

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:)	
)	Docket No. 40-8943
CROW BUTTE RESOURCES, INC.)	
)	ASLBP No. 08-867-02-OLA-BD01
(License Renewal))	

CROW BUTTE RESOURCES' RESPONSE TO PROPOSED NEW
CONTENTIONS BASED ON FINAL ENVIRONMENTAL ASSESSMENT

Tyson R. Smith
Winston & Strawn LLP
101 California St.
San Francisco, CA 94111

Mark D. McGuire
McGuire Law Firm
625 South 14th Street, Suite C
Lincoln, Nebraska 68508

COUNSEL FOR CROW BUTTE
RESOURCES

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INTRODUCTION

Pursuant to 10 C.F.R. § 2.309(i)(1), Crow Butte Resources, Inc. (“Crow Butte”) hereby answers the “The Oglala Sioux Tribe’s Renewed and New Contentions Based on the Final Environmental Assessment (October 2014)” (“New OST Contentions) and “Consolidated Intervenors’ New Contentions Based on the Final Environmental Assessment (October 2014)” (“New CI Contentions”), both dated January 5, 2015. For the reasons discussed below, the proposed new contentions do not meet the criteria for timeliness of contentions based on environmental review documents and are otherwise inadmissible.

BACKGROUND

Crow Butte is currently licensed to operate an in-situ uranium recovery facility in Crawford, Nebraska. On November 27, 2007, Crow Butte requested that the NRC renew Crow Butte’s source material license for another 10-year period.¹ A notice of opportunity to request a

¹ The proposed action is license renewal, and not an initial license or an expansion of the existing facility. Crow Butte has separately requested license amendments that would allow the development of two satellite facilities, the “North Trend Expansion Area” and “Marsland Expansion Area,” near its existing ISL operation. Those applications are the subject of separate ongoing licensing proceedings.

hearing was published in the *Federal Register* with a deadline for filing petitions of July 28, 2008.² Three timely petitions to intervene were filed by: (1) the Oglala Sioux Tribe (“OST”);³ (2) Beatrice Long Visitor Holy Dance, Joe American Horse, Sr., Debra White Plume, Loretta Afraid of Bear Cook, Thomas K. Cook, Dayton O. Hyde, Bruce McIntosh, Afraid of Bear/Cook Tiwahe, American Horse Tiospaye, Owe Aku/Bring Back the Way, and Western Nebraska Resources Council (“Consolidated Intervenors” or “CI”);⁴ and (3) the Oglala Delegation of the Great Sioux Nation Treaty Council (“Treaty Council”).⁵ OST submitted five proposed contentions; the Consolidated Intervenors submitted twenty-three proposed contentions; and the Treaty Council submitted six proposed contentions.

The Licensing Board issued its decision on standing and contentions on November 21, 2008. The Board found that OST had standing and admitted all five proposed contentions (Environmental Contentions A through E). The Board granted standing to Consolidated Intervenors and admitted four contentions (or parts of contentions) (Environmental Contention E, Technical Contention F, and Miscellaneous Contentions G and K). The Board denied the petition of the Treaty Council. On December 10, 2008, the Board admitted a late-filed contention filed by Consolidated Intervenors.

² See “Notice of Opportunity for Hearing, Crow Butte Resources, Inc., Crawford, NE, In Situ Leach Recovery Facility, and Order Imposing Procedures for Access to Sensitive Unclassified Non-Safeguards Information (SUNSI) for Contention Preparation,” 73 Fed. Reg. 30426 (May 28, 2008).

³ “Request for Hearing and/or Petition to Intervene,” dated July 28, 2008.

⁴ “Consolidated Request for Hearing and Petition for Leave to Intervene,” dated July 28, 2008 (“Consolidated Petition”).

⁵ “Request for Hearing and Petition for Leave to Intervene,” dated July 28, 2008.

In CLI-09-09, the Commission reversed the Board's decision admitting the OST's Contentions EC-B (cultural resources) and EC-E (waste removal) and Consolidated Petitioners' Contentions EC-E (economic value of environmental benefits), MC-K (foreign ownership), and SC-A (Arsenic). The Commission also granted a motion for summary disposition on MC-G (concealment of foreign ownership). The Commission affirmed admission of the four remaining contentions.

The four remaining contentions revolve around similar technical and environmental issues: whether Crow Butte's operations will lead to contamination of nearby aquifers. The contentions are:

OST-EC-A: There is no evidence based science for [Crow Butte's] conclusion that ISL mining has "no non radiological health impacts" (see Table 8.6-1 of application), or that non-radiological impacts for possible excursions or spills are "small" (see 7.12.1 of application).

OST-EC-C: In 7.4.2.2 in its application for renewal, [Crow Butte's] characterization that the impact of surface waters from an accident is "minimal since there are no nearby surface water features," does not accurately address the potential for environmental harm to the White River.

OST-EC-D: In 7.4.3 [Crow Butte's] Application incorrectly states there is no communication among the aquifers, when in fact, the Basal Chadron aquifer, where mining occurs, and the aquifer, which provides drinking water to the Pine Ridge Indian Reservation, communicate with each other, resulting in the possibility of contamination of the potable water.

CP-TC-F: Failure to include recent research regarding hydrogeologic conditions of the site.

After completion of its technical and environmental reviews, the NRC Staff issued its Safety Evaluation Report ("SER") in December 2012, which was revised in August

2014,⁶ and the final Environmental Assessment (“EA”) on October 27, 2014. In their filings, dated January 5, 2015, CI and OST proposed 14 new “joint” contentions, and OST proposed one additional contention, purportedly based on the EA.

ADMISSIBILITY AND TIMELINESS STANDARDS

Although OST and CI filed their new contentions in accordance with the Board’s Scheduling Order, dated November 24, 2014, the timeliness and admissibility of the proposed contentions still must be evaluated in accordance with the Commission’s standards in 10 C.F.R. Part 2. In general, a contention must be based on the application or other documents available at the time the hearing request and petition to intervene is filed.⁷ The regulations provide that intervenors may file a new or amended environmental contention if there are data or conclusions in the EA that “differ significantly from the data or conclusions in the applicant’s documents.”⁸ Otherwise, a new contention may be considered only if: (1) the information upon which the new or amended contention is based was not previously available; (2) the information upon which the new or amended contention is based is materially different from information previously

⁶ As explained in an NRC Staff notice to the parties, dated August 20, 2014 (ADAMS Accession No. ML14232A141), the SER revisions included changes to License Condition (LC) 9.7, regarding appointment of a qualified designee for daily health physics inspections; conforming changes to LCs 9.2 and 9.6; changes to the NRC Staff’s evaluation regarding those LCs; and a change to the surety amount in LC 9.5 for consistency with Amendment 27 to Crow Butte’s license. The changes did not implicate the issues raised in the proposed new contentions.

⁷ 10 C.F.R. § 2.309(f)(2); *see also Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), LBP-00-27, 52 NRC 216, 223 (2000) (time to submit contentions tolls when the information on which the contention is based first becomes available).

⁸ 10 C.F.R. § 2.309(f)(2).

available; and (3) the new or amended contention has been submitted in a timely fashion based on the availability of subsequent information.⁹

New or amended contentions, including those based on the EA, also must meet the admissibility standards that apply to all contentions, which the Commission has said are “strict by design.”¹⁰ As set forth in 10 C.F.R. § 2.309(f)(1), a proposed contention must contain: (1) a specific statement of the issue of law or fact raised; (2) a brief explanation of the basis for the contention; (3) a demonstration that the issue is within the scope of the proceeding; (4) a demonstration that the issue is material to the findings that the NRC must make regarding the action which is the subject of the proceeding; (5) a concise statement of the alleged facts or expert opinions supporting the contention; and (6) sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Failure to comply with any of these requirements is grounds for the dismissal of a contention.¹¹

DISCUSSION

Crow Butte addresses below each of the 15 proposed new contentions and concludes that none are admissible under the standards of 10 C.F.R. § 2.309. Additionally, nowhere in their proposed contentions do the intervenors attempt to show, much less affirmatively demonstrate, that the proposed contentions are based on new or materially different information in the EA. Indeed, for each contention, Crow Butte demonstrates that the contention

⁹ 10 C.F.R. § 2.309(c)(1).

¹⁰ *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001).

¹¹ *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).

could have been raised previously — for example, based on the original License Renewal Application (“LRA”), the SERs, or Section 106 consultation documentation. All of the contentions are therefore untimely.

A. Contention 1: Failure to Meet Applicable Legal Requirements Regarding Protection of Historical and Cultural Resources, and Failure to Involve or Consult the Oglala Sioux Tribe as Required by Federal Law

1. Admissibility

In Contention 1, the intervenors argue that the EA fails to meet the requirements of NEPA and the National Historic Preservation Act (“NHPA”) because the EA lacks an adequate description of the project’s impact on archaeological, historical, and traditional cultural resources at the site. The intervenors complain that “[n]o specific survey was performed for this license renewal in order to demonstrate that archaeological sites within the project area are properly identified, evaluated and protected” and assert that all interested tribes were not “meaningfully” consulted.¹² Neither argument provides a basis for an admissible contention.

