December 31, 2009

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
Northern States Power Co.	)	Docket Nos. 50-282-LR
	)	50-306-LR
(Prairie Island Nuclear Generating Plant,	)	
Units 1 and 2)	)	ASLBP No. 08-871-01-LR
	)	

PRAIRIE ISLAND INDIAN COMMUNITY'S REPLY IN SUPPORT OF MOTION FOR LEAVE TO FILE NEW CONTENTIONS ON NRC'S DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT

I. BACKGROUND

On December 14, 2009, in accordance with the Licensing Board Order of November 4, 2009,[1] the Prairie Island Indian Community ("Community," "Tribe," or "Petitioner") submitted new contentions on the Nuclear Regulatory Commission ("NRC" or "NRC Staff") Draft Supplemental Environmental Impact Statement.[2] Northern States Power Company ("NSP" or "Applicant")[3] and the NRC Staff[4] each submitted answers opposing the Community's New Contentions.

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[1] Licensing Board Order (Conference Call summary and Scheduling Order) (Nov. 4, 2009) (unpublished).
[2] Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants, Supplement 39, Regarding Prairie Island Nuclear Generating Plant, Units 1 and 2, Draft Report for Comment, NUREG-1437, Supplement 39 (October 2009).
[3] Northern State Power Company's Answer Opposing the PIIC's New Environmental Contentions (December 24, 2009) ("NSP Answer").
[4] NRC Staff's Answer to the Prairie Island Indian Community's Motion for Leave to File New Contentions on NRC's Draft Supplemental Environmental Impact Statement (December 24, 2009) ("NRC Answer").

The Community's Motion for Leave to File New Contentions on the NRC's Draft Supplemental Environmental Impact Statement ("DSEIS") included an introduction setting certain background information, as well as a summary of some of the disproportionate risks and costs associated with the PINGP's continued operation that are borne disproportionately by the Community. While dismissed by NSP as a mere "recitation of grievances dating back to the 1950's,"[5] the background information was intended to bring into focus the significant cumulative and integrated impacts that the PINGP's past and continued operation has had and will have on the Tribe as a "minority population." As set forth in the Community's Motion and also more fully below, this discussion of "cumulative impacts" on a specific minority population and federally-recognized Indian Tribe located within a 1 to 2 mile radius of the PINGP is certainly relevant under applicable regulations and policy for evaluating environmental justice considerations.

The Community acknowledges that many of the cumulative impacts may be individually assessed in other proceedings outside the scope of license renewal, and that Applicant's compliance with certain legal and regulatory requirements will be reviewed and evaluated by other state or federal agencies. Nevertheless, to accurately assess the cumulative and integrated impacts of the PINGP's continued operation from an environmental justice perspective, a consideration and analysis of all impacts and insults is required. For example, if NSP has repeatedly violated the NPDES permit limits on discharge of cooling water, then those violations could be raised with the Minnesota Pollution Control Agency when NSP seeks to renew that permit.[6] Indeed, even if the thermal discharge were within permitted levels, the impact on the

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[5] *See* NSP Answer at 2, n. 2.

[6] To the best of the Community's knowledge, NSP has never conducted follow up studies to demonstrate that the construction of the discharge channel in the 1980s achieved whatever

surface waters used by Community members or adjacent to the Community's lands would still represent an adverse impact that falls disproportionately on the Community.

While disregarding most of the Community's "grievances," NSP nevertheless misrepresents (as it did in the proceedings before the Minnesota Public Utilities Commission) the conclusions of the Minnesota Department of Health's ("MDH") study of cancer rates in Goodhue County.[7] Interestingly, NSP does not dispute that the latest and best available health physics monitoring technology could be used to upgrade and improve the environmental and radiation health monitoring technology in and around the PINGP.[8] Instead, NSP misrepresents that the MDH has concluded "that there is no significant additional cancer risk associated with living near the Prairie Island Plant."[9] Such a conclusion would completely contradict *the limitations that MDH identified* in its own study. Specifically, the MDH noted:

> It is important to emphasize that the analyses of cancer occurrence described above were undertaken to respond to claims of elevated cancer rates, and not to confirm or refute the safe operation of a nuclear power plant.

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purpose for its design and construction. The DSEIS does not include any monitoring data or model results on this issue.

[7] *See* NSP Answer at 2, n. 2.

[8] Despite generating hundreds of millions of dollars in annual revenues and profits from the PINGP, and despite pledging $750 million dollars to plant and system improvements, NSP refuses to spend *any* funds for *any* improvements for improved environmental and health monitoring. NSP nevertheless questions *the Community's* financial commitment to such efforts in these and other proceedings? NSP correctly notes that $100,000 of the settlement payment to the Community was designated for a health study, emergency management activities, and other PIIC purposes, but unfortunately goes on to say that "the PIIC has never used this money to conduct the health studies for which it was intended." While perhaps no response is warranted for this gratuitous and self-serving statement, the Community can assure NSP that the Community's various efforts to protect its people and lands (including a preliminary health study, emergency management activities, efforts in these and other proceedings to identify the shortcomings in the old, existing environmental and health monitoring equipment and systems and the need for the best available technology) have required the Community to expend considerable resources. Of course, the Community, unlike NSP (which annually receives hundreds of millions of dollars in revenues and profits as a result of the operation of the PINGP), must also utilize its own resources to support its efforts.

