



**Prairie Island Indian Community  
Legal Department**

May 8, 2009

William C. Storm, Project Manager  
Minnesota Department of Commerce  
85 7<sup>th</sup> Place East, Suite 500  
Saint Paul, Minnesota 55101-2198

Re: Comments on the draft EIS for PUC Docket E002/CN-08-509 (Extended Power Uprate) and PUC Docket E002/GS-08-690 (Site Permit Application)

Dear Mr. Storm:

The Prairie Island Indian Community (“Community” or “Tribe”) would like to offer the following comments regarding the draft Environmental Impact Statement (EIS) prepared by the Minnesota Department of Commerce, Office of Energy Security (OES), for the above-referenced PUC dockets. At this time we are providing comments on the draft EIS for the extended power uprate docket (PUC No. E002/CN08-509, E002/GS-08-690).

The Community is limiting its EIS comments to the uprate and site permit dockets. By consolidating the dry cask storage and uprate dockets, Xcel Energy has placed the Prairie Island Indian Community in an untenable position. Although treated separately in the draft EIS, the Community finds it difficult to separate cumulative and integrated health and safety concerns, including cumulative and integrated and environmental and health impacts, that could be related to either the uprate or the expansion of dry cask storage, such as increased radiation.

Proceeding is Premature

We remain concerned that the uprate CON and site permit applications are premature. As you are aware, Xcel Energy submitted its license renewal application to the NRC in April of 2008. The license renewal application contains two elements, the safety Analysis Report (SAR) and the Environmental Report (ER), which forms the basis of the NRC’s supplemental EIS (SEIS). In fact, the NRC is currently in the process of developing the draft SEIS; a draft SEIS is expected by June 11, 2009. The NRC’s draft

Safety Evaluation Report (SER), which is an engineering analysis of the PINGP, will be issued June 7, 2009; a final SER is expected October 22, 2009.

As was correctly stated in the draft EIS, the NRC will be completing a detailed evaluation of environmental impacts, health and safety impacts, and mitigation options for the license extension review. Furthermore, the draft EIS states that the NRC has “sole regulatory authority” over radiation and safety issues of continued plant operation. Since the NRC’s review and SEIS and SER are not expected to be final until November 2009, we maintain that it is prudent to complete the State EIS and CON process after the NRC has completed its environmental, health, and safety (which includes aging management) reviews.

According to the Minnesota rules, in order for the Commission to grant the Certificate of Need for the proposed extended power uprate, the Commission must determine, among other things, that the extended power uprate “will provide benefits to society in a manner compatible with protecting the natural and socioeconomic environments, including human health.” The draft EIS, however, lacks the critical and essential analysis and review of the NRC that the OES acknowledges is with the “sole regulatory authority” of the NRC. How can the Commission make a determination that the proposed power uprate “will provide benefits to society in a manner compatible with protecting the natural and socioeconomic environments, including human health,” without the NRC’s analysis of the environmental, health and safety impacts?

Final approval from the NRC, for license extension, could come between April/May 2010 and November/December 2010, depending on whether there is a hearing. It should be noted that the Prairie Island Community has been admitted as a party to the licensing proceedings. In December 2008, the Atomic Safety and Licensing Board panel ruled that the Prairie Island Indian Community had identified seven issues (contentions) with Xcel’s ER and/or SAR that required further information and analysis. Of the seven issues, two environmental and one safety have been addressed by Xcel. There are still three safety-related contentions to be addressed by Xcel.

There is an underlying presumption in the EIS that the LRA will be approved. As stated above, the Prairie Island Indian Community has successfully intervened in the NRC proceeding and has requested a hearing. We believe that the State proceeding should wait until the NRC has completed its process to evaluate whether the PINGP can operate safely for another twenty years. This is even more important as the ER submitted to the NRC, as part of the license renewal application, contained no information about the environmental impacts of the uprate. The SAR contains some information about the uprate. The Community believes that the environmental impacts from the uprate must be fully evaluated by the NRC before the application moves forward at the state-level.

