Appendix E Comments on Draft SEIS and Responses

Appendix E Comments on the Draft SEIS and Responses

This appendix contains the written and oral comments received on the draft SEIS prepared for Xcel Energy's proposed change in spent fuel storage technology at the PINGP ISFSI, as well as responses to these comments. The draft SEIS was issued on February 1, 2022. Comments on the draft were solicited by EERA staff through two public meetings, a meeting with the Prairie Island Indian Community, and a public comment period. The public comment period ended on March 3, 2022.

A total of seven written and nine oral comments were received on the draft SEIS (Table E-1). Each comment has been assigned a unique identification number (ID number). Individuals who made multiple oral comments have been assigned a separate ID number for each time they spoke at the public meetings.

This appendix includes responses to the comments received on the draft SEIS. Some responses are relatively short; others are longer. Some of the responses include modifications of the text and tables of the draft SEIS. All such modifications are noted in the responses. All modifications to the text of the draft SEIS are noted by <u>underlining</u>.

For each comment, an image of the comment letter or the transcript from the public meeting is provided along with the comment ID number. Individual sub-comments within each comment have been marked to indicate their location. These sub-comments are designated with the ID number followed by a dash and a number for the sub-comment. Thus, for example, comment 1-1 is the first sub-comment in the submission from commenter 1; 1-2 is the second sub-comment.

EERA responses to each comment and sub-comment are provided at the end of the comment letter or meeting transcript. Responses are labeled with the same nomenclature as the sub-comments (e.g., 1-2) and correspond one-to-one with the marked sub-comments.

Table E-1. Commenters and Comments Received on Draft SEIS

ID Number	Commenter	Page Number
Written Comments	3	
1	Prairie Island Indian Community	E-4
2	Minnesota Pollution Control Agency	E-8
3	William Gehn	E-10
4	Carol Overland	E-11
5	PINGP Study Group	E-31

Appendix E – Comments on Draft SEIS and Responses

ID Number	Commenter	Page Number
6	Marc and Ann Vogel	E-45
7	Xcel Energy	E-46
Oral Comments		
8	Alan Mueller	E-61
9	Carol Overland	E-63
10	Alan Mueller	E-70
11	Carol Overland	E-73
12	Carol Overland	E-76
13	Susan Anderson	E-82
14	Carol Overland	E-93
15	Heather Westra	E-103
16	Michael Roach	E-114

Written Comments

Johnny Johnson President

Valentina Mgeni Secretary



Shelley Buck Vice President

Michael Childs Jr.
Treasurer

Cody Whitebear Assistant Secretary/Treasurer

March 3, 2022

Ray Kirsch, Environmental Review Manager Minnesota Department of Commerce 85 7th Place, Suite 500 St. Paul, MN 55101-2198

RE: Draft Supplemental Environmental Impact Statement for the Proposed Change in Technology at the Prairie Island Nuclear Generating Plant (Docket No. CN-08-510)

Dear Mr. Kirsch:

The Prairie Island Indian Community ('PIIC," "the Community," or "the tribe") offers the following comments regarding the draft Supplemental Environmental Impact Statement (SEIS) for Prairie Island Spent Fuel Storage, published February 1, 2022. Our comments are in addition to the comments made during the meeting on February 22, 2022 with members of the PIIC. We wish to thank you for organizing and supporting the community meeting.

Comments

Section 2.1(page 8)—please describe what conditions the Minnesota Public Utilities Commission (PUC) could place on the 2009 Certificate of Need (CON) for the Prairie Island Nuclear Generation Plant (PINGP) Independent Spent Fuel Storage Installation (ISFSI).

1-2

1-1

Section 3.5 (page 24)—please indicate how long the process might be for the Nuclear Regulatory Commission (NRC) to approve the TN-40HT casks for transportation.

1-3

Section 3.6 (page 24)—please clarify the statement "the increased number of fuel assemblies that can now be stored in a canister." It is our understanding that the canisters hold fewer assemblies than the TN-40HT dry casks.