[9] *Id.*

* * * *

> While this report provides extensive data on county-wide cancer occurrence, it does not address cancer occurrence for particular populations or regions *within* the county. It does not address cancer occurrence among various racial groups in Goodhue County.

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> This report also does not address cancer rates specifically among the Prairie Island Indian Community (Prairie Island Mdewakanton Dakota Community). (*Cancer Occurrence in Goodhue County* at 2-3 (emphasis in original)).

These limitations, standing alone, reveal that the at-risk populations that reside at or near the PINGP need to be the focus of a study using the best available health physics monitoring technology.

II. ARGUMENT

A. Contention 1 Requesting the NRC to Require the Applicant to Implement Mitigating Techniques Is an Admissible Contention.

Despite the arguments of the Applicant and the Staff, the Community believes that Contention One meets the standards for the admission of new contentions in 10 C.F.R. 2.309(f)(2). Contention One is based on data or conclusions in the DSEIS that differ significantly from the data or conclusions in the Applicant's environmental report. Therefore, it meets the standards in 10 C.F.R. 2.309(f)(2). The Applicant makes much of the fact that the Environmental Report ("ER")[10] identified environmental impacts, and in some cases, spoke to the mitigation of impacts.[11] However, the Applicant's ER did not have any analysis of the environmental impacts of its proposed license renewal from an environmental justice perspective

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[10] *See* Prairie Island Nuclear Generating Plant License Renewal Application, Appendix E.

[11] Although the Community cited and discussed various methods of mitigating impacts that were included in the DSEIS and ER in its Motion for Leave to File New Contentions on NRC's Draft Supplemental Environmental Impact Statement, *see* Motion at 8-13 and n. 9, counsel erroneously omitted Exhibit A summarizing the mitigation ideas and opportunities from its filing. Exhibit A was subsequently provided to opposing counsel, and is also attached hereto to avoid any confusion.

– either of single impacts or of cumulative impacts – nor of any mitigating strategies for those impacts. The Applicant previously argued, unsuccessfully,[12] that it did not have an obligation to evaluate environmental justice impacts. Now the Applicant would attempt to deprive the Community, based solely on a misguided procedural basis that elevates form over substance, from raising its concerns that the impacts and mitigation strategies in the DSEIS still fail to adequately address environmental justice – the cumulative and integrated impacts on the Community, and the insufficient mitigation of those impacts.

Furthermore, it is only the NRC that can require the Applicant to mitigate impacts. While as a Cooperating Agency the Community argued that the federal trust responsibility required additional mitigation of the disproportionate impacts on the Community, the NRC stated that its mere compliance with statutes and regulations was sufficient. Those interactions occurred during the drafting of those sections of the DSEIS that the NRC had determined included topics within the scope of the Community's Cooperating Agency status,[13] as opposed to the entire DSEIS. Moreover, *the content and specific language of the final DSEIS was determined solely by the NRC*, including all analysis and conclusions regarding impacts, alternatives and mitigation. Indeed, the DSEIS is replete with direct, block quotes from the Community devoid of any analysis by the NRC or, except where specifically referenced, any indication that the NRC's analysis or conclusions rely upon, or are in any way based upon, the Community's contributions. As such, there never was a final, filed statement until the DSEIS was publicly available. Consequently, the Community necessarily had to wait for the DSEIS in

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[12] Northern States Power Co. (Prairie Island Nuclear Generating Plant Units 1 and 2), LBP-08-26, 68 NRC 905 (2008); Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), LBP-08-26, NRC (2009).

[13] *See* Memorandum of Understanding Between the U.S. Nuclear Regulatory Commission and the Prairie Island Indian Community as a Cooperating Agency, U.S. Nuclear Regulatory Commission, June 14, 2008.

order to raise its concerns regarding the adequacy of the NRC's determination of its responsibility, if any, to require mitigation of impacts on an environmental justice community.[14]

On the substantive issues, the Community's arguments are twofold. First, as set forth in Contention One, the NRC did not adequately evaluate environmental justice impacts from a cumulative perspective, as required by the National Environmental Policy Act ("NEPA")[15], and that, with respect to the impacts from refurbishment, did not correctly identify the impacts as disproportionately high and adverse on t the Prairie Island Indian Community as a "minority population."[16] The Community contends that these deficiencies contravene the NRC's Policy Statement on Environmental Justice,[17] as well as the Office of Nuclear Reactor Regulation Office Instructions on environmental justice.[18] The Community's second substantive argument is that the NRC has an obligation to ensure the mitigation of environmental justice impacts.