Citing discussion in Section 3.9.6, the intervenors argue that the EA relies on cultural resources surveys that are from 1982 and 1987, which identified a total of 21 prehistoric and historic period archaeological sites, six of which were considered as “potentially eligible” for nomination and listing on the National Register of Historic Places. The intervenors allege that “potential impacts to these resources have not been addressed.”¹³ But, setting aside the fact that the NHPA is a procedural statute that does not dictate particular outcomes,¹⁴ the EA specifically addresses these sites, noting that the six “potentially eligible sites” were designated for avoidance

¹² CI Contentions at 4-5.

¹³ *Id.* at 6.

¹⁴ *See Nat’l Mining Ass’n v. Fowler*, 324 F.3d 752, 755 (D.C. Cir. 2003) (requirements imposed by NHPA Section 106 are procedural, not substantive).

during construction activities — both at the time and for the future.¹⁵ The EA explains that only one site is located in an area of potential disturbance, but that it is protected by a fenced perimeter. The EA explains that avoidance will continue during aquifer restoration and plant decommissioning. The intervenors have not disputed the EA’s assessment of potential impacts to these sites. There is therefore no basis for a genuine dispute with respect to whether impacts to these sites have been addressed in the EA, or to the adequacy of the EA’s assessment of those impacts.

The intervenors also assert that the NRC Staff failed to meaningfully engage with tribes in the consultation process. Specifically, the intervenors characterize “the ‘consultation’ process as one involving a single large collective meeting involving the NRC, several tribes and representatives of more than one uranium company (Crow Butte and Powertech-Dewey Burdock) in June 2011.”¹⁶ They complain that there was “never a meeting with the Oglala Sioux Tribe solely devoted to the Crow Butte renewal or the cultural resources that are within the existing Crow Butte licensed area.”¹⁷ Although they acknowledge that OST was invited to do a survey at its own cost, the intervenors complain that OST was not involved in the surveys

¹⁵ EA at 86. The Crow Butte license also includes a condition calling for (1) additional cultural resources surveys should any previously unsurveyed land be used for future developmental activity, (2) cessation of work and immediate notification to the NRC should a discovery of previously unknown cultural artifacts take place during project disturbance activity, and (3) providing the NRC with documentation of its interaction with the Nebraska State Historical Society before any development activity takes place in the immediate vicinity of the six “potentially eligible” sites. *Id.*

¹⁶ New CI Contentions at 7.

¹⁷ *Id.*

conducted for the expansion areas (*e.g.*, Marsland Expansion Area) or the 1982 or 1987 surveys at the main processing area.¹⁸ None of these claims support an admissible contention.

First, the consultation process was significantly more involved than a single meeting. As outlined in Section 3.9.7, the NRC Staff's consultation process included the following:

- On January 13, 2011, the NRC sent a letter to 18 tribes, including OST, inviting the tribal governments to a formal consultation for license renewal under NHPA Section 106. The letters requested any known information on any areas on the project site that the tribes believe have religious and cultural significance. The letters included a map showing the Crow Butte site's location.
- On May 12, 2011, the NRC sent letters to 24 tribes, including OST, inviting them to attend an informal information gathering meeting and a site visit June 7-9, 2011, at the Pine Ridge Reservation in South Dakota (ADAMS Accession No. ML110950627). The letter included a CD with publicly-available archaeological surveys for the Crow Butte project area and a map of the project area.
- Six consulting tribes, including OST, attended the June 2011 meeting and site visit.¹⁹ The NRC staff also met with the Tribal Historic Preservation Offices ("THPOs") to gather information on June 8, 2011.
- On January 19, 2012, the NRC staff sent letters to 24 tribes, including OST, inviting them to attend a meeting on February 14-15, 2012, to continue ongoing consultation and discuss potential Traditional Cultural Properties ("TCP"). Representatives of 19 tribes, including OST, attended the meetings.
- On October 31, 2012, NRC invited all the consulting tribes to complete a TCP field survey of the CBR facility. In November and December of

¹⁸ The intervenors reference (New CI Contentions at 9) a 2013 Redmond opinion with respect to the cultural resource surveys performed for the Marsland Expansion Area. But, the Marsland Expansion Area is the subject of a different application and a different licensing proceeding. The intervenors provide no information to link the results of the surveys performed for Marsland to the conditions at the main Crow Butte permit area.

¹⁹ *See, e.g.*, Letter from Kevin Hsueh, NRC, to James Laysbad, THPO, Oglala Sioux Tribe, dated October 11, 2011 (providing unredacted archeological surveys for Crow Butte license renewal) (ADAMS Accession No. ML112440097).

2012, a TCP field survey was completed by the Santee Sioux Nation and the Crow Nation. A TCP report (ADAMS Accession No. ML13064A481) was submitted to the NRC by the Santee Sioux Nation on behalf of both tribes. The report concluded that there were no eligible sites of cultural or religious significance to the tribes at the CBR facility.

- On September 30, 2013, The NRC Staff also posted its Section 106 documentation for the project on its website and requested comment.²⁰ Emails were sent to consulting parties and notices filed in this proceeding. No comments were received.
- In October 2013, all tribes, including OST, were sent a copy of the NRC Staff's preliminary documentation of its NHPA review for the CBR license renewal.

Secondly, the intervenors fail to identify any legal support for their assertion that the NRC Staff's extensive efforts, outlined above, fail to comply with the NHPA. They have not identified any procedural step required by statute or regulation that the NRC Staff is alleged to have overlooked.²¹ Nor have they identified any legal or factual basis for their claim that the NRC can only satisfy the consultation requirements by having a meeting dedicated solely to Crow Butte.²² And, there is no requirement that Crow Butte or the NRC pay for OST to perform its own TCP survey. The intervenors' claims about the inadequacies of the EA ignore the record and fail to establish a basis for relief in this license renewal proceeding.²³

²⁰ The information was posted at <http://www.nrc.gov/info-finder/materials/uranium/licensed-facilities/crow-butte/section-106-license-renewal-docs.html>.

²¹ *Narragansett Indian Tribe v. Warwick Sewer Auth.*, 334 F.3d 161, 166 (1st Cir. 2003) (characterizing NHPA Section 106 as a requirement that agency decisionmakers “‘stop, look, and listen,’ but not that they reach particular outcomes”).

²² If anything, the NRC Staff's approach is more efficient and considerate of the tribes' time. Conducting a single meeting reduces travel expenses and maximizes participation.

²³ *See infra* n.18 (explaining that the adequacy of surveys at the *Marsland Expansion Area* is outside the scope of this *license renewal* proceeding).

Lastly, the intervenors complain that, although the NRC Staff refers to the existence of a “a class III archeological survey” in Section 4.8, no information is provided as to the date of such survey or the name and credentials of the person supervising the survey that would indicate that it is a valid Class III survey. But, the EA does cite the Class III survey report from 1982 and 1987 in the References section: Bozell, John, and Robert Pepperl. (1987). “A Cultural Resources Study of the Crow Butte Uranium Prospect, Dawes County, Nebraska.” Nebraska State Historical Society, Lincoln, NE. A detailed summary of this report was provided to tribes in May 2011.²⁴ And, the intervenors have pointed to no requirement that the NRC specifically identify the credentials of survey report authors in the EA itself.²⁵ The intervenors have therefore failed to establish a genuine dispute with the EA on a material legal or factual issue.

2. *Timeliness*

Proposed Contention 1 is also untimely. As the NRC Staff explains in the EA (at 87), the NRC posted a draft of its Section 106 documentation for the project on the NRC’s public website on September 30, 2013, and requested public comment.²⁶ E-mails were sent notifying the consulting parties of the website. And, a specific notice of the availability of this information

²⁴ See EA at 56 (explaining that the May 12, 2011 letter from the NRC Staff to the tribes inviting them to attend an informal information gathering meeting and a site visit June 7-9, 2011, at the Pine Ridge Reservation in South Dakota included a CD with publicly-available archaeological surveys for the Crow Butte project area and a map of the project area); see also Crow Butte Cultural Resources Report, dated July 29, 1987 (ADAMS Accession No. ML111170476).

²⁵ To avoid undue length, an EA may incorporate by reference background data to support its discussion of the proposal and relevant issues. 46 Fed. Reg. 18026, 18037 (Mar. 23, 1981) (CEQ’s 40 Most Frequently Asked Questions on NEPA).