PIIC Draft SEIS Comments Mr. Raymond Kirsch March 3, 2022 Section 3.6 (page 25—please use today's costs, not 2008 costs. Using the calculator found on the Federal Reserve Back of Minnesota website, a cask costing \$4.1 Million in 2008 would cost \$5.15 1-4 Million each in 2021 dollars or \$180.64 Million total for 35 casks in 2021 dollars (most recent available). 1 1-5 Page 26—revise Table 2 with updated cost information. Section 4.1 (Page 29)—the Supplemental Environmental Impact Statement should state that the 1-6 PINGP ISFSI is immediately adjacent to the Prairie Island Indian Community, not the other way Please update the number of full-time residents within two miles of the PINGP to 2022 or 2021 1-7 numbers. Section 5.4 (page 37)—please clarify why the average cumulative exposure to workers loading a 1-8 horizontal canister and overpack is much higher than from loading a vertical canister overpacks. The readability of the SEIS would be greatly improved if either footnotes or references were used, 1-9 instead of endnotes. Again, thank you for this opportunity to provide comments on the draft SEIS as well as organizing the community meeting. If you have any questions or require additional information, please feel free to contact Heather Westra, at (651) 329-5796. Respectfully submitted, Shelley Buck Johnny Johnson President Vice President Valentina Mgeni Michael Childs Jr. Secretary Treasurer Cody Whitebear Assistant Secretary/Treasurer

¹ https://www.minneapolisfed.org

ID Number 1 – Responses

1-1

The Commission could place any number of conditions on an amendment of its 2009 CN decision. For example, the Commission could grant an amendment conditioned on Xcel Energy reporting on the results of the competitive bidding process that Xcel Energy conducts to select spent fuel storage technology. See Department of Commerce, Division of Energy Resources comments regarding conditions on any amendment of the 2009 CN decision (eDockets Number 20215-174604-01, May 28, 2021).

Several possible CN conditions are noted in the text of the SEIS and are summarized in the Summary (see Comments on the Draft SEIS).

1-2

Xcel Energy estimates that it will take 24 to 30 months for the NRC to complete its review for TN-40HT transportation license. Text in Chapter 3.5 has been modified to include this estimated review time.

1-3

The commenter is correct that canisters typically hold fewer fuel assemblies than casks (see Chapter 3.6, noting that canister systems can now hold 32 to 37 PINGP fuel assemblies, which is less than the 40 assemblies held by the TN-40 type casks). The text referenced by the commenter notes the increased number of fuel assemblies that can *now* be held by canisters, as compared to when canisters were first certified by the NRC for spent fuel storage (emphasis added). The text does not compare the capacity of canisters and casks; it notes that a greater number of fuel assemblies – now, relative to when canisters were first introduced – can be stored in a canister.

1-4

The text in Chapter 3.6 has been modified to reflect costs in 2021 dollars.

1-5

Table 2 has been revised to reflect costs in 2021 dollars.

1-6

Text in Chapter 4.1 has been modified to note that the PINGP is immediately south of the Prairie Island Indian Community.

1-7

Text in Chapter 4.1 has been modified to address this comment. Text in Chapter 5.3 has also been modified to reflect an estimated population of 950 persons within two miles of the PINGP.

1-8

Text in Chapter 5.4 and Table 4 has been modified based on additional information from Xcel Energy. Based on this information, there is no significant difference in radiological exposure levels for workers between horizontal and vertical overpack systems. Exposure levels in Table 4 for Monticello's horizontal overpack system are relatively higher due to a higher radiation source (boiling water reactor spent fuel) as compared to PINGP spent fuel (pressurized water reactor spent fuel). See response to comments 7-12 and 7-13.

1-9

Your comment is noted. EERA staff selected a document format that employs endnotes in attempt to make the document easier to read. As the commenter notes, some readers may prefer a different format. For continuity in the preparation of this SEIS, EERA staff has not made any changes to the document format.



520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300 800-657-3864 | Use your preferred relay service | info.pca@state.mn.us | Equal Opportunity Employer

March 1, 2022

Ray Kirsch Environmental Review Manager Minnesota Department of Commerce 85 7th Place East, Suite 280 St. Paul, MN 55101

Re: Prairie Island Spent Fuel Storage Project

PUC Docket Number: E002/CN-08-510

Dear Ray Kirsch:

Thank you for the opportunity to review and comment on the Draft Environmental Impact Statement for the Prairie Island Spent Fuel Storage project (Project), a proposed change in spent fuel storage technology in Red Wing, Goodhue County, Minnesota. Regarding matters for which the Minnesota Pollution Control Agency (MPCA) has regulatory responsibility and other interests, the MPCA staff has the following comments for your consideration.

