in Contention 3A is with the “moderate” impact significance level used in the DEIS to describe global climate change effects in general, separate from the emissions of the proposed units. This proceeding, however, concerns a decision on whether to issue COLs for two APWR units at the proposed site, and it is not a forum for determining which significance level best describes the global effects of climate change. Even had the review team concluded that the national and worldwide cumulative impacts of greenhouse gas emissions were “small” or “large,” the estimated impacts from greenhouse gas emissions of the proposed units on global climate change would not have changed that finding, given that the impacts of emissions from building, operating, and decommissioning the proposed units would be minimal. DEIS at 7-25. Resolution of the Intervenor’s dispute with the review team’s impact finding would not make any material difference in the DEIS conclusion: that national and worldwide cumulative impacts of greenhouse gas emissions would remain at the same significance level, with or without greenhouse gas emissions from the proposed units. Thus, Contention 3A does not show that a genuine, material dispute with the DEIS exists. 10 C.F.R. § 2.309(f)(1)(vi).

The Intervenor do not offer adequate factual support or expert opinion to support their assertion that the DEIS is flawed. 10 C.F.R. § 2.309(f)(1)(v). The EPA report does not provide adequate support for Intervenor's contention. The Intervenor allege that the DEIS impact finding is in conflict with the EPA report. DEIS Contentions at 8. However, the DEIS impact finding is actually supported by the EPA report. The Intervenor cite to sections of the EPA report to present "compelling evidence" that climate in the United States is changing and will affect the environment. DEIS Contentions at 8 (citing EPA Report at 4). The DEIS does not dispute this; it states that the "production and use of energy" is a "primary cause of global warming," and that as result, "climate change will eventually affect our production and use of energy." DEIS at 7-25. The DEIS acknowledges that the "total number and variety of greenhouse gas emissions is extremely large and ubiquitous." *Id.* Examining the Intervenor's sources is proper because a petitioner's documents may be examined both for statements that support and oppose its position. See *Virginia Electric and Power Co.* (North Anna Power Station, Unit 3), LBP-08-15, 68 NRC 294, 334 n.207 (2008). Contrary to the Intervenor's assertion, the EPA report does not contradict the DEIS conclusion that the national and worldwide cumulative impacts of greenhouse gas emissions are noticeable, but not destabilizing. Both the EPA report and the DEIS acknowledge that changes in climate are occurring, will continue to occur, and will negatively affect the environment. See, e.g., EPA Report at 22, 68; DEIS at 2-111 to 2-112, 2-114 to 2-115, 7-7, 7-9, 7-11 to 7-12, 7-15 to 7-16, 7-20, 7-25 to 7-26, 7-28, 9-45 to 9-49. The Intervenor's references to the EPA report, however, do not show that such negative effects are destabilizing the affected resources. Intervenor have not shown how the EPA report contradicts the DEIS "moderate" impact finding. They have not provided adequate support for their contention. 10 C.F.R. § 2.309(f)(1)(v).

Additionally, the EPA report fails to provide adequate support for the Intervenor's contention because the EPA report relies on the same document used by the review team to analyze greenhouse gas impacts in the DEIS. The EPA report relies on "assessment reports

from . . . the U.S. Global Change Research Program” for the conclusion that climate change is “linked . . . to increasing greenhouse gas emissions from human activities.” EPA Report at 68. The most recent assessment report from the U.S. Global Change Research Program (“GCRP report”) is the principal document that the review team relied on for its greenhouse gas analysis in the DEIS, and is cited in the same sentence that the Intervenor’s dispute: “Based on the impacts in the GCRP [Global Change Research Program] report, the review team concludes that the national and worldwide cumulative impacts of greenhouse gas emissions are noticeable but not destabilizing.” DEIS at 7-26. The Intervenor’s EPA report does not support their position that the DEIS is flawed, given that both documents relied on the GCRP report. The Intervenor’s do not take issue with the GCRP report itself, nor do they take issue with the carbon dioxide emission rate statistics listed in Table 7-2 or the carbon footprint estimates in Appendix J. DEIS at 7-26 and DEIS, Appendix J. The DEIS conclusions on greenhouse gas emissions are not in conflict with the EPA report, but rather affirm them. The EPA Report does not constitute adequate support for the Intervenor’s contention. 10 C.F.R. § 2.309(f)(1)(v). Because they fail to support their contention, the Intervenor’s have not shown that a genuine dispute exists between the EPA report and the DEIS. 10 C.F.R. § 2.309(f)(1)(vi).

The Intervenor’s also allege that by “understating” the effects of climate change, the DEIS minimizes the importance of selecting the energy source with the lowest greenhouse gas emissions. DEIS Contentions at 8-9. The review team, however, concluded in the DEIS that among the reasonable energy alternatives, the CO₂ emissions for nuclear power constitute a small fraction of the emissions of the other energy generation alternatives. DEIS at 9-30. This is also reflected in Table 9-6, which compares CO₂ emissions from nuclear power to other reasonable energy alternatives and reveals that nuclear power has the lowest amount of emissions compared to all of the viable alternatives. Table 9-6, DEIS at 9-33; see also DEIS at 9-30. There is, therefore, no genuine, material dispute with the DEIS on this account. 10 C.F.R. § 2.309(f)(1)(vi).

The Intervenor also address alternatives not considered viable in the DEIS. The Intervenor claim that fully accounting for the uranium fuel cycle shows that nuclear power “has significantly greater GHG burdens than wind, solar power or geothermal.” DEIS Contentions at 9. For several reasons, this argument does not support the admissibility of Contention 3.

First, the DEIS does, in fact, quantitatively account for the projected CO₂ emissions from the uranium fuel cycle (UFC) in DEIS Section 6.1.3.¹² See DEIS at 6-9. The Intervenor have not disputed the DEIS calculation of UFC greenhouse gas emissions or any other DEIS calculation of the proposed units’ greenhouse gas emissions. They assert that the DEIS calculations of CO₂ emissions in Chapter 9 of the DEIS are flawed. DEIS Contentions at 9. However, the Intervenor do not explain how the specified calculations in Table 9-6 and in Section 9.2.5 of the DEIS are “incomplete and distorted” but simply allege that the latter calculations fail to account for construction and decommissioning emissions.¹³ DEIS Contentions at 9. In fact, contrary to the Intervenor’s assertions, the DEIS does account for construction and decommissioning emissions. DEIS at 4-66 to 4-67, 6-36. The Intervenor do not challenge these calculations. Nor do they challenge the CO₂ footprint estimates for a 1,000 MW(e) light water reactor (LWR) in Appendix J, which includes estimates for emissions from building, operating, and decommissioning a reactor.¹⁴ DEIS, Appendix J. Thus, there is no genuine dispute with the DEIS regarding the calculation of UFC emissions. 10 C.F.R. § 2.309(f)(1)(vi).