NEPA, the associated regulations of the Council on Environmental Quality ("CEQ"), and NRC practice and policy[19] address the analysis of cumulative impacts in an environmental impact statement. Under CEQ regulations, "cumulative impact" is defined as the:

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[14] Indeed, it is nonsensical to suggest that the Community would need to file separate contentions on successive, preliminary drafts of a document that would not be finalized months later.
[15] 42 U.S.C. Section 4321 *et seq*.
[16] Note that the Executive Order on environmental justice not only refers to "low income populations" and "minority populations," but also to "Native Americans." Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," 59 Fed. Reg. 7629 (February 16, 1994).
[17] Policy Statement on the Treatment of Environmental Justice Matters in Regulatory and Licensing Actions, U.S. Nuclear Regulatory Commission, 69 Fed.Reg. 52040 (August 24, 2004).
[18] "Procedural Guidance for Preparing Environmental Assessments and Considering Environmental Issues," Appendix D, NRR Office Instruction, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, LIC-203, Revision 1 (2004), the instructions to NRC staff for evaluating potential environmental justice impacts. *See also* Environmental Standard Review Plan, Section 5.8.3 "Environmental Justice Impacts," U.S. Nuclear Regulatory Commission, NUREG-1555, Rev. 1 (July 2007).
[19] *Id*. at D-10; at 5.8.3-5.

> …impact on the environment which results from the incremental fact of the action ***when added to other past, present, and reasonably foreseeable future actions*** regardless of, what agency (federal or non-Federal) or person undertake such actions. ***Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time***.[20]

The agency must consider the overall impact that can be expected if the individual impacts are allowed to accumulate.[21] In the environmental justice context, the NRC must analyze the cumulative impact of all the many impacts identified in the DSEIS on the "minority population" – the Prairie Island Indian Community – regardless of how small an individual impact might be. This cumulative impact analysis should also address modifying or adding alternatives to avoid, minimize, or mitigate cumulative effects. Although the Community endeavored to provide the NRC with one perspective on cumulative effects and environmental justice as part of its responsibilities as a "cooperating agency,"[22] in the final DSEIS the NRC has neither performed any analysis of cumulative effects from an environmental justice perspective nor implemented adequate mitigation of those cumulative effects.[23]

In addition to the failure of the NRC to analyze the cumulative effects from an environmental justice perspective, as noted in our original pleading there is also one disproportionate impact specifically identified by the NRC that we believe is mischaracterized.

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[20] 40 C.F.R. 1508.7 (emphasis added).
[21] Fritiofson v. Alexander, 772 F.2d 1225 (5th Cir. 1985).
[22] *See* Memorandum of Understanding.
[23] It would be appropriate at this point to respond to Applicant's statement in its Answer that the "…PIIC's own analysis does not support this Contention."[23] While the Community appreciates the Commission's decision to designate it as a "cooperating agency," and the sincere and stalwart efforts of the NRC staff to discuss Community environmental justice concerns, the Cooperating Agency agreement did not cover the full scope of the DSEIS. The Community did not have access to many areas of the pre-publication draft of the DSEIS, and was not able to engage in the discussion of these impacts with the NRC staff. In addition, the NRC did not independently evaluate the Community's concerns. The Community's comments were simply inserted into the DSEIS without any indication of whether the NRC agreed or disagreed with those comments. In short, the Applicant assigns a far greater weight to the "PIIC's own analysis" than is justified.

In its analysis of the impacts on "Public Services – Transportation,"[24] the NRC identifies the impacts as ranging from SMALL to MODERATE. These impacts would result from the traffic associated with the additional workers needed for the refurbishment activities of replacing the steam generators.[25] MODERATE impacts are those where the environmental effect are "sufficient to alter noticeably, but not to destabilize important attributes of the resource".[26] The NRC also identifies several mitigating strategies to alleviate the impact of refurbishment. [27]

In Section 3.2.10 of the draft SEIS, the NRC notes that these SMALL to MODERATE refurbishment impacts could disproportionately affect the Community and that the Community could also experience the increased noise level from steam generator replacement activities.[28] The NRC concludes that these impacts are of "short duration and are not expected to be high."[29] The Community does not believe that just because an impact has a short duration that its impact will not be "high and adverse." According to the draft SEIS, Federal agencies are responsible for identifying and addressing potential disproportionately high and adverse human health and environmental impacts on low-income and majority communities.[30] "Disproportionately high and adverse environmental effects" are those that appreciably exceed the environmental impact on the larger community.[31]

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[24] *See* DSEIS at 3-7.
[25] *Id*. at 3-2 to 3-3.
[26] *Id*. at 1-4.
[27] *Id*. at 3-8.
[28] *Id*. at 3-9.
[29] *Id*.
[30] *Id*. at 4-33.
[31] *Id*. This definition is drawn from Council on Environmental Quality (CEQ) guidance, "Environmental Justice: Guidance Under the National Environmental Policy Act (NEPA)", Council on Environmental Quality (1997).