Section 2.3 Other Permits and Approvals

In the event the Project will disturb one acre or more of land, a National Pollutant Discharge Elimination System/State Disposal System Construction Stormwater Permit is required from the MPCA. Information regarding the MPCA's Construction Stormwater Program can be found on the MPCA's website at: http://www.pca.state.mn.us/water/stormwater/stormwater-c.html. Questions regarding Construction Stormwater Permit requirements should be directed to Roberta Getman at 507-206-2629 or Roberta.Getman@state.mn.us.

Please be aware that this letter does not constitute approval by the MPCA of any or all elements of the Project for the purpose of pending or future permit action(s) by the MPCA. Ultimately, it is the responsibility of the Project proposer to secure any required permits and to comply with any requisite permit conditions. If you have any questions concerning our review of this project please contact me by email at karen.kromar@state.mn.us or by telephone at 651-757-2508.

Sincerely,

Karen Kromar

This document has been electronically signed.

KK:rs

Karen Kromar Project Manager Environmental Review Unit Resource Management and Assistance Division

cc: Dan Card, MPCA St. Paul

ID Number 2 – Responses

2-1

Text in Chapter 2.3 has been modified to note that the project may require a construction stormwater permit from the MPCA. As noted in the associated endnote and in Chapter 4, any change in spent fuel storage technology in the PINGP ISFSI is not anticipated to disturb more than one acre of land.



85 7th Place East, Suite 280 Saint Paul, MN 55101 mn.gov/commerce

DRAFT SEIS PUBLIC COMMENT FORM

Prairie Island Change in Spent Fuel Storage Technology Docket No. E002/CN-08-510

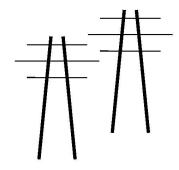
Name: William Gehn				
Street Address: 2361 Sunny Meadow Lane				
City: Red Wing State: MN ZIP: 55066				
Email or Phone: 651-388-7541				
Please share your comments on the draft supplemental environmental impact statement (SEIS) that has been prepared for Xcel Energy's proposed change in spent fuel storage technology:				
 What information needs to be clarified or included in the draft SEIS to ensure that the final SEIS is complete and accurate? 				
COMMENTS MUST BE RECEIVED BY THURSDAY, MARCH 3, 2022.				
(1) I support the proposed change in used fuel storage containers as-described in Docket No. CN -08-510.				
2) I am pleased that the proposed new connister technology will facilitate transport of used fuel to an offsite location,				
hopefully working towards fuel reprocessing and reuse in a nuclear power plant.				
(3) I am confident that the oversight by the NRC, and care ? Skill of the PINGA Staff, will continue to protect				
The health & safety of the public, and plant workers.				
(4) The lowest-dose commister is what I would hope to be chosen: Vertical				
overpack.				
(5) No comments on the baft SEIS. Signature: Wilher Cut. Date: 2-16-22				
Please submit this form at today's meeting or mail it to the address provided on the back. Please use additional sheets as necessary. Comments can also be e-mailed to the Department of Commerce Environmental Review Manager, Ray Kirsch, at: raymond.kirsch@state.mn.us .				

ID Number 3 – Response: Thank you for your comment.

Legalectric, Inc.

Carol Overland Attorney at Law, MN #254617 Energy Consultant—Transmission, Power Plants, Nuclear Waste overland@legalectric.org

1110 West Avenue Red Wing, Minnesota 55066 612.227.8638 P.O. Box 69 Port Penn, Delaware 19731 302.834.3466



raymond.kirsch@state.mn.us via email and eDockets

March 3, 2022

Ray Kirsch Environmental Review Manager Dept. of Commerce 85 – 7th Place East, Suite 280 St. Paul, MN 55101

> RE: Overland's SEIS Comments - Xcel Request for Change in Cask Technology PUC Docket E-002/CN-08-510

Dear Mr. Kirsch:

Thanks for the opportunity to comment on the Supplemental Environmental Impact Statement. I am making these comments as an individual, and I am not representing any party in this docket.

First, a housekeeping, format, detail. It's really annoying when the footnotes are not on the page of origin, where review requires constant flipping back and forth.