²⁶ The information was posted at <http://www.nrc.gov/info-finder/materials/uranium/licensed-facilities/crow-butte/section-106-license-renewal-docs.html>.

was provided to the parties in this proceeding.²⁷ The website and comment solicitation included the NRC Staff's documentation of its Section 106 review findings that formed the basis for NHPA compliance and the cultural resource evaluation in the EA.²⁸ Indeed, the information in the NRC Staff's 2013 consultation document, including the description of the consultation process, the assessment of previously-identified cultural resources, reliance on prior surveys, review of TCP surveys and TCPs, and the overall conclusion, is the same as that in the EA.

As noted above, amended or new contentions may be considered only if: (1) the information upon which the amended or new contentions is based was not previously available; (2) the information upon which the amended or new contention is based is materially different than information previously available; and (3) the amended or new contention has been submitted in a timely fashion based on the availability of subsequent information.²⁹ Here, the information on which the contention is based was available at least as early as September 30, 2013, and there are no material differences between that information and the information in the EA.³⁰ Moreover, the intervenors have made no attempt to identify any new or materially

²⁷ See NRC Staff Letter to ASLB, dated October 1, 2013 (ADAMS Accession No. ML13274A631) (notifying the Board and the parties that the Staff had published on the NRC website information related to its cultural resources evaluation under Section 106).

²⁸ "Crow Butte In-Situ Uranium Recovery Facility License Renewal National Historic Preservation Act of 1966, As Amended, Consultation" (ADAMS Accession No. ML13260A566).

²⁹ 10 C.F.R. § 2.309(c).

³⁰ The Commission previously found that OST's Environmental Contention B, which related to NHPA compliance, was not ripe because the NHPA applies only to federal agencies, such as the NRC, and not to private applicants. CLI-09-09 at 24. However, the issue became ripe upon publication of the NRC Staff's Section 106 documents on September 30, 2013. See *also id.* at 25 (noting that a timely NHPA contention could be filed upon issuance of a draft document or publication of other official agency records documenting the NRC Staff's NHPA review).

different information as required under 10 C.F.R. § 2.309(c)(1). Consequently, proposed Contention 1 is untimely and cannot be admitted.

B. Contention 2: Failure to Do EIS; Failure to Involve OST with surveys being conducted by Crow Butte at Crow Butte's expense; Conduct of TCP Survey Designed to Fail to Discover TCPs

1. Admissibility

Contention 2 raises issues similar to those in Contention 1. The intervenors argue that Crow Butte is not qualified to determine whether cultural sites or artifacts or sites exist or how to preserve them. The intervenors also allege that there are “issues of whether CBR can be trusted to cause TCP surveys to be conducted in a manner that does not decrease the likelihood of finding TCPs.”³¹ In support of their assertions, the intervenors cite field surveys conducted for the Marsland Expansion Area in November 2010 and in February 2011. According to the intervenors, the Marsland site was under snow and ice and that therefore the survey was “designed to fail.”³² The intervenors have presented no information that demonstrates a material dispute with the NRC Staff's EA for the main Crow Butte site.

First, the intervenors fail to link the field surveys at the Marsland site to the adequacy of the EA for the Crow Butte site. The field surveys at the Marsland site in November 2010 and in February 2011 were performed to support the Marsland application and have no direct relevance to this license renewal proceeding. Moreover, the two surveys were not performed by Crow Butte, but rather by a qualified archeological contractor.³³ The intervenors'

³¹ New CI Contentions at 22.

³² *Id.* at 24.

³³ See Marsland ER at 3-76 (citing Graves et al, *Marsland Expansion Area Uranium Project Class III Cultural Resource Investigation*, dated April 28, 2011 (ADAMS Accession No. ML12165a503)).

speculation regarding site conditions also are contrary to the record. Unlike speculation in the proposed contention and the Redmond letter, the *Marsland Expansion Area Uranium Project Class III Cultural Resource Investigation* specifically describes the survey conditions:

E. Weather and Ground Conditions

Weather was cold and windy for most of the survey with a brief stint of snowfall and snow cover. Survey was not conducted when frost or snow cover exceeded 20 percent ground coverage. Other than delaying the ability to complete inventory before the 2010 year end, the weather and ground conditions did not alter field methods. Note-taking was abbreviated in the field at times do to extreme cold temperatures or during extreme wind, but daily field notes were supplemented and elaborated at each day's end.³⁴

The photographs accompanying the report also demonstrate the general absence of significant snow cover during the survey period. And, at page 10, the report notes that “[o]verall, conditions were very good for the discovery of cultural materials and fair for the documentation of cultural materials in northwestern Nebraska.” The discussion of Marsland field surveys in Contention 2 therefore is not only immaterial, but also baseless.

The intervenors complain that OST has not been involved in a TCP field survey of the Crow Butte project area.³⁵ But, they acknowledge that OST was invited to conduct a survey. Indeed, on October 31, 2012, NRC invited all the consulting tribes to complete a field survey of the CBR facility and proposed expansion areas in the vicinity of Crow Butte.³⁶ And, a field survey was in fact completed by the Santee Sioux Nation and the Crow Nation.³⁷ Although the intervenors complain they were not provided funds to conduct a survey, they never cite to

³⁴ Graves et al. at 21.

³⁵ New CI Contentions at 29.

³⁶ EA at 57.

³⁷ *Id.*

any requirement that such funds be provided by an applicant, and there is none.³⁸ The intervenors therefore have provided no information specific to the main Crow Butte site, much less any information that demonstrates a genuine dispute with the EA, nor have they identified a legal basis for challenge to the consultation process used by the NRC Staff.

Lastly, the intervenors allege that preparation of an Environmental Impact Statement (“EIS”) is required. However, the EA reaches a Finding of No Significant Environmental Impact (“FONSI”) and concludes that preparation of an EIS is therefore unnecessary. Specifically, the NRC Staff prepared the EA in accordance with NRC regulations in 10 C.F.R. Part 51 and NRC Staff guidance in NUREG-1748, “Environmental Review Guidance for Licensing Actions Associated with NMSS Programs.” The NRC Staff reviewed previous EAs and EISs prepared for the initial licensing of the Crow Butte facility and its first license renewal; consulted with other federal agencies, federally-recognized Indian tribes, and state and local government agencies; conducted site visits; and reviewed responses to NRC requests for additional information.³⁹ The NRC Staff ultimately found that the impacts from the proposed action would be small for all environmental resource areas.⁴⁰ Contention 2 does not challenge the NRC Staff’s impact assessment in any particular resource area or discuss how an EIS would change the outcome of the environmental review. The contention therefore lacks a basis for its assertion that preparation of an EIS is necessary. Contention 2 is inadmissible.

³⁸ Indeed, if a party seeks to engage in litigation to challenge a proposed action, it is incumbent on that party to develop its bases and support for its position.

³⁹ EA at viii.

⁴⁰ *Id.*

2. *Timeliness*

Proposed Contention 2 is also untimely. As noted above, the NRC posted a draft of its Section 106 documentation for the project on the NRC's public website and requested public comment on September 30, 2013.⁴¹ A contention based on NHPA compliance became ripe at that time.⁴² The information in the 2013 consultation document, including the description of the consultation process, the assessment of previously-identified cultural resources, reliance on prior surveys, review of TCP surveys and TCPs, and the overall conclusion, is the same as that in the EA. Because the information in the EA on which the proposed contention is based was available at least as early as September 30, 2013, proposed Contention 2 is untimely and cannot be admitted.

C. **Contention 3: Failure To Describe All Relevant Environmental Justice Impacts**

1. *Admissibility*

Contention 3 is inadmissible. The proposed contention fails to raise a genuine dispute on a material issue of fact or law. There is no factual support for the assertion that that Crow Butte's operations are causing or will cause disproportionate impacts on minority or low-income populations. The NRC Staff followed its guidance in identifying minority and low-income populations in the site vicinity and in assessing potential impacts from Crow Butte's operations.⁴³ The NRC Staff in the EA acknowledges the presence of minority and low-income populations in Shannon County, South Dakota, which includes the Pine Ridge Reservation, but

⁴¹ "Crow Butte In-Situ Uranium Recovery Facility License Renewal National Historic Preservation Act of 1966, As Amended, Consultation" (ADAMS Accession No. ML13260A566).

⁴² See CLI-09-09 at 25 (noting that a timely NHPA contention could be filed upon issuance of a draft document or publication of other official agency records documenting the NRC Staff's NHPA review).

⁴³ EA at 89-92.

concludes that there would not be disproportionately high impacts on those populations because of the distance from the Crow Butte facility.⁴⁴ In contrast, the intervenors have provided no data or supporting affidavits regarding users or uses of the White River by minority or low-income populations, nor is there other data or information to show that Crow Butte’s operations could disproportionately affect such populations.⁴⁵ Simply noting the presence of minority or low-income populations does not establish a disproportionate impact (*i.e.*, that those populations would suffer impacts different from what others would experience).⁴⁶ The intervenors’ generalized concerns and unsupported claims do not demonstrate a genuine dispute with the conclusions in the EA and therefore do not support an admissible contention.