The Community disagrees with the NRC conclusion that there "exists no disproportionately high and adverse impacts to the PIIC."[32] The Community believes that the potential for a MODERATE impact due to the refurbishment activities discussed above, qualifies as a disproportionate high and adverse impact under the NRC criteria. i.e., it "appreciably exceeds the environmental impact on the larger community."[33] It is not only the individual members of the Community that will be affected by the applicant's refurbishment activities, but also the Community's resort enterprise. Not only are safety considerations involved, but also significant economic resources. The fact that the impact is of short duration does not mean that it isn't significant and unacceptable. We have seen no data in the Applicant or Staff Answers that changes our assertion on this point.

Finally, as noted in our pleading, the Community believes that the NRC has obligation to take special care that the Applicant implements the mitigation strategies identified in the DSEIS. The DSEIS identifies numerous methods for mitigating the impacts discussed in the document. However, the NRC does not require the Applicant to adopt any of these mitigation strategies. The only mitigation required of the Applicant is that imposed as part of the settlement of the Community's original Contention One on cultural resources,[34] and not because of any action by the NRC.

The Community repeats and relies upon the statements of the Commission cited in our initial pleading. In characterizing the legal nature of the Policy Statement noted, the

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[32] Id. at 4-39. Note that the NRC would have classified the MODERATE impact on cultural and archeological resources as disproportionately high and adverse but did not do so because of the Applicant' s commitment to mitigation strategies. What the Community desires in regard to the potentially MODERATE impact from refurbishment is the same type of commitment of the applicant to mitigation.
[33] Supra note 18.
[34] *See* DSEIS at 4-32, line 32.

Commission stated that "…it does not de-emphasize the importance of adequately weighing ***or mitigating*** the affects of a proposed action on low income and minority communities by assessing impacts peculiar to those communities."[35] Furthermore, in the licensing context, the NRC's focus is not merely on full disclosure of environmental impacts associated with a proposed action, as required by NEPA, but also "… ***[t]o take care to mitigate or avoid*** special impacts attributable to the special character of the community."[36] For example, this responsibility to mitigate was characterized by the NRC in an Environmental Impact Statement on a new reactor licensing action as follows:

> In its environmental reviews, the NRC considers demographic and economic circumstances of local communities where nuclear facilities are to be sited ***and takes care to ensure that the license applicant mitigates or avoids special impacts attributable to the special character of those communities***.[37]

In the case of the PINGP license renewal, how is the NRC "taking care" to ensure that special impacts to the minority community are mitigated? Mitigation strategies are merely identified in the DSEIS. There is no effort of the NRC to require that the Applicant address these mitigation strategies. Essentially, the NRC identifies mitigation possibilities and then leaves the playing field. This is not consistent with the intent of Commission's Policy Statement. The Community's view is not just a "generalized view of what applicable policies should be" as argued in the staff Answer.[38] Instead, the Community simply seeking to require the NRC to follow the commitments made on the face of its environmental justice policy – of mitigating the effects of a proposed action on low income and minority communities.

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[35] Supra note 16 at 52042 (emphasis added).
[36] *Id*. at 52044 (citing Private Fuel Storage L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-20, 56 NRC 147, at 156 (2002) (emphasis added).
[37] Final Environmental Impact Statement for an Early Site Permit (ESP) at the North Anna ESP Site, U.S. Nuclear Regulatory Commission, NUREG-1811, Vol. 2, at 225 (December 2006) (emphasis added).
[38] *See* NRC Answer at 12.

There is no assurance that the Applicant will implement any of the mitigation strategies. Far in advance of any litigation in this case, the Community had attempted to negotiate with the Applicant on the adoption of some fairly basic mitigation strategies. The Applicant was not receptive to adopting any mitigation strategies voluntarily. It was only after the Board admitted the relevant Community contentions that the Applicant showed any interest in negotiating mitigation strategies.

