UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Gregory B. Jaczko, Chairman
Peter B. Lyons
Dale E. Klein
Kristine L. Svinicki

In the Matter of	)	
	)	Docket No. 40-8943-OLA
CROW BUTTE RESOURCES, INC.	)	
	)	
(License Renewal for	)	
In Situ Leach Facility, Crawford, Nebraska)	)	
	)	

CLI-09-09

MEMORANDUM AND ORDER

This order responds to appeals of two Board decisions in this license renewal proceeding: an initial decision granting a hearing to several petitioners, LBP-08-24,[1] and a subsequent decision admitting a late-filed contention concerning the effects of arsenic, LBP-08-27.[2] The NRC Staff and the applicant, Crow Butte Resources, Inc. (Crow Butte), have appealed LBP-08-24 on the grounds that the hearing requests should have been denied entirely.[3] Petitioner Oglala Delegation of the Great Sioux Nation (Delegation) has appealed the Board's denial of party status in LBP-08-24.[4] A group of petitioners, designated the "Consolidated

[1] LBP-08-24, 68 NRC __ (Nov. 21, 2008)(slip op.).

[2] LBP-08-27, 68 NRC __ (Dec. 10, 2008)(slip op.).

[3] *NRC Staff's Notice of Appeal of LBP-08-24, Licensing Board's Order of November 21, 2008, and Accompanying Brief* (Dec. 10, 2008) (Staff Appeal); *Crow Butte Resources' Notice of Appeal of LBP-08-24* (Dec. 10, 2008).

[4] *Petitioner's Election to Participate and Notice of Appeal* (Dec. 10, 2008) (Delegation Appeal).

Petitioners," has filed a petition for review of the Board's rejection of several proposed contentions.[5] Finally, the NRC Staff and Crow Butte have also appealed the Board's ruling admitting a late-filed contention relating to the impacts of arsenic.[6]

As discussed further below, we deny the Delegation's appeal, and grant in part and deny in part the Staff's and Crow Butte's appeals. We also deny, without prejudice, Consolidated Petitioners' request for interlocutory review of the Board's rejection of certain contentions.

I. BACKGROUND

Crow Butte operates an *in situ* leach (ISL) uranium recovery operation in Nebraska. In the instant proceeding, it seeks to renew its materials license for 10 years. In a separate proceeding pending before another Board, Crow Butte is seeking to expand its operation to a satellite facility approximately five to eight miles away called the North Trend Expansion Area (NTEA). The NTEA application was filed prior to the license renewal application, and that Board issued a ruling on standing and contentions prior to the two orders now under appeal relating to the license renewal application.[7] Although the NTEA proceeding is a separate matter, that Board's rulings are relevant to several issues raised in this proceeding.

Several of the same Petitioners sought a hearing in the license renewal proceeding who sought – and were granted – a hearing in the NTEA proceeding. The "Consolidated Petitioners" in this proceeding – a group of individuals and organizations sharing the same counsel – include Owe Aku/Bring Back the Way (Owe Aku), Deborah White Plume, and Western Nebraska

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[5] *Consolidated Petitioners' Brief in Support of Appeal from LBP-08-24* (Dec. 10, 2008)(Consolidated Petitioners' Appeal).

[6] *Crow Butte Resources' Notice of Appeal of LBP-08-27* (Dec. 18, 2008)(Crow Butte Arsenic Appeal); *NRC Staff's Notice of Appeal of Licensing Board's Order of December 10, 2008 (LBP-08-27), and Accompanying Brief* (Dec. 22, 2008)(Staff Arsenic Appeal).

[7] *Crow Butte Resources Inc.* (North Trend Expansion Area), LBP-08-6, 67 NRC 241 (2008).

Resources Council (WNRC), all of which were found to have standing in the NTEA proceeding.[8] The Board here similarly found these petitioners to have standing, and also found standing for petitioners Beatrice Long Visitor Holy Dance, Thomas Kanatakeniate Cook,[9] Loretta Afraid of Bear Cook, the Afraid of Bear/Cook Tiwahe (family), Joe American Horse, Sr., and the American Horse Tiospaye (extended family).[10]

The Board also found that the Oglala Sioux Tribe (Tribe) has standing as a party, but that the Delegation does not.[11] The Board admitted five of the Tribe's proposed contentions, all of which concerned the possible environmental impacts from the ISL uranium recovery operation.

Consolidated Petitioners proposed 23 contentions. The Board admitted Consolidated Petitioners' Environmental Contention E, relating to the economic value of affected wetlands,[12] and Technical Contention F, which claimed that the application failed to include recent research related to geology in the area of the ISL operation.[13] The Board also admitted, in part, Consolidated Petitioners' Miscellaneous Contention G, relating to Crow Butte's asserted

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[8] *Id*., 67 NRC at 344. The standing determinations in the NTEA proceeding are the subject of pending appeals.

[9] Thomas Kanatakeniate Cook was found not to have standing in the NTEA proceeding. *Id.*, 67 NRC at 288.

[10] LBP-08-24, 68 NRC __ (slip op. at 3).

[11] *Id.* In total, therefore, the Consolidated Petitioners in this proceeding are comprised of Owe Aku, Debra White Plume, WNRC, Beatrice Long Visitor Holy Dance, Thomas Kanatakeniate Cook, Loretta Afraid of Bear Cook, the Afraid of Bear/Cook Tiwahe, Joe American Horse, Sr., and the American Horse Tiospaye.

[12] LBP-08-24, 68 NRC __ (slip op. at 49-52).

[13] *Id*. at 54-56.

concealment of its foreign ownership;[14] and Miscellaneous Contention K, relating to whether Crow Butte's ownership by a foreign parent corporation is "inimical" to the common defense and security. The Board also determined that the issue of foreign ownership should be "segregated from the other contentions and briefed on the merits up front."[15] The Board denied Consolidated Petitioners' remaining 19 proposed contentions.[16]

Consolidated Petitioners have appealed the rejection of eleven of their proposed contentions.

II. DISCUSSION

The Commission defers to a Board's rulings on standing and contention admissibility in the absence of clear error or abuse of discretion.[17] Keeping this standard in mind, we consider

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[14] *Id*. at 62-68.

[15] *Id*. at 74.

[16] *Id*. at 43-45. The remainder of Consolidated Petitioners' proposed contentions relate to climate change (Environmental Contention C and Technical Contention C), cultural impacts of geochemical changes to the water (Environmental Contention D), public health impacts of water contamination (Technical Contention B), "failure to follow statistical analysis protocols" (Technical Contention D), failure to use "best available technology" (Technical Contention E), failure to analyze effects of possible excursions and radiological emissions (Technical Contention G). The Board also rejected proposed contentions relating to the applicant's failure to consult tribal leaders concerning the NTEA application (Miscellaneous Contention A); and Miscellaneous Contentions B, C, D, E and F – all relating to purported Indian rights – for which the Board said Consolidated Petitioners "wholly failed to provide any discussion" or support. *Id*. at 58-61. The Board also rejected proposed Miscellaneous Contention H, wherein Consolidated Petitioners claimed generally that the applicant failed to provide updated information, and Miscellaneous Contention I, wherein they claimed generally that the applicant failed to include recent research (*see id*. at 69-70). The Board found Miscellaneous Contention J, which claimed that a page was missing from the petitioners' copy of the application, to be moot. *Id*. at 70. The Board also rejected Miscellaneous Contention L (surety bond too low to account for post-decommissioning monitoring).

[17] *Dominion Nuclear Connecticut, Inc.* (Millstone Power Station, Unit No. 3), CLI-08-17, 68 NRC __ (Aug. 13, 2008), slip op. at 4; *see also Dominion Nuclear Connecticut, Inc.* (Millstone Power Station, Unit No. 3), CLI-09-5, 69 NRC __ (Mar. 5, 2009), slip op. at 5; *PPL Susquehanna LLC* (Susquehanna Steam Electric Station, Units 1 and 2), CLI-07-25, 66 NRC 101, 104 (2007); (continued …)

the appeals of the various participants.

A. Standing

Both the Staff and Crow Butte contend that none of the petitioners has demonstrated standing to participate in a hearing on the license renewal application at issue.

1. Native American Entities

Two Native American groups, the Oglala Sioux Tribe and the Oglala Delegation of the Great Sioux Nation, sought to intervene, claiming standing based on treaty rights and on their interests in cultural resources located on the Crow Butte site.

a. Treaty Claims

Both the Tribe and the Delegation claim standing under now-abrogated 19th century treaties.[18] Under the terms of the 1851 and 1868 Fort Laramie Treaties, a large portion of the Great Plains was recognized as the territory and property of the Sioux Indian tribe, including – according to the Delegation – the land on which Crow Butte's operation now sits.[19] The Delegation continues to claim actual ownership of the land on which Crow Butte operates by virtue of those treaties.

The Board rejected the Tribe's and Delegation's claims under the 1868 Fort Laramie Treaty, relying on a Supreme Court decision finding that Congress had abrogated that treaty and that it was, therefore, no longer in effect.[20] "As a consequence," the Board found, "any

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AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 121 (2006).

[18] LBP-08-24, 68 NRC __ (slip op. at 19-20).

[19] Oglala Delegation of the Great Sioux Nation Treaty Council, *Request for Hearing and Petition to Intervene*, at 2-3 (July 30, 2008).

[20] LBP-08-24, 68 NRC __ (slip op. at 20-21), citing *United States v. Sioux Nation of Indians*, 448 U.S. 371, 382-83 and 410-11 (1980). In *Sioux Nation,* the Court held that Congress had rescinded the portion of the Treaty that granted the Black Hills territory (including the area now (continued …)

claims to ownership of the land upon which the Crow Butte mining site sits cannot support standing here."[21]

The Board correctly relied on the Supreme Court's ruling that the Fort Laramie Treaty is no longer in effect. As the treaty was the only basis on which the Delegation based standing, the Board correctly found that the Delegation does not have standing as a party in this proceeding. While the Delegation's brief on appeal offers interesting historical insights, it offers no basis by which the Commission could disregard the Supreme Court's holding with respect to Congress' power to break a treaty.[22] We therefore deny the Delegation's appeal.

