

**To: Bill Cole Storm, Project Manager
Office of Environmental Security, Energy Facilities Permitting**

Re: Comments to the DEIS for Xcel Energy Prairie Island Nuclear Generating Plant (PINGP) Extended Power Uprate Project and Additional Dry Cask Storage at Prairie Island

Burden of development: An attempt to comment on the DEIS, draws the reader into the challenge of creating such a document. Yet it is not the reader's, but the state agencies' duty to provide a basis for decision-makers; to provide information, research, analysis and a foundation for decision making; to identify, assess and evaluate the socio-economic and environmental factors that apply to the proposed project. 116D.02 and 116D.03 outlines the duties of all agencies under the state's environmental policy: <https://www.revisor.leg.state.mn.us/statutes/?id=116D.03&year=2000>
<https://www.revisor.leg.state.mn.us/statutes/?id=116D.03&year=2000>

This is not to say that this is not a daunting task. But if an administrative agency is not motivated by the fulfillment of its public interest mandates, and instead puts its energy and intelligence into a bare compliance with rule in the name of governmental “efficiency, “service to the public good will be limited and distorted. At the same time, it is the duty of the state legislature and the citizenry it represents to provide adequate resources for the execution of these mandates, and to participate in the environmental rights and responsibilities outlined in MERA and 116D. It is important to keep in mind that this is what commentators on the DEIS are proposing to do. We see ourselves as necessary partners with government in the protection of the state's resource, and fulfillment of environmental policy.

The 'economy' of this document and process, which appears to be one of the prime values of its preparation, is potentially very 'costly' to the public interest, the state and its citizens. Since the scoping process diligently scoped 'out' of the document any items that the staff found outside its ability to address, or outside the scope of its authority – there would seem to be no reason for the DEIS not to engage substantively in the items and issues that remained. It is puzzling that the list of preparers did not include or even cite other key state agencies.

PUC Advisory Task Force Report: OES had the benefit of being assisted in identifying issues to be considered in the EIS, by the able execution of a brief, but intense Advisory Task Force. This task force of citizens, local government officials, environmental and citizen organizations – in just 3 sessions, produced an extensive report, using the scoping framework provided by OES.

Unfortunately, it is not evident from the content or approach, from the observations or insights of the document – that this effort ever took place. OES had every opportunity to 'scope' specific socio-economic, psychological, and environmental perspectives of the communities. But virtually none of the information that was provided to OES has yet been addressed in the DEIS. And so the document appears dismissive of both the effort and the citizen's report. This is disappointing for a number of reasons.

State and public interest: The DEIS document appears hamstrung, in matters of intense concern to the communities, the state and its citizens. The DEIS primarily uses the proposer's environmental report as a basis, and provides virtually no regulatory counterbalance to the proposer's intentions and interests. The document does not provide even a basis for “independent” conclusions. The DEIS could still choose, a path that summarizes not just the proposer's document, but the plethora of “next generation” initiatives in which the OES itself is involved – to create a document that will assist not only PUC, but the legislature and even the utility in evaluating pending re-investments in nuclear power.

The failure of the DEIS to engage in an independent analysis of the issues, alternatives and mitigations, leaves the public or parties with the entire burden of developing additional perspectives. The ability of the public and parties to do so, is severely limited by the fact that the state provides for no intervenor compensation, and there is not funding available in the public arena to support the ability of the public, or even public interest groups, to develop the kind of information and analysis that it would take to provide to PUC – a foundation for deliberation on the balance of social, economic and environmental factors – in implementation of state policy – that are their primary duties. Thus, again, the 'economy' of this document and process, which appears to be one of the prime values of its preparation, is potentially very 'costly' to the public interest, the citizens of the state, and the integrity of the decision making process.

For the record, the key issues identified by the Task Force report include (but are not limited to) the following:

- 1) Lack of information accessible to the public about the shape, characteristics, release and dispersal pattern of emissions plumes, air and water, from ongoing operations;
- 2) Concern for short and long term effects of increased temperature stresses of the uprate on:
 - a) the river ecology (see task force report)
 - b) the aging reactor;
 - c) pool storage – increased heat puts stresses on an already overburdened and old pool facility.
 - d) dry cask storage - current engineering studies have not yet determined the effects of this increased heat on longer term dry cask storage containment.
 - e) the qualities of ice, fish populations and other factors that are key to the tourist and recreational economies of the area.
- 3) The socio-economic and psychological effects of continued operations – or its alternatives. Particularly upon the primary responsibilities of the local governments, and tribal government for the health, welfare and safety of their citizens. The DEIS does not reflect, or even acknowledge the enormous commitment of resources that the communities have made through the years to the regulatory process; to cooperation in emergency planning, monitoring and care of natural resources etc. There must be assurance of mutual support and cooperation from Xcel.
- 4) Above all, that there is no plan for the waste from the plant beyond storage in casks and facility designed for temporary storage on the banks of the Ms River, and in close proximity to the PI Indian Community, Red Wing and other down and cross-the-river communities. Responsible nuclear waste management requires adequate funding, maintenance and monitoring for the duration of the projected storage period, which is now – more than ever – uncertain, indefinite – unknown. Xcel proposes to continue the 'temporary storage' charade. They have no plans for upgrading the facility, or covering the facility to manage or minimize exposure to the factors found in the YM EIS no-action analysis to be the primary factors in deterioration of containment materials – precipitation and freeze-thaw cycles.

A new alignment of concerns: For the first time in history, the communities are aligned around these common concerns, irregardless of the outcome of the proceeding. One of the most meaningful mitigations that the state could provide in this proceeding, is to require that an ongoing body be formed for a collaborative, iterative management of the risks, uncertainties, concerns and plans for the PINGP and the Independent Spent Fuel Storage Installation, and its replacements. It is imperative, and required by federal statute that Xcel provide complete assurance of funding, maintenance and management of the waste from the PINGP for the duration of its “interim” storage at PI and in the state of MN.

Please review the Advisory Task Force report.

<http://energyfacilities.puc.state.mn.us/resource.html?Id=19788>. This document is only the latest iteration of a decades long record of community and environmental concerns, of commitment of state legislative, regulatory, and natural resources to the “nuclear option”. Then ask, how are these concerns reflected, addressed in the DEIS? As a sample, please compare the comments in the Advisory Task Force report with the treatment of “Sociological Impacts”, page 56, part II.

What we hope for: As neighbors to the plant, we hope that the obvious deficiencies of the document's approach are that this is a 'draft'. The purpose of a draft EIS is not transparency to process, but to give the public an opportunity to comment on its adequacy. If there is no opportunity for the public to comment on the final EIS, then the paucity of independent research, review or analysis is of great concern. We can only hope that the issuance of the draft will facilitate the development of an EIS that better supports the state's decision making process.

“Independent Review”: is the hallmark and benchmark of an EIS. While many might consider this proceeding a 'done deal', an 'independent' review of the significant socio-economic and environmental issues at stake has never been more critical. Xcel is seeking the granting of a certificate of need for a capacity uprate and additional dry cask storage to support relicensing the plant – at a moment in time, when the fate of the high level radioactive nuclear waste is more uncertain than ever.

The conviction that Judge Klein articulated in his several findings of fact and recommendations to the state's PUC has never been more relevant: that if there is no where for the waste to go...and no timeline for removal – then the waste cannot be considered temporary, and the decision must be based upon a full awareness of the potential, even likelihood of ad hoc permanent storage. The record for the ALJ Certificate of Need proceeding on the building of an Independent Spent Fuel Storage Installation at PI, that eventually brought the case to the legislature in 1994, was carefully filed, cross referenced, indexed and preserved by Judge Klein, with the belief that it would be needed again someday.

Like the first CoN for dry cask storage, this record, the ALJ and PUC deliberations will provide the basis for a landmark decision. The decision in both cases involves the commitment of resources that, from the perspective of the waste, could be irretrievable – for both state and utility. The decision to sink substantial new investments into “the nuclear option”, is even more critical than in 1993, when we still had a federal plan for waste from the reactors, and a federal repository under development. There has never been a plan for waste from the relicensed reactors. And now there is not even a federal plan for permanent storage. After the failure of YM, we may not assume that the federal government will necessarily decide to pursue centralized storage. And we must consider, without YM, that the “no-action” alternative, is now in force.

This proceeding's evaluation of the environmental and economic factors associated with “the nuclear option” will:

- direct public investments towards or away from increased and continued dependence upon nuclear power,
- be the state's primary foundation for exercise of its authority and oversight over nuclear waste within the state's borders;
- guide the deliberation of the legislature;
- assure, or undermine, the long term security of the critical water resources – in terms of both supply and quality – of the Ms. River, and associated groundwater resources;
- assure or undermine the confidence of the public in nuclear operations & waste storage at PI.

If comments in response to the DEIS, so indicate that the task may be too great for overburdened staff, charged with executing public process and environmental review for what may be the largest influx of energy infrastructure proposals in the state's history – we advocate that supplemental resources, in the form of outside EIS consultants be retained to assist staff in producing the final EIS. The fiscal resources that this might represent can be no excuse for failing to provide adequate, if not exemplary independent environmental review for this critical set of decisions. The consequences are too great. To the challenge of addressing this document, I will choose two critical items for my comment.