If the NRC approves the license renewal for the PINGP, the earliest date for approval would be February 15, 2010 (no hearing) or October 15, 2010 (hearing). According to the draft EIS, Xcel plans to submit its license amendment for the uprate in 2010.

We are concerned that approval of the uprate CON will be used as leverage to support the NRC license amendment request.

As we stated in our scoping comments, we wonder which state agency will do an engineering analysis to determine if the plant can handle the increased heat load resulting from the uprate. The state is being asked to approve the uprate before the NRC has determined that the plant can safely operated for an additional 20 years, at the current power level, let alone at an extended power uprate.

#### EIS is Inadequate

Too much of the information in the EIS is copied verbatim from either Xcel's Certificate of Need (CON) application to the Public Utility Commission (PUC) or its Environmental Report (ER) submitted to the NRC as part of its License Renewal Application.

According to the EIS scoping Decision, "the EIS will verify, summarize, supplement and/or incorporate by reference existing information as outlined in the Scoping EAW ad OES Treatment of Scoping Comments." We understand that there is a large body of existing information available that helps to support the State's EIS. We believe that existing data sources should have been summarized (not copied) and properly referenced. The fact that so much of the draft EIS is copied from the Applicant's sources (ER and/or CON application) casts doubt on the State's conclusions regarding unavoidable impacts from the uprate.

This draft EIS is also misleading to members of the public who have expectations about the independence and objectivity of the State's environmental review. There are too few references. There are some footnotes used, but not always and often not until the end of several paragraphs. There are even references in parentheses that were carried over from the copied sections (from the ER) that should have been removed. It seems that the draft EIS, like this proceeding, has been rushed.

Many of the conclusions made in the draft EIS are the same conclusions made by Xcel in their ER or CON application. Statements made regarding conducted studies mislead the reader into thinking that the studies were conducted by the State, when in fact they were conducted by Xcel and is stated so in the ER or CON application.

There are no consultation or concurrence letters in the draft EIS from other state agencies, such as the Minnesota Pollution Control Agency (MPCA) or the MN Department of Natural Resources (MDNR). There are conclusions made about thermal

impacts or impacts to mussels, but no supporting documentation from the agencies with expertise.

This draft EIS does not meet the requirements of Minnesota Rules 7849.5300 (EIS Preparation) or Minnesota Statutes 116D.04 (Environmental Impact Statements). This draft EIS should either be scrapped altogether or significantly revised to reflect true authorship and independent analysis. For example, where the draft EIS copies or substantially restates the statements or analysis provided by Applicant in its ER or CON application, such statements and analysis should include the introductory clause, "According to the Applicant," or other similar phrase. Likewise, the draft EIS should also clarify which portions of the draft EIS contain no independent review or analysis, such as, for example, "The OES relies on the statements and analysis provided by Applicant and has made no independent review or analysis."

#### Advisory Task Force

The Advisory Task Force (ATF), comprised of representatives from the Prairie Island Indian Community, the City of Red Wing, Lake City, Florence Township, and the public met three times during the fall of 2008. The ATF developed an exhaustive set of scoping recommendations, many of which have been ignored. The Community incorporates by reference the comments submitted by the Prairie Island Nuclear Generating Plant Study Group regarding this docket.

#### Prairie Island Indian Community

The draft EIS still contains inaccurate information about our community (land holdings, populations), because it relies on incorrect information from Xcel's 2008 ER submitted to the NRC. As we stated in our scoping comments, the tribe's land holdings total over 3,000 acres (land and water).

As we stated in our scoping comments, the CON application discusses land use planning for Goodhue and Dakota counties (MN) and Pierce County, Wisconsin, but makes no mention of the Prairie Island Indian Community. The draft EIS makes no mention of the tribe's land use-planning activities.