The Board, however, appropriately found that the Delegation may participate as an interested governmental entity in this proceeding, to which the Staff and Crow Butte did not object when asked.[23] The Delegation has elected to so participate.[24]

b. Interest in Cultural Resources

The Board found that the Tribe demonstrated standing based on its interest in preserving cultural resources or artifacts that are on the Crow Butte site.[25] It is undisputed that the Crow Butte operation sits on the Tribe's aboriginal land. Nevertheless, the NRC Staff and Crow Butte argue that the Tribe has failed to demonstrate standing through its interest in preserving cultural artifacts that exist or may exist on the site.

Crow Butte's license renewal application identifies eight archeological sites within the

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belonging to Crow Butte) to the Sioux Tribe, through Congress's power of eminent domain.

[21] *Id*. at 21.

[22] *See* Delegation Appeal at 7-13.

[23] LBP-08-24, 68 NRC __ (slip op. at 25 n.120).

[24] *Id*.

[25] *Id*. at 19, 24.

project area that are Native American in origin.[26] Of twenty-one cultural resource sites found during the survey, six were deemed to be "potentially eligible for the National Register of Historic Places."[27] Crow Butte has known about the sites since it began operations in the 1980s and states that they have not been directly impacted by licensed operations.[28]

The Board observed that several federal statutes recognize that Indian Tribes have an interest in artifacts related to their heritage.[29] The Board also found that under provisions of National Historic Preservation Act (NHPA) section 106, a federal agency must consult with a Tribe concerning a federal action that might affect sites of cultural interest to the Tribe.[30] The Board noted that under these provisions, the NRC Staff should have consulted with the Tribe regarding these cultural resources when Crow Butte's license was renewed in 1995, but apparently never did so.[31] The Board therefore based standing both on the substantive interest the Tribe has in protecting the artifacts on the site and on its procedural interest in being consulted on their significance.[32]

Crow Butte and the Staff argue that the Board erred in basing standing on the Tribe's

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[26] Crow Butte Uranium Project, Application for Renewal of USNRC Radioactive Source Materials License, SUA-1534, ADAMS Accession No. ML073480264, at 2-48 to 2-50 (LRA).

[27] *Id.* at 7-27. All Native American artifacts are described in the application as "unassigned," rather than identifying the tribe of origin.

[28] In its application, Crow Butte states, "[t]hese resources however, have been avoided and not directly impacted as a result of construction activities. Any further construction activities will avoid these identified resources." *Id*. *See also* LBP-08-24, 68 NRC __ (slip op. at 32-33).

[29] LBP-08-24, 68 NRC __, slip op. at 22, citing*, e.g.*, Native American Graves Protection and Repatriation Act (NAGPRA), 25 U.S.C. § 3001 et. seq.; the National Historic Preservation Act, 16 U.S.C. § 470 et seq.; and the Archaeological Resources Protection Act (ARPA), 16 U.S.C. § 470aa et seq.

[30] *Id*. at 23-24.

[31] *Id*. at 24, n.118, *see also* discussion *id*., slip op. at 32-34.

[32] *Id*. at 24-25.

injury stemming from the Staff's asserted failure to consult in compliance with the NHPA. They argue that the Staff's duty to "consult" under the NHPA in this proceeding has not yet ripened (that is, the Staff has not reached the consultation stage yet), and the "injury" does not arise from a deficiency in the application.[33]

These arguments misinterpret the Board's ruling. The Board found that the Tribe has a current, concrete interest in protecting the artifacts on the site, not simply a procedural interest.[34] The past failure of the Staff to consult illuminates the difficulties faced in protecting that interest. In addition, the Board pointed to federal case law holding that, where a party's procedural right has been violated, that party has standing to contest the procedural violation even where the underlying interest the procedural right seeks to protect does not face an "immediate" threat.[35] We decline to disturb the Board's ruling on this point.

c. "Nexus" to Injury

We reject Crow Butte's argument that the Board must find that the Tribe has no standing because its contentions have no "nexus" to the injury on which the Board found standing. This argument fails for two reasons. First, it is not clear that the Board found standing based *solely* on the Tribe's interest in cultural resources on the site. The Tribe asserted standing based both on its interest in cultural resources and on the potential contamination of water resources used

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[33] Staff Appeal at 15-16.

[34] LBP-08-24, 68 NRC __ (slip op at 24). The Board's ruling on standing is in contrast to the NTEA Board's ruling admitting a contention on the basis that the Staff had not yet undertaken required consultations. *See* LBP-08-6, 68 NRC at 327-30. Standing and contention admissibility are separate issues with distinct requirements.

[35] *Id*. at 24 n.117, citing *Nulankeyutmonen Nkihtagmikon v. Impson*, 530 F.3d 18 (1st Cir. 2007) (finding that a Native American citizens group had standing to challenge BIA action where agency had not followed procedures under NEPA and NHPA. The court held that a "person who has been accorded a procedural right to protect his concrete interests can assert that right without meeting all the normal standards for redressability and immediacy." *Id*. at 27).

by the Tribe.[36] With the exception of Environmental Contention E, each of the Tribe's environmental contentions relating to water contamination argued that this contamination could reach the Pine Ridge Indian Reservation and affect Tribe members living there.[37]

The Board pointed out that the Tribe was among the petitioners claiming that interconnection between the aquifers was the source of potential injury.[38] After concluding that this theory described a plausible pathway to injury, the Board said it would therefore "grant standing to those petitioners with claims based on the use of well water," although it did not specify the Tribe as being among these petitioners.[39] Therefore, we cannot say that the Board based standing solely on the Tribe's interest in preserving artifacts on the Crow Butte site.

In addition, we have not, in the past, required that a petitioner demonstrate contention-based standing. Crow Butte finds support for its argument in our 1996 decision in the *Yankee Rowe* reactor decommissioning proceeding, where we held that "once a party demonstrates that it has standing to intervene … that party may raise any contention that, if proved, will afford the party relief from the injury it relies on for standing."[40] Crow Butte argues that *Yankee Rowe* thus requires that there be a "nexus" between the injury and the contention. This misinterprets the

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[36] *Request for Hearing and/or Petition to Intervene,* at 6 (Tribe Petition) (July 29, 2008). Several of the individual Consolidated Petitioners living on the Pine Ridge Reservation, whom the Board found to have standing based on potential exposure to contaminated water, are members of the Tribe.

[37] Tribe Petition at 12-13 (Environmental Contention A); *id*., at 18 (Environmental Contention C); *id*. at 20 (Environmental Contention D).

[38] LBP-08-24, 68 NRC __ (slip op. at 12 & n.52). "While no petitioner claims to reside, or own property, immediately contiguous to an ISL injection or processing well, all assert that [interconnections between the aquifers will result in] contaminants from Crow Butte's mining site [ ] 'flowing into pathways of human ingestion.'" *Id*., citing Consolidated Petitioners' Reply, Tribe Petition, and Delegation Petition.

[39] *Id*. at 17.

[40] *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1, 6 (1996).

Yankee Rowe ruling.

Yankee Rowe holds that, at a minimum, the "redressability" requirement for standing means that the claimed injury or potential injury could be relieved by some action taken in response to a sustained contention. Rather than requiring a "nexus" between the claimed injury and the contention, *Yankee Rowe* requires a nexus between the injury and the relief. For practical purposes, if denying a license amendment would alleviate a petitioner's potential injury, *Yankee Rowe* would allow that petitioner to prosecute any admissible contention that could result in the denial of the license amendment, regardless of whether the contention was directly related to that petitioners' articulated "injury."[41] An example can be seen in *Duke Power Co. v. Carolina Environmental Study Group*,[42] a U.S. Supreme Court ruling (which we cited in *Yankee Rowe*) that *rejects* a "nexus" requirement for cases other than taxpayer lawsuits.[43] There, the Court upheld the district court's finding that persons living near a proposed nuclear power plant (who claimed injury from radiological emissions from the plant) had standing to challenge the constitutionality of the Price-Anderson Act.[44] The Court accepted the district court's reasoning that the petitioners had shown that "but for" Price-Anderson's liability limitation, the proposed nuclear power plants would not be built, which would in turn redress the petitioners' injuries.[45]

The other cases Crow Butte cites for a "nexus" requirement concern standing to

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[41] *See also Nulankeyutmonen Nkihtagmikon,* 503 F.3d at 28 ("all that is required in the case of a procedural injury is 'some possibility that the requested relief will prompt the injury-causing party to reconsider the decision that allegedly harmed the litigant'" (quoting *Massachusetts v. EPA*, 549 U.S. 497, 517-18 (2007)).

[42] 438 U.S. 59 (1978).

[43] *Id*. at 78-79.

[44] Atomic Energy Act of 1954, as amended, § 170. 42 U.S.C.A. § 2210.

[45] 438 U.S. at 72-78.

challenge statutory or regulatory provisions – a situation quite different from that presented here. In *Davis v. Federal Election Commission*,[46] the U.S. Supreme Court observed that a candidate who had standing to challenge one statutory provision of the campaign finance law would not *necessarily* have standing to challenge a different provision of that same law.[47] Similarly, in *Rosen v. Tennessee Commissioner of Finance and Admin*.,[48] the U.S. Court of Appeals for the Sixth Circuit held that a class of plaintiffs challenging one provision of the state Medicaid program would not have standing to challenge a different provision unless they could show that one of the named plaintiffs would be adversely affected by that provision. In those cases, however, the standing inquiry did not turn on type or substance of the claim, but on whether or not the challenged regulation applied to the party challenging it.

Here, the Tribe claimed injury stemming from asserted groundwater contamination and, additionally, demonstrated to the Board's satisfaction that its interest in cultural resources on the site could be adversely affected by operations at the licensed facility. In this case, there are alternative grounds for finding standing for the Tribe. This case is not an appropriate vehicle to revisit the question of contention-based standing or consider limitations to the standing doctrine.

2. Consolidated Petitioners

Crow Butte and the Staff claim that none of the Consolidated Petitioners has shown a "plausible scenario" wherein the individuals (or individual members of organizational petitioners) will be harmed by the license renewal application in this proceeding.

a. Representational Standing of Owe Aku and WNRC

Crow Butte and the Staff argue that the Board erroneously based standing for two

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[46] __ U.S. __, 128 S.Ct. 2759 (2008).

[47] *Id*., 128 S.Ct. at 2768-69.