Part II. ALTERNATIVES - 6.4.

It is unclear how the DEIS* for Part II in its present form, would be used by decision-makers to evaluate the issues, the information, the reasonableness and adequacy of alternatives development, or the balance of environmental factors for dry cask storage. The evaluation of alternatives, and comparison of their impacts is a central feature and function of environmental review.

The state, with the rest of the nation, is in the midst of trying to implement one of the most ambitious undertakings of energy sector transformation in human history – in response to the dangers of global climate change. Yet rather than use this critical undertaking as a framework for evaluation or analysis, the DEIS ignores all that is going on at the state to move beyond “business as usual”.

The approach of the DEIS has been generally to summarize the applicant's environmental report and conclusions, followed by a sentence or two of reflection and/or common sense observations. On occasion, the DEIS on provides a reference outside the materials provided by Xcel. This reference is then given in a footnote and the responsibility of research, analysis and evaluation of the topic at hand is then left to the reader.

On several occasions the EIS provides an interesting speculation, but in most cases carries it no further. It draws in no additional material (other than by reference or footnote), and most often concludes with a statement of uncertainty or inconclusiveness as though the preparers did not see their document as having any real purpose or authority. As a result the neutrality and generally uncertain stand of the document harms rather than supports the purposes of environmental review.

An example of helpful observations that could become the foundation of further analysis are:

- For purposes of analysis here, reasonable alternatives include energy sources which by themselves, or in combination with other resources, could replace the electrical generating characteristics of the PINGP. [Bullet point for six “reasonable alternatives” follow]
- Potential human and environmental impacts of each of these scenarios could be reduced through demand side management or DSM.
- Thus renewable resource technologies would have a neutral or positive long-term employment impact compared to continued operation of the PINGP.

Excel's environmental report served for both the state's analysis and the NRC analysis of their applications. NOTABLY, Xcel's “reasonable alternatives” listed, but did not analyze the very scenario that Xcel has repeatedly identified as the 'least cost' option to the “nuclear option”, that is Wind-Gas.

This is because NRC does not accept, as reasonable, anything other than a one-source alternative. OES correctly states in the bullet point that combinations of resources could provide an alternative to either the uprate or continued operations at PI. In fact, it is now widely understood that combining installed

traditional, with renewable resources and renewable with other renewable resources, is the most effective route to reducing environmental impacts of energy production.

Yet Xcel fails to analyze a wind-gas scenario, due to the NRC restriction. OES fails to develop the alternative, or require that Xcel do so. The DEIS outlines the bare assumptions of Xcel's analysis (“the scenario relies heavily on generation by LEWCMs...this technology has a relatively lower capacity factor and performs best when combined with another energy source...”), without providing ANY additional information, or guidance.

What is damaging about the omission of immediate opportunities in renewables and the failure to elaborate upon the plethora of DSM opportunities at hand, is that PUC is the body that is charged with directing public and state investments at a most critical time for our energy future.

This document needs to be a foundation for the economic and environmental factors to be evaluated in yet another historic deliberation on the “nuclear option” in MN. Relying solely or primarily on excerpts from Xcel's ER does a grave injustice to the efforts, investments of the state and proactive policy direction of the legislature. A major rationale of putting OES in charge of this review, is that the agency is privy to the policy, planning and implementation of a “next generation” energy system envisioned by the state. OES's full engagement is essential for at least two important reasons:

- a) This document will be used by the legislature in its evaluation of the record and PUC decision;
- b) No other party to this docket is in a position to develop alternatives, to fill the gaps, or balance the advocacy of Xcel's well known position on “the nuclear option”.

Wind-Gas alternative must be fully developed: Gas from new sources was analyzed for Monticello. But the pre-hearing order for that proceeding, specified that gas from existing sources should be analyzed for strategic combining with wind. This was not done. And should be done here – using the resources of Xcel's gas fleet, which has been under review for upgrading. Strategically located wind-gas could easily replace the 164MW uprate, and has been analyzed by Xcel in its 2003 resource plan for the most economical replacement of PI.