Section 4.6 of the draft EIS (Demographics) makes no mention of the Prairie Island Indian Community, even though we are right next door. Other population centers are mentioned (i.e., Red Wing); 250 members of the Prairie Island Indian Community reside within 3 miles of the PINGP.

#### Demand Decline and Alternatives

The alternative analysis (Section 3.0) does not adequately discuss the effect State's wind energy mandate of 2600 MW by 2020. The result of the 2020 wind mandate, 2600 MW,

is greater than two PINGP's (at current level of 1044 MW's).

The Next Generation Energy Act mandates a statewide goal of 1.5 percent annual energy savings. There is no information regarding Xcel's total energy portfolio and what effect a 1.5 percent energy savings would have on that total portfolio (i.e., total number of MW's) and how it relates to the 164 MW uprate application.

Furthermore, the conclusion reached on page 24 of the draft EIS, stating that it may be "unreasonably risky to rely on increased DSM in order to replace the energy and capacity from the PINGP EPU project" is Xcel's conclusion, not the State's (CON page 4-9).

Section 3.2 (DSM) is concluded with the statement that "it would not be practical to expect the results of the [DSM] program to be doubled or tripled in less than a year, the time remaining after the result of the Commission's Need decision." Why is this so? Does a Need decision have an expiration date? Xcel is choosing to submit its license amendment in 2010; we should not forgo an exhaustive review of alternatives to meet Xcel's timetable.

In addition, the analysis of potential alternatives to the extended power uprate in the final EIS should include actual and anticipated decline in demand reflected in Xcel's SEC filings, February 9, 2009 Resource Plan Update, and communications with the media. These sources project a decrease in demand through 2012 of at least 374 MW and as much as 500 MW as compared to Xcel's Application. The final EIS should independently and objectively review the need for the proposed power uprate and the available alternatives.

The Community also incorporates by reference Sections 6 and 7 of the Comments of the PINGP Study Group.

#### Environmental and Health Concerns

As set forth above, much of the information, including some conclusions, in the draft EIS is copied either from either Xcel's CON application to the PUC or its ER submitted to the NRC as part of its License Renewal Application. We remain concerned that there has been very little independent or objective analysis of the important environmental issues.

#### Thermal impacts

As we stated in our EIS scoping comments, the state must conduct thorough evaluation of thermal impacts to the Mississippi River resulting from the increased temperature of the circulating water discharge. There have been studies (in the early 1980's) that demonstrate that the surface waters of the river actually flow back upstream (back to Sturgeon Lake) when winds are out of the S, SE, SW, E or W (varying with the speed of the wind) – instead of distributing and discharging water discharged from PINGP

downstream, it would actually be pushed back upstream. This would certainly impact not only the thermal pollution but also the radiological effluents from the PINGP.

The Applicant constructed a discharge channel in the 1980s. How has the discharge channel affected, if at all, the thermal discharge? The PINGP continues to discharge thermal and radioactive effluent into the Mississippi River *above* Lock and Dam No. 3. However, according to the National Pollutant Discharge Elimination System (NPDES) and State Disposal System (SDS) Permit MN00004006, PINGP's heat discharge or thermal load to the river is limited by mixed river temperature *immediately below* Lock and Dam No. 3. The Community continues to question the effectiveness and logic of a monitoring scheme that does not adequately monitor and assess the thermal impacts above Lock and Dam No. 3. The draft EIS makes no effort to examine much less evaluate the sufficiency of the existing monitoring equipment and methodologies. Knowing that the uprate will increase the thermal and radioactive effluent, the EIS should include a comprehensive review and analysis of the monitoring equipment and methodologies to ensure Applicant's use of the best available technology for monitoring and its ongoing compliance with its permit.

As we noted in our scoping comments, the US Army Corps of Engineers (St. Paul District) is also contemplating a draw-down of Pool 3 (Sturgeon Lake) to improve habitat conditions. This ecosystem restoration project would target goals to improve water quality, emergent and submersed aquatic plants, and fish and wildlife. The effects of the uprate, relative to increased withdrawals, a drawdown of Pool 3, increased thermal discharges and its effects on aquatic life were not evaluated in the draft EIS and should be included in the final EIS.