2. *Timeliness*

Contention 3 is also untimely. In proposed Contention 3, the intervenors allege that “[t]he Final EA does not describe the low-income people living at Pine Ridge Indian Reservation ... as being affected or impacted in any way by the renewal of the license of the mine” and complain that the NRC only looked at the area near Crawford, NE, which is only 4.4% minority, when finding no need to conduct a more detailed environmental justice

⁴⁴ *Id.* at 43, 92.

⁴⁵ Although the intervenors reference the 2008 LaGarry Opinion, that document does not discuss the extent of use of groundwater or the location or quantity of withdrawals at Pine Ridge that would support a claim of disproportionate impact. There is therefore no basis for concluding that there would be disproportionate impact on minority or low-income populations.

⁴⁶ *See e.g.*, “Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions,” 68 Fed. Reg. 62642, 62644 (Nov. 5, 2003) (noting that “[t]he focus of any [environmental justice] review should be on identifying and weighing disproportionately significant and adverse environmental impacts on minority and low-income populations that may be different from the impacts on the general population”).

analysis.⁴⁷ However, the intervenors do not acknowledge that the same information and conclusion was presented previously.

Crow Butte included an assessment of potential environmental justice impacts in its initial LRA.⁴⁸ The affected area selected for the environmental justice analysis in the LRA included the characteristics of the population within the city of Crawford and the surrounding census tract blocks. Like the EA, the LRA analysis concluded that “[t]here has been no disproportionate impact to minority population from the construction and implementation of the Crow Butte Project” and found that there would be no disproportionate adverse impact to populations living below the poverty level.”⁴⁹ The LRA assessment did not consider the potential for contamination at Pine Ridge from discharge to the White River, nor conclude that there was a potential for environmental justice impacts at the Pine Ridge Reservation — the same approach as the EA.

A new contention based on the EA is only timely if the information on which it is based was not previously available or is materially different from information that was available previously.⁵⁰ Here, the intervenors have made no attempt to identify any new or materially different information in the EA relative to the original LRA. And, the basis for the NRC Staff’s assessment, including the focus on Crawford (and not the Pine Ridge Reservation), as well as the overall conclusion on environmental justice impacts, were included in Crow Butte’s LRA. This environmental justice contention is not timely.

⁴⁷ New CI Contentions at 30-31.

⁴⁸ LRA at 7-31 (Section 7.11)

⁴⁹ *Id.*

⁵⁰ 10 C.F.R. § 2.309(c).

D. Contention 4: The Final EA Fails to Take ‘Hard Look’ at and Failure to Include Necessary Information for Adequate Determination of Baseline Ground Water and Surface Water Quality

In proposed Contention 4, the intervenors argue broadly that the EA “fails to provide an adequate baseline groundwater characterization or demonstrate that ground water and surface water samples were collected in a scientifically defensible manner, using proper sample methodologies.”⁵¹ The intervenors allege that “new baselines [must] be taken for each renewal licensing action” and claim that “the methods for taking baselines and setting upper control limits have been biased to the upper end leading to increased potential for undetected leaks or excursions.”⁵² Citing two reports prepared in 2008 (Abitz and JR Engineering), the intervenors argue that the EA’s discussion of baseline ground water quality collection and monitoring is inadequate.⁵³ The proposed contention is both inadmissible and untimely.

1. Admissibility

Contention 4 is inadmissible. The intervenors provide no technical or regulatory basis for their claim that “NEPA requires new baselines to be taken for each renewal licensing action, a comparison of the new baselines to the old baselines with consideration of the interim monitoring and reporting data and an analysis of the total amount of data under scientifically defensible protocols.”⁵⁴ The intervenors also fail to support the assertion that NEPA “requires

⁵¹ New CI Contentions at 32.

⁵² *Id.* at 34.

⁵³ *Id.* at 44-48.

⁵⁴ *Id.* at 34. If anything, the intervenors’ proposal to update the baseline to reflect conditions during ongoing operations (rather than comparing to conditions prior to operations) would have the effect of minimizing the environmental impacts of Crow Butte’s operations.

that the public and its experts have enough information to replicate the results.”⁵⁵ An EA need not include all theoretically possible environmental effects and the discussion of the impacts need not be exhaustive in scope or detail.⁵⁶ If the intervenors believe there is insufficient information available to meet NRC requirements, they must examine the publicly available information and identify with specificity each alleged deficiency and the bases for their assertions.⁵⁷ Here, the baseline and restoration ground water quality data collected from Crow Butte is available publicly,⁵⁸ and the intervenors have not identified what, if any, information is lacking.⁵⁹ Contention 4 fails to demonstrate a genuine dispute and is therefore inadmissible.

⁵⁵ *Id.* Neither the 2008 Abitz Report or 2008 JR Engineering document provide a regulatory basis for the claim that an EA must contain sufficient information for the public to replicate the results of an NRC Staff analysis. Such an assertion would be contrary to the purpose of an EA. *See* 40 C.F.R. § 1502.2(a) (noting that NEPA documents should be “analytic rather than encyclopedic.”).

⁵⁶ *See, e.g., San Luis Obispo Mothers for Peace v. NRC*, 751 F.2d 1287, 1300-01 (D.C. Cir. 1984), *rehearing en banc granted on other grounds*, 760 F.2d 1320 (D.C. Cir. 1985).

⁵⁷ Abitz’s opinion as to what applicable regulations should (but do not) require cannot serve as a basis for a contention. *Georgia Inst. of Tech.* (Georgia Tech Research Reactor), LBP-95-6, 41 NRC 281, 303, *vacated in part and remanded on other grounds*, CLI-95-10, 42 NRC 1, *aff’d in part*, CLI-95-12, 42 NRC 111 (1995).

⁵⁸ Available at <http://www.nrc.gov/info-finder/materials/uranium/licensed-facilities/crow-butte/isr-wellfield-ground-water-quality-data.html>.

⁵⁹ Intervenors also argue that EA fails to describe the additional monitoring of the English Creek and other downstream sediments to determine if they are increasing in concentrations for the period from 2010-2014. But the sediment monitoring data was included in Crow Butte’s semi-annual monitoring reports. *See e.g.*, Section 3.4 and Appendix H of the 2010, 2011, and 2012 *Semiannual Radiological Effluent and Environmental Monitoring Report for the Crow Butte Uranium Project* (ADAMS Accession Nos. ML110840124, ML12110A247, and ML13070A014); Section 3.3 and Appendix H of 2013 *Semiannual Radiological Effluent and Environmental Monitoring Report for the Crow Butte Uranium Project* (ADAMS Accession No. ML14071A019). This aspect of the contention is therefore untimely, in addition to lacking information to show an error in the baseline data.

2. *Timeliness*

Contention 4 is untimely. The intervenors' complaints regarding baseline groundwater characterization and monitoring are not new. Indeed, the two reports referenced as support for Contention 4 initially were prepared based on the LRA.⁶⁰ And, CI's original petition to intervene included proposed Technical Contention D, which alleged a failure by Crow Butte to follow statistical protocols for baseline monitoring, and Technical Contention E, which cited the 2008 JR Engineering Report.⁶¹ The EA is not an opportunity to re-raise contentions that were previously considered and rejected.

The same issues also were addressed in the SER for License Renewal, which was first issued in December 2012 and revised in August 2014. Both SERs describe the process used to establish baseline groundwater quality.⁶² And, both SERs describe the groundwater and surface water monitoring program.⁶³ Any contention regarding baseline groundwater quality could have been (but was not) raised at that time.

The intervenors have made no effort to identify any new or materially different information in the EA — relative to either the LRA or the SERs — that would justify a timely new contention. Having failed to identify any new or different information in the EA, proposed Contention 4 is untimely.

⁶⁰ See, e.g., LBP-08-24 at 53 (Abitz Report) and 53-54 (JR Engineering Report).

⁶¹ See *id.* at 53-54 (denying Technical Contentions D and E).

⁶² See, e.g., 2014 SER at xv (describing license condition on establishing background water quality).

⁶³ See, e.g., *id.* at 123 (Section 5.7.9, *Ground Water and Surface Water Monitoring Programs*).

E. Contention 5: The Final EA Fails to Include An Adequate Hydrogeological Analysis To Assess Potential Impacts to Groundwater and Surface Water; the NRC Staff Failed to Take a ‘Hard Look’ at Proposal Even After Expert Criticisms

Proposed Contention 5 is a mishmash of old arguments and outdated claims that are both untimely and inadmissible.