Second, the Intervenor imply that the DEIS is deficient because it does not compare the greenhouse gas emissions of the proposed units with the emissions from wind, solar, and geothermal alternatives. NEPA, however, does not require the DEIS to compare the

¹² See *supra* at 32-33 n.11 for the discussion of these calculations.

¹³ See *supra* at 32-33 n.11 for the discussion of these calculations.

¹⁴ See *supra* at 32-33 n.11 for the discussion of these calculations.

environmental impacts (including greenhouse gas emissions) of the proposed units with the environmental impacts of wind, solar, or geothermal generation alternatives because none of these alternatives are “reasonable alternatives” to the proposed action.¹⁵ NRC regulations require the DEIS to contain a discussion of alternatives to the proposed action, 10 C.F.R. § 51.71, but “[t]o make an impact statement something more than an exercise in frivolous boiler-plate the concept of alternatives must be bounded by some notion of feasibility.” *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.*, 435 U.S. 519, 551 (1978). An “agency need not analyze the ‘environmental consequences of alternatives it has in good faith rejected as too remote, speculative, or . . . impractical or ineffective.’” *Fuel Safe Washington v. Federal Energy Regulatory Commission*, 389 F.3d 1313, 1323 (10th Cir. 2004) (quoting *All Indian Pueblo Council v. United States*, 975 F.2d 1437, 1444 (10th Cir.1992)). Rather, an EIS only needs to consider reasonable or feasible alternatives. *City of Sausalito v. O’Neill*, 386 F.3d 1186, 1207 (9th Cir. 2004). An alternative might not be considered reasonable for a variety of reasons, including a failure of the alternative to meet the project’s purpose and need. *Exelon Generation Co. (Early Site Permit for Clinton ESP Site)*, CLI-05-29, 62 NRC 801, 806 (2005) (excluding the energy efficiency alternative because it would not advance the applicant’s goals), *aff’d Environmental Law and Policy Center v. U.S. Nuclear Regulatory Comm’n*, 470 F.3d 676 (7th Cir. 2006). For alternatives that are not reasonable, an agency need only “briefly discuss” the reasons why the alternative was rejected from more detailed study. 40 C.F.R. § 1502.14(a) (Council on Environmental Quality (CEQ) regulation).¹⁶

¹⁵ The DEIS interchangeably uses the terms “reasonable alternative” and “viable alternative” to represent the same concept.

¹⁶ Although CEQ regulations are not binding on the Commission, both the NRC and the U.S. Supreme Court accord them “substantial deference.” See *Dominion Nuclear North Anna, LLC* (Early Site Permit for North Anna ESP Site), CLI-07-27, 66 NRC 215, 222 n.21 (2007) (citing *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 334, 355-56 (1989)).

In DEIS Sections 9.2.3.1, 9.2.3.3, and 9.2.3.5, the review team examined the wind, solar, and geothermal alternatives, respectively, and determined that they should be excluded from further consideration because they are not reasonable alternatives. DEIS at 9-24, 9-25, 9-26. In Contention 3A, the Intervenor do not cite to these analyses, nor offer a specific, focused, material, and sufficiently supported dispute with the DEIS. The Shrader-Frechette Report referenced by Intervenor, entitled “Greenhouse Emissions and Nuclear Energy,” does not support their contention. DEIS Contentions at 9. That article concludes that when one accounts for emissions from the uranium fuel cycle, “solar and wind power appear to be more effective (than nuclear energy) at helping to reduce GHGEs.” Shrader-Frechette Report at 56.¹⁷ This conclusion does not raise a genuine dispute with the DEIS, which acknowledges that emissions from wind and solar power would be minor, but determines that such alternatives are not viable. DEIS at 9-32, 9-24, 9-25; 10 C.F.R. § 2.309(f)(1)(vi). The Shrader-Frechette Report states that alternative sources (such as wind, solar, and “gas co-generation”), in isolation and in combination, should be considered in place of nuclear power, but the Report fails to raise a genuine dispute with the DEIS conclusion that such alternatives are either not viable or are not environmentally preferable to nuclear power. Shrader-Frechette Report at 56-57; DEIS at 9-24, 9-25, 9-32; 10 C.F.R. § 2.309(f)(1)(vi).

The Intervenor’s argument regarding the DEIS characterization of the global impacts of climate change is also untimely. As the language of 10 C.F.R. § 2.309(f)(2) makes clear, the Intervenor has the burden of demonstrating that contentions filed after the initial filing deadline meet the late-filing standards of § 2.309(f)(2). *Amergen Energy Company, LLC* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 260-61 (2009).

The Intervenor has not explained how the data or conclusions in the DEIS “differ significantly” from the data or conclusions in the Applicant’s documents, as required under

¹⁷ The Shrader-Frechette Report does not discuss the geothermal power alternative. See Shrader-Frechette Report at 54-57.

10 C.F.R. § 2.309(f)(2). Although § 2.309(f)(2) allows new or amended contentions to be filed if information in the DEIS differs significantly from the Environmental Report (ER), the information in the DEIS does not meet this standard. 10 C.F.R. § 2.309(f)(2). The discussions of greenhouse gas emissions in the DEIS expand on the analysis in the ER, but both come to the same essential conclusion -- that the estimated impacts of greenhouse gases from the proposed units are insignificant. *Compare* DEIS at 7-25 (“impacts of the combined emissions for the full plant life cycle are minimal”) *with* ER at § 10.3.3 (“energy provided from nuclear power plants avoids the generation of carbon dioxide emissions that may have a significant long-term detrimental effect on global climate”). Thus, there is no significant difference between the two documents with respect to the discussion of greenhouse gases. 10 C.F.R. § 2.309(f)(2). The ER (Rev. 1) considers greenhouse gas emissions in the context of construction activities (e.g., ER § 4.4.1.6) and alternative energy sources, such as coal and natural gas (e.g., ER §§ 9.2.3.1.1, 9.2.3.2.1.1); the ER also analyzes the benefits of nuclear power, in light of its comparably lower greenhouse gas emissions (e.g., ER §§ 10.3.2.2, 10.3.3, 10.4.1.2.4). Unlike the DEIS, there does not appear to be an analysis of the global impacts of greenhouse gases in the ER. *Id.* The DEIS analysis of global climate change is more detailed than in the ER, adding discussions of greenhouse gas emissions as pertaining to construction, operation, the uranium fuel cycle, decommissioning, and cumulative impacts of the proposed units, as well as emissions from alternative energy sources. *See, e.g.,* DEIS at 4-66 to 4-67, 5-63, 6-9, 7-25 to 7-26, 7-32, 9-30, 9-30. The Intervenors had an earlier opportunity to challenge the adequacy of the ER’s overall analysis of greenhouse gas emissions, but they chose not to do so. In *Oyster Creek*, the Commission upheld a Board decision finding that a contention was untimely when the contention was based on alleged “new information” in the form of enhancements to programs that were already in existence. *See Oyster Creek*, CLI-09-7, 69 NRC at 274. The Commission found the Board’s following basis for rejecting the contention to be reasonable:

[A]s a matter of law and logic, if — as Citizens allege — AmerGen's *enhanced* monitoring program is inadequate, then AmerGen's *unenanced* monitoring program embodied in its [license renewal application] was *a fortiori* inadequate, and Citizens had a regulatory obligation to challenge it in their original Petition [t]o Intervene.