The staff and Applicant also argue that Contention 1 is unsupported by fact or expert opinion. We would only note that a long line of NRC cases have affirmed the proposition that "[e]xpert support is not required for admission of a contention; a fact-based argument may be sufficient on its own." Crow Butte Resources, Inc. (North Trend Expansion Project), LBP-08-06, 67 N.R.C. 241, 317 (citing Oconee, CLI-99-11, 49 N.R.C. at 342). Furthermore, a petitioner is not "require[d]… to prove its case at the contention stage, Yankee Atomic Electric Co. (Yankee Nuclear Power Station), CLI-96-7, 43 N.R.C. 235, 249 (1996), and "need not proffer facts in formal affidavit or evidentiary form sufficient to withstand a summary disposition motion." Id. (citing Georgia Tech, CLI-95-12, 42 N.R.C. at 118). The Community believes that it has shown sufficient information to show that a genuine dispute exists and reasonably indicating that a further inquiry is appropriate. *See* Id. (citing Costle v. Pacific Legal Foundation, 445 U.S. 198, 204, 100 S.Ct. 1095, 63 L. Ed. 2d 329 (1980); Vermont Yankee Nuclear Power Corp. v. NRC, 435 U.S. 519, 554, 98 S. Ct. 1197, 55 L. Ed. 2d 460 (1978)). Finally, as previous NRC case law has emphasized, "[a]lthough the requirements of [10 C.F.R. Part 2] must ultimately be met, every benefit of the doubt should be given to the potential intervenor in order to obviate dismissal of an intervention because of inarticulate draftsmanship

or procedural or pleading defects." Sequoyah Fuels Corp. (Gore, Oklahoma Site Decontamination and Decommissioning Funding), LBP-94-8, 39 NRC 116 (1994).

B. Contention 2 Regarding the Inadequacy of evaluation of Tritium Monitoring in the ER and DSEIS Is an Admissible Contention.

The Community's second contention focuses on our concern with the leakage of tritium into groundwater and into the Community's drinking water. The staff and Applicant raise several objections to this concern, including the Category 1 issue objection. At the heart of the Community's rationale for this contention are environmental justice concerns. The Applicant may think that the environmental justice basis for Community contentions is some type of "blue smoke and mirrors" deception to somehow sneak an objection into the proceeding. However, when the facility of interest is in close proximity to a designated "minority population" and Native American Tribe, the reality to be dealt with is environmental justice. This is the lens through which the Community's contentions must be viewed.

Tritium has been found in the Community's drinking water, and the Community did not put it there. In the late 1980s, early 1990s time frame, above normal background levels of tritium were detected in wells around the PINGP. Although the detected levels were below the EPA standard of 20,000 pico curies per liter (pCi/L), the range detected (1,300 – 1500 pCi/L) was above what was detected in other wells (300 – 400 pCi/L). Tritium is still detected in observation wells. Community members are concerned with the history of leakage of tritium from PINGP for which no adequate explanation has yet been given. Even though the Radiological Environmental Monitoring ("REMP") Reports state that the tritium results are far below the EPA drinking water standard, the Community is concerned about how the tritium is getting into the groundwater, why the concentration of detected tritium fluctuates so dramatically, and what is the best way to monitor the leakage to ascertain the source of the

leakage, determine precisely whether, how and to what extent the tritium migrates adjacent lands, and to ensure that the levels of tritium do not exceed the EPA standards over time. According to the 2006, 2007, and 2008 REMP, tritium results for PINGP on-site well P-10 have been relatively high (3773 pCi/L (2006), 2258 pCi/L (2007), and 2060 pCi/L (2008)) compared with the two off-site indicator locations 2 miles away (ranging between <19 pCi/L and 59 pCi/L) and 13 miles away (ranging between <19 and 46 pCi/L).

The first application of environmental justice to this contention is on the objection of staff and applicant to the admissibility of the contention because it is a "category 1" issue. However, when site-specific issues, such as environmental justice, are concerned, the Category 1 issue must be evaluated on a site-specific basis. Therefore, no waiver is necessary. Adding further emphasis to the need to look at this issue from a site-specific basis is the concern expressed over radionuclide releases to groundwater in the NRC's proposed rule modifying the provisions for the environmental review of license renewal applications. The proposed rule would make radionuclides released into groundwater a category 2 issue.[39] This change in regulatory approach was largely driven by the spate of tritium releases at nuclear power plants. As stated by the NRC, "[t]he NRC did identify that under the existing regulatory requirements, the potential exists for inadvertent radionuclide releases to migrate offsite into groundwater."[40] The Community realizes that this is a draft GEIS and a proposed rule. We are not arguing that it has a legal application to this proceeding. However, the Community contends that the concern expressed by the NRC in the proposed rule concerning the evaluation of tritium releases to

[39] Revisions to Environmental Review for Renewal of Nuclear Power Plant Operating Licenses, U.S. Nuclear Regulatory Commission, 74 Fed. Reg. 38117, 38122 (July 31, 2009).
[40] *Id*. at 38123.

groundwater should be given life in the environmental justice analysis in this license renewal proceeding.

In terms of the timing of the contention, the Community believes that it meets the standard in 10 C.F.R. 2.309(f)(2), the data in the DSEIS differ significantly from the data in the ER. The ER contains no information about tritium in groundwater or tritium leaks. Chapters 2 and 4 of the DSEIS address the leakage of tritium. This is the trigger for the timing of this contention.[41]

The Community's concern is that the impacts of the continuing leakage of tritium have not been properly evaluated or corrected. Until this happens, the only assurance for the prevention of potential impacts on the Community, a designated "minority population," is implementation of the mitigating strategy of effective monitoring. The difference between the situation cited in the Applicant's Answer on radiation monitoring at Monticello[42] and the present case, is that here there is a "minority population" involved and effective monitoring is a key mitigation strategy.