Second, the "Xcel Energy Additional Information," document cited in footnotes 4, 8-9, 11-14, 17-20, 22 is not in the record – it's not an appendix to the Xcel "Request," not attached to the SEIS, and is not filed in eDockets, in short, we have no way of knowing what the "Xcel Energy Additional Information" is. This information must be added to the record in its entirety.

Third, the SEIS is overtly biased in its selection and use of information sources, using only Xcel Energy and the 2009 Prairie Island EIS. The EIS is not a primary source, it's a compilation of information from many sources. Sources of information should include the Nuclear Regulatory Commission, Environmental Quality Board, Prairie Island Indian Community, City of Red Wing, the 2008-2009 PINGP Study Group, individuals participating, cask manufacturers, other states' agencies addressing cask issues, and the NRC and agencies in Texas and New Mexico where "interim" storage facilities have been applied for or are licensed.

Now, in no particular order, and this laundry list is not all inclusive:

XCEL REFUSES TO DISCLOSE THE DRY CASK IT PLANS TO USE

The SEIS is inadequate to the extent that it does not identify or analyze impacts of the dry cask

4-4

4-1

4-2

4-3

1

that Xcel Energy plans to use. Beginning with the project description, it's "Xcel Energy proposes," "Xcel Energy Indicates" x 3; "Xcel notes" x 2, but in this section (1.2) it should be clearly stated that "Xcel Energy has not disclosed the casks it proposes to use."

4-4 cont.

Once more with feeling, the SEIS does not address the failure of Xcel to disclose the cask that it plans to use. As we know, Xcel plans ahead, as early as 1989 for the dry casks it first started using in May 1995. To posit that Xcel does not have a plan is absurd. Further, the appearance of two representatives from the Orano "TN family," Roger Maggi, the Chief Communications Officer, and Jack Besholin (?), Chief Engineer for the TN interim Storage Partners "interim" facility in Texas, though claiming they were not invited to the call, did in fact appear, and no representatives from other cask manufactures or interim storage facilities appeared.

Roger Maggi also stated, clearly, that "Monticello uses canisters being considered for Prairie Island." That's a rather direct statement – the later walk-back from that declaration, that "no others are being considered," and Kapitz's statement that "Xcel is not actively considering any casks," didn't make it go away.

Minnesota environmental law requires discussion and analysis of alternatives, and there are no alternatives presented here. Minn. Stat. §116D.04, Subd. 2a. See also Minn. R. 7855.0110. "For the storage of spent nuclear fuel, the Commission must apply Minnesota Rules, Chapter 7855. SEIS, p. 2, Section 2.1 Certificate of Need. Alternatives is an important piece of "adequacy," as is comparison of various alternatives. Minn. R. 4410.2800, Subp. G and H. Adequacy is a matter for comment. Minn. R. 4410.2800, Subp. 2.

4-5

It's beyond naïve to think that these two Orano reps were appearing out of the goodness of their hearts or boredom on a Thursday night. They are paid employees, one specifically tasked with "communications," and I think the message was clearly communication. Xcel Energy plans, or at least is giving serious consideration of Orano Trans-Nuclear casks of some sort, with hopes of using the Texas Interim Storage Partners "interim" nuclear storage facility. On the other hand, Texas is working to prohibit nuclear storage at the Orano site, as noted in the SEIS.¹

The impact of uncertainty of any and every interim storage approvals exacerbates Xcel's failure to disclose the cask it intends to use. If there is no "interim" site that uses whatever cask is ultimately selected, there's absolutely no point in this exercise, and we've wasted our time, resources, and state agency time and resources.

Go no further until Xeel identifies specifically what cask it is proposing, and do not approve a "fill in the blank" request. That would be irresponsible.

-

4-6

PROJECT "NEED" IS NOT SUFFICIENTLY DEMONSTRATED – AND THERE IS NO APPARENT CON PROCEEDING AND NEED DETERMINATION ON WHICH THE COMMISSION CAN BASE A DECISION

¹ See Civilian Nuclear Waste Disposal, p. 3, fn. 10, citing Texas Governor Greg Abbott, "Interim Storage Partners (ISP) Consolidated Interim Storage Facility Project, Docket ID NRC-2016-0231," November 3, 2020, https://www.nrc.gov/docs/ML2030/ML20309B061.pdf; Texas Legislature Online, Actions, HB7, https://capitol.texas.gov/BillLookup/Actions.aspx?LegSess=872&Bill=HB7.