Id. The Board's reasoning similarly applies to the situation at hand: if the Intervenors are dissatisfied with the more detailed analysis of greenhouse gas impacts in the DEIS, they had a regulatory obligation to challenge the less detailed or missing analysis of those impacts in the ER.

The Intervenors also fail to explain how the reports they rely on – the EPA Report and the Shrader-Frechette Report -- satisfy the requirements under 10 C.F.R. § 2.309(f)(2)(i)-(iii). Both of these reports were previously available; the EPA Report was issued in April 2010, and the Shrader-Frechette Report was issued in August 2009. 10 C.F.R. § 2.309(f)(2)(i); EPA Report at back cover; "Greenhouse Emissions and Nuclear Energy," *Modern Energy Review*, August 2009, at 54-57. The information from the portion of the EPA report they rely on, which broadly characterizes potential climate change impacts, is not materially different from previously available information – especially given that the EPA report relied on the same source used by the review team. 10 C.F.R. § 2.309(f)(2)(ii). The Intervenors have not addressed how their reliance on these reports satisfies the requirements of 10 C.F.R. § 2.309(f)(2)(i)-(iii).

The Intervenors raised this challenge before in this proceeding, asserting in their petition that the COLA did not consider the greenhouse gas emissions associated with each stage of the uranium fuel cycle. See Petition at 34. The Board rejected this challenge, holding that the Intervenors had not raised a genuine dispute with any specific section of the Application or sufficiently supported their assertion, and thus denied the contention on those grounds. *Luminant Generation Co., LLC* (Comanche Peak Nuclear Power Plant, Units 3 and 4), LBP-09-17, 71 NRC __ , __ (Aug. 6, 2009) (slip op. at 62). The Intervenors have not specified how this

contention raises any new issues from what has already been addressed by the Board in this proceeding.

BASIS B:

The DEIS water use and quality summary states “Impacts would be comparable to the impacts for a new nuclear power plant.” Based on this conclusion the DEIS states that the environmental impact of water use and quantity for the combination of alternatives is moderate. But the DEIS also states that, according to the D.O.E., substantial water savings will be realized as wind power increases. The DEIS makes no attempt to reconcile these conflicting statements. Moreover, the assertion that water use quantities related to nuclear plant operations are comparable to the combinations of alternatives is not quantified in the DEIS. Even a brief review of the water quantity data in the Comanche Peak ER betrays this comparison. Comanche Peak Units 3 & 4 are expected to consume 1,317,720 gpm for its circulating water system, alone. The DEIS does not quantify water use quantities for the combination of alternatives but it is difficult to imagine that such could even approach the quantities anticipated for Comanche Peak Units 3 & 4. In the absence of quantitative evidence to support this assertion in the DEIS there is also a question about how systematic and comprehensive the DEIS actually is. [C]umulative impacts on surface water and groundwater quality [sic] but fails to compare cumulative impacts to surface water quality from alternatives such as wind and solar. The failure to compare water quality impacts from alternatives including wind, solar, geothermal, etc. has the effect of distorting the relative advantages of nuclear power. Further, this failure to make the comparison calls into the DEIS has been prepared in a systematic and comprehensive manner as required by NUREG 1555.

DEIS Contentions at 9-10 (internal footnotes omitted). Intervenors cite to the following sources in Contention 3B: DEIS, Table 9-4 at 9-31; DEIS at 9-23; Comanche Peak Environmental Report, Table 3.3-1 at 3.3-5; and DEIS at 7-16 to 7-21.

The Intervenors have failed to demonstrate that a comparison of cumulative impacts to surface water quality from alternatives such as wind and solar, as well as water quality impacts from alternatives including wind, solar, and geothermal, are material to the finding the NRC must make to support this licensing action. 10 C.F.R. § 2.309(f)(1)(iv). The Intervenors have also failed to provide a concise statement of the alleged facts or expert opinions, together with references to specific documents, which support their arguments. 10 C.F.R. § 2.309(f)(1)(v). Further, the Intervenors have not provided sufficient information to show that that there is a

genuine dispute with the DEIS on these issues. 10 C.F.R. § 2.309(f)(1)(vi). Similarly, the Intervenor has not demonstrated that the data or conclusions in the DEIS differ significantly from data or conclusions in the ER. 10 C.F.R. § 2.309(f)(2). For the reasons described below, this contention should be dismissed.

The Intervenor challenges the DEIS conclusion in Table 9-4 that the impacts on water use and quality from a combination of alternative power sources would be moderate and comparable to the impacts for a new nuclear power plant. DEIS Contentions at 9; Table 9-4, DEIS at 9-31. The basis for this challenge is their assertion that this finding is in conflict with another statement in the DEIS referring to the Department of Energy's (DOE) prediction that there will be substantial water savings, especially in the west, as wind power production increases. DEIS at 9-23. The Intervenor does not specify how these two statements, the DEIS conclusion and the DOE prediction, are contradictory. The statement referencing DOE's prediction is made in the context of the DEIS discussion of the wind power generation alternative, and the DEIS conclusion is in reference to the impacts from a combination energy alternative. DEIS at 9-23, 9-31. The Intervenor appears to argue that if wind production increases in accordance with DOE's prediction, the impacts on water use and quality for a combination alternative would be smaller than those of a nuclear plant, rather than comparable. DEIS Contentions at 9. The Intervenor has not provided any support for this argument, nor have they challenged the validity of either of the statements standing alone, which must be viewed in light of the context in which they are raised in the DEIS. Their bare assertion that these two statements cannot be reconciled is insufficient to support a material dispute with the DEIS. 10 C.F.R. § 2.309(f)(1)(vi).

The Intervenor also asserts that the DEIS does not quantify its finding that the water use impacts from a combination alternative would be moderate. DEIS Contentions at 9. In Section 9.2.4 of the DEIS, however, the review team assessed the environmental impacts from a combination of alternative energy sources: wind and solar, each with storage; a combination of

sources including biomass, municipal solid waste, and geothermal; and natural gas. DEIS at 9-28. The review team assumed that the 2120 MW(e) natural gas-fired portion [out of the total 3200 MW(e)] of the combination would be built in a manner similar to the natural gas-fired alternative also discussed in the DEIS; thus, the environmental effects for this portion of the combination would be scaled to the order of 2/3 of the natural gas-fired alternative. DEIS at 9-29. In Section 9.2.2.2, the review team concluded that the impacts on water use and quality from constructing and operating a natural-gas fired plant would be moderate and comparable to the impacts associated with a new nuclear power plant. DEIS at 9-18. The review team came to this conclusion after analyzing where the cooling water for such a natural gas-fired plant would be withdrawn, what the plant discharges would consist of, and how water quality could be affected. *Id.* Because the combination alternative was scaled to the order of 2/3 of the natural gas-fired alternative, the review team qualified the water use impacts for the combination alternative based on its review of the same impacts for the natural gas-fired alternative. DEIS at 9-29. NEPA gives agencies broad discretion to keep their inquiries within appropriate and manageable boundaries. *Louisiana Energy Services, L.P. (Claiborne Enrichment Center)*, CLI-98-3, 47 NRC 77, 103 (1998). The Intervenor has not challenged this analysis or offered any support for their argument that it is inadequate.