[48] 288 F.3d 918 (6th Cir. 2002).

organizations – Owe Aku and WNRC – on affidavits that were executed and filed in the NTEA expansion license amendment proceeding, which is a separate proceeding from the one at bar. The NTEA Board found standing for WNRC based on an affidavit and supplemental affidavit submitted by Dr. Francis Anders, and for Owe Aku based on an affidavit submitted by David Alan House.[49]

Consolidated Petitioners did not attach Mr. House's or Dr. Anders' affidavits to their original intervention petition in this license renewal proceeding.[50] Instead, they "incorporated by reference" the affidavits submitted in the NTEA proceeding, along with many other documents also filed in that proceeding.[51] The Consolidated Petition's description of Owe Aku does not mention Mr. House at all, and the petition states without elaboration that Dr. Anders is a WNRC member living near the existing site.[52]

Consolidated Petitioners first specifically discussed Dr. Anders as WNRC's representative in their reply to the Staff's and Crow Butte's answers.[53] There, they advanced a "collateral estoppel" argument, based on the NTEA Board's finding of standing in that

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[49] *See* Affidavit of Francis E. Anders (Dec. 28, 2007) (ML080080289) (Anders Affidavit), and Supplemental Affidavit of Francis E. Anders (Jan. 29, 2008) (ML080370544) (Supplemental Anders Affidavit); Affidavit of David Alan House (Jan. 10, 2008) (ML080240299) (House Affidavit). The captions of all three affidavits are titled "Crow Butte Resources, Inc. (In Situ Leach facility)" (that is, they do not refer to the "North Trend Expansion facility" by name); the proceeding number is given as "ASLBP No. 07-859-03-MLA;" and the NTEA Board members are listed at the top.

[50] *Consolidated Request for Hearing and Petition for Leave to Intervene*, at 6 (July 28, 2008) (Consolidated Petition).

[51] *Id.* at 4-8.

[52] *See id.* at 13-14.

[53] *Petitioners' Consolidated Reply to Applicant and NRC Staff Answers to Consolidated Petition to Intervene*, at 44-45 (Sept. 3, 2008) (Consolidated Reply).

proceeding.[54] Crow Butte moved to strike the portions of the Consolidated Petitioners' reply that referred to new persons in support of standing, who were not discussed in the original petition, and for whom no new affidavits authorizing representation were submitted. [55]

Consolidated Petitioners' answer to the Motion to Strike argued that the incorporation by reference of the Anders and House affidavits from the NTEA proceeding was sufficient to show that the representation was authorized, and further argued that there "is no requirement for a person to sign a new affidavit in this [p]roceeding when they have signed and delivered an Affidavit in the Expansion Proceeding." [56]

The Board rejected the collateral estoppel argument, but granted standing on the basis of the NTEA affidavits.[57] The Board did not elaborate on the reasoning underlying its holding that affidavits filed in one proceeding may be used to authorize representation in a different proceeding. We surmise that the NTEA Board looked at such factors as the close timing of the two licensing proceedings, the physical proximity of the two facilities involved, and the fact that they involve the same license, if not the same licensing action.

We do not agree that there was no need to file new affidavits in the instant proceeding. Our case law requires an organization to submit written authorization from a member whose interests it purports to represent in order to have a "concrete indication" that the member wishes to have the organization represent his interests there.[58] While it is permissible to incorporate by

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[54] *Id.* at 42.

[55] *See Applicant's Motion to Strike Portions of Petitioners' Replies*, at 7 (Sept. 15, 2008).

[56] *Petitioners' Answer to Applicant's Motion to Strike Portions of Petitioners' Reply*, at 20 (Sept. 25, 2008).

[57] LBP-08-24, 68 NRC __ (slip op. at 10, 17-18).

[58] *See Consumers Energy Co.* (Palisades Nuclear Plant), CLI-07-18, 65 NRC 399, 409-10 (2007), quoting *Houston Lighting and Power Co.* (Allens Creek Nuclear Generating Station, Unit
(continued …)

reference specific documents in a proceeding, incorporation by reference cannot change or expand the legal effect of an affidavit.

If we would allow, on some occasions, an affidavit executed in one proceeding to be used in another, then the Board would be in a position of guessing in each case what the affiant truly intended. The affidavits in this case illustrate this dilemma. Mr. House's affidavit, which he filed in the license amendment proceeding, speaks only of the expansion project and of Mr. House's concern that the expansion project will affect the water he drinks and the air he breathes.[59] His affidavit does not mention the existing facility. On the other hand, Dr. Anders' affidavit speaks of harm arising from the existing facility, and can reasonably be construed to authorize representation by WNRC with respect to the existing facility.[60]

It does not follow, however, that WNRC could use Anders' affidavit in every other proceeding that may arise in the future involving Crow Butte. For example, in a proceeding arising five or ten years hence, a licensing board could not know if the affiant has moved, died, or simply changed his views. To avoid such ambiguity, we think it best to follow a "bright line" rule: Affidavits authorizing organizational representation must be filed with specific reference to the proceeding in which standing is sought.[61]

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1), ALAB-535, 9 NRC 377, 396 (1979), *reconsideration denied*, ALAB-539, 9 NRC 422 (1979) and ALAB-544, 9 NRC 630 (1979).

[59] *See* House Affidavit ("I am therefore concerned that the *proposed mine expansion* project may effect [sic] the quantity and quality of the water in my well" (emphasis added)).

[60] *See* Anders Affidavit at 1. ("I have observed that since CBR started drilling near my well in Fall 2007 … my well water becomes discolored"); Supplemental Anders Affidavit at 1 ("I have been a member of WNRC since I began opposing *this uranium mine* many years ago" (emphasis added)).

[61] We do not think it a burden for the organizational petitioner to get a fresh affidavit for each proceeding in which it seeks to represent a member. This is particularly true when the defect was brought to the attention of petitioners – represented by counsel in this proceeding – who did not attempt to remedy the defective affidavits. *See Applicant's Motion to Strike Portions of* (continued …)

Such a rule, however, is not set forth in our regulations, nor have we previously made this finding in so many words.[62] For this reason we *remand* this issue to the Board so the Board may give these organizations the opportunity to cure the defects in their affidavits.[63]

b. Individual and Family Petitioners

The individual and family petitioners[64] among the Consolidated Petitioners live on the Pine Ridge Indian Reservation, approximately 40 miles from the site of the Crow Butte operation. The Board found that these petitioners had shown that the ISL uranium recovery facility may cause contamination of the White River, which runs through the Pine Ridge Indian Reservation and which these petitioners use for fishing and recreation, and of the Arikaree aquifer, from which these petitioners draw water for domestic use.

The petitioners argued that their expert, a geologist, Hannan E. LaGarry, Ph.D., whose opinion was submitted in support of the Consolidated Petition, described "pathways" through which each petitioner could be exposed to contaminants from the ISL uranium recovery

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Petitioners' Replies, at 7 (Sept. 15, 2008).

[62] In *Allens Creek* the Appeal Board implied that a specific affidavit might not be necessary: "in some instances, the authorization might be presumed. For example, such a presumption could well be appropriate where it appear[s] that the sole or primary purpose of the petitioner organization was to oppose nuclear power in general or the facility at bar in particular. In such a situation, it might be reasonably inferred that, by joining the organization, the members were implicitly authorizing it to represent any personal interests that might be affected by the proceeding." ALAB-535, 9 NRC at 396.

[63] Provided the defective affidavits are cured, we see no reason to revisit the Board's determination Dr. Anders' and Mr. House's standing. The Staff and Crow Butte do not argue that these two petitioners, who reside much closer to the facility than the individual Consolidated Petitioners who live on the Pine Ridge Indian Reservation, otherwise would be unable to demonstrate standing.

[64] By "individual and family petitioners," we refer to Beatrice Long Visitor Holy Dance, Debra White Plume, Loretta Afraid of Bear Cook, Thomas Kanatakeniate Cook, Joe American Horse, Sr., and the Afraid of Bear/Cook Tiwahe and American Horse Tiospaye.

operation. [65] In particular, they pointed to portions of Dr. LaGarry's opinion that suggest that the uranium being recovered could exist in faults between the mined aquifer and aquifers supplying drinking water to the petitioners.

The Board looked closely at Dr. LaGarry's opinion in finding standing. Among Dr. LaGarry's concerns that the Board cited were: that "the 'layer cake' concept applied to the local geology by 1990s researchers, and relied on by Crow Butte, is incorrect and overestimates the thickness and areal extent of many units [of confinement] by a factor of 40 to 60 percent;"[66] that the uranium recovery operation itself could contribute to the vertical transfer of water "through intersecting faults and joints that can extend for tens of miles;"[67] that the mined uranium may exist within the faults themselves;[68] which would make "contamination [of overlying aquifers] by chemically altered waters [] a virtual certainty."[69]

The Staff claims that the Board "improperly formulates its own bases to enhance the sufficiency of the Consolidated Petitioners' standing argument."[70] By this the Staff means that the Consolidated Petition did not explain how the LaGarry Opinion supports the Petitioners' claims of potential harm.

We do not agree that the Consolidated Petition fails to describe a plausible theory whereby the petitioners could be harmed. The Consolidated Petition explained each petitioner's use of well water and water from the White River, as applicable, and gave a brief summary of

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[65] Consolidated Petition at 3. citing LaGarry, Expert Opinion Regarding ISL Mining in Dawes County, Nebraska, at 3 (LaGarry Opinion).

[66] LBP-08-24, 68 NRC __ (slip op. at 13).

[67] *Id*. at 14, citing LaGarry Opinion at 4.

[68] *Id.*

[69] *Id.*

[70] Staff Appeal at 9.

how the LaGarry Opinion showed that these sources could be contaminated. It was not unreasonable for the Board to look more closely at the LaGarry Opinion in deciding whether there was a plausible pathway to injury.

The Staff and Crow Butte also argue that the Board improperly shifted the burden to the Staff and the applicant to refute the plausibility of harm to the petitioners, rather than requiring the petitioners to show a plausible chain of causation in the first instance.[71] We do not agree that the Board reversed the burden here.