Applicant and NRC Staff both contend that the Community's concerns about tritium leaks, tritium migration and tritium contamination fall short of stating an admissible contention. Indeed, both claim that the Community must do more to demonstrate that better, more effective monitoring is available. Neither NSP nor NRC Staff will affirmatively state that the current

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[41] Applicant nevertheless contends that the Community should have raised any concerns about tritium earlier in these proceedings. This argument lacks merit. The Community has consistently expressed its concerns about tritium releases and tritium contamination, and continued to do so in its scoping comments and during consultations as a cooperating agency. While the NRC ultimately determined that the Community's concerns about tritium were outside the scope of license renewal – a determination with which the Community respectfully disagrees – the NRC's position was not "finalized" until the DSEIS was filed and publicly available. *See, e.g.*, discussion at pp. 4-5, above.

[42] NSP's Answer 36.

monitor program utilizes the best available technology, or that the monitoring system is the best available. Neither the Applicant nor NRC Staff will affirmatively state that no additional improvements of any kind can be made to improve the accuracy or sensitivity of the monitoring equipment, or to improve the utility of the data by generating monitoring information on a real-time basis along with pertinent plant information (i.e. the precise timing, concentration and duration of planned or unplanned releases) and corresponding environmental and meteorological conditions to provide clear, accurate baselines, exposure pathways and offsite dose calculations. Is better monitoring technology available? Is more sensitive monitoring equipment available? Is there effluent monitoring equipment available that can provide real-time measurements linked and coordinated on a computer network with meteorological conditions and other pertinent data to provide clear, accurate baselines for tritium releases, tritium contamination, radioactive effluent, and thermal effluent? The number one priority for both NSP and the NRC is public safety. NSP generates hundreds of millions of dollars of revenues, profits and taxes every year through the operation of the PINGP. Considering that NSP is a nuclear power plant operator reaping the financial rewards of the PINGP's operation and that the NRC is the regulator charged with ensuring the safe operation of the PINGP, it would seem that both NSP and the NRC would be in a much better position that the Community to know the answers to these questions. Yet rather than answer these straightforward questions, the Applicant and the NRC Staff instead challenge the Community for raising these concerns. This is an environmental justice issue because tritium releases, tritium contamination, radiological releases, radiological contamination, thermal releases and thermal pollution are most acute – and the impacts are most disproportionately experienced – in the immediate vicinity of the plant. So the "current monitoring complies with all applicable regulations" mantra rings hollow for the Community.

Can we do better? Can more be done? Can we provide a more accurate assessment of what is happening in the immediate vicinity of the PINGP? Can we have a more accurate assessment and baseline of exposure pathways and dose estimates based on real data as opposed to formulas, models and manuals? In order to achieve ALARA, wouldn't having better, more accurate monitoring data support and promote that objective?

The NRC also criticizes the Community for "seizing" upon one isolated quotation in the Environmental Justice/Subsistence section. Usually subsistence relates to native or minority populations and the consumption of fish/wildlife on a subsistence level because subsistence consumers would be at greater risk. The City of Red Wing was not identified as a minority population, so the use of tritium results for Red Wing in the Environmental Justice/Subsistence section seems out of place.

The NRC also questions why the Community would need more monitoring or timely data. First, groundwater can flow towards the Mississippi (north) under certain conditions, not just away from the PINGP toward the southwest. Why else did the tritium end up in the tribe's water in the late 1980s? The precise point and purpose of monitoring wells on the PIIC-PINGP boundary is to detect tritium that may be migrating towards the PIIC. Second, the Community gets the REMP reports a year after samples are collected. Where is the harm with providing provisional data to the Tribe? What is the harm in providing additional monitoring sites, more sensitive monitoring equipment, or real-time data that is linked on a computer network with plant operational data and environmental and meteorological information?

C. Contention 3 Regarding the Inadequacy of Estimates of Dose Exposures for All Individuals Who Live Within 3 Kilometers of All Sources of Emissions Is an Admissible Contention.