Need is more than a matter of economics, and contrary to apparent practice, need is more than a matter of what Xcel wants. Xcel now requests, as noted in the EIS, a change in "type," a change in the type of cask, and an amendment to the Certificate of Need. This change will also require an amendment to Xcel's NRC Part 72 license, or licensing of the facility under Part 50/51. Section 1.3 of the SEIS is equally inadequate, as it addresses "need" only in the economic terms stated by Xcel Energy, and that is the "lower customer costs." However, the SEIS gives no specific figures, nor does Xcel. Section 3.1 Project costs.

The SEIS parrots Xcel's statements that:

... it will not know the cost of different spent fuel storage technology for the PINGP ISFSI (if different technology is approved by the Commission) until it completes a competitive bidding process for the technology.

Id., p. 25, see also p. 24-25, 3.6 Project Costs. And prudency demands that costs be reviewed, which happens in a Certificate of Need proceeding.

Table 2. Characteristics of Spent Fuel Casks and Canisters

Characteristic	Cask (e.g., TN-40)	Canister System	
Fuel Confinement	Steel	Steel	
Loading of Fuel	In spent fuel pool; dried; backfilled with helium	In spent fuel pool; dried; backfilled with helium	
Seal	Bolted, with O-ring seal	Welded, with two lids	
Shielding	Steel	Concrete overpack for storage; metal overpack (transfer cask) for handling	
Cost	Relatively more expensive; approximately \$4.1 million per cask	Relatively less expensive; estimated to be 40 to 50 percent less expensive than TN-40 casks	

Table 2, SEIS p. 26. "Relatively" means nothing where there are no concrete numbers. Granted, the full extent of the Commission's jurisdiction on nuclear issues is over costs, and costs alone, the SEIS does not appropriately assert its jurisdiction in accepting this vague description. However, the Commission does have, as a part of cost considerations, the Certificate of Need process and review. Minn. Stat. §216B.243; Minn. Stat. §216B.08.

The SEIS states that "Xcel Energy INDICATES that its proposed change in spent fuel storage technology would LIKELY result in lower customer costs." SEIS, p. 2, Section 1.3. Note the

qualified language. This is not sufficient to support a need claim.

The SEIS is erroneous in its statement that "The cask PROPOSED by Xcel Energy to store the spent nuclear fuel was a steel cask..." SEIS, p. 7, Section 2.1 (emphasis added). Xcel has admitted in recent meetings to selecting the TN-40 cask in 1989, more than a mere "proposal" for the CoN. It is also the cask licensed by the NRC in its cask specific Part 72 license.

4-8

There has been no explanation of whether an RFP could be issued and results provided to the Commission for review, as per the meeting on February 17, there are only three vendors, TN/Orano, Holtec, and NAC. If Orano's representatives are eager enough to "attend" the Dept's meeting, they could provide a cost estimate.

4-9

With the type of cask not identified, if a cask was chosen that is NOT accepted by an "interim" facility or a permanent repository, the purpose of having a cask that could be sent elsewhere would be defeated, and we'd be in the same position that we are now, but having wasted the money to purchase these new unidentified casks. If the request is approved, and the casks does not fulfill the purpose of facilitating transportation to "interim" storage, there's no point.

Under Minnesota law, economic considerations alone are not sufficient justification for going forward with a project with potential for impacts. Minn. Stat. §116D.04, Subd. 6. Where are the non-economic considerations raised and analyzed?

4-10

CONSIDERATION OF THE ENVIRONMENTAL SETTING AND POTENTIAL IMPACTS REQUIRES DISCLOSURE OF ALL ENVIRONMENTAL MONITORING AND SAMPLING

Xcel Energy claims it "regularly samples river waters; well water and ground water from five locations near the PINGP; drinking water from the City of Red Wing; agricultural products including corn from fields irrigated with river water, cabbage, and milk; and upstream and downstream fish, periphyton or invertebrates, bottom sediments, and shoreline sediment from the Mississippi River." Xcel Energy Comment, p. 6, March 3, 2022. The SEIS should have links to this data from the 2009 EIS until the present time.