The Intervenor has not shown why the review team's analysis of the water use impacts of the combination alternative is insufficient. The only support the Intervenor offer to support their assertion is a statement in the Applicant's ER that the proposed units are expected to consume 1,317,720 gpm for its circulating water system. DEIS Contentions at 9. However, this figure refers not to consumption, but to the amount of water that will be circulated through the circulating water system per minute. Environmental Report (Rev. 1), Table 3.3-1 at 3.3-5.¹⁸

¹⁸ See Tables 3.3-1 and 3.4-2 for the Applicant's projected water consumption figures. Environmental Report (Rev. 1) at 3.3-5 and 3.4-10. See also Figure 3.4-1 for a simplified diagram of the water use structures of the proposed action. Environmental Report (Rev. 1) (ML100081478).

The Intervenor do not explain how this figure affects the review team's conclusion that water use impacts from a combination alternative would be moderate. Without further support, they fail to raise a genuine dispute with the DEIS. 10 C.F.R. 2.309(f)(1)(vi). To be material, environmental contentions must focus on "significant inaccuracies or omissions" in the DEIS. *Grand Gulf*, CLI-05-4, 61 NRC at 13. The Intervenor have not done so here.

The Intervenor also assert that the DEIS fails to compare cumulative impacts to surface water quality from alternatives such as wind and solar, as well as water quality impacts from alternatives including wind, solar, and geothermal, and that these omissions have the effect of distorting the relative advantages of nuclear power. DEIS Contentions at 10. NEPA does not require a comparison of the environmental impacts of the proposed action with the environmental impacts of alternatives that are not considered reasonable or feasible. See *Fuel Safe Washington*, 389 F.3d at 1323; *City of Sausalito v. O'Neill*, 386 F.3d at 1207. The wind, solar, and geothermal generation alternatives were examined in DEIS Sections 9.2.3.1, 9.2.3.3, and 9.2.3.5, respectively, and were determined not to be reasonable alternatives to the proposed action. For this reason, the review team was under no obligation to compare the impacts (cumulative or otherwise) of wind, solar, and geothermal generation with the impacts of the proposed action. Such a comparison, therefore, is not material to the findings required in this proceeding. 10 C.F.R. § 2.309(f)(1)(iv). The Intervenor cite to no legal authority that such a comparison is required, as is required for contentions of omission. 10 C.F.R. § 2.309(f)(1)(vi). In Contention 3B, the Intervenor do not challenge the DEIS conclusions of the wind, solar, and geothermal alternatives as not being viable alternatives, nor have they offered a genuine, material, and sufficiently supported challenge to these conclusions, as is required by 10 C.F.R. § 2.309(f)(1)(iv) and (vi).

The Intervenor's argument regarding the DEIS characterization of the water use and quality impacts from the proposed action and alternative energy sources is also untimely. As the language of 10 C.F.R. § 2.309(f)(2) makes clear, the Intervenor have the burden of

demonstrating that contentions filed after the initial filing deadline meet the late-filing standards of § 2.309(f)(2). *Amergen Energy Company, LLC* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 260-61 (2009).

The Intervenors support their challenge with a reference to the Environmental Report, which they assert “betrays” the flawed comparison in the DEIS of water use quantities of the proposed action to those of the combination of alternative energy sources.¹⁹ DEIS Contentions at 9. This reference to the ER reveals that they could have raised their challenge in response to the ER, and that they acknowledge there is no material difference between the ER and the DEIS on this issue. 10 C.F.R. § 2.309(f)(2). The ER contains a comparison of water use and quality impacts of alternative energy sources to those of a nuclear unit; those water use and quality impacts for nuclear power and all the alternative energy sources are projected to be at the same impact level. See ER (Rev. 1), Table 9.2-1. There is no material difference between the conclusions in the ER and DEIS, as both deem the water use and quality impacts from the alternative energy sources to be the same or comparable to those of nuclear power. 10 C.F.R. § 2.309(f)(2). Additionally, the Intervenors could have raised their challenges about the evaluation of water use and quality impacts regarding the combination alternatives in the ER. See Applicant’s Alternatives ER Revision. They fail to explain why the assessment in the DEIS of those impacts differs significantly from the evaluation in the ER. The Intervenors could and should have raised their objections earlier in response to the ER.

Contention 3, therefore, is inadmissible.

B. Contention 4:

The DEIS fails to discuss increases in ambient water temperatures caused by global warming as such would affect the capacity of the Squaw Creek Reservoir to maintain water temperatures consistent with operational requirements.

¹⁹ See *supra* at 47 and n.18 for discussion on this reference.

DEIS Contentions at 10-11 (internal footnotes omitted). Intervenors support this contention with the following discussion:

The DEIS fails to consider the effect of global warming on operations of Comanche Peak Units 3 & 4 related to increased ambient temperatures of air and the effect of higher cooling water temperatures and limited quantities of water. The failure to consider these adverse impacts has the effect of omitting material information concerning water usage and temperature thereof and effects on plant operations. This omission has the effect of overstating advantages of nuclear power and understating environmental impacts.

The DEIS discusses the changes caused by global warming on surface water that is intended for use by Units 3 & 4. However, the DEIS omits discussion of increased ambient water temperatures that would cause the nuclear units to decrease power output or cease operations altogether. Ambient water temperature that reaches 95 F causes a loss in plant production and at 101 F operations must cease. This surface water impact was not compared to surface water impacts related to alternatives for generating power. This omission is material because it bears on the suitability of the nuclear generation option when compared to other generation options that are not constrained by ambient temperatures of surface water.

DEIS Contentions at 10-11 (internal footnotes omitted). Intervenors cite to the following: DEIS at 7-11 to 7-12; the Smith Report at 4-5 (citing ERM, Intake Water Temperature Reduction Alternatives).

The Intervenors have failed to demonstrate that the effects of global warming on ambient water temperatures are within the scope of or material to the finding the NRC must make regarding the environmental review of the Application. 10 C.F.R. § 2.309(f)(1)(iii) and (iv). The Intervenors have also failed to provide alleged facts or expert opinions, together with specific references to supporting documents, which support their arguments and demonstrate a genuine issue of material fact or law with respect to the environmental review of this Application. 10 C.F.R. § 2.309(f)(1)(v)-(vi). Additionally, the Intervenors have not demonstrated that this contention is based on data or conclusions in the DEIS that differ significantly from data or conclusions in the ER. 10 C.F.R. § 2.309(f)(2). Furthermore, the report that they rely on is not new or materially different from previously available information. 10 C.F.R. § 2.309(f)(2)(i)-(iii). For the reasons explained below, this contention should be dismissed.