The Board recognized that it was the petitioners' burden to show a "specific and plausible means" whereby the licensing decision may harm them.[72] In determining how that standard should be applied in an ISL uranium recovery proceeding, the Board looked to the standing analysis applied in the *Hydro Resources* ISL proceeding. The presiding officer in *Hydro Resources* reasoned that "anyone who uses a substantial quantity of water personally or for livestock from a source that is reasonably contiguous to either the injection or processing sites has suffered an 'injury in fact.'"[73] Recognizing that in this case, "reasonable" contiguity would be a matter of judgment, the Board considered whether the petitioners had presented evidence for their theory that the mined aquifers may be connected to overlying aquifers and to the White River, and found that they had. The Board cited several portions of the LaGarry Opinion, which it found raised a plausible pathway by which the petitioners could be harmed.

Once the Board found that the petitioners had presented a plausible injury, it was not

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[71] Staff Appeal at 11-12, Crow Butte Appeal at 12-13.

[72] LBP-08-24, 68 NRC __ (slip op. at 11). *See USEC, Inc*. (American Centrifuge Plant), CLI-05-11, 61 NRC 309, 310-11 (Where there is no "obvious potential" for offsite harm, the petitioner must show a "specific and plausible means of how the challenged action may harm him or her").

[73] *Hydro Resources, Inc*. (2929 Coors Road, Suite 101, Albuquerque, NM 87120), LBP-98-9, 47 NRC 261 (1998), *rev'd on other grounds*, CLI-98-16, 48 NRC 119 (1998).

required to weigh the evidence to determine whether the harm to the petitioners is beyond doubt.[74] In other words, it did not find that, at that point, Crow Butte and the Staff then had to refute the plausibility of petitioners' theory in order to defeat standing. While Crow Butte and the Staff *attempted* to refute the petitioners' claims, the Board was not persuaded. We find no clear error, and defer to the Board's judgment of the individual and family petitioners' standing.

B. Contention Admissibility

Both the Staff and Crow Butte contend that, even if the various petitioners have demonstrated standing, none of them has set forth an admissible contention in the license renewal proceeding. We do not agree that none of the contentions is admissible. We find, however, that the Board erred in admitting Tribe Environmental Contentions B and E, Consolidated Petitioners' Environmental Contention E, Consolidated Petitioners' Miscellaneous Contentions G and K, and Consolidated Petitioners' Safety Contention A, for the reasons described below.

1. Tribe's Contentions[75]

a. Tribe's Environmental Contention A (Non-radiological and Radiological Health Impacts)

The Tribe contends that Crow Butte has failed to substantiate its claim that there are no non-radiological health impacts relating to ISL uranium recovery, and that Crow Butte's groundwater monitoring system does not protect against potential contamination affecting the Tribe. Although the Tribe made many assertions in its proposed contention, the Board limited

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[74] *Sequoyah Fuels Corp. and General Atomics* (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 74 (1994).

[75] The Consolidated Petitioners requested to join in each of the Tribes' contentions. *Petitioners Joinder to Oglala Sioux Tribe Environmental Contentions A, B, C, D and E* (Nov. 26, 2008). The Board denied that request but stated that a motion by the Consolidated Petitioners to adopt or co-sponsor the Tribes' contentions "would be appropriate." Order (Denying Motion for Joinder), at 4 (Dec. 30, 2008).

the admitted contention to the following claim:

> The Tribe has raised a genuine dispute with the License Renewal Application by raising sufficient questions whether Crow Butte's spill contingency plan adequately addresses non-radiological contaminants. Specifically in this regard, the Tribe challenges the monitoring frequency for contaminants, and the Tribe's expert, Dr. Abitz, opines that certain portions of the License Renewal Application are deficient.[76]

The Tribe cited the report of Dr. Richard J. Abitz, Ph.D., a geochemist, who opined that there is "no valid scientific reason" to exclude uranium from the substances for which Crow Butte monitors.[77] The Tribe also argued that a biweekly testing plan was too infrequent to detect leaks that might occur between tests.[78]

The Staff challenges the admission of the Tribes' Environmental Contentions A, C, and D together, saying that the Board should not have relied on the opinion of Dr. LaGarry.[79] In this general argument, the Staff claims Dr. LaGarry's opinion is deficient in various ways.[80] But in admitting Tribe Environmental Contention A, the Board relied primarily on the expert opinion of Dr. Abitz, rather than on the testimony of Dr. LaGarry.[81] The general attack on the sufficiency of Dr. LaGarry's report does not provide a reason to overturn the Board's ruling.

Crow Butte's appeal claims that the Tribe failed to call into question the adequacy of

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[76] LBP-08-24, 68 NRC __ (slip op. at 29).

[77] *Id*. at 27, n.132, citing a report by Richard Abitz, Ph.D., Geochemical Consulting Services, (July 28, 2008) that was attached to the Consolidated Petition (Abitz Report).

[78] Tribe Petition at 7, citing LRA section 5.8.8.2.

[79] Staff Appeal at 19.

[80] *Id.* at 20-21.

[81] LBP-08-24, 68 NRC __ (slip op. at 29 & n.132). The Tribe also offered a 1989 letter to NRC from an exploration geologist, John Peterson, to Gary Konwinski, NRC Uranium Recovery Field Office, which claimed that the mined aquifer communicated with aquifers used for drinking water at Pine Ridge. *Id*. at 27.

Crow Butte's biweekly monitoring program because its "application and experience shows [that] an undetected excursion is unlikely."[82] It claims that the wellfield is ringed by monitoring wells in both the mined and overlying aquifers that would detect any excursions.[83] It defends its decision to monitor for chloride rather than uranium, because chloride is naturally found in low concentrations and will be detected quickly by monitoring wells should an excursion occur.[84]

Crow Butte's arguments go to the merits of whether its monitoring program is adequate. They do not show that there is no genuine dispute over this matter. The Tribe explained its position in reasonable detail and provided expert reports to support that position. We therefore defer to the Board's ruling that Environmental Contention A, as limited by the Board, is admissible.

b. Tribe's Environmental Contention B
(Failure to Consult with the Oglala Sioux Tribe
Concerning Properties of Potential Cultural Significance)

Environmental Contention B claims that the Staff has not fulfilled statutory obligations to consult with tribal leaders regarding cultural artifacts found on the Crow Butte site:

> The Oglala Sioux Tribe has not been consulted … regarding the cultural resources that may be in the license renewal area. [Crow Butte] has identified what it believes to be cultural resources in the area, but the Tribe has had no input on this list, and it therefore cannot be complete. Furthermore, [Crow Butte] has provided that it will work in conjunction with the Nebraska State Historical Society to avoid the identified resources, but this ignores mandated participation by the Oglala Sioux Tribe.[85]

The Board admitted the contention without revision.[86]

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[82] Crow Butte Appeal at 16-17.

[83] *Id*.

[84] *Id*. at 17-18, citing LRA at 5-107.

[85] Tribe Petition at 13.

[86] LBP-08-24, 68 NRC __ (slip op. at 36).

As discussed above, Crow Butte's license renewal application identified eight sites of potential historical interest that are identified as Native American of unspecified origin.[87] Because the Crow Butte site is within the Tribe's historical territory, some or all of these artifacts may be of Sioux origin. The Tribe argues that under the National Historic Preservation Act[88] the Staff must consult with the Tribal Historic Preservation Officer (THPO) before it approves this licensing action.

The NHPA requires federal agencies to take into account the effect that certain proposals may have on properties listed, or eligible for listing, on the National Register of Historic Places.[89] The implementing regulations of the Advisory Council on Historic Preservation provide that an agency must consult with Indian tribes in two situations. First, where the action is going to take place on tribal lands, the agency must consult with the THPO if one has been designated, to assume the duties normally performed by the State Historic Preservation Officer (SHPO) on tribal lands.[90] Second, the agency must make a "reasonable and good faith effort to identify any Indian tribes … that might attach religious and cultural significance to historic properties in the area of potential effects and invite them to be consulting parties."[91]

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[87] *See* notes 26-28 and accompanying text.

[88] 16 U.S.C. § 470 *et seq*.

[89] The Advisory Council on Historic Preservation's NHPA regulations apply to Federal "undertakings," defined as any "project, activity or program … funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those … requiring a Federal permit, license or approval. 36 C.F.R. § 800.16(y). The NRC implements its responsibilities under NHPA in conjunction with the NEPA process. *See USEC Inc.* (American Centrifuge Plant), CLI-06-9, 63 NRC 433, 437-38 (2006).

[90] 36 C.F.R. § 800.3(c).

[91] 36 C.F.R. § 800.4(f)(2).

The Staff argues that this contention is not ripe.[92] Because the NHPA requires the Staff, not the applicant, to consult with the Tribe, the issue will not ripen until the Staff completes its NEPA review, they argue. Similarly, Crow Butte argues that NHPA imposes duties on the Staff, not the licensee, and therefore the contention does not show a material dispute with the application.[93]

The Board rejected the "ripeness" argument after considering how the NHPA requirements were handled when Crow Butte's license was first issued in 1988, and subsequently renewed.[94] The NHPA imposed no consultation duty on the Staff when Crow Butte's license was first issued, as the consultation requirement was added in 1992.[95] Despite the change to the law, however, the Tribe was not consulted regarding cultural artifacts known to exist on the site when Crow Butte's license was renewed in 1998.[96] According to the Staff, it attempted to satisfy the Section 106 requirements by consulting with the Nebraska Deputy SHPO.[97] The Nebraska Deputy SHPO approved Crow Butte's plan to avoid the identified cultural resource sites and to consult with the Nebraska State Historical Society prior to any new

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[92] Staff Appeal at 21-24.

[93] Crow Butte Appeal at 18.

[94] *See* Tr. 363-65.

[95] 16 U.S.C. § 470(a)(1990).

[96] *Staff Response to Board Questions* at 7.