4-11

CONSIDERATION OF POTENTIAL IMPACTS TO THE HUMAN ENVIRONMENT AND RADIOLOGICAL IMPACTS

The SEIS notes that there are "relatively few persons that live near the PINGP" and that Red Wing is six miles to the southeast. SEIS p. 30, Section 4.3. Earlier, it claims 450 residents within PIIC, which is not 'relatively few persons." Red Wing, home to just over 16,000, is directly downriver and downwind, and in nuclear terms, that distance is very small. That six miles is within the first ring 10 mile Emergency Planning Zone, so within 10 miles, PIIC, Red Wing, and more miles out means that roughly 20,000 people live within the first ring EPZ.

Fig. 1 - 10-mile radius from Prairie Island Nuclear Generating Plant - Emergency Planning Zone (shaded area)

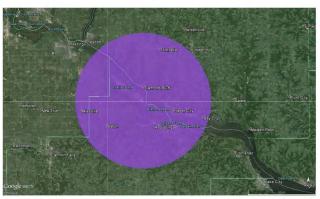


Fig. 2 - 50-mile radius from Prairie Island Nuclear Generating Plant (shaded area).



The 2nd EPZ is a 50 mile radius from the plant, above, and includes Minneapolis and much of Hennepin County; St. Paul and all of Ramsey County; much of Scott County; all of Dakota, Washington, Rice, Goodhue and Wabasha counties, Rochester and parts of Olmsted, Dodge and Steele Counties; St. Croix, Dunn, Pierce, Pepin Buffalo Counties in Wisconsin, which presents

significant potential for human impacts. The SEIS must at least note the wide range of the 10 and 50 mile EPZs.

4-13

Regarding potential for human impacts and mitigation, the SEIS must include links to all Goodhue County public health monitoring for radiological impacts and harms.

4-14

SEIS ADMITS THIS REQUEST REQUIRES A CERTIFICATE OF NEED AMENDMENT, YET THERE IS NO APPARENT CERTIFICATE OF NEED AMENDMENT PROCESS IN THE WORKS.

The SEIS states:

The Commission will consider the final SEIS and **the entire record** in making a decision on a CN amendment for Xcel Energy's proposed change in spent fuel storage technology.

4-15

SEIS, p. 2, Section 1.4. What is the "entire record" of which you speak? As above, the Commission does have, as a part of its review of Xcel's request, a requirement to follow the Certificate of Need process and review. Minn. Stat. §216B.243; Minn. Stat. §216B.08. Although the SEIS foreshadows exemption of this request, there is no exemption in the statute or rules. And the SEIS does indeed state:

For the storage of spent nuclear fuel, the Commission must apply Minnesota Rules, Chapter 7855.

SEIS, p. 2, Section 2.1 Certificate of Need. The criteria for a Certificate of Need are:

7855.0120 CRITERIA.

A certificate of need shall be granted to the applicant if it is determined that:

A. the probable direct or indirect result of denial would be an adverse effect upon the future adequacy, reliability, safety, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states, considering:

- (1) the accuracy of the applicant's forecast of demand for the energy or service that would be supplied by the proposed facility;
- (2) the effects of existing or expected conservation programs of the applicant, the state government, or the federal government;
- (3) the effects of promotional practices in creating a need for the proposed facility, particularly promotional practices that have occurred since 1974:
- (4) the ability of current facilities and planned facilities not requiring certificates of need to meet the future demand; and (5) the effect of the proposed facility, or a suitable modification thereof, in making efficient use of resources;

B. a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record by parties or persons other than the applicant, considering:

- (1) the appropriateness of the size, the type, and the timing of the proposed facility compared to those of reasonable alternatives;
- (2) the cost of the proposed facility and the cost of energy to be supplied by the proposed facility compared to the costs of reasonable alternatives and the cost of energy that would be supplied by reasonable alternatives;
- (3) the effects of the proposed facility upon the natural and socioeconomic environments compared to the effects of reasonable alternatives; and
- (4) the expected reliability of the proposed facility compared to the expected reliability of reasonable alternatives;
- C. it has been demonstrated by a preponderance of the evidence on the record that the consequences of granting the certificate of need for the proposed facility, or a suitable modification thereof, are more favorable to society than the consequences of denying the certificate, considering:
 - (1) the relationship of the proposed facility, or a suitable modification thereof, to overall state energy needs;
 - (2) the effects of the proposed facility, or a suitable modification thereof, upon the natural and socioeconomic environments compared to the effects of not building the facility;
 - (3) the effects of the proposed facility, or a suitable modification thereof, in inducing future development; and
 - (4) the socially beneficial uses of the output of the proposed facility, or a suitable modification thereof, including its uses to protect or enhance environmental quality; and
- D. that it has not been demonstrated on the record that the design, construction, operation, or retirement of the proposed facility will fail to comply with those relevant policies, rules, and regulations of other state and federal agencies and local governments.