The intervenors begin by asserting that the EA is deficient because it contains “unsubstantiated assumptions as to the isolation of the aquifers in the ore-bearing zones based on four (4) decades-old pump tests from 1982-2002, and failure to account for natural and man-made hydraulic conductivity through faults and fractures, and the historic drilling of literally thousands of drill holes and wells in the aquifers and ore-bearing zones in question, which were not properly abandoned or are still in use.”⁶⁴ The intervenors allege that, although Crow Butte’s original pump tests showed no responses that would suggest a lack of confinement, “it is entirely possible that there was an equipment or instrument failure.”⁶⁵ The proposed contention also argues that, despite the suggestions in 2008 by JR Engineering and Dr. LaGarry that additional pump tests be performed, none have been reported in the EA.⁶⁶ According to the intervenors, this constitutes a failure to take a ‘hard look’ as required by NEPA.

This aspect of proposed Contention 5 simply repeats arguments raised previously based on the LRA. The intervenors have made no effort to identify any new or different information in the ER that could form the basis for a timely contention and in fact rely on the same reports submitted back in 2008. The fact that the NRC did not accept their

⁶⁴ New CI Contentions at 50.

⁶⁵ *Id.* at 61.

⁶⁶ *Id.*

recommendation and require a new pump test is not itself new or materially different information, and the NRC Staff continued to rely on the data developed in the earlier pump tests.

This aspect of the contention also lacks sufficient support to demonstrate a genuine dispute. The Intervenors have presented no data to suggest that the earlier pump tests were flawed in any way.⁶⁷ The reference to “equipment or instrument failure” is pure speculation without any basis in fact. The reference in the proposed contention to the impacts of “thousands of drill holes” and to wells that were “not properly abandoned” also lacks supporting information or a basis in fact.⁶⁸ There is no basis provided for this aspect of Contention 5.

Proposed Contention 5 also alleges that “the White River Fault is a fault not a fold.”⁶⁹ According to the intervenors, Crow Butte field study data is inaccurate and therefore cannot be used to interpret the feature as a fold (rather than a fault). But, this aspect of Contention 5 is both untimely and unsupported.

⁶⁷ To the extent that LaGarry identifies a “wish list” of activities and investigations that Crow Butte ought to undertake, intervenors cite no regulatory provision in support of their position. LaGarry’s opinion as to what applicable regulations should (but do not) require cannot serve as a basis for a contention.

⁶⁸ This claim may not even be directed to Crow Butte. *See, e.g., Powertech USA, Inc.* (Dewey-Burdock In Situ Uranium Recovery Facility), Order (Question Following Prehearing Hearing Conference), dated August 6, 2014 (ADAMS Accession No. ML14218A743) (referencing an OST contention alleging “literally thousands of drill holes in the aquifers and ore-bearing zones in question, which were not properly abandoned”).

⁶⁹ New CI Contentions at 63.

With respect to timeliness, the discussion of the White River Structural Feature in the EA is based on the same information and data used in the SER.⁷⁰ Any challenges to the adequacy of the NRC Staff's assessment of the structural feature are therefore too late.

The intervenors also have not identified any dispute with either the interpretation provided by Crow Butte or the NRC Staff's evaluation of that interpretation. As the December 2012 SER explains (at 23-24), Crow Butte based its interpretation of the feature on close-spaced drilling data, and Crow Butte provided updated cross sections and a discussion that supported its interpretation in the LRA. For its part, the NRC Staff performed an independent modeling exercise to assess conclusions drawn by Crow Butte that included modeling multiple scenarios.⁷¹ Based on the modeling effort and hydrogeologic characterization data, the NRC Staff determined that the White River structural feature is not a fault but a fold, and as such, does not hydraulically connect the Basal Chadron with the Brule aquifer.⁷² The 2015 LaGarry opinion does not address or dispute the adequacy of the data provided by Crow Butte or the NRC Staff's evaluation in the SER or EA.⁷³ As a result, there is no basis establishing a genuine dispute with the EA.

The last part of the proposed contention revolves around potential groundwater contamination. The intervenors assert that the NRC Staff inadequately assessed the impacts of spills and leaks because it failed to account for potential selenium, uranium, and lead

⁷⁰ Compare EA at 38-39 (Section 3.5.2.3.3, *Ground Water Modeling of the White River Structural Feature*) to December 2012 SER at 23 (Section 2.4.3.3, *Evaluation of White River Structural Feature by Groundwater Modeling*).

⁷¹ December 2012 SER at 24-28.

⁷² *Id.* at 28.

⁷³ The 2015 LaGarry opinion refers to a "White River Fault" only in passing (2015 LaGarry opinion at 3). LaGarry does not acknowledge, much less address, the data provided in the LRA or the NRC Staff's modeling efforts.

contamination as a result of “leakage from the mined aquifer that is making its way to Squaw Creek, English Creek, and possibly other surface waters.” But, the potential for groundwater from the mined aquifer to make its way to Squaw Creek, English Creek, and other surface waters was specifically addressed in the LRA. For example, in Section 7.4.2.2, Crow Butte noted that wellfield areas are installed with dikes or berms to prevent spilled solution from entering surface water features. Crow Butte also discussed measures to protect against contamination of the shallow aquifer (Brule).⁷⁴ Other engineering controls are also in place (production bleed, adjust flow rates, monitoring wells) to prevent, detect, or mitigate potential groundwater contamination. The intervenors have made no attempt to identify any new or different information in the EA that could justify a timely contention. Moreover, there is no factual support provided for the assertion that “selenium-contaminated groundwater could seep into low areas or basins in upland sites and create wetlands which would attract migratory birds and other wildlife” or that mining fluid is making its way to surface water.⁷⁵ Speculation cannot support an admissible contention.⁷⁶

F. Contention 6: The Final EA Fails to Adequately Analyze Ground Water Quantity Impacts

In proposed Contention 6, the intervenors argue that the EA violates NEPA because it “does not provide reliable and accurate information as to the project’s ground water

⁷⁴ See LRA at 7-13 to 7-14. These measures include use of high density polyethylene with butt welded joints and leak testing. *Id.* at 7-14. As for groundwater protection, the application highlights the geologic and hydrologic data that demonstrate control over mining fluids. See *id.* at 7-10 (referencing Sections 2.6 and 2.7).

⁷⁵ New CI Contentions at 67.

⁷⁶ *Fansteel, Inc.* (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003).

consumption.”⁷⁷ The proposed contention notes that Section 4.6.2.2.1 of the EA states that the “CBR facility is licensed to process 9,000 gallons per minute (gpm) [34,065 lpm] of leach solution,” and argues that this “does not include and is in addition to the consumption of water for restoration and decommissioning.” The intervenors also reference discussion in the EA regarding flow rates during aquifer restoration. Contention 6 is both untimely and inadmissible.

1. Timeliness

First, the issues raised in the contention could have, and therefore should have, been raised based on the LRA. The EA simply reflects the fact that Crow Butte is licensed to process 9,000 gallons per minute. There is no change from the original LRA.⁷⁸ There is also no new or different information in the EA regarding aquifer drawdown. As the proposed contention acknowledges, the data in the EA was provided to the NRC by Crow Butte.⁷⁹ The intervenors have made no effort to identify new or materially different information in the EA relative to the information previously available. The same contention could have been proposed based on the LRA. Contention 6 is therefore untimely.

2. Admissibility

Contention 6 is also inadmissible. The intervenors do not identify any material dispute with the EA. Neither Crow Butte nor the NRC Staff suggested that the reference to processing 9,000 gallons per minute of leach solution also included decommissioning and restoration flow rates, and there is no indication that the decommissioning and restoration flow

⁷⁷ New CI Contentions at 69.

⁷⁸ See LRA at Table 7.12-6 (noting average production flow rate of 9000 gpm).

⁷⁹ See New CI Contentions at 71 (citing EA Section 4.6.2.2.1, which explains that “the licensee reported” the decline in the potentiometric surface in 2009); *id.* at 72 (citing EA Section 4.6.2.3, which in turn cites a 2012 Crow Butte document regarding the flow capacity through the reverse osmosis circuit).

rates provided by Crow Butte (and referenced in the EA) are incorrect. There is therefore no basis for a genuine dispute on this aspect of Contention 6.

Moreover, the NRC Staff fully considered impacts to groundwater quantity throughout the EA. The NRC Staff explained that, during operations, consumptive water use can cause impacts to ground water quantity, but concluded that the drawdowns associated with the pumping during ISR operations will not significantly impact the ground water quantity in the Brule or Basal Chadron aquifers.⁸⁰ With respect to restoration impacts, the EA explains that “consumptive use of ground water from bleed during aquifer restoration is generally greater than during ISR operations,” but concluded that any short-term impact from consumptive ground water use during aquifer restoration would eventually be reversed after restoration was complete.⁸¹ The intervenors do not dispute the NRC Staff’s assessment of the drawdown in the potentiometric surface of the Basal Chadron aquifer. Nor do they provide any other information to dispute the EA’s conclusion that restoration impacts are reversible and ultimately small. There is simply no factual or legal basis for a dispute with EA. Contention 6 is inadmissible.