"The premise of environmental justice is that communities with high concentrations of racial or ethnic minorities or low-income families are disproportionately exposed to a variety of environmental burdens and hazards."[43] As the Committee on Environmental Justice of the Health Sciences Policy Program found, "as assessment of baseline data is therefore essential to ascertaining the relative role of environmental exposure in determining the health of a population."[44] Moreover, as required in Subpart H of 40 C.F.R. Part 61,[45] "[t]he characterization of exposure in the community requires an understanding of all of the potential pathways by which pollutant releases may result in exposure."[46] This understanding must include direct pathways (air and drinking water) as well as uptake by food sources.[47] In fact, according to the Committee on Environmental Justice, "[a] more accurate description of the amount of toxicants absorbed requires data on *actual* doses received by humans."[48] While "[p]roximity to a source is an inexact surrogate of actual contact with toxicants from [a] source [or sources]" . . . "[q]uantification of the actual emissions from the source moves the analysis a step closer to measuring actual human exposure to an environmental health hazard."[49] As a minority population with a large number of individuals residing within a 3 km radius of the PINGP and its ISFSI, more accurate dose estimates for the Community should be required in order for the NRC to fulfill a complete and thorough environmental justice analysis.

III. CONCLUSION

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[43] Committee on Environmental Justice, Health Sciences Policy Program, Health Sciences Section, Institute of Medicine, Toward Environmental Justice: Research, Education and Health Policy Needs (National Academy Press 1999) at 11.
[44] *Id.*
[45] While the Community realizes that 40 C.F.R. Part 61, Subpart H applies to facilities owned and operated by the Department of Energy,
[46] *Id.* at 17.
[47] *Id.*
[48] *Id.*
[49] *Id.* at 16.

For the foregoing reasons, the Community's new contentions based on the NRC's draft Supplemental Environmental Impact Statement should be admitted in their entirety.

Respectfully Submitted,
/*Signed electronically by Philip R. Mahowald*/

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Dated: December 31, 2009

EXHIBIT A

I. Mitigation Ideas and Opportunities Identified by NSP in the Environmental Report and by the NRC in the Draft Supplemental Environmental Impact Statement.

Chapter 3, Refurbishment

3.2.1 Terrestrial Resources – Refurbishment Impacts (page 3-3, line 41)

A few mitigation measures that cold reduce impacts to the terrestrial environment during construction of the temporary facilities include silt fences to minimize sediment transport, the use of best management practices, and revegetation of cleared land remaining after completion of construction. These mitigation measures could reduce impacts by reducing erosion and minimizing the movement of sediment, nutrients, and pollutants.

3.2.2 Threatened and Endangered Species

Section 3.2.2.1, Terrestrial Species (page 3-4, line 28)

Possible mitigation measures that could reduce impacts include undertaking the SGR project outside the peregrine falcon breeding season, and minimizing activities that may cause significant noise during mid-day hours when peregrine falcons are more likely to hunt for food.

Page 4-23 of ER. Xcel plans to conduct the Unit 2 SGR project outside the March – July falcon breeding period. Thus the SGR project will not impact falcon breeding activities. In Summary, NMC concludes that impacts to terrestrial resources from refurbishment activities would be SMALL and do not warrant mitigation.

Section 3.2.2.2, Aquatic Species (page 3-5, line 1)

Mitigation measures that could reduce impacts to aquatic threatened and endangered species during transport and offloading of the steam generators include ensuring that the barges do not approach the site of the Higgins eye relocation project, described in Section 2.2.7.

3.2.3 Air Quality During Refurbishment (page 3-6, line 19)

NRC staff identified a variety of measures that could mitigate potential air quality impacts resulting from the SGR project: best management practices and implementation of dust control plans to minimize emissions from construction activities, the use of multi-person vans and the implementation of shift changes for the workforce to reduce the number of vehicles on the road at any given time. NRC staff did not identify any cost-benefit studies applicable to these mitigation measures.

Page 4-30 of ER. Identified some best management practices (seeding and wetting). No additional mitigation was deemed warranted.

3.2.7 Public Services – Transportation (page 3-8, line 14)

Suggested mitigation includes: staggering NSP work schedules, use NSP employees and/or local police to direct traffic entering and leaving PINGP to minimize level of service impacts on Sturgeon Lake Road, during periods of high traffic volume. NSP could work with the PIIC to establish additional mitigation measures, such as developing an agreement to coordinate shift changes, coordinate events, identify days where traffic volume is expected to be high, or use traffic control staff.

Page 4-52 of ER. States that there could be problems with traffic flow along Sturgeon Lake during shift changes, due to increased volume of traffic and lack of signals. Further states that increased traffic flows could be mitigated by using local police officials to direct traffic during shift changes, if necessary.

3.2.9 Historic and Archaeological Resources

No specific "mitigation" measures identified by NRC, other than new corporate procedures and instructions.

Page 4-55 of ER. "NMC concludes that refurbishment activities would not impact cultural resources and no mitigation measures would be warranted beyond those prescribed in NMC's "Excavation and Trenching Controls" procedure.

Chapter 4, Continued Operation

Section 4.5.2 Entrainment and Impingement (page 4-11, line 10)

Potential mitigation could include operating in closed cycle more often, using the fine-mesh screens for a longer period of time, reducing intake velocities, and operating under reduced intake flows. NRC did not identify any cost-benefit studies applicable to these mitigation measures. The SEIS noted that it is the responsibility of the MPCA to impose any restrictions or modifications to the cooling system to reduce the impact of entrainment and impingement under the NPDES permitting process.