- Why is OES not requiring Xcel to develop this alternative, or develop it itself? Comparing costs of using new and existing gas resource – and the emerging MISO market to balance and optimize “wind on the wires”?
- Why is OES not giving the decision makers the latest information in how transmission, MISO markets and wind are being combined to alleviate if not eliminate the old bias against renewable alternatives, as “intermittent”?
- The “Natural Gas Combined Cycle Plant” alternative, fails to mention that there is a fully developed study that looks at the conversion of the PI steam plant from nuclear to gas fuel. This is a replacement plan that was ordered by the Commission to supplement the 1998 IRP.
- What is the potential for (even a partial) conversion of the plant to gas, to be combined with wind and freeing the location's transmission infrastructure to integrate more wind capacity, in evaluating options to the uprate, and/or to increasing waste storage at PI.

The DEIS, despite its regulatory proximity to the extensive resources at OES, fails to update decision makers on numerous developments that transform old assumptions about the limitations of renewable options. Instead it simply repeats assumptions about intermittency and capacity of renewables, that are being rapidly left behind – as a result of studies and resource proceedings that OES itself is involved in. The state policy preference for renewables is embedded in the Certificate of Need statute and rule. OES as the RGU, not just the facilities planning staff, must take responsibility for the adequacy of the alternatives analysis. Or at least ensure that the resources and information are available for development.

The range of alternatives discussed in Section I, that include transmission, DG and other combined and renewable options should be discussed in Section II as well.

Provide an update of the 1993 record on the “Phase-Out” alternative for PI: One alternative that the Commission could consider – to minimize the amount of waste over and beyond that for which the federal government provided a plan – is a phased or staged replacement plan. This could be easily accomplished by updating the “Phase-Out” concept that was developed in an extensive record on the first PI Certificate of Need for Dry Cask Storage. The update would be constructed from current established and emerging technologies. Were the state or Xcel to develop such a phase out plan, the scenario would provide for a smooth transition, continued use of the PINGP location's infrastructure, and continuing of jobs and business for both utility and communities – which was its original purpose.

CUMULATIVE IMPACTS 5.4 – Statements and Conclusions, page 37:

Link to all historic documents: <http://www.leg.state.mn.us/LRL/Issues/prairieIsland.asp>

The DEIS 'considers' two 'reasonably foreseeable future projects': Continued operation of the PINGP, and use of the ISFSI to facilitate decommissioning. The document does not take up one of the key concerns articulated by the Prairie Island Indian Community (PIIC), and other Advisory Task Force members and documented in the task force's scoping report. As noted earlier, the unexamined potential for impacts from the combined effects of the uprate, the increased storage, and continued operations that is a key concern. Hotter fuel affects every dimension of the operational and waste cycle.

Because of the timing of the dockets, as PIIC has argued, there will not be an opportunity to test the combined effects of these connected actions. To repeat one of the key sets of issues identified in the task force report, and discussed in PIIC's comments:

Concern for short and long term effects of increased temperature stresses of the uprate on:

- a) the river ecology (see task force report)
- b) the aging reactor;
- c) pool storage – increased heat puts stresses on an already overburdened and old pool facility.
- d) dry cask storage - current engineering studies have not yet determined the effects of this increased heat on longer term dry cask storage containment.
- e) the qualities of ice, fish populations and other factors that are key to the tourist and recreational economies of the area.

Of even greater concern are the assumptions and assertions that characterize the DEIS's “consideration” of the cumulative effects of at reactor waste storage, which will not be removed on any timeline that is either known or projected – by any body, including the federal government.

The document (p. 334-35):

- “Assumes that regulator monitoring and maintenance continue as currently performed at the ISFSI, radiological impacts from the continued operation of the PI ISFSI for up to 200 years would be within NRC regulatory limits and would not be significant during normal operations.”

The DEIS takes the most irrational of NRC premises and extends it over a period 2 to 3 times longer than the furthest reach of the NRC “Waste Confidence Decision”, which it discusses at some length in the conclusion of this section. Furthermore these assumptions are in significant contradiction to the analysis and engineering studies that form the basis of the YM “no-action” alternative – which we must now assume to be in force. These references were provided in comments to OES.

- “Once the casks are loaded, transported, and placed on the ISFSI pad, they are no longer handled. Barring the need to repair a cask seal or other possible damages (which scenario is not addressed at all), the casks are not handled or transported within the PINGP site. Thus, handling of the casks effectively ends within the first 50 years of the 200 year time frame”

The “consideration” goes on to use a simple mathematical multiplication of risks from a per year estimate, times 34 additional casks and 50 years, to conclude that there is no significant risk. This is, at best, not confidence building.