G. Contention 7: The Final EA Fails to Demonstrate Adequate Technical Sufficiency and Fails to Present Information in a “Clear, Concise” Manner to Enable Effective Public Review and Omits Material Information and Analysis

In proposed Contention 7, the intervenors argue that “NRC staff’s incorporation of its own and Crow Butte’s assumptions into the Final EA are inadequate to justify the scientific conclusions presented and, therefore, violate NEPA.”⁸² The intervenors consider this to be a contention of omission. As an example, the intervenors complain that the EA refers to a 2007

⁸⁰ EA at 74-75.

⁸¹ *Id.* at 83.

⁸² New CI Contentions at 73.

earthquake as the most recent earthquake in Nebraska, but then cite a newspaper article that references two small 2011 earthquakes.⁸³ The intervenors also criticize the ER for not specifically acknowledging that even small earthquakes can result in greater secondary porosity. The intervenors then highlight two typographical errors in the ER and cite the 2008 Abitz opinion to show that there are an additional 46 items that should have been discussed in detail. But, the intervenors do not support an assertion that any of the additional information would change the EA. The specific issues raised by the intervenors are immaterial, inadequately supported, and untimely.

Licensing boards do not sit to “flyspeck” environmental documents or to add details or nuances.⁸⁴ Intervenors must allege with adequate support that the NRC Staff has failed to take a hard look at one or more significant environmental questions — that is, that the NRC Staff has unduly ignored or minimized pertinent environmental effects of the proposed action.⁸⁵ If the EA on its face “comes to grips with all important considerations,” nothing more need be done.⁸⁶ The EA more than meets this standard.

The discussion in EA Section 3.4.3, *Seismology*, notes the presence of earthquakes in the area historically, but explains that overall the facility is in an area of low

⁸³ *Id.* at 74.

⁸⁴ *Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-04, 53 NRC 31, 71 (2001).

⁸⁵ *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-03-17, 58 NRC 419, 431 (2003).

⁸⁶ *Id.*

seismic risk.⁸⁷ The intervenors provide no information to support a claim that another small earthquake would lead to a different conclusion in the EA. Nor is it necessary for the NRC Staff to specifically state in the EA that even small earthquakes can result in greater secondary porosity absent any information to suggest that small earthquakes have in fact had impacts on secondary porosity at the site.⁸⁸ In any event, this aspect of the contention is untimely. The implications of seismic events and local seismology were evaluated in the NRC Staff's SERs, which were issued in 2012 and 2014 — that is, after the two earthquakes in 2011.⁸⁹ The intervenors have not even attempted to demonstrate that the contention is timely or that the information in the EA is new or materially different from that presented in the SER.

The rest of Contention 7 also cannot support an admissible contention. The two typographical errors identified by the intervenes are minor and not material to the NRC Staff's conclusions in the EA.⁹⁰ The issues raised previously by Abitz in 2008 also are untimely.⁹¹ The

⁸⁷ EA at 28. The ER explains that the nearest area to the project area of higher seismic risk is in the southeastern part of Nebraska within the eastern part of the central Nebraska Basin about 300 miles from the project area.

⁸⁸ NEPA does not call upon the NRC Staff to make an “examination of every conceivable aspect of federally licensed projects.” *Private Fuel Storage, L.L.C.*, CLI-02-25, 56 NRC 340, 349 (2002) (internal quotation omitted). NEPA “should be construed in the light of reason if it is not to demand virtually infinite study and resources.” *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 315 (2010) (internal quotation omitted).

⁸⁹ See December 2012 SER at 17 (In Section 2.3.3.3, *Seismology*, the NRC Staff concludes that the Crow Butte license area is located in a low seismic risk area and concurs that the seismology assessment is supported by recently published information and is consistent with the acceptance criteria in standard review plan Section 2.6.3).

⁹⁰ One error involves a reference to the year 2207, rather than 2007. New CI Contentions at 75. The intervenors also highlight a reference to the North Trend project area, rather than the main processing facility. *Id.* In neither case did the intervenors make an effort to show that the substantive discussion is inaccurate.

same issues were raised based on the LRA in 2008. The intervenors have made no effort to link those same issues to new or materially different information in the ER. There is therefore no basis for a timely contention.

H. Contention 8: Failure to Adequately Describe Air Quality Impacts

In proposed Contention 8, the intervenors argue that a defect in the LRA regarding the discussion of air emissions “is carried forward into the Final EA at 3.11.2.”⁹² Specifically, the intervenors complain that the EA, like the LRA, incorrectly states that the only radioactive air emissions are radon gas. The proposed contention also complains that a supposed defect in the LRA relating to absence of site-specific particulate data “is carried forward into the Final EA at 3.3.5 and 4.4.”⁹³ Lastly, the proposed contention reiterates complaints about the LRA discussion of air emissions from evaporation ponds that were first raised by Abitz in 2008.

1. Timeliness

On their face, each of the bases provided for Contention 8 could have been raised based on the LRA (*i.e.*, the contention alleges that defects in the LRA were “carried forward” to the EA). There is no new information in the EA on air emissions that could support a timely contention. The EA does not “reset the clock” and permit intervenors to re-raise issues that were

⁹¹ They also do not demonstrate a genuine dispute. A long list of supposed omissions and problems does not, without more, provide a basis for believing that there is a safety issue. *Texas Utilities Generating Co.* (Comanche Peak Steam Electric Station, Units 1 and 2), LBP-83-75A, 18 NRC 1260, 1263 n.6 (1983); *Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), ALAB-819, 22 NRC 681, 725 (1985). Intervenors must link an alleged deficiency with a regulatory violation or a substantial health and safety concern. Abitz’s opinion as to what applicable regulations should (but do not) require cannot serve as a basis for a contention. *See G.I.T.*, LBP-95-6, 41 NRC at 303.

⁹² New CI Contentions at 80.

⁹³ *Id.* at 81.

initially based on information in the LRA or other information available at the time.⁹⁴ As a result, Contention 8 is untimely.

2. *Admissibility*

Contention 8 is also inadmissible. The EA discusses the dose to workers and the public resulting from radon emissions.⁹⁵ The intervenors have not disputed the results of those calculations. The EA also discusses particulate emissions, noting Crow Butte’s use of a vacuum dryer with liquid condenser that precludes particulate releases.⁹⁶ The intervenors have provided no new information that would call into question the adequacy of the discussion in the EA.⁹⁷ The intervenors therefore have failed to demonstrate a genuine dispute with the EA on a material issue.

I. **Contention 9: Failure to Adequately Describe or Analyze Proposed Mitigation Measures**

In proposed Contention 9, the intervenors allege that the EA’s “reliance on Crow Butte’s representations and/or future, as yet-unsubmitted or planned but not performed,

⁹⁴ *DTE Electric Company* (Fermi Nuclear Power Plant, Unit 3), CLI-15-01, _ NRC _ (2015) (slip op. at 7-8).

⁹⁵ See EA at 102-104 (Section 4.12.2.2, *Radiological impacts associated with exposure from air pathways*, and Section 4.12.2.3, *Radiological impacts associated with population dose*).

⁹⁶ See *id.* at 63 (Section 3.11.2, *Radiological Activities Associated with Current Operations*); see also *id.* at 8 (Section 2.2.1, *Waste Management – Airborne*); *id.* at 111 (Section 4.13.4, *Cumulative Impacts for Air Quality*).

⁹⁷ Beyond the fact that relying on 2008 Abitz Report shows that the contention could have been raised based on the LRA, Abitz’s claims on their own, with no supporting statement or foundation, are vague and overly-broad, and do not demonstrate a genuine dispute with the EA. For example, the intervenors identify no requirement that an EA include a “wind rose for the area, average wind speeds at 10 and 60 meters, rainfall events and duration, and topographic effects that influence the model results” or a “summary table to compare model results with actual measurements from radon monitors.” New CI Contentions at 82.

mitigation to prevent/mitigate adverse impacts to these resources” violates NEPA.⁹⁸ The proposed contention then lists a number of references to supposed “mitigation” in the EA that it alleges to be undeveloped or inadequate. But, as discussed below, each of the topics identified by the intervenors was either addressed in the original LRA and is now being raised in an untimely manner; provides insufficient support for a contention that mitigation is not adequately described; or both. Further, the intervenors state that this is a contention of omission and therefore no expert support is required. However, even a contention of omission requires support for the proposition that more disclosure is necessary under NEPA.

The intervenors reference the EA’s statements regarding runoff control procedures during construction and spill response procedures.⁹⁹ But, as the intervenors note, the runoff control procedures are not hypothetical — they are required as part of Crow Butte’s NDEQ permit and storm water prevention plan and already are implemented at the site through procedures.¹⁰⁰ In any event, the same information was included in the original LRA.¹⁰¹ Therefore, this aspect of the contention is inadmissible and untimely.

Similarly, the intervenors reference EA Section 4.6.2.2.2, which discusses groundwater quality impacts from spills and leaks and explains that the use of PVC pipes and leak testing will reduce the risk of a leak; Section 4.6.2.2.3, which discusses leak detection

⁹⁸ New CI Contentions at 84.