The SEIS also states:

Minnesota Rule 7849.0400 provides procedures the Commission must use when considering a change to the size, type, or timing of a non-nuclear generating plant or a high-voltage transmission line for which a CN has been issued. The Commission could look to this rule, which addresses other types of energy facilities, for guidance in how to address Xcel Energy's request. The rule requires notice to the Commission of the proposed change to the CN, a comment period, and then a decision by the Commission on the proposed change. The rule also requires the Commission to order a hearing if it determines that the proposed change to the CN, if known at the time of the initial CN decision, could reasonably have resulted in a different CN decision. 11

The Commission could place conditions on any amendment of its 2009 CN decision for the PINGP ISFSI.

SEIS, p. 8.

The radiation monitoring section should include at least links to monitoring reports. Potential risks should also have links to primary documentation. Any discussion of radiation impacts,

accident conditions (SEIS p. 35, 38), and potential for cancer should include at least a link to Ex. A - "Radiobiological shot noise explains Three Mile Island biodosimetry indicating nearly 1,000 mSv exposures," Datesman.² The impacts of low dose radiation have been understated.

4-16 cont.

THERE IS NO EXEMPTION FOR NUCLEAR WASTE IN THE CON RULES!

The SEIS is inadequate based on the qualified language -- that the Commission "could" over and over and over, in the section ostensibly explaining the state regulatory framework! It does not appear that the Commission has explicitly acknowledged or followed the procedures found in Minnesota Rule 7849.0400.

4-17

This Xcel Energy request for an amendment regarding "size, type, or timing" of the Certificate of Need does require, beyond the SEIS, a Comment Period on the Certificate of Need amendment requested, and a Certificate of Need specific hearing. The Commission MUST build "the entire record" with at minimum, comments and a hearing, and address appropriate need factors laid out in the rule.

CHANGING THE WASTE STORAGE INCREMENTS FROM CASKS TO ASSEMBLIES CONFUSES THE RECORD AND LEAVES STATUS OF CASKS AND ROOM AT ISFSI AND ON PAD UNCLEAR.

Xcel has already received federal authorization to place 48 casks at the Prairie Island storage installation, and state authorization for 29 casks. Xcel has filled 25 of these casks to date. Xcel predicts that the capacity of the 29 authorized casks, combined with the capacity of the Prairie Island pools, will be sufficient to store the spent fuel generated at the Prairie Island Plant through the end of the current operating licenses in 2013 and 2014. If no other storage facility becomes available by the time Xcel decommissions the Prairie Island Plant, Xcel anticipates adding another 34 casks to the storage facility to hold the remaining spent fuel and other waste. (Neither the 29 previously authorized casks nor the 34 "decommissioning" casks are the subject of the current proceeding.)

Order Accepting Environmental Impact Statement, and Granting Certificates of Need and Site Permit with Conditions, p.6, December 18, 2009, Docket Nos. CN-08-509, CN-08-510, GS-08-690 (200912-45206-02). That Order addresses the number of casks and also casks required for decommissioning. Id. P. 7.

Xcel will need NRC authorization for various aspects of its proposal. Xcel has already requested authorization to begin using a newer type of storage cask. Xcel will also ask the NRC to renew Xcel's license to operate its Independent Spent Fuel Storage Installation; Xcel's current license expires in 2013. And eventually Xcel will need NRC approval in order to expand the capacity of the Independent Spent Fuel Storage Installation beyond 48 casks.

Id., p. 7.

Although an additional 34 casks are anticipated to be needed for decommissioning, with additional storage space within the facility for these casks, the EIS does not address the impact

² Scientific Reports | (2020) 10:10933 | https://doi.org/10.1038/s41598-020-67826-5