The potential for cask failure or worst case scenarios are dismissed with the usual concluding statement of uncertainty: “Because of the substantial uncertainties involved in making a worst-case scenario projection, there are likely differences of opinion regarding potential health impacts”. (p. 33)

The primary concern of the communities, about the discrepancy between the design life of a 'temporary facility' and the indefinite duration of at reactor storage is addressed in the following way, at pg. 13. “The minimum design life for the TN-40 series of Transnuclear casks is 25 years. However, due to the passive nature of the dry storage casks and the robustness of their components, it is anticipated that the ISFSI could physically be operated (whatever assurance that provides) for several hundred years”.

The DEIS does not seek out either balanced or independent expertise, provides no policy insights or implications and simply dismisses or ignores the fundamental predicament in which we find ourselves with no federal storage plan, waste stranded at the reactor site, while NRC continues to relicense plants and proceed apace with licensure for new plants.

NRC Confidence and MN's authority:

The scoping document for the Monticello ISFSI proceeding, traces the intriguing history of Minnesota's role in the promulgation of the Nuclear Waste Confidence Decision. Suffice it to say, that from the first, Minnesota challenged NRC on its promise to remove waste from the reactor sites. When the reactors were first proposed, the plant was to remove the waste continually – approximately every 6 months. This never happened, and none of the many iterations of plans and promises on the part of the federal government has ever been fulfilled. Hence the promulgation of the “NRC Waste Confidence Decision.

In the face of this less than responsible and rational regulatory 'solution', the state's Radioactive Waste Management Act and the exercise of Minnesota's economic decision making authorities have been the key features of the oversight that Minnesota has been able to exercise over nuclear operations and wastes within its borders.

116C.705: “The legislature finds that the disposal and transportation of high level radioactive waste is of vital concern to the health, safety, and welfare of the people of Minnesota, and to the economic and environmental resources of Minnesota. To ensure the health, safety, and welfare of the people, and to protect the air, land, water, and other natural resources in the state from pollution, impairment, or destruction, it is necessary for the state to regulate and control, under the laws of the United States, the exploration for high level radioactive waste disposal within the state of Minnesota. It is the intent of the legislature to exercise all legal authority for the purpose of regulating the disposal and transportation of high level radioactive waste.”

This legislative intent was reinforced in an amicus brief from legislators, written to the court, on the decision that brought the decision on dry cask storage to the 1994 legislature.

<http://www.leg.state.mn.us/webcontent/lrl/issues/nuclear%20waste/amicusbrief.pdf> Innumerable comments, testimonies and lobbying efforts through the years have sought to sustain these powers. It is therefore of enormous concern that the section on cumulative impacts in the DEIS, ends with the following assertion of conclusion and position:

“Confidence at the NRC that temporary, long term storage of dry casks at ISFSI's nationwide can be effected safely does not provide or supplant an independent decision by the State of Minnesota regarding the risks of long term storage of dry casks at the Prairie Island ISFSI. However, *discussion in this section*, based on analysis required by the NRC (Safety Analysis Report; which is not yet available for the relicensing proceeding), *and independent analysis* (EPRI risk assessment), *is congruent with the NRC's Waste Confidence Rule*”.

This alarming conclusion to the section on cumulative and radiological impacts, insofar as it makes sense, could be read to seriously undermine the state's record and independent view on this matter. It is in direct contradiction to the interests of the local communities, stated positions of the PIIC, and long time policy positions of the state. It appears to assert:

- a) the reasonableness of the proposed extension (to 60 years, or indefinitely) of the Waste Confidence decision timeline;
- b) agreement of the DEIS's conclusions with the proposed ruling; and
- c) that there is no fundamental incongruity between the state's authority and interests and the implications of this ruling.

I will depend upon the comments of the Prairie Island Indian Community to the proposed Revisions to the Waste Confidence Rule (Docket ID NRC-2008-0404) and the Waste Confidence Decision (Docket ID-2008-0482) to lay out the issues.

<http://docs.google.com/gview?a=v&pid=gmail&attid=0.1&thid=1205e18c031c7a1a&mt=application%2Fpdf>.

It is critical that the OES's Office of Federal Intervention, and the state's attorney general investigate the implications of the conclusion of the DEIS on this matter.

The DEIS must grapple, once and for all, with the fact that long term storage is not temporary storage, and a temporary storage facility is not adequate for long term storage. To fail to address this fundamental flaw, is to endanger many future generations and the water body that is the juggler vein of the nation. I wish to incorporate, in whole, by reference the PINGP Study Group Comments to the DEIS, submitted on 5-08-09 by counsel, Paula Maccabee.

Most respectfully yours,
Kristen Eide-Tollefson

Florence Township, MN 1-651-345-5488

In stark contrast to the investments of the host and neighboring communities primary purpose of this document appears to be to protect It is difficult to evaluate what the preparers consider inside the scope