Information about increased water appropriations and consumption by the PINGP is identical to Xcel's CON application. The conclusion in the draft EIS that "the EPU will slightly increase the temperature of the circulating water discharged to the Mississippi River (3°F maximum)" can be found on page 8-6 of the CON application. Why is there no concurrence from the MPCA, the agency with the regulatory authority? We would like to see a letter from the MPCA that includes an independent verification of the temperature increase and assurances that the 3°F increase will not have an adverse impact on aquatic life.

The Community also incorporates by reference Section 8 of the Comments of the PINGP Study Group.

#### Threatened and Endangered Species

In our EIS scoping comments, we stated our concerns about impacts to the Higgins eye pearl mussel (*Lampsilis higginsii*), an endangered species listed by both the USFWS and the MN Department of Natural Resources (MN DNR), from both the increase in water withdrawals and thermal impacts. As stated above, there have been studies that

demonstrated that the surface waters of the river actually flow back upstream (back to Sturgeon Lake) when winds are out of the S, SE, SW, E or W. The Higgins eye restoration site is only 0.5 miles upstream of the PINGP's intake. The final EIS should evaluate whether increased thermal discharges impacts the survival of the Higgins eye.

With regard to possible entrainment, the draft EIS states, "It is conceivable that some larval *higginsii* will be carried downstream into the power plant's intake screenhouse. It should be noted, however, that mortality rate of early life stages of mussels is very high under the best of circumstances, and glochidia that do not attach to fish hosts soon after being released have a very low probability of survival." This statement was made by Xcel in the ER and there is no footnote or reference indicating that this conclusion was made by the applicant, not the State. There is no concurrence from the MN DNR indicating that they agree that there will be no impacts to the Higgins eye from the thermal discharge or increased water use resulting from the uprate.

### Radiological Concerns

As the closest neighbors to the PINGP, the Prairie Island Indian Community is concerned about health impacts from radiological releases.

The discussion in the draft EIS about exposure pathways and the State's and Xcel's monitoring efforts fails to adequately address the need to use best available technology to monitor releases, verify exposure pathways, and calculate accurate dose levels to ensure that doses to the workers and the general public are as low as reasonably achievable. There is nothing in the draft EIS, moreover, about the unique exposure pathways of Community members and potential impacts. Many tribal members consume native plants for traditional purposes (direct consumption, medicines, teas, ceremonies) that are not typically part of Xcel's or the State of Minnesota's monitoring programs. We remain concerned about the increased radiolnuclide releases from the uprate. Particularly troubling is the statement on the page 87 that past cancer incidence reports "were not able to address cancer rates in the Prairie Island Indian Community members who reside near the plant." There is no further explanation. To our knowledge, the MN Department of Health has never offered to discuss cancer rates in our community, to study our community, or offer possible explanations as to why past studies and reports were not able to address cancer rates in our community.

The draft EIS fails to reference, much less discuss, recent studies raising troubling questions about increased rates of childhood cancers for residents in close proximity to nuclear power plants. *See, e.g.*, Direct Testimony of Gregg S. Wilkinson on behalf of the Prairie Island Indian Community and Preliminary Report of Capability of Environmental Radiological Monitoring Data to Support Radioepidemiologic Studies of Leukemia filed on April 22, 2009, and the numerous studies referenced therein which post-date those cited in footnotes 56-65 of the draft EIS. For example, peer-reviewed studies in Germany have reported increased rates of leukemia and childhood cancers for residents who live