⁹⁹ *See id.* (citing ER Sections 4.6.1.1, 4.6.1.2, 4.6.1.3).

¹⁰⁰ Reliance on mitigation is appropriate when required by permit. *See, e.g.*, 76 Fed. Reg. 3843, 3847 (Jan. 21, 2011) (“[T]he authority for the mitigation may derive from legal requirements that are enforced by other Federal, state, or local government entities (e.g., air or water permits administered by local or state agencies).”).

¹⁰¹ *See* LRA at 7-9 (Section 7.4.1, *Surface Water Impacts of Construction and Decommissioning*); *id.* (7.4.2, *Surface Water Impacts of Operations*); *see also id.* at (Section 5.8.1.3, *Spill Contingency Plans*).

methods and equipment at Crow Butte; and Section 4.6.2.2.5, which references to deep disposal well permitting requirements. Beyond the lack of any factual, expert, or legal support that would establish the existence of an omission — or any information to suggest that the EA’s conclusion would change if more information were provided — the information in the EA is the same as that in the LRA.¹⁰²

The remainder of proposed Contention 9 merely restates the portions of the EA that discuss consumptive use of groundwater and historical excursions without providing a basis for a dispute. The intervenors also reiterate their unfounded claims that the earlier pump tests are based on results of a “faulty sensor.”¹⁰³ But, the intervenors again point to no error or omission in the EA and provide no expert support to suggest that the conclusions in the EA are incorrect. At bottom, there is no issue to litigate. The intervenors also did not identify any information in the EA that differs from the information included in the LRA. Therefore, Contention 9 is inadmissible and untimely.

J. Contention 10: The Final EA Fails to Adequately Analyze Cumulative Impacts

In proposed Contention 10, the intervenors allege that the EA’s discussion of cumulative impacts is deficient. The intervenors argue that the cumulative impact assessment omits a discussion of present and foreseeable uranium development, “including the North Trend Expansion Area, the Marsland Expansion Area and the Three Crows Expansion Area.”¹⁰⁴ According to the intervenors, “these expansion areas are discussed in the cultural resources

¹⁰² See *id.* at 7-13 (Section 7.4.3.3, *Potential Groundwater Impacts from Accidents*); *id.* at 4-4 (Section 4.2.1.2, *Secondary Water Sources*).

¹⁰³ New CI Contentions at 89.

¹⁰⁴ *Id.* at 92.

sections,” but “the scope of the Final EA is not elsewhere expanded to include the cumulative impacts of these CBR Expansion Areas.”¹⁰⁵ Contention 10 is inadmissible.

Contrary to the proposed contention, the EA specifically discusses the North Trend Expansion Area, the Marsland Expansion Area, and the Three Crows Expansion Area in the context of cumulative impacts.¹⁰⁶ The NRC Staff assessed the cumulative impacts for various resource areas, including land use, transportation, geology and soils, air quality, noise, water resources (surface water and groundwater), socioeconomics, cultural resources, environmental justice, ecology, and health. The intervenors pointed to no specific impacts that were overlooked or ignored. As a result, the intervenors have failed to demonstrate a genuine dispute with the EA. Contention 10 is inadmissible.

K. Contention 11: The Final EA Failed to Consider All Reasonable Alternatives

Contention 11 asserts that the EA fails to consider reasonable alternatives to the proposed action.¹⁰⁷ Although the intervenors allege that “numerous unexplored and unreviewed alternatives exist,” they only mention two: (1) an alternative that precludes adoption of Alternate Concentration Limits for ground water resources; and (2) an alternative that requires Crow Butte to complete “the restoration of the groundwater and surface waters to limits that make it acceptable for domestic and agricultural uses.”¹⁰⁸ This contention is inadmissible and untimely.

The intervenors provide nothing more than a bare assertion that two additional alternatives must be considered — there is no information to suggest the scope of either

¹⁰⁵ *Id.*

¹⁰⁶ EA at 104-128 (Section 4.13, *Cumulative Impacts*).

¹⁰⁷ New CI Contentions at 92.

¹⁰⁸ *Id.* at 93-94.

alternative, how they would apply to Crow Butte, or even that the alternatives are reasonable.¹⁰⁹ A contention that simply alleges that some matter ought to be considered, without more, does not provide the basis for an admissible contention.¹¹⁰

Moreover, in the EA the NRC Staff in fact considered restoration to (1) the Commission-approved background concentration of that constituent in ground water, (2) the respective value in the table in Part 40, Appendix A, paragraph 5C, if the constituent is listed in the table and if the background level of the constituent is below the value listed, or (3) an alternate concentration limit the Commission establishes.¹¹¹ The EA explains that, if ground water is restored to any of these restoration standards, the impact on ground water quality in surrounding aquifers is negligible.¹¹² The intervenors have made no attempt to show that the EA conclusions are incorrect or that consideration of other alternatives would change the outcome of the NRC Staff's review.¹¹³ At bottom, there is no expert support or factual information provided for either of the supposedly omitted alternatives and therefore no basis for genuine dispute.

¹⁰⁹ For example, there is no need to consider alternatives that are impractical or technologically unproven. *See Communities, Inc. v. Busey*, 956 F.2d 619, 627 (6th Cir. 1992) (upholding rejection of alternatives that “presented severe engineering requirements” or were “imprudent for reasons including their high cost, safety hazards, [and] operational difficulties”); *Kelley v. Selin*, 42 F.3d 1501, 1521 (6th Cir. 1995).

¹¹⁰ *Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station)*, LBP-93-23, 38 NRC 200, 246 (1993).

¹¹¹ EA at 81-83 (Section 4.6.2.3, *Aquifer Restoration Impacts on Ground water*).

¹¹² *Id.* at 82.

¹¹³ It is sufficient under NEPA to consider an appropriate range of alternatives, rather than every available alternative — particularly when there is no evidence to suggest that impacts from an additional alternative are not bounded by those already considered. *Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation)*, LBP-03-30, 58 NRC 454, 463, and 479 (2003).

Contention 11 is also untimely. The original LRA included a discussion of alternatives, including a discussion of alternatives related to lixiviant chemistry, groundwater restoration, and waste management.¹¹⁴ The intervenors have failed to demonstrate that the information in the EA regarding alternatives is new or materially different from that in Chapter 8 of the LRA.

L. Contention 12: Failure to Take a Hard Look at Impacts Such As Those Related to Selenium and Those Associated with Air Emissions and Liquid Waste.

Contention 12 alleges that the EA fails to take a hard look at impacts from the project. However, the issues raised in this proposed contention are untimely. And, the do not even acknowledge the information in the EA, much less establish a basis for a dispute.

The intervenors first argue that the EA “lacks current and confirmed information on air emissions and their impacts on various ‘receptors’ in the region” and claim that the air dispersion model in the EA is based on incomplete and inaccurate information.¹¹⁵ Contrary to the proposed contention, the EA does describe air quality impacts from Crow Butte operations. In EA Section 3.11.2, *Radiological Activities Associated with Current Operations*, the NRC Staff notes that the CBR facility uses a vacuum dryer that works on the principle that gases or particulates released into the system are collected in a liquid condenser and there is no release of particulates. There is a 100 percent effluent collection efficiency for this dryer system. The EA explains that the only routine radioactive emission is radon gas that is dissolved in the leaching solution and that may be released as the solution is brought to the surface and processed in the plant. The EA explains that there will be minor releases of radon during the air blowdown prior to elution and during the filling of the columns after elution has been completed. The NRC Staff

¹¹⁴ LRA at Chapter 8, *Alternative to Proposed Action*.

¹¹⁵ New CI Contention at 95.

also verified Crow Butte’s radon release calculations in the 2014 SER and summarized them in the EA (at 102-104). The intervenors dispute none of this information in the EA, nor do they make any effort to identify new or different information in the EA relative to either the LRA or the Crow Butte SER.

The intervenors also complain that “[t]he Final EA makes no mention of the foreseeable impact of major wind storm events, including tornadoes, on the facility.” But, the 2014 SER discusses tornado hazards,¹¹⁶ as did Section 2.5.5. of the LRA. The intervenors have not identified any specific deficiency in the ER, nor have they demonstrated that the contention was raised in a timely manner.

Lastly, the intervenors claim that “the Final EA fails to properly account for impacts to wildlife resulting from land application of ISL wastes,” such as from use of “center pivot irrigation for the disposal of in-situ mining wastewater.”¹¹⁷ But, the EA in fact notes, in Section 4.6.1.3, *Aquifer Restoration Impacts on Surface Water*, that, while Crow Butte has a permit to discharge treated wastewater via land application, Crow Butte “has not used” this option and has not indicated that it will in the future.¹¹⁸ In Section 2.4.1, *Disposal of Pond Water*, the EA explains that “[i]f there is any land application activity associated with the disposal of the pond water that is not included in CBR’s NPDES permit No. NE0130613, CBR will be required to apply for additional permits from the State of Nebraska.”¹¹⁹ This same

¹¹⁶ See 2014 SER at 158 (Section 7.3.5, *Natural Events*).