[97] *NRC Staff's (1) Responses to the Board's "Follow Up" Questions During the September 30-October 1, 2008 Oral Argument and (2) Statement of Clarification Relating to the Scope of NRC's Jurisdiction to Regulate the Release of Non-Radiological Contaminants*, at 5 (Oct. 22, 2008), attachment E, Letter from Joseph J. Holonich, Chief, Uranium Recovery Branch, USNRC, to Lawrence J. Sommer, Director, Nebraska State Historical Society (Dec. 31, 1997) (Staff Response to Board Questions).

development in the vicinity of those sites.[98]

According to a 1997 letter from the Staff to the Nebraska State Historical Society, Crow Butte committed to "initiating contact with the appropriate Native American Tribes."[99] The attempts to contact appropriate tribes consisted of letters from Crow Butte's contractor to various Indian tribes, known to have used the project area, asking for input. But rather than asking for help identifying the specific Native American artifacts found onsite, the letters imply that no such artifacts were found:

> Surface investigations were conducted in 1986 ... to identify the physical remains of historic and prehistoric resources in the project area, but *localities of potential traditional concern or value to Native American groups were not identified*. If you know of any traditional properties or values located in the legal location described above … your input would be greatly appreciated. [100]

The NRC Staff considered that the contractor's letters constituted a "good faith effort" to identify traditional cultural properties.[101]

The Board expressed doubts whether the Staff's past handling of its NHPA was adequate:

> Certainly, because the duty to consult with tribes lies with the Agency, not the Applicant, inserting a condition into Crow Butte's license requiring it to consult with tribes does not absolve the NRC Staff of its duty to consult. Moreover, the NRC Staff's mention of [Crow Butte's contractor's] apparently unsuccessful attempt to contact the Oglala Tribe, and the NRC Staff's subsequent determination that [the

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[98] Staff's Response to Board Questions, Attachment E at 1.

[99] Staff's Response to Board Questions, Attachment G, Letter from L. Robert Puschendorf, Nebraska State Historical Society, to Joseph J. Holonich, Chief, Uranium Recovery Branch, USNRC (May 4, 1998).

[100] *See* Staff's Response to Board Questions, Attachment F, Survey of Traditional Cultural Properties Crow Butte Project, Dawes County, NE (April 2, 1998), app. A, Letters and Faxes Sent to the Native American and Governmental Contacts. (Emphasis added).

[101] Staff's Response to Board Questions, Attachment H, Letter from Joseph J. Holonich, Chief, Uranium Recovery Branch, USNRC, to L. Robert Puschendorf, Nebraska State Historical Society (June 26, 1998).

> contractor] made a "good faith effort in attempting to identify [Traditional Cultural Properties] also does not excuse the NRC Staff from its duty to consult with the Tribe itself.[102]

It appears that the Board reasoned that, if the Staff in the past has relied on the applicant's actions to satisfy its NHPA duties, it could assume that the Staff will do so again. The Board also expressed concern that if the Tribe is required to wait until the Staff's environmental review is complete before it raises an issue concerning consultation, it will be subject to more stringent admissibility standards applicable to late filed contentions, and would not be privy to correspondence taking place between the Staff and Nebraska SHPO. The Board further rejected the Staff's argument that whether the Staff has fulfilled its NHPA duties is not an issue "material to the findings the NRC must make in support of" the licensing action.[103]

We agree with the Board that consultation with the Tribe is material and within the scope of this license renewal proceeding, but we find that the matter is not ripe. As to the Board's concerns that a contention would be subject to the late-filing standards if the Tribe must defer its contention until the NEPA review is complete, our rules of procedure explicitly allow the filing of new contentions on the basis of the draft or final environmental impact statement where that document contains information that differs "significantly" from the information that was previously available.[104] In this case, whether and how the Staff fulfills its NHPA obligations are

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[102] LBP-08-24, 68 NRC __ (slip op. at 34).

[103] *Id.* at 35, citing 10 C.F.R. § 2.309(f)(1)(iv). On appeal, the Staff argues that its *past* alleged violations of NHPA requirements are not within the scope of this proceeding. *See* Staff Appeal at 24. The contention as admitted, however, does not encompass past violations.

[104] *See* 10 C.F.R. § 2.309(f)(2)(providing that, with respect to issues arising under NEPA, the petitioner may file new contentions "if there are data or conclusions in the NRC draft or final environmental impact statement . . . that differ significantly from the data or conclusions in the applicant's documents."). In such a case, the "late-filing" standards are no bar to the admission of properly-supported contentions.

issues that could form the basis for a new contention pursuant to that provision.[105] In addition, official agency records relating to the Staff's NHPA review that are essential to the decision-making process will be made available on the agency's public records system (ADAMS). We therefore reverse the Board's decision to admit the Tribe's Environmental Contention B.

c. Tribe's Environmental Contention C (Impact on Surface Waters from Accidents)

The Tribe disputes Crow Butte's statement in its application that, because there are no nearby surface water features, there will be no impacts to surface waters from an accident:

> 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.[106]

In its petition, the Tribe pointed out that other portions of the application identify two small tributaries of the White River that cross the area of operations. The Tribe also claimed that the operation could contaminate the White River alluvium through three pathways, identified by Dr. LaGarry: "a) from surface spills at the Crow Butte mine site; b) from waters transmitted through the Chamberlain Pass Formation[[107]] where it is exposed at the land surface; and c) through faults."[108] The Tribe submitted an additional report from an engineering firm, which opined that, given the description of Crow Butte's operation, the White River alluvium should be tested for

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[105] Such a contention is usually considered timely if filed within 30 days of publication of the draft environmental impact statement. *See, e.g., Pacific Gas and Electric Co.* (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-08-1, 67 NRC 1, 6 (2008).

[106] Tribe Petition at 16.

[107] "Chamberlain Pass Formation" is, according to LaGarry, the correct term for the formation that Crow Butte calls the "Basal Chadron Sandstone" (the mined aquifer). LaGarry Opinion at 2. According to LaGarry, the Chamberlain Pass is between 1 million and 1.5 million years older than the Chadron formation. *Id.* at 3.

[108] LaGarry Opinion at 3.

contamination.[109]

The Board admitted the contention as proposed, finding that based on the three expert reports, "the Tribe has supplied sufficient expert opinion to draw into question whether these aquifers are interconnected and so could be the potential pathway for contaminant migration to surface waters." The Board found that Crow Butte's arguments to the contrary amount to "banking on its ability to prevent accidental releases from ever reaching surface waters."[110]

The Staff and Crow Butte argue that the Tribe's expert opinions were not specific enough, and include examples of information that could have been in the reports, but was not.[111] Fundamentally, Crow Butte and the Staff argue that the Tribe has not proved a connection between the mined aquifer waterways.

Whether the Tribe has proved its claim is not the issue at the contention pleading stage. The Board simply has to find that each of the elements of contention admissibility is satisfied, and need not weigh the merits of the petitioner's arguments. We defer to the Board's decision to admit this contention.

d. Tribe's Environmental Contention D (Communication Among the Aquifers)

The Tribe claims that the LRA "incorrectly states that there is no communication among the aquifers" and that, in fact, there is communication between the Basal Chadron and the aquifer supplying drinking water to the reservation:

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[109] Paul G. Ivancie, PG, and W. Austin Creswell, PE; *Summary of Recommendations and Opinions on CBR* (July 28, 2008) (unnumbered attachment to Consolidated Petition).

[110] LBP-08-24, 68 NRC __ (slip op. at 36).

[111] Among the deficiencies Staff claims in the LaGarry Opinion is that he does not identify "what constitutes contaminants." Staff Appeal at 20. But LaGarry specifically mentions "lixiviant or uranium-laden water" as potential contaminants. LaGarry Opinion at 3. In addition, Crow Butte acknowledges that the lixiviant used in its processes solubolizes such contaminants as arsenic and radium, so that the lixiviant itself must be contained or neutralized within the well field.

> 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.[112]

The Tribe cited to Dr. LaGarry's expert opinion, specifically pointing to his assertion that there is a fault along the White River that could transport contaminants. The Tribe also cited a November 8, 2008, letter from the Nebraska Department of Environmental Quality (NDEQ)[113] requesting more information to support Crow Butte's application for an aquifer exemption with respect to the NTEA site. The NDEQ letter, which deals primarily the NTEA site, as opposed to the site of existing operations, also questions portions of the aquifer exemption application that claim there is no interconnection between the mined and overlying aquifers.[114]

The Board admitted the contention as proposed, finding that the Tribes' two documents supported its claim and raised an issue whether the aquifers are interconnected.

On appeal, Crow Butte claims that the Tribe provides no proof of its claim that the aquifers are interconnected and questions the specificity and adequacy of the two documents on which the Tribe relies.

With respect to Dr. LaGarry's report, Crow Butte argues that the report "posits a potential link to the White River, but not to the aquifers used for drinking water in Pine Ridge."[115] But, in actuality, Dr. LaGarry's report does both. Dr. LaGarry states that one path through which

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[112] Tribe Petition at 17.

[113] Letter, Stephen A. Fischbein, P.G., Nebraska Department of Environmental Quality, to Stephen P. Collings, Crow Butte Resources, Inc., Technical Review of Aquifer Exemption Petition for North Trend Expansion (ML073300399) (Nov. 8, 2008).

[114] *See* LBP-08-24, 68 NRC __ (slip op. at 40).

[115] Crow Butte Appeal at 20.

contaminants could migrate away from the well fields is through faults.[116] He avers that faulting and jointing is common in the region of northwestern Nebraska.[117] He says that one way faults could transmit the contaminants is if excursions of lixiviant or uranium-laden water in the Chamberlain Pass (Basal Chadron) formation were to escape the well field.[118] Dr. LaGarry also states that the groundwater gradient is generally eastward, and such an excursion could potentially threaten Pine Ridge to northeast or the Town of Chadron, to the southeast.[119] Finally, Dr. LaGarry notes that artesian flow occurs "along the Pine Ridge," which would cause upward flow from the Chamberlain Pass formation to the upper aquifer wherever there is a hydrologic connection, whether naturally occurring or the result of drilling.[120]

Crow Butte argues on appeal that the LaGarry Opinion is "nothing more than an overview of regional geology" which is "no substitute for the detailed, site-specific investigations" in Crow Butte's own application. The Board response to that argument (asserted below by both Crow Butte and Staff) is apt: "What Crow Butte and the Staff choose to ignore, however, is that the Tribe is concerned with potential migration 'outside the mining area.'"[121]

As with Environmental Contention C, the Board was not required to weigh the evidence, but rather to determine whether the contention was supported and raised a genuine dispute material to, and within the scope of, the proceeding. We therefore defer to the Board's decision to admit Environmental Contention D for hearing.

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[116] *See* LaGarry Opinion at 3-4.

[117] *Id.* at 3.

[118] *Id.*

[119] *Id*. at 3-4.