The Intervenors assert that the DEIS fails to consider the effects of global warming on the ambient temperatures of air and its related effect on higher cooling water temperatures and

quantities of water. DEIS Contentions at 10-11. The Intervenor specifically challenge the failure of the DEIS to address these factors with respect to the capacity of Squaw Creek Reservoir to maintain temperatures consistent with operational requirements. *Id.* However, the proposed units would not use water from Squaw Creek Reservoir for their operations. The DEIS affirms this in Chapter 5: "Operation of CPNPP Units 3 and 4 would not use groundwater or SCR [Squaw Creek Reservoir] surface water." DEIS at 5-8. Squaw Creek Reservoir is the cooling water source for CPNPP Units 1 and 2.²⁰ Thus, to the extent the Intervenor are challenging the failure of the DEIS to address impacts on Squaw Creek Reservoir, that challenge is not material to this proceeding and does not raise a genuine dispute. 10 C.F.R. § 2.309(f)(1)(iv) and (vi).

Regardless, the DEIS does address the effects of global warming on the bodies of water that are pertinent to the proposed action, the Brazos River Basin and Lake Granbury (on which the water intake structure for the proposed units would be built):

If global climate change results in decreased precipitation and increased temperatures in the Brazos River Basin, as many predictions suggest, the resulting reduction in surface runoff and increase in evapotranspiration would contribute to cumulative impacts on surface water quality. By reducing streamflows, these changes could reduce the ability of Lake Granbury and the Brazos River downstream to dilute natural salt concentrations and waste heat and other constituents in the effluent from Units 3 and 4.

These changes would increase salt concentrations in Lake Granbury and downstream during reduced streamflow conditions, but would not significantly change the existing thermal and chemical profiles of Lake Granbury. Additionally, because operation of the proposed CPNPP Units 3 and 4 would be among the larger contributors to cumulative impacts, the staff concludes that cumulative impacts to surface-water quality resulting from the operation of the proposed CPNPP Units 3 and 4 would be SMALL to MODERATE. The MODERATE level is based on the potential impacts to ambient water conditions and downstream users from increased dissolved solids, particularly during low flow conditions. Current and future water users would still be required to implement water treatment mechanisms to address salinity regardless of the increase in salt concentrations attributable to CPNPP Units 3 and 4.

DEIS at 7-11 to 7-12.²¹ The Intervenor, despite asserting that the DEIS fails to consider the

²⁰ See ER (Rev. 1), § 2.3.1.3.5.

²¹ The DEIS also discussed the impacts of global warming on aquatic biota, as follows:

effects of global warming on surface water intended for use by the proposed units, then acknowledge that the DEIS does actually discuss those changes (the discussion of which is quoted above). DEIS Contentions at 10 (citing DEIS at 7-11 to 7-12). The Intervenor's state that this analysis "omits discussion of increased ambient water temperatures that would cause the nuclear units to decrease power output or cease operations altogether." *Id.* However, this specific issue – at what temperatures the nuclear units must decrease power output or cease operations – is primarily a safety-related issue that was addressed in the Application.²² The Intervenor's cite to no legal authority that such a discussion is required in the DEIS, as is required for contentions of omission. 10 C.F.R. § 2.309(f)(1)(vi). Further, the Intervenor's fail to explain what environmental impacts would occur if temperatures were to rise such that the units would need to cease operations. If that event were to happen, the only effect would be that the plants would shut down. Thus, there would be no impacts from plant operations if the plants were not operating. The Intervenor's thus fail to raise a genuine dispute with the DEIS. 10 C.F.R. § 2.309(f)(1)(vi).

To support this challenge to the DEIS, the Intervenor's reference their attached Smith

If global climate change results in decreased precipitation and increased temperatures in the Brazos River Basin, the resulting reduction in surface runoff and increase in evaporation would contribute to reduction in wetlands and stream flows. Reduction in stream flows could reduce the dilution of natural salt concentrations from the Brazos River watershed, as well as other constituents in the effluents from Units 3 and 4 and other discharges, in Lake Granbury and the Brazos River downstream. Higher air temperatures also could slow the dissipation of waste heat from these water bodies. These climate-driven changes in conjunction with anthropogenic changes affecting water quantity and quality in the area of interest would have cumulative effects on water biota. Such effects may include loss of native species due to altering of breeding patterns, water quality, food supply, and habitat availability; increasing vulnerability of natural communities to invasive species; and resulting changes in the composition and diversity of aquatic communities (Karl et al. 2009).

DEIS at 7-20.

²² These issues were discussed in the Final Safety Analysis Report (FSAR) in the Application. Table 10.4.5-1R in the FSAR (Rev. 1) provides the design inlet and outlet temperatures for the Circulating Water System (CWS). If either the design inlet or outlet temperature (103.7 degrees F and 88.5 degrees F, respectively) is exceeded, the condenser could lose vacuum, thereby causing the turbine to trip and resulting in an adverse impact on plant operations. See FSAR (Rev. 1) at 10.4-11. The CWS is a nonsafety-related system.

report for the conclusion that “[a]mbient water temperature that reaches 95 F causes a loss in plant production and at 101 F operations must cease.” DEIS Contentions at 11 (citing Smith Report at 4-5). The Intervenor’s allege that this is a surface water impact; however, as explained above, these issues – reduced power output or shutdowns – are not environmental impacts from plant operations. *Id.* Moreover, the Smith Report that Intervenor’s rely on cites to information that is irrelevant to the proposed action. The Smith report references an ERM document entitled “Intake Water Temperature Reduction Alternatives” (ERM Report). Smith Report at 4 (citing ERM Report at 1). However, the ERM Report was clearly prepared for evaluating CPNPP Units 1 and 2. ERM Report at 1 (stating that the purpose of the study was to evaluate the “cooling water intake temperature for Comanche Peak Steam Electric Station...[which] uses Squaw Creek Reservoir (SCR) to transfer waste heat to the atmosphere”). The Intervenor’s fail to explain how a report regarding existing Units 1 and 2 have any relevance to potential environmental impacts at the proposed new units. Thus, this report fails to support the admission of this contention. The Intervenor’s’ arguments in this regard do not raise a genuine dispute with the DEIS, and lack adequate support. 10 C.F.R. § 2.309(f)(1)(v) and (vi).