¹¹⁷ New CI Contentions at 96.

¹¹⁸ EA at 72-73.

¹¹⁹ See also Section 2.4.2, *Pond Sludge and Sediments* (same); Section 2.4.3, *Disposal of Pond Liners and Leak Detection Systems* (same).

information was addressed in the 2014 SER at Section 3.1.3.5.4, *Plant Material Balance and Flow Rates* (at 41).

Having failed to put forth specific data or information, or address the basis for a timely filing, proposed Contention 11 is both inadmissible and untimely.

M. Contention 13: The Final EA Fails to Comply with NEPA With Regard to Impacts on Wildlife, and Fails to Comply with the Endangered Species Act.

Contention 13 claims that the EA discussion of impacts to species, including consultation with other federal agencies, is deficient.¹²⁰ The intervenors argue that Endangered Species Act (“ESA”) consultation “was not completed, and impacts to imperiled species were not analyzed and reviewed as required in the Final EA.” Specifically, the intervenors focus on the whooping crane, black-footed ferret, swift fox, and bald eagle. But, the potential impacts to each of these species were in fact discussed in the EA and the NRC Staff fully complied with the requirements of the ESA.

The EA explains that there are no known threatened or endangered species on the Crow Butte site.¹²¹ According to the U.S. Fish & Wildlife Service (“USFWS”), the whooping crane, black-footed ferret, swift fox, and bald eagle have the potential to occur in Dawes County, Nebraska. But, according to the NRC Staff, the “only species with a reasonable possibility of occurring on or near the project site are the bald eagle and swift fox.”¹²² The swift fox, however, is not listed as threatened or endangered under the ESA, and therefore no consultation is required.¹²³ Similarly, the bald eagle is no longer listed as endangered or threatened under the

¹²⁰ New CI Contentions at 97-98.

¹²¹ EA at 61.

¹²² *Id.* at 97.

¹²³ *Id.* at 61-62.

ESA, so no consultation is necessary.¹²⁴ For the two federally-listed species — the whooping crane and the black-footed ferret — the NRC Staff determined that Crow Butte’s activities would have “no effect” on either species.¹²⁵ No consultation with USFWS under Section 7 of the ESA is required when an agency determines that a proposed action will have “no effect.”¹²⁶ The intervenors have presented no information to dispute the NRC Staff’s conclusions in the EA with respect to these species.

In addition, the intervenors have made no effort to demonstrate that the contention is based on any new or materially different information. The original LRA in fact contains the same information and reaches the same conclusion with respect to the four species as the EA.¹²⁷ Proposed Contention 13 is therefore inadmissible and untimely.

N. Contention 14: The Final EA Fails to Adequately Describe or Analyze Impacts From Earthquakes; Fails to Take ‘Hard Look’ at Impacts on Secondary Porosity

In proposed Contention 14, the intervenors assert that the EA violates NEPA because it fails “to provide an analysis of the impacts on the project from earthquakes; especially as it concerns secondary porosity and adequate confinement.”¹²⁸ The intervenors claim that the lack of an evaluation of the impact of small earthquakes on the potential for secondary porosity

¹²⁴ *Id.* at 61-62.

¹²⁵ *Id.* at 98.

¹²⁶ *See Southwest Center for Biological Diversity v. U.S. Forest Service*, 100 F.3d 1443, 1447-48 (9th Cir. 1996) (“[I]f the agency determines that a particular action will have no effect on an endangered or threatened species, the consultation requirements are not triggered.”).

¹²⁷ *See* LRA at 7-21 (Section 7.5.11, *Threatened, Endangered and Candidate Species*).

¹²⁸ New CI Contentions at 102.

constitutes a failure to take a ‘hard look’ under NEPA.¹²⁹ This contention, which raises issues similar to proposed Contention 7, is inadmissible.

First, the EA discusses the potential impacts of seismological events on Crow Butte operations. Section 3.4, *Geology, Seismology, and Soils*, describes the geology and seismology of the site. The intervenors do not directly address any of the specific information in the EA regarding site conditions. Nor do the intervenors provide any data or information to suggest that earthquakes have had effects on Crow Butte operations, including on secondary porosity at Crow Butte. The contention, therefore, is pure speculation, which cannot support an admissible contention.¹³⁰

Moreover, the NRC Staff previously addressed seismology in its 2014 SER on Crow Butte license renewal. Specifically, the NRC Staff reviewed Crow Butte’s characterization of geology and seismology at the site in order for the NRC Staff to be able to assess the applicant’s ability to control production fluids containing source and byproduct materials, as required by 10 C.F.R. § 40.41(c).¹³¹ The NRC Staff noted that it had previously approved the regional geologic, site geologic, seismologic, and soils data in a prior license renewal review. The NRC Staff further explained that Crow Butte updated its interpretation of the White River structural feature, which is now considered a monocline fold.¹³² The NRC Staff found no other information to invalidate previous findings and determined that its prior conclusions remained

¹²⁹ *Id.* at 104.

¹³⁰ *Fansteel*, CLI-03-13, 58 NRC at 203.

¹³¹ 2014 SER at 14 (Section 2.3, *Geology and Seismology*).

¹³² *Id.* at 28.

valid.¹³³ Intervenors have made no effort to identify any new or materially different information in the EA. Because the proposed contention could have been filed based on the SER, it is now untimely.

O. Contention F (OST only): Failure to Discuss or Demonstrate Lawful Federal Jurisdiction and Authority Over Crow Butte’s Activities

In Contention F, OST argues that the EA “fails to discuss, let alone demonstrate, lawful federal jurisdiction and NRC authority over the territory and lands upon which Crow Butte seeks the renewal of its license.”¹³⁴ OST asserts that it “is the lawful possessor of sovereign jurisdiction, to the exclusion of the United States, over the territory upon which both the land and its natural resources lie and is the rightful caretaker of that land and its natural resources, including its minerals and its surface and ground water and air.”¹³⁵ According to OST, the United States lacks jurisdiction over the activities that occur within that territory or over the land and its natural resources.¹³⁶

As the Board explained in LBP-08-24 (at 60-61) addressing a similar contention, it is bound by the Supreme Court’s decision in *United States v. Sioux Nation of Indians*, 448 U.S. 371, 423-24 (1980), which found Congress rescinded the portion of the Treaty that granted the Black Hills territory (including the area now belonging to Crow Butte) to the Sioux Tribe, through Congress’s power of eminent domain.¹³⁷ Moreover, OST fails to take issue with any

¹³³ *Id.*

¹³⁴ New OST Contentions at 4.

¹³⁵ *Id.* at 5.

¹³⁶ *Id.*

¹³⁷ *See also* CLI-09-09, slip op. at 5-6 (finding that the Board in LBP-08-24 correctly relied on the Supreme Court decision in *Sioux Nation of Indians*).

specific part of the EA, and the assertion that the NRC Staff is not respecting treaty rights is merely a statement of general concern that does not raise a material dispute of law or fact for the Board to consider. Proposed OST Contention F is therefore inadmissible.

CONCLUSION

For the foregoing reasons, none of the intervenors proposed contentions are admissible or timely. Contentions 1-14 and OST Contention F should be denied.

Respectfully submitted,

/s/ signed electronically by
Tyson R. Smith
Winston & Strawn LLP
101 California Street
San Francisco, CA 94111

Mark D. McGuire
McGuire Law Firm
625 South 14th Street, Suite C
Lincoln, Nebraska 68508

COUNSEL FOR CROW BUTTE
RESOURCES, INC.

Dated at San Francisco, California
this 30th day of January 2015

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:)
) Docket No. 40-8943
CROW BUTTE RESOURCES, INC.)
) ASLBP No. 08-867-02-OLA-BD01
(License Renewal))

CERTIFICATE OF SERVICE

I hereby certify that copies of “CROW BUTTE RESOURCES’ RESPONSE TO PROPOSED NEW CONTENTIONS BASED ON FINAL ENVIRONMENTAL ASSESSMENT” in the captioned proceeding have been served this 30th day of January 2015 via electronic mail to Consolidated Intervenors at davidcoryfrankel@gmail.com, Arm.legal@gmail.com, and harmonicengineering@gmail.com and via the Electronic Information Exchange (“EIE”), which to the best of my knowledge resulted in transmittal of the foregoing to all those on the EIE Service List for the captioned proceeding other than Consolidated Intervenors.

/s/ signed electronically by _____
Tyson R. Smith
Winston & Strawn LLP
101 California Street
San Francisco, CA 94111

COUNSEL FOR CROW BUTTE
RESOURCES, INC.