[120] *Id.* at 4.

[121] LBP-08-24, 68 NRC __ (slip op. at 40).

e. Tribe's Environmental Contention E (Wastes Remain on Site)

The Tribe contends that the application misstates how Crow Butte handles waste disposal:

> CBR's application incorrectly states in 7.11 that "wastes generated by the facility are contained and eventually removed to disposal elsewhere."[122]

The Tribe argues, in Environmental Contention E, that Crow Butte's cited statement in the application is in error, because, for a two and a half year period, Crow Butte "released well development water upon … the ground" in violation of its Nebraska-issued Underground Injection Control Permit.[123] As support for this claim, the Tribe offered an NDEQ enforcement complaint and a consent decree entered into between NDEQ and Crow Butte in May 2008.[124] According to the Consent Decree, Crow Butte "recycled its well development water as a conservation measure," "[s]uch treatment of the well water did not result in any pollution of either the surface of the ground or any aquifer thereunder," and Crow Butte self-reported the violation after discovering that this practice violated the terms of its NDEQ permit.[125]

The Board admitted Environmental Contention E because the Board found that it raised questions concerning Crow Butte's environmental practices. The Board pointed to the Commission's ruling with respect to the Georgia Tech Research Reactor that license renewal is "an appropriate occasion for appraise[ing] … the entire past performance of [the] licensee."[126]

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[122] Tribe Petition at 21.

[123] *Id.*

[124] *See* Complaint, Dist. Ct. Lancaster County, NE Case No. CI08-228 (May 23, 2008); Consent Decree, Dist. Ct. Lancaster County, NE Case No. CI08-228 (May 23, 2008).

[125] Consent Decree at 2.

[126] LBP-08-24, 68 NRC __ (slip op. at 42), citing *Georgia Inst. of Tech.* (Georgia Tech Research Reactor), CLI-95-12, 42 NRC 111, 120 (1995), citing *Hamlin Testing Laboratories, Inc*. 2 AEC 423, 428 (1964).

We find that this contention fails to raise a genuine issue of material fact. Further, in admitting the contention, the Board appears to have expanded the Tribe's claim regarding a single, past violation into a broad inquiry into the applicant's management integrity.

The Tribe's only supporting evidence of its claim – the NDEQ complaint and the consent decree – show that the practice of recycling of well development water has been discontinued. We do not see how a single, past violation of Crow Butte's state permit could demonstrate an "ongoing pattern of violations or disregard of regulations that might be expected to [recur] in the future."[127] To raise an admissible issue, "[a]llegations of management improprieties… must be of more than historical interest."[128]

In addition, the Tribe did not frame this contention as a general attack on the quality or integrity of the management of the uranium recovery facility (as was the case with the Georgia Tech Research Reactor).[129] It is difficult to see how the self-reported violation could raise such an issue had the contention been so presented. This contention does not show a need for the Board to "appraise the entire past performance" of the licensee with respect to its waste management practices.

We find that this contention does not show a genuine dispute with the application that is within the scope of this proceeding, and does not meet the requirements of 10 C.F.R. § 2.309(f)(1). Therefore, we reverse the Board's decision to admit the Tribe's Environmental Contention E.

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[127] *See USEC, Inc.* (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 464 (2006).

[128] *Georgia Tech*, CLI-95-12, 42 NRC at 120.

[129] In *Georgia Tech,* the petitioners alleged several serious safety problems that had persisted with respect to the reactor over a period of years. *See* CLI-95-12, 42 NRC at 118.

2. Consolidated Petitioners' Contentions

In LBP-08-24, the Board considered 23 proposed contentions submitted by the Consolidated Petitioners, and rejected all but four. Crow Butte and the Staff now appeal the Board's admissibility findings with respect to those four contentions.

a. Consolidated Petitioners' Environmental Contention E (Failure to Consider Economic Value of Wetlands in Cost/Benefit Analysis)

Consolidated Petitioners argue that the application is deficient in that it fails to consider the economic value of wetlands in describing the benefits of not renewing the license (the "no action" alternative). In support of their claim, Consolidated Petitioners cited studies that analyze the economic benefit of wetlands.[130] Consolidated Petitioners pointed to portions of the application that describe the economic impacts of the no-action alternative in terms of jobs lost and the loss of an "important source of domestic uranium," and they point out that the application does not discuss the economic benefits of restoring wetlands.[131]

The NRC Staff argues that there is no need to discuss the potential economic value of restoring wetlands because the ongoing operation has no effect on wetlands.[132] According to the application, only 3 percent of the area covered by the license is wetlands,[133] there are no wetlands within the project area,[134] and Crow Butte takes steps to ensure that construction does

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[130] *See, e.g.*, http://www.adelaide.edu.au/adelaidean/issues/23221/news23241.html (last visited 4/8/2009). This study, conducted at the University of Adelaide, Australia, concludes that natural wetlands are worth "$7100 per hectare."

[131] Consolidated Petition at 28-29, citing LRA at 8.1.2 and 8.2. This section of the Consolidated Petition inserts comments on the application's economic analysis, but the comments relate to Consolidated Petitioners' claims regarding foreign ownership and potential shipment of uranium to foreign countries.

[132] Staff Appeal at 27.

[133] LRA at 2-195, 2-208, 7-18.

[134] *Id.* at 7-17.

not affect surface waters through runoff.[135] The Staff argues that Consolidated Petitioners fail to address these points.

We are persuaded by the Staff's argument, and find that this contention does not raise a genuine dispute with the application. Consolidated Petitioners provided no support for the underlying premise of this contention, which seems to be that the ongoing operation has or will drain or contaminate wetlands such that they can no longer provide the economic benefits that a well-functioning wetland could. Indeed, the contention does not claim that the licensed operation has adversely affected wetlands, either within or outside the area covered by the license. Unless Consolidated Petitioners present a genuine dispute regarding whether wetlands have been or will be adversely affected by the existing operation, there can be no need for Crow Butte to consider the economic benefits that might accrue from restoring them.

We therefore conclude that this contention is inadmissible and reverse the Board's decision to admit it.

b. Consolidated Petitioners' Technical Contention F (Failure to Include Recent Research)

In Technical Contention F, Consolidated Petitioners claim that the application's description of the geology and seismology[136] of the area does not include up-to-date research on the subject. Consolidated Petitioners cited portions of the application that uses research from the 1980s. Petitioners supported their claim with the opinion of their expert, Dr. LaGarry, who states that much of the research from that time period is outdated:

> The recent mapping of the geology of northwestern Nebraska has shown that the simplified "layer cake concept applied by pre-1990s workers is incorrect, and overestimates the thickness and areal extent of many units by 40-60%. Many units' distributions are heavily influenced by the contours of the ancient landscapes onto which they were deposited. For example, when considered to be

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[135] *Id.* at 7-9.

[136] Consolidated Petition at 30, citing LRA section 2.6.

> the 'Basal Chadron Sandstone,' the Chamberlain Pass Formation was assumed to have a distribution equal to that of the overlying Chadron Formation. However, the Chamberlain Pass Formation is 1-1.5 million years (Ma) older than the Chadron Formation and has a distribution determined by the ancient topography weathered into the Pierre Shale prior to deposition of the Chamberlain Pass formation.[137]

Petitioners also cited the November 8, 2007 NDEQ letter responding to Crow Butte's aquifer exemption application, which raised the same concern that Crow Butte was not considering recent information that contradicts some of its statements describing the local geology and which addresses the question of whether the mined aquifer is adequately confined.

Crow Butte and Staff argued before the Board that the regulations do not require Crow Butte to consider the research of any particular expert.[138]

The Board found that "the issue before [it] is the reliability of scientific evidence in order for Crow Butte's License Renewal application to be complete and accurate."[139] The Board noted that both Dr. LaGarry's opinion and the November 8, 2007 NDEQ letter raised the same concern as that articulated by Consolidated Petitioners – that Crow Butte was ignoring more recent information concerning geology and hydrology.[140] The Board also cited a report from Dr. Paul Robinson, Director of the Southwest Research and Information Center,[141] which was

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[137] LaGarry Opinion at 3.

[138] *NRC Staff Response in Opposition to Petitioners' Consolidated Request for Hearing and Petition for Leave to Intervene of Debra White Plume, Thomas K. Cook, Loretta Afraid of Bear Cook, Dayton O. Hyde, Bruce Mcintosh, Joe American Horse, Sr., Beatrice Long Visitor Holy Dance, Owe Aku/Bring Back The Way, Afraid of Bear/Cook Tiwahe, American Horse Tiospaye And Western Nebraska Resources Council*, at 40 (Aug. 25, 2008) (Staff Response to Consolidated Request); *Applicant's Response to Petition to Intervene Filed by Consolidated Petitioners,* at 39 (Aug. 22, 2008) (Applicant's Response to Consolidated Petitioners).

[139] LBP-08-24, 68 NRC at __ (slip op. at 55).

[140] *Id*., slip op. at 54, 55.

[141] Robinson, Comments and Recommendations Regarding the "Application for 2007 License Renewal USNRC Source Materials License SUA-1534 Crow Butte license Area (July 28, (continued …)

appended to the Consolidated Petition but not specifically cited in support of proposed Technical Contention F.[142] The Board concluded that "the more recent research likely represents more reliable science and thus there is a question regarding whether Crow Butte has simply cherry-picked its supporting data."[143]

On appeal, both the NRC Staff and Crow Butte object that the contention was inadequately explained and the Board improperly bolstered the contention with its reference to the Robinson Report.[144]

We find no clear error in the Board's contention admissibility determination. Consolidated Petitioners cited to the application and provided expert opinion in support of their claim that Crow Butte's application uses superannuated data. The Board's brief reference to a report, attached to the Consolidated Petition but not specifically referenced for this contention, is, in our view, of minimal significance to its overall decision to admit the contention. Further, the reliability of the data concerning the geology and hydrology of the area on which and around Crow Butte's operation is within the scope – in fact, at the center – of this license renewal proceeding. We therefore defer to the Board's decision to admit this contention.

c. Foreign Ownership – Consolidated Petitioners' Miscellaneous Contentions G and K

Consolidated Petitioners proposed two contentions relating to the fact that, although Crow Butte is a U.S. corporation, its parent corporation is a Canadian concern, Cameco

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2008)(Robinson Report).