The Intervenor’s also assert, in support of Contention 4, that the surface water impacts from the proposed action are not compared to those of the alternatives for generating power. DEIS Contentions at 11. Contrary to the Intervenor’s’ assertion, the review team did compare the water use and quality impacts from alternative energy sources found to be reasonable to those of the proposed project.²³ As for the alternative energy sources determined not to be reasonable, there was no obligation to examine the water use and quality impacts from those sources. As explained previously, NEPA does not require a comparison of the environmental

²³ See DEIS at 9-12, 9-18, 9-31 (concluding that water use and quality impacts from a coal-fired plant, natural gas-fired plant, and a combination energy source comprised of wind and solar, each with storage, a combination of biomass, municipal solid waste, and geothermal, as well as natural gas, would be comparable to those of a nuclear plant).

impacts of the proposed action with the environmental impacts of alternatives that are not considered reasonable or feasible. *See Fuel Safe Washington*, 389 F.3d at 1323; *City of Sausalito v. O'Neill*, 386 F.3d at 1207. For this reason, the review team was under no obligation to compare the water use and quality impacts (cumulative or otherwise) of wind, solar, and other alternative energy sources found not to be reasonable alternative sources with the impacts of the proposed action. Such a comparison, therefore, is not material to the findings required in this proceeding. 10 C.F.R. § 2.309(f)(1)(iv). The Intervenor's cite to no legal authority that such a comparison is required, as is required for contentions of omission. 10 C.F.R. § 2.309(f)(1)(vi).

The Intervenor's argument -- that the DEIS fails to discuss increases in ambient water temperatures caused by global warming as such would affect the capacity of the Squaw Creek Reservoir to maintain water temperatures consistent with operational requirements -- is also untimely. As the language of 10 C.F.R. § 2.309(f)(2) makes clear, the Intervenor has the burden of demonstrating that contentions filed after the initial filing deadline meet the late-filing standards of § 2.309(f)(2). *Amergen Energy Company, LLC (Oyster Creek Nuclear Generating Station)*, CLI-09-7, 69 NRC 235, 260-61 (2009). As discussed above, the specific analysis that Intervenor's claim is omitted from the DEIS -- at what water temperatures the proposed nuclear units must decrease power output or cease operations -- is primarily a safety-related issue that was addressed in the Application.²⁴ The Intervenor has not shown how data or conclusions in the DEIS differ significantly from the data or conclusions in the ER. 10 C.F.R. § 2.309(f)(2). The Intervenor also fails to address how the Smith Report satisfies the requirements under 10 C.F.R. § 2.309(f)(2)(i)-(iii). As explained above, that report relies on a document pertaining to Units 1 and 2. Thus, the Intervenor fails to meet 10 C.F.R. § 2.309(f)(2)(i)-(iii), since they rely on a report that was previously available and is not materially different from previously available information.

²⁴ See *supra* at 52 and n.22.

Additionally, the Intervenor raised these concerns in an earlier contention that this Board dismissed. See Petition at 31. In that contention, the Intervenor asserted that the COLA was inadequate because it failed to analyze the impacts of global warming on the availability of water for plant operations. *Id.* The Board held that Intervenor had not raised a genuine dispute with the Application or sufficiently supported their assertion, other than stating that such matters “should” be addressed, and thus denied the contention on those grounds. *Luminant Generation Co., LLC* (Comanche Peak Nuclear Power Plant, Units 3 and 4), LBP-09-17, 71 NRC __, __ (Aug. 6, 2009) (slip op. at 59). This challenge has been raised before and denied by the Board. The Intervenor has not specified how this contention raises different issues from what has already been addressed by the Board in this proceeding.

Contention 4, therefore, is inadmissible.

C. Contention 5:

The DEIS fails to compare the CO₂ emissions of the uranium fuel cycle (UFC) to the CO₂ emissions of wind and solar power.

DEIS Contentions at 11. Intervenor claims that a study by B.K. Sovacool, which Intervenor states is referenced in Appendix I of the DEIS, concludes that “alternatives such as wind, solar, and geothermal have much smaller CO₂ footprints than nuclear powered generation.” *Id.* (citing DEIS Appendix I, p. I-4)²⁵. Although Intervenor recognizes that the DEIS concludes that “wind, solar and hydropower have minor CO₂ impacts,” Intervenor asserts that “other than the flawed Table 9-6 (see DEIS Contention 2, above) the DEIS otherwise makes no attempt to compare the CO₂ footprints of alternative generation modes.” *Id.* at 12. The Intervenor further argues that the DEIS omits comparisons of CO₂ emissions of alternative forms of energy generation with respect to construction and preconstruction activities, air quality, operational impacts, fuel cycle, transportation and decommissioning, cumulative impacts, water use and quality impacts,

²⁵ The study by B.K. Sovacool is referenced in Appendix J to the Comanche Peak Nuclear Power Plant, Units 3 & 4, DEIS, not Appendix I.

ecology impacts, and alternatives requiring new generation capacity. *Id.* at 12 n. 37 (citing DEIS §§ 4.7.1, 5.7.1, 6.0, 6.3, 7.0, 7.2.1, 7.2.2, 7.3, and 9.2.2).

The Intervenors have failed to demonstrate that the DEIS omits information it is legally required to contain, or otherwise demonstrate that a genuine dispute exists with the DEIS regarding CO₂ emissions of wind and solar power generation. 10 C.F.R. § 2.309(f)(1)(vi). Because the Intervenors cite only to the DEIS as support for their arguments that wind and solar power are reasonable alternatives to the proposed action, and the DEIS does not provide this support, the Intervenors have not provided any alleged facts or expert opinions to support their position. 10 C.F.R. § 2.309(f)(1)(v). Accordingly, DEIS Contention 5 should be rejected.

The Intervenors have not explained why wind or solar power generation are reasonable alternatives to the proposed project, or provided the legal requirement that the DEIS include a comparison of CO₂ emissions for forms of power generation that are not reasonable alternatives to the proposed project. An EIS is only required to compare the environmental impacts of the proposed action with the environmental impacts of reasonable alternatives. *See Fuel Safe Washington v. Federal Energy Regulatory Commission*, 389 F.3d 1313, 1323 (10th Cir. 2004); *City of Sausalito v. O'Neill*, 386 F.3d 1186, 1207 (9th Cir. 2004). Because solar power and wind power generation, alone or with storage, are not reasonable alternatives to the proposed project, the DEIS need only “briefly discuss” the reasons why these alternatives were rejected from more detailed study. 40 C.F.R. 1502.14(a) (Council on Environmental Quality (CEQ) regulation).²⁶ Additionally, in this proceeding, the Licensing Board has already ruled that side-by-side comparisons of the CO₂ emissions of nuclear power compared to renewable fuels, generally, is not required under NEPA and Commission authority. *Luminant Generation Company, LLC* (Comanche Peak Nuclear Power Plant, Units 3 & 4), LBP-09-17, 70 NRC ___, ___

²⁶ Although CEQ regulations are not binding on the Commission, both the NRC and the U.S. Supreme Court accord them “substantial deference.” *See Dominion North Anna, LLC* (Early Site Permit for North Anna ESP Site), CLI-07-27, 66 NRC 215, 222 n.21 (2007) (citing *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 334, 355-56 (1989)).