closest to nuclear power plants compared with those who live further away from these facilities. A recent National Institute for Occupational Safety and Health study of nuclear workers reported increased risks for leukemia among workers who had a cumulative whole body dose of at least 3 rem compared with those who had lower cumulative doses. These findings are consistent with many other studies in Europe and the United States in which elevated rates or risks of leukemia and cancers associated with low doses of ionizing radiation or operations at nuclear facilities were reported. The results from these studies and the public health tenet of prevention indicate that a study similar to those previously conducted in Germany and currently being conducted in Switzerland of populations who reside in the vicinity of nuclear power plants should be carried out for residents of Prairie Island and surrounding communities, using latest and best available technology, including genetic epidemiology and genomic profiling differential diagnosis. The radiation and environmental (including human health) monitoring data currently available is not adequate to assess the PINGP impacts on the natural and socioeconomic environments, including human health, with acceptable certainty. Such a study is necessary in order to determine, using the best available technology, whether the proposed Extended Power Uprate at the PINGP provides benefits to society in a manner compatible with protecting the environment, including public health.

#### Tritium

The Prairie Island Indian Community remains concerned about tritium releases from the PINGP. Since the late 1980's tritium has been found in the tribe's groundwater. The draft EIS discusses spikes in tritium levels in certain wells and attributes the spikes to "plant operations." The draft EIS further states that the spikes are within EPA standard and are short-lived (short duration). This statement implies that it is okay to contaminate the groundwater, as long as the contamination is lower than the drinking water standard or if the event is short-lived. We do not want tritium or any other radiological contaminant in our groundwater. Instead of dismissing the issue, why not investigate the cause of the problem and require that Xcel address it? Will the proposed power uprate at an aging power plant result in even more planned and unplanned releases of tritium and other radiological contaminants? This issue should be fully addressed in the final EIS.

Tritium is still detected in observation wells on our land. We did not ask for the tritium to enter our groundwater. Community members are still concerned about the health impacts. Even though the Radiological Environmental Monitoring Program (REMP) reports states that the tritium results are far below the EPA drinking water standard of 20,000 pCi/L, the BEIR VII 2006 on radiation health effects state that Linear-No-Threshold standard should apply to chronic low dose exposure for potential cause of cancer and other radiation-induced diseases. This evaluation should be in the final EIS.

#### Psychological Impacts

The draft EIS minimizes the psychological impacts associated with living next to a

nuclear power plant. Many of our youth experience increased levels of stress and anxiety because of health and safety fears related to the power plant. These are the same youth who will be our leaders in the future, the people with whom future Xcel, State and NRC representatives will be working over the re-licensing period and until the plant is fully decommissioned.

Northern States Power chose to build the PINGP next to our communality; we did not choose to develop our community next to the power plant. Most Community members have lived with the PINGP as their neighbor for all of their lives, with no hope that it will ever be shut down. Unless one has lived in the shadow of a nuclear power plant, one cannot possibly understand how frightening the consequences of a severe accident are, especially to the youth.

Emergency preparedness concerns (one entrance/exit road)

We remain concerned about an incident at the PINGP. There is only one road that would serve as an evacuation route in the event of a radiological emergency. This aspect was not included in the draft EIS.

Socio-economic impacts

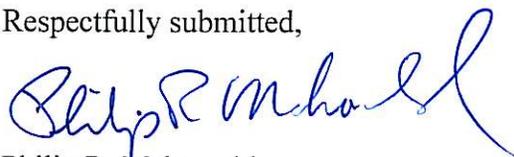
The Prairie Island Indian Community is the largest, most diverse and culturally significant population immediately adjacent to the Prairie Island Nuclear Generating Plant. Since we bear the greatest risks from PINGP operation, it is our responsibility to ensure that the impacts of operation of PINGP on our Community and the surrounding environmental resources are fully evaluated. Unlike other jurisdictions, the Community does not enjoy the tax benefits generated by the PINGP.

Conclusion

For the foregoing reasons, the Community respectfully requests that the additional analysis set forth in these comments be included in the final EIS.

We appreciate this opportunity to provide these comments on the draft EIS for the extended power uprate for the PINGP. We look forward to participating in this process.

Respectfully submitted,



Philip R. Mahowald  
General Counsel for the  
Prairie Island Indian Community