[142] The Board noted that, according to Robinson, the license application uses two Environmental Protection Agency Guidance documents from the 1970s that are out of date and have been superseded. LBP-08-24, 68 NRC __ (slip op. at 55).

[143] *Id*.

[144] Staff Appeal at 28, Crow Butte Appeal at 23.

Corporation.[145] In Miscellaneous Contention G, Consolidated Petitioners claimed, among various other asserted omissions, that Crow Butte failed to disclose this foreign ownership in violation of our regulatory requirement that it submit "complete and accurate" information in an application.[146] In their proposed Miscellaneous Contention K, Consolidated Petitioners claimed that the NRC has no authority to issue the renewed license to a foreign-owned entity:

> Lack of Authority to Issue License to US Corporation which is 100% owned, controlled and dominated by foreign interests; voidability of mineral and real estate leases due to Nebraska Alien Ownership Act.[147]

The Board admitted Consolidated Petitioners' Miscellaneous Contention G with respect to its failure to disclose the foreign parentage.[148] The Board admitted Miscellaneous Contention K with respect to two questions: First, is there an absolute prohibition on issuing a source materials license to a company controlled by foreign interests? And, if not, does the foreign ownership raise questions of whether the license is "inimical" to the common defense and national security?[149]

In admitting these contentions, the Board considered Atomic Energy Act of 1954, as

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[145] Crow Butte Resources, Inc. is a Nebraska corporation owned by Cameco US Holdings, Inc., a U.S. corporation, which is held by Cameco Corporation, a Canadian corporation. *See* Crow Butte LRA, 1-2 (Rev. Dec. 2008) (ML090020026).

[146] 10 C.F.R. § 40.9(a) ("Information provided to the Commission by an applicant for a license or by a licensee … shall be complete and accurate in all material respects."). Petitioners also alleged that the application violated this provision because it omitted other bits of information, including a so-called "whistleblower letter" from 1989, but the Board found only the failure to disclose foreign ownership to be material. LBP-08-24, 68 NRC __ (slip op. at 68).

[147] Consolidated Petition at 36.

[148] LBP-08-24, 68 NRC __ (slip op. at 66-67). The Board rejected other "bases" of proposed Contention G, including Consolidated Petitioners' claims that Crow Butte "suppressed" geologic data (*id*. at 67) and that it "failed to disclose" the direction of flow of the White River (*id*. at 68).

[149] *Id*. at 73. The Board rejected the claim relating to a Nebraska state law prohibiting foreign entities from owning land in the state. *Id*. at 71.

amended (AEA), Section 182a – a general provision which indicates that the citizenship of an applicant may be considered in the context of a license application:

> Each application for a license hereunder shall be in writing and shall specifically state such information as the Commission, by rule or regulation, may determine to be necessary to decide such of the technical and financial qualifications of the applicant, the citizenship of the applicant, or any other qualification of the applicant as the Commission may deem appropriate for the license.[150]

The Board noted that by regulation, neither a uranium enrichment facility nor a nuclear power plant may be owned, controlled, or dominated by a foreign entity,[151] although no regulation specifically prohibits this with respect to a materials license such as the one in this proceeding. Materials license regulations, in contrast, contain no express prohibition, but require the Staff to make a finding that the issuance of the license "will not be inimical to the common defense and security."[152] The Board cited Commission rulings in which we indicated that, with respect to a production or utilization facility, foreign ownership and control would be "inimical to the common defense and security."[153]

The Board concluded that Crow Butte's foreign parentage was a material issue of fact

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[150] AEA § 182a, 42 U.S.C. § 2232a.

[151] 10 C.F.R. § 40.38 (enrichment facility); 10 C.F.R. § 50.38 (nuclear power plant) ("Any person who is a citizen, national or agent of a foreign country, or any corporation, or other entity which the Commission knows or has reason to believe is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government, shall be ineligible to apply for and obtain a license"). *See* AEA § 103(d) ("No license [for a production or utilization facility] may be issued to an alien or any corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government.").

[152] LBP-08-24, 68 NRC __ (slip op. at 74), citing 10 C.F.R. § 40.32(d). *See* AEA § 103(d).

[153] LBP-08-24, 68 NRC __ (slip op. at 74), citing *Florida Power & Light Co.* (Turkey Point Nuclear Generating Units No. 3 and No. 4), 4 AEC 9, 12 (1967). In *Turkey Point* the Commission rejected the argument that this provision of the AEA requires nuclear reactors to protect against attacks or sabotage by "enemies of the United States," and instead stated that the "common defense and security standard … refer[s] principally to: the safeguarding of special nuclear material; the absence of foreign control over the applicant; the protection of Restricted Data and the availability of special nuclear material for defense needs." *Id.* at 12-13.

that should have been disclosed in the application, and which raises a question of whether the license is "inimical to the common defense and security." On this basis, it admitted Consolidated Petitioners' Miscellaneous Contentions G and K.

Crow Butte maintains that it notified NRC of the change in ownership years ago when the change in ownership took place, and was informed at that time that a license amendment was not required.[154]

Whether or not Crow Butte should have given a more complete description of its corporate structure in its original application, as Consolidated Petitioners' Miscellaneous Contention G maintains, is a question that is now moot, and we need not address it. In December, 2008, Crow Butte amended its license application to include a discussion of its corporate structure, including foreign ownership interests.[155] It then moved for summary disposition of Miscellaneous Contention G, arguing that there exists no genuine issue as to any material fact relevant to the contention; its motion was supported by NRC Staff.[156] Although the Board has not yet ruled on the motion for summary disposition, in our view summary disposition

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[154] *See* letter from Stephen P. Collings, Senior Vice President – Operations, Crow Butte Resources Inc., to Thomas Essig, Chief, Uranium Recovery Branch, Office of Nuclear Material Safety and Safeguards, NRC, Re: Docket No. 40-8943, Source Materials License SUA-1534, Change of Ownership (Apr. 7, 2000) (ML080390182); letter from Thomas H. Essig to Stephen P. Collings, Subject: License Amendment is not needed for change in ownership, License No. SUA-1534 (May 31, 2000) (ML003711700).

[155] Letter from Stephen P. Collings, President, Crow Butte Resources, to Charles L. Miller, Director, Office of Federal and State Materials and Environmental Management Programs, NRC, at 1 (Dec. 16, 2008) (ML090020026).

[156] *Motion for Summary Disposition of Miscellaneous Contention G* (Jan. 28, 2009). *NRC Staff's Answer in Support of Applicant's Motion for Summary Disposition of Miscellaneous Contention G* (Feb. 10, 2009). The Consolidated Petitioners opposed, arguing that grant of summary disposition on Miscellaneous Contention G would not expedite the proceeding, which, they reasoned, is "inextricably connected" to Miscellaneous Contention K. *Intervenors' Answer Opposing Summary Disposition of Misc. Contention G - Concealment of Foreign Ownership* (Feb. 10, 2009).

of Miscellaneous Contention G is appropriate. The contention was one of "omission," and that omission has been cured. We therefore direct the Board, *sua sponte*, to grant the motion for summary disposition of Miscellaneous Contention G.[157]

As for Consolidated Petitioners' Miscellaneous Contention K, there is no statutory or regulatory bar on a foreign ownership or control of a source materials license, whether as a licensee or as a parent entity. In addition, we find the admission of the second "issue" of Miscellaneous Contention K to be unsupported. Consolidated Petitioners failed to show any basis why renewing the license would be "inimical" to the common defense and security. Each of Consolidated Petitioners' arguments relating to inimicality relates to various scenarios wherein Crow Butte, at the behest of Cameco, sells the unprocessed uranium to an "enemy of the United States." But, as the Staff and Crow Butte pointed out in subsequent briefs before the Board, any export of uranium would require a separate application for an export license.[158] Such an export license application carries with it an opportunity to seek to intervene and request a hearing.[159] The instant proceeding involves only renewal of the existing license to possess and use source material, not the export of source material to any country outside the United States.[160]

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[157] It has been several months since Crow Butte amended its license renewal application and the Consolidated Petitioners have not sought to amend their contention to address the new material. An attempt to amend Miscellaneous Contention G at this point would be well out of time.

[158] *Applicant's Brief Regarding Miscellaneous Contention K*, at 9-10 (Jan. 21, 2009); *NRC Staff's Brief in Response to Consolidated Petitioners' Miscellaneous Contention K* (Jan. 21, 2009).

[159] *See generally* 10 C.F.R. § 110.82.

[160] Although the Consolidated Petitioners argue, throughout their brief to the Board on this subject, that exporting uranium would remove it from U.S. restrictions and render it liable to fall into the hands of enemies of the United States, they do not explain why a foreign-owned uranium producer would be any more likely than a U.S.-owned company to seek an export license. *See, e.g., Petitioners' Brief Re: Misc. Contention K – Foreign Ownership* (Jan. 21, (continued …)

In summary, we find that the Board erred in admitting for hearing Consolidated Petitioners' Miscellaneous Contention K. As discussed above, we need not reach the admissibility of Miscellaneous Contention G, as it is now moot.

d. Arsenic – Consolidated Petitioners' Safety Contention A

We find that the Board erred in admitting the late-filed Consolidated Petitioners' Safety Contention A. This contention fails to show a genuine dispute within the scope of the license renewal proceeding.

Consolidated Petitioners based their proposed late-filed contention on a medical study released in August 2008,[161] which concludes that there is a link between low-level exposure to inorganic arsenic and diabetes.[162] Consolidated Petitioners further argued that there is a link between diabetes and pancreatic cancer.[163] Finally, they submitted an affidavit, executed by their own attorney, stating his belief that the Pine Ridge, South Dakota, and Chadron, Nebraska populations have a disproportionately high incidence of these diseases.[164] Consolidated

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2009) ("... [T]he export of the Yellowcake outside US control is contrary to nuclear security and … Applicant has attempted to create a loophole which is ripe for abuse by … bad actors." *Id.* at 17. "Our task is to make sure the IAEA investigators don't ever need to show up at the offices at the Crow Butte mine to find out how Nebraskan Yellowcake was weaponized by bad actors that got hold of it after it left the hands of the Nebraskans that work the mine." *Id.* at 21. "…[T]he issuance of a source materials license to a foreign controlled entity is *per se* inimical to the common defense and security of the United States due to the nuclear threats posed by nuclear smuggling and proliferation of dual-use items that enable enrichment and the construction of atomic bombs by terrorists and rogue nations." *Id*. at 38.)