(August 6, 2009) (slip op. at 81 -82) (“Nor do we find that a ‘side-by-side comparison of mortality and morbidity consequences of nuclear power compared to renewable fuels’ generally, or a comparison of the effects of catastrophic accidents and greenhouse gases with regard to each generally, fall under the types of alternatives that must be discussed under NEPA and Commission authority.”).

The review team determined that based on significant wind resources in Texas, wind power generation warranted more detailed analysis as a potential alternative to the proposed project. DEIS at 9-21. The review team concluded that based on the fact that there are no known or proposed wind power projects that even approach the scale of 3200 MW(e), and that the use of the wind alternative would result in significant land use and aesthetic impacts, wind power generation, with or without energy storage, was not a reasonable alternative to the proposed project. DEIS at 9-21 – 9-24. Because the ERCOT region has solar generation capacity in the southwestern region of Texas, the review team considered whether solar generation, together with energy storage systems that could help control the variability of solar energy production, might provide a reasonable alternative to the proposed project. DEIS at 9-24 – 9-25. The review team concluded that because of the following factors -- a significant amount of land would be needed to generate 3200 MW(e), solar has a lower capacity factor and energy storage does not increase baseload solar generation capacity, and solar thermal electric technologies also typically require water supplies that would not be available in the southwestern region of Texas -- solar generation was not a reasonable alternative to the proposed project. DEIS at 9-25. In addition to considering several forms of alternative energy generation individually, the DEIS examined and considered a combination of alternatives that were reasonable for the ERCOT region, which includes a mix of wind and solar, each with storage; a combination of geothermal, biomass, and municipal solid waste; and supplemental natural gas. DEIS at 9-28 – 9-33. The review team determined that this combination of alternatives was a reasonable alternative to the proposed project, and compared the

environmental impacts, including CO₂ emissions, of the combination of alternatives with the impacts from the proposed units. *Id.* The review team concluded, however, that the combination of alternatives was not environmentally preferable to the proposed new nuclear units. *Id.* at 9-32.

The DEIS's analysis of alternatives is sufficient because it considered an appropriate range of alternatives, even if it did not consider every conceivable alternative or combination of alternatives. See *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-03-30, 58 NRC 454, 479 (2003) (quoting *Headwaters, Inc. v. BLM*, 914 F.2d 1174, 1181 (9th Cir. 1990), *reh'g and reh'g en banc denied*, 940 F.2d 435 (1991)). The DEIS does not, therefore, provide support for the Intervenor's argument that the DEIS omits comparisons of CO₂ emissions of reasonable alternatives. Accordingly, DEIS Contention 5 does not meet the contention admissibility requirement in 10 C.F.R. § 2.309(f)(1)(vi). The Intervenor's cite portions of the DEIS as support for Contention 5, but the DEIS does not support their arguments that wind and solar are reasonable alternatives to the proposed action. The Intervenor's have not otherwise provided facts or expert opinions to support their position that there were other reasonable alternatives that the DEIS omitted. Contention 5 should, therefore, be rejected. 10 C.F.R. § 2.309(f)(1)(v).

- D. Contention 6:
Combinations of wind and solar without storage for baseload are not discussed in the DEIS.

DEIS Contentions at 13. The Intervenor's argue that the DEIS conclusion mistakenly assumes that alternatives such as wind and solar (or the combination thereof) are not viable baseload alternatives without storage, and omits any discussion of the combination of wind and solar power to provide baseload generation. DEIS Contentions at 13 (citing DEIS at 9-28, and Raymond H. Dean, Ph.D. Comments Regarding Luminant's Revision to the Comanche Peak Nuclear Power Plant, Units 3 & 4 COL Application Part 3 (Dean Report), at 1-2.) The

Intervenors argue that because Dr. Dean discusses the viability of combining wind and solar without storage to produce a uniform generation profile, the combination of wind and solar without storage is a practicable alternative for baseload generation and exclusion of the discussion of this combination is unreasonable. *Id.* (citing *Strahan v. Linnon*, 967 F.Supp. 581, 602 (D.Mass 1997) *aff'd*. 187 F.3d 623 (1st Cir. 1998)).

This contention is nontimely because it could have been raised as a specific contention against the Applicant's ER. 10 C.F.R. § 2.309(f)(2). In fact, the Licensing Board has previously narrowed the issues related to the alternatives analysis in this matter to a four-part combination of wind, solar, storage, and supplemental natural gas, based, in part, on Intervenors' arguments at oral argument. The Intervenors have made no showing that the information in the DEIS upon which this contention is based was not previously available or differs significantly from previously available ER information. 10 C.F.R. § 2.309(f)(2). The Intervenors have also failed to provide sufficient information to show that a genuine dispute exists with the DEIS over whether a combination of wind and solar without storage would be a reasonable alternative to the proposed action. 10 C.F.R. § 2.309(f)(1)(vi).

This contention is not based on anything in the DEIS which is new or differs significantly from the ER, and the Licensing Board has previously narrowed the issues related to the alternatives analysis in this matter to a four-part combination of wind, solar, storage, and supplemental natural gas in Contention 18, which the Intervenors adopted as their own. In Contention 18 of their original petition, which the Applicant and the NRC Staff opposed, the Intervenors could have raised a specific contention that the ER omitted a combination alternative consisting of wind and solar, but instead argued broadly that the ER omitted a thorough alternatives analysis. Petition at 42. The Board reformulated and admitted Contention 18 as a more specific contention that focused on the omission from the ER of an alternative consisting of wind, solar, advances in energy storage technology such as CAES and molten salt, and supplemental natural gas. *Comanche Peak, Units 3 & 4*, LBP-09-17 70 NRC at

___ (slip op. at 82, 85). Subsequently, at oral argument on the Applicant's motion to dismiss Contention 18, the Licensing Board noted that while the Intervenor's expert's report referenced wind and solar, they had not made an explicit argument about a combination of wind and solar. Transcript of Oral Argument at 762-63, 765. *Luminant Generation Co., LLC* (Comanche Peak Nuclear Power Plant, Units 3 and 4) (LBP April 15, 2010) (Transcript). Counsel for the Intervenor stated that they had "characterized the contention broadly" and purposefully "did not hone in on a particular combination." *Id.* at 765 - 66. Counsel for the Intervenor also noted that the Licensing Board, by admitting the reformulated contention, directed that attention be given to combinations of wind and solar. *Id.* at 765 - 66. The Licensing Board noted that the Board's reformulated contention did not specify a particular combination of wind and solar. *Id.* Counsel for the Intervenor stated that the Intervenor were pleased with the reformulated contention admitted by the Licensing Board, which created a more specific task for the Applicant to address, and, in effect, adopted it, stating that

"[N]otwithstanding what was in the the original contention as it was in our petition to intervene, whatever was there or wasn't there was subsumed by the Board's reconfiguration of Contention 18 which did explicitly call for a consideration of wind and solar power. So in that regard we were taking the contention as reformulated and arguing accordingly."