Page 4-15 of ER. Identifies no mitigation, beyond 316(b) demonstration and determination (NPDES permit).

Section 4.5.3 Heat Shock (page 4-13, line 4

Additional mitigation (beyond what PINGP does now—closed and helper cycle cooling and flow limitations) could include operating the closed cycle more often and operating under reduced intake flows. NRC staff did not identify any cost-benefit studies applicable to these mitigation measures. The SEIS noted that it is the responsibility of the MPCA to impose any restrictions or modifications to the cooling system to reduce the impact of heat shock under the NPDES permitting process.

Page 4-21 of ER. No further mitigation is necessary, beyond NPDES permit conditions.

4.7 Threatened or Endangered Species

4.7.1 Aquatic Species Page 4-17, line 2-10)

This section references mitigation ideas in Section 4.5.2 (entrainment and impingement). Otherwise, nothing specific identified other than to state that the FWS could issue a Biological Opinion (BO) for the Higgins eye mussel in response to the NRC's Biological Assessment. The FWS evaluates whether there are reasonable and prudent measures to further minimize the impact of the PINGP cooling system on the Higgins eye, and these measures would be specified in the terms and conditions of the BO.

Page 4-27. NMC concludes that mitigation is not warranted.

Section 4.8.2 Microbiological Organisms – Public Health (Page 4-23)

The NRC identified one additional measure that could mitigate potential human health impacts from thermophillic microbiological organisms from continued operation of the PINGP: periodic monitoring for thermophillic bacteria in the water and sediments in and near the discharge canal. NRC staff did not identify any cost-benefit studies applicable to this mitigation measure.

Page 4-33 of ER. NMC concludes that mitigation is not warranted.

4.8.3 Electromagnetic Fields – Acute Shock (Page 4-24, line 7)

The NRC identified a variety of measures that could mitigate potential acute electromagnetic field impacts resulting from continued operation of the PINGP 1 and 2 transmission lines. Mitigation measures would include erecting barriers along the length of the transmission lines to prevent unauthorized access to the ground beneath the conductors, installing road signs at road crossings, and raising the elevation of the lowest energized conductor to increase the distance between it and a potentially exposed individual directly beneath it. These mitigation measures could reduce human health impacts by minimizing public exposures to electric shock hazards. NRC staff did not identify any cost-benefit studies applicable to this mitigation measure.

Page 4-36 in ER. No additional mitigation is warranted. (Procedures are in place for checking for encroachment, ground inspections, aerial patrols).

4.9.6 Historic and Archaeological Resources (Page 4-32, line 20)

Draft SEIS discusses includes new NSP commitments (37, 38, 39, 40), not really identified as mitigation measures. Draft SEIS states that NSP could mitigate MODERATE impacts by training NSP staff in Section 106 consultation process, and cultural awareness training to ensure to ensure that informed decisions are made when considering the effects of continued operations and maintenance on historic and archaeological resources. In addition, NSP would also develop a cultural resources management plan which would coordinate procedures, policies, and effectively manage and protect the archaeological sites and resources within the PING1 1 and 2. The CRMP should be developed in consultation with the NRC, PIIC, OSA, BIA and MHS. NSP should also establish a point of contact to facilitate open communication with the PIIC regarding activities that could impact historic and archaeological resources.

Page 4-56 of ER. NMC concludes that no mitigation measures would be warranted beyond those prescribed in NMC's "Excavation and Trenching Controls" procedure.

4.9.7 Environmental Justice (page 4-35, line 38)

Draft SEIS acknowledges that there may be potential for disproportionate impacts to the PIIC, because of its proximity to the PINGP and its uniqueness. Cites the SMALL impacts (land, air, water, ecology, human health, and socioeconomics) and the MODERATE impact to archaeological resources. Reiterates the applicant's mitigation strategies discussed in 4.9.6 (archaeological). Mentions traffic increases during refurbishment (short duration). Otherwise, no mitigation is offered.

4.11.4 Cumulative Socioeconomic Impacts (page 4-52, line 6)

Reiterates concern for potential impacts to archaeological impacts from continued operation and commitments made by NSP.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of	)	
	)	Docket Nos. 50-282-LR
Northern States Power Co.	)	50-306-LR
	)	
(Prairie Island Nuclear Generating Plant,	)	ASLBP No. 08-871-01-LR
Units 1 and 2)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of "Prairie Island Indian Community's Reply in Support of Motion for Leave to File New Contentions on the NRC's Draft Supplemental Environmental Impact Statement," dated December 31, 2009, was provided to the Electronic Information Exchange for service on the individuals listed below, this 31st day of December, 2009.

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/*Signed electronically by Philip R. Mahowald*/

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