[161] Ana Navas-Acien, et al., *Arsenic Exposure and Prevalence of Type 2 Diabetes in US Adults*, 300 J. AM. MED. ASS'N 814 (Aug. 20, 2008)(Arsenic Study).

[162] *Petition for Leave to File New Contention Re: Arsenic* (Sept. 22, 2008) (Arsenic Petition).

[163] Arsenic Petition at 8, citing Suresh T. Chari, et al, *Probability of Pancreatic Cancer Following Diabetes: a Population-Based Study*, 129 GASTROENTEROLOGY No. 2, 504 (Aug. 2005).

[164] Arsenic Petition at 3-4, Affidavit of David C. Frankel (Sept. 22, 2008) (attached to Arsenic Petition).

Petitioners attribute the allegedly high rate of diabetes and pancreatic cancer to arsenic exposures from Crow Butte's operation.

Summing up the entire pleading, the Board reframed the contention as Safety Contention A:

> The oxidation of uranium due to Crow Butte's mining operations releases low-levels of arsenic that contaminate[] drinking water. This contamination threatens the health and safety of the public in that it contributes to an increase in diabetes and pancreatic cancer. The AEA and NRC regulations require Crow Butte's operations to be conducted without harm to the public health and safety.[165]

The Board observed that the contention raises concerns similar to those in the Tribe's Environmental Contention A, but is a safety contention to be resolved under the AEA rather than NEPA.[166] Because of this similarity, the Board stated that it might combine these two contentions for a single evidentiary presentation at a hearing.[167]

On appeal, both the NRC Staff and Crow Butte argue that the contention did not meet the timeliness criteria in 10 C.F.R. § 2.309(f)(2), and fails to satisfy the late filing factors in 10 C.F.R. § 2.309(c)(1).[168] Further, both argue that Safety Contention A is inadmissible because Consolidated Petitioners failed to satisfy the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1).[169]

In our view, Safety Contention A is flawed because it lacks adequate support and does not demonstrate a genuine dispute with the application. First, Consolidated Petitioners mischaracterize the license renewal application as showing that Crow Butte is "aware" that its

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[165] LBP-08-27, 68 NRC __ (slip op. at 7).

[166] *Id.*, slip op. at 7 n.32.

[167] *Id.*, slip op. at 8 n.33.

[168] Staff Arsenic Appeal at 12-13; Crow Butte Arsenic Appeal at 3-8.

[169] Staff Arsenic Appeal at 17-20; Crow Butte Arsenic Appeal at 8-12.

uranium recovery operation "causes … release of Arsenic in to the … Brule aquifer,"[170] but the cited portion of the application does not concede that such releases have occurred.[171] As stated by Crow Butte, the Arsenic Petition does not provide information, beyond the Consolidated Petitioners' assertions, to suggest that Crow Butte's operations have resulted in arsenic contamination outside the operations area.

Consolidated Petitioners' contention is fundamentally unsupported. Consolidated Petitioners appear to seek to litigate the adverse health effects of exposure to arsenic, as if it had already been shown that 1) the applicant's operation has released, and will continue to release, arsenic into the groundwater, and 2) arsenic released from Crow Butte's operation has already reached as far as the Pine Ridge Reservation, and 3) people living in these areas have been exposed to arsenic released from Crow Butte's operation sufficient to develop the adverse health effects about which Consolidated Petitioners are concerned.[172] But Consolidated Petitioners do not provide any alleged facts or expert opinion on these matters sufficient to demonstrate a genuine dispute.[173] Because the Consolidated Petitioners' fundamental premise – that Crow Butte's licensed activities have exposed petitioners and others to arsenic – is unsupported, our consideration of the contention must end there.

Even assuming that the Consolidated Petitioners had demonstrated a dispute as to

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[170] Arsenic Petition at 8, citing LRA at section 2.9.6.

[171] As noted by Crow Butte, the cited reference (to Section 2.9.6 of the application) describes baseline soil sampling and the uranium recovery process.

[172] *See, e.g.*, Arsenic Petition at 3, 5, 7.

[173] Consolidated Petitioners mischaracterize the Board's ruling on standing as a finding that the contamination has already occurred: "Prior findings by the Board in LBP-08-06 show that Petitioners have met their initial burden that there exist fractures and faults and pathways along [t]he White River which lead to the human and environmental exposure to increased Arsenic levels from Applicant's mine." Arsenic Petition at 8. (We observe that LBP-08-6 is the ruling on standing and contentions in the NTEA proceeding, rather than this license renewal proceeding, but at any rate neither board found these claims to have been proven).

whether arsenic would be released from the site as a result of ISL uranium recovery operations during the period of the renewed license, there are gaps in Consolidated Petitioners' reasoning. First, Consolidated Petitioners assert that the findings of the study explain the asserted prevalence of diabetes at Chadron, Nebraska and the Pine Ridge reservation, but provide no facts or expert opinion to buttress the argument. For example, they do not argue that persons in Chadron, or on the reservation, are exposed to inorganic arsenic in quantities comparable to those of the Arsenic Study's subjects. And they do not exclude other factors that may cause diabetes. In addition, Consolidated Petitioners offer the unsubstantiated arguments of counsel regarding the increased incidence of pancreatic cancer in Chadron.[174] Without more, therefore, Consolidated Petitioners' arguments are speculative, and do not form the basis for a litigable contention.

Because this contention fails to satisfy the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1), we need not reach the procedural arguments on lateness. We note, however, that Crow Butte's timeliness arguments help illustrate why the contention is substantively inadmissible for failing to show a genuine dispute with the application. Crow Butte argues that the study discussing the link between low-level arsenic exposure and diabetes is not new information supporting a late-filed contention, because the various adverse health effects of arsenic exposure have long been known.[175] Crow Butte, in other words, does not dispute that the release of arsenic into public drinking water would be harmful. Crow Butte maintains that its operations have not and will not release contaminants such as arsenic – a broad issue that some of the admitted contentions already address in more specific form. But there is nothing in

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[174] Arsenic Petition at 3-4.

[175] *Crow Butte Resources, Inc.'s Response to Consolidated Petitioners' Late-Filed Contention*, at 4 (Oct. 14, 2008); Crow Butte Arsenic Appeal at 4.

the Arsenic Study that tends to show that Crow Butte's operation is likely to, or already has, released arsenic. The Arsenic Study, therefore, does not include any new information within the scope of this adjudication.

We therefore conclude that the Board erred in its ruling in LBP-08-27, admitting a new contention relating to the health effects of arsenic exposure.

C. Consolidated Petitioners' Appeal

Consolidated Petitioners appeal the Board's decision with respect to eleven of the 19 proposed contentions that the Board rejected.[176]

We find that Consolidated Petitioners' appeal is not yet ripe under our rules of practice. Our regulations permit interlocutory appeal only in specific, extremely limited circumstances.[177] Section 2.311, which governs Crow Butte's and the Staff's instant appeals, allows a party to appeal a ruling on contention admissibility only if (a) the order wholly denies a petition for leave to intervene (that is, the order denies the petitioner's standing or the admission of all of a petitioner's contentions), or (b) a party other than the petitioner alleges that a petition for leave to intervene or a request for hearing should have been wholly denied. Because the Consolidated Petitioners were granted a hearing, their appeal is treated under our rules as a request for interlocutory review, governed by the general provisions for interlocutory review, 10 C.F.R. § 2.341(f)(2).[178] That section provides that review of the presiding officer's decision will be granted where the decision either "threatens the party adversely affected by it with immediate and serious irreparable impact which, as a practical matter, could not be alleviated

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[176] Consolidated Petitioners' Appeal.

[177] *See* 10 C.F.R. § 2.311.

[178] This rule reflects the Commission's general policy to minimize interlocutory review. *See Statement of Policy on Conduct of Adjudicatory Proceedings*, CLI-98-12, 48 NRC 18, 23 (1998) (referencing 10 C.F.R. § 2.714a, the substantively identical predecessor to 10 C.F.R. § 2.311).

through a petition for review," or "affects the basic structure of the hearing in a pervasive or unusual manner."

The Consolidated Petitioners do not address the standard governing interlocutory appeal. But even had the Consolidated Petitioners addressed the standard, it does not appear a convincing case could be made for interlocutory review. Our case law is clear that "the rejection or admission of a contention, where the Petitioner has been admitted as a party and has other contentions pending, neither constitutes serious and irreparable impact, nor affects the 'basic structure of the proceeding in a pervasive and unusual manner.'"[179] However, Consolidated Petitioners will have the opportunity to appeal the Board's contention admissibility rulings at the end of the case pursuant to 10 C.F.R. § 2.341(b).[180]

III. CONCLUSION

In conclusion, we *affirm* the Board's ruling on standing with respect to all petitioners, with the exception of Owe Aku and WNRC. With respect to those two organizations, we *remand* the matter to the Board so it may give them the opportunity to provide affidavits authorizing representation in this proceeding.

We *reverse* the Board's decision to admit the following contentions: Tribe Environmental Contention B, Tribe Environmental Contention E, Consolidated Petitioners' Environmental Contention E, Consolidated Petitioners' Miscellaneous Contention K, and Consolidated Petitioners' Safety Contention A. We further direct the Board to grant Crow Butte's motion for summary disposition of Consolidated Petitioners' Miscellaneous Contention G. We *affirm* the

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[179] *Indian Point*, CLI-08-7, citing *Exelon Generation Co., LLC* (Early Site Permit for the Clinton ESP Site), CLI-04-31, 60 NRC 461, 466-67 (2004). *See also Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), 65 NRC 10, 12 (2007); *Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), CLI-00-2, 51 NRC 77, 79-80 (2000).

[180] *See, e.g., Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-873, 26 NRC 154 (1987).

Board's admission of the remaining contentions. Finally, we *reject* Consolidated Petitioners' appeal, without prejudice to their ability to file a petition for review following the issuance of the Board's final initial decision in this matter.

IT IS SO ORDERED.

For the Commission

[SEAL] **/RA/**

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Annette L. Vietti-Cook
Secretary of the Commission

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