Id. at 767-68. Because this contention is not based on anything in the DEIS which is new or differs significantly from the ER, and the Licensing Board has previously narrowed the issues regarding the combination of alternatives, this contention should be dismissed for failure to meet the contention admissibility requirements under 10 C.F.R. § 2.309(f)(2).

The Intervenor have also failed to demonstrate that a genuine dispute exists with the DEIS over whether a combination of wind and solar without storage would be a reasonable alternative to the proposed action. 10 C.F.R. § 2.309(f)(1)(vi). With respect to alternative sources of power, the Commission has focused on the *type and amount* of electrical energy that the applicant seeks to produce. See *Exelon Generating Company, LLC* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 808-09 (2005). In order to be a reasonable

alternative, an alternative must be able to produce sufficient power to satisfy the project's purpose. *Id.* In *Clinton ESP*, the Commission specifically noted that the licensing board's decision rested, in part, upon the fact that "[i]n order to satisfy the purpose of the project, and thus to constitute a reasonable alternative, the combined facility must be able to generate power in the amount of 2180 MW at all times." *Id.* at 809. With this in mind, the Commission found that "[b]ecause wind and solar power cannot reliably generate power at all times the fossil-fueled portions of the facility would have to have a capacity of 2180 MW." *Id.* at 810 (citing *Exelon Generating Company, LLC* (Early Site Permit for Clinton ESP Site), LBP-05-19, 62 NRC 134, 165 (2005) ("there are undoubtedly times at night (no solar power production) when the wind will not be blowing"))).

For the Comanche Peak Nuclear Power Plant, Units 3 & 4 COL application, the Applicant has identified the purpose and need of the project as the production of 3200 MW(e) of additional baseload electrical power "for use in the owner's current markets and/or for potential sale on the wholesale market." DEIS at 1-6. Chapter 8 of the DEIS concluded that there was a justified need for new baseload capacity in excess of the 3200 MW(e) output of the proposed units, and Chapter 9 used 3200 MW(e) as the target value for comparing energy alternatives. *Id.* at 8-22, 9-3. Therefore, the key issue in determining the admissibility of Contention 6 is whether Intervenor's have provided sufficient information to demonstrate a genuine, material dispute over whether wind and solar generation without energy storage can generate 3200 MW(e) of baseload power. 10 C.F.R. § 2.309(f)(1)(vi).

Contrary to the Intervenor's assertion that the DEIS "omits any discussion of the combination of wind and solar power to provide baseload generation[]" (DEIS Contentions at 13), the DEIS describes and analyzes a combination alternative which includes wind and storage; a combination of sources including biomass, municipal solid waste, geothermal, solar and storage; and supplementary natural gas. DEIS at 9-28 through 9-33. In DEIS Section 9.2.3.1, the review team recognized that wind energy, which, by itself, is an intermittent power

source, might serve as a baseload power source in combination with CAES, but concluded that wind power, with or without storage, would not be a reasonable alternative to the proposed action. DEIS at 9-21 through 9-24. Similarly, the DEIS considered solar generation in conjunction with energy storage, as a potential source of baseload power, but concluded that it would not be a reasonable alternative to the proposed action. DEIS at 9-25.

To support their contention, Intervenor offer comments by Dr. Raymond H. Dean, that wind and solar generation complement one another because wind speeds tend to be greater at night while solar generates power during sunlight hours. DEIS Contentions at 13. The Intervenor also argue that “Dr. Dean discusses the viability of combining wind and solar without storage to produce a uniform generation profile because of their complimentary characteristics,” and therefore conclude that “[t]hese complimentary qualities make the combination of wind and solar without storage a practicable alternative for baseload generation.” *Id.* The Intervenor do not explain how the concept that wind and solar energy may complement one another leads to the conclusion that together, without storage, they comprise a reasonable practicable alternative to the proposed new nuclear units, which would generate 3200 MW(e) of additional baseload power.

Similarly, the Intervenor do not explain why the range of alternatives the DEIS considered is insufficient, or why the DEIS conclusions are inadequate or incorrect. The Commission has noted as indisputable “fundamental points” that “solar and wind power, by definition, are not always available” and “in combination plants the fossil-fired components certainly will run some of the time.” *Clinton ESP Site*, CLI-05-29, 62 NRC at 811 (citing *Clinton ESP Site*, LBP-05-19, 62 NRC at 171). The DEIS concluded that while wind and solar generation would not provide reasonable alternatives to the proposed action by themselves, with or without storage, the DEIS considered a combination alternative that included wind and solar, and found that while it may provide a reasonable alternative to the proposed action, it was not environmentally preferable to the proposed action. DEIS at 9-24, 9-25, 9-28 – 9-33. The

Intervenors do not explain why the DEIS conclusions that alternatives such as wind and solar (or the combination thereof) are not viable baseload alternatives without storage is incorrect, nor do the Intervenors explain why the combination of alternatives the DEIS examined was erroneous or insufficient. While the DEIS does not consider the specific combination the Intervenors raise now for the first time, it does consider an appropriate range of alternatives and the Intervenors have not demonstrated otherwise. “[A]n agency’s consideration of alternatives is sufficient if it considers an appropriate range of alternatives, even if it does not consider every available alternative.” *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-03-30, 58 NRC 454, 479 (2003) (quoting *Headwaters, Inc. v. BLM*, 914 F.2d 1174, 1181 (9th Cir. 1990), *reh’g and reh’g en banc denied*, 940 F.2d 435 (1991)) (alteration in original). This contention is therefore inadmissible. 10 C.F.R. § 2.309(f)(1)(vi).

CONCLUSION

As explained above, the Intervenor's DEIS Contentions do not satisfy the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1) or (f)(2), and should be dismissed.

Respectfully submitted,

/Signed (electronically) by/

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

NOTICE OF APPEARANCE

Notice is hereby given that the undersigned attorney herewith enters an appearance in the captioned matter in accordance with 10 C.F.R. § 2.314(b).

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Dated at Rockville, Maryland
this 27th day of September, 2010

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CERTIFICATE OF SERVICE

I hereby certify that copies of the NRC STAFF RESPONSE TO INTERVENORS' NEW CONTENTIONS BASED ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT and NOTICE OF APPEARANCE of Stephanie N. Liaw, have been served upon the following persons by Electronic Information Exchange this 27th day of September, 2010:

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Dated at Rockville, Maryland
This 27th day of September, 2010

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CERTIFICATE OF SERVICE

I hereby certify that copies of a letter from Susan Vrahoretis, counsel for the NRC Staff, dated October 22, 2010, to the Members of the Licensing Board, and page-numbered copies of NRC Staff Answer to Luminant's Motion for Summary Disposition of Contention 18 and Alternatives Contention A, dated September 15, 2010, and NRC Staff Response to Intervenors' New Contentions Based on the Draft Environmental Impact Statement, dated September 27, 2010, were served on the following persons by Electronic Information Exchange on this 22nd day of October, 2010:

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