

October 7, 2005

Mr. John T. Conway  
Site Vice President  
Monticello Nuclear Generating Plant  
Nuclear Management Company, LLC  
2807 West County Road 75  
Monticello, Minnesota 55362-9637

SUBJECT: ISSUANCE OF ENVIRONMENTAL SCOPING SUMMARY REPORT  
ASSOCIATED WITH THE STAFF'S REVIEW OF THE APPLICATION BY  
NUCLEAR MANAGEMENT COMPANY, LLC, FOR RENEWAL OF THE  
OPERATING LICENSE FOR MONTICELLO NUCLEAR GENERATING PLANT

Dear Mr. Conway:

The U.S. Nuclear Regulatory Commission (NRC) staff conducted a scoping process from June 2, 2005, through August 2, 2005, to determine the scope of the NRC staff's environmental review of the application for renewal of the operating license for Monticello Nuclear Generating Plant (Monticello). As part of the scoping process, the NRC staff held two public environmental scoping meetings in Monticello, Minnesota, on June 30, 2005, to solicit public input regarding the scope of the review. The scoping process is the first step in the development of a plant-specific supplement to NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" (GEIS), for Monticello.

The NRC staff has prepared the enclosed Environmental Scoping Summary Report. This report identifies comments received at the June 30, 2005, license renewal environmental scoping meetings, comments provided by letter and electronic mail. In accordance with Title 10 of the *Code of Federal Regulations* Section 51.29(b), you are being provided a copy of the scoping summary report. The transcripts of the meetings can be found as an attachment to the meeting summary issued on July 28, 2005. The meeting summary is available for public inspection in the NRC Public Document Room (PDR) located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland, or electronically from the Publicly Available Records component of NRC's document management system (ADAMS) under Accession Number ML052030005. ADAMS is accessible from the NRC's Web site at <http://www.nrc.gov/reading-rm/adams.html>. This site provides access to the NRC's Public Electronic Reading Room link (note that the URL is case-sensitive). Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS should contact the NRC's PDR Reference staff at 1-800-397-4209 or 301-415-4737, or by e-mail addressed to [pdr@nrc.gov](mailto:pdr@nrc.gov).

J. Conway

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The next step in the environmental review process is the issuance of the draft supplement to the GEIS, scheduled for February 2006. Notice of the availability of the draft supplement to the GEIS and the procedures for providing comments will be published in an upcoming *Federal Register* notice. If there are any questions concerning this matter, please contact me at 301-415-3835 or email [JXD10@nrc.gov](mailto:JXD10@nrc.gov).

Sincerely,

**/RA/**

Jennifer A. Davis, Project Manager  
Environmental Section D  
License Renewal and Environmental Impacts Program  
Division of Regulatory Improvement Programs  
Office of Nuclear Reactor Regulation

Docket No.: 50-263

Enclosure: As stated

cc w/encl: See next page

J. Conway

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Sincerely,

**/RA/**

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**Environmental Impact Statement  
Scoping Process**

**Summary Report**

**Monticello Nuclear Generating Plant  
Monticello, Minnesota**

**September 2005**



**U.S. Nuclear Regulatory Commission  
Rockville, Maryland**

## Introduction

On March 24, 2005, the Nuclear Regulatory Commission (NRC) received an application from Nuclear Management Company, LLC (NMC), dated March 16, 2005, for renewal of the operating license of Monticello Nuclear Generating Plant (Monticello). Monticello is located in Wright County, Minnesota. As part of the application, NMC submitted an environmental report (ER) prepared in accordance with the requirements of 10 CFR Part 51. 10 CFR Part 51 contains the NRC's requirements for implementing the National Environmental Policy Act (NEPA) of 1969, as amended, and the implementing regulations promulgated by the Council on Environmental Quality (CEQ). Section 51.53 outlines requirements for preparation and submittal of environmental reports to the NRC.

Section 51.53(c)(3) was based upon the findings documented in NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants," (GEIS). The GEIS, in which the staff identified and evaluated the environmental impacts associated with license renewal, was first issued as a draft for public comment. The staff received input from Federal and State agencies, public organizations, and private citizens before developing the final document. As a result of the assessments in the GEIS, a number of impacts were determined to be small and to be generic to all nuclear power plants. These were designated as Category 1 impacts. An applicant for license renewal may adopt the conclusions contained in the GEIS for Category 1 impacts, absent new and significant information that may cause the conclusions to fall outside those of the GEIS. Category 2 impacts are those impacts that have been determined to be plant-specific and are required to be evaluated in the applicant's ER. The Commission determined that the NRC does not have a role in energy planning decision-making for existing plants, which should be left to State regulators and utility officials. Therefore, an applicant for license renewal need not provide an analysis of the need for power or the economic costs and economic benefits of the proposed action. Additionally, the Commission determined that the ER need not discuss any aspect of storage of spent fuel for the facility that is within the scope of the generic determination in 10 CFR 51.23(a) and in accordance with 10 CFR 51.23(b). This determination was based on the Nuclear Waste Policy Act of 1982 and the Commission's Waste Confidence Rule, 10 CFR 51.23.

On June 2, 2005, the NRC published a Notice of Intent in the *Federal Register* (70 FR 32381), to notify the public of the staff's intent to prepare a plant-specific supplement to the GEIS to support the renewal application for the Monticello operating license. The plant-specific supplement to the GEIS will be prepared in accordance with NEPA, CEQ guidelines, and 10 CFR Part 51. As outlined by NEPA, the NRC initiated the scoping process with the issuance of the *Federal Register* Notice. The NRC invited the applicant; Federal, State, and local government agencies; local organizations; and individuals to participate in the scoping process by providing oral comments at the scheduled public meetings and/or submitting written suggestions and comments no later than August 2, 2005. The scoping process included two public scoping meetings, which were held at the Monticello Community Center in Monticello, Minnesota, on June 30, 2005. The NRC issued press releases and distributed flyers locally. Approximately fifty (50) members of the public attended the meetings. Both sessions began with NRC staff members providing a brief overview of the license renewal process and the NEPA process. Following the NRC's prepared statements, the meetings were open for public comments. Ten (10) attendees provided either oral comments or written statements that were recorded and transcribed by a certified court reporter. The transcripts of the meetings can be found as an attachment to the meeting summary, which was issued on July 28, 2005. The meeting summary is available electronically for public inspection in the NRC Public Document

Room or from the Publicly Available Records (PARS) component of NRC's document management system (ADAMS) under accession number ML052030005. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm.html> (the Public Electronic Reading Room). (Note that the URL is case-sensitive).

The scoping process provides an opportunity for public participation to identify issues to be addressed in the plant-specific supplement to the GEIS and to highlight public concerns. The Notice of Intent identified the following objectives of the scoping process:

- Define the proposed action
- Determine the scope of the supplement to the GEIS and identify significant issues to be analyzed in depth
- Identify and eliminate peripheral issues
- Identify any environmental assessments and other environmental impact statements being prepared that are related to the supplement to the GEIS
- Identify other environmental review and consultation requirements
- Indicate the schedule for preparation of the supplement to the GEIS
- Identify any cooperating agencies
- Describe how the supplement to the GEIS will be prepared

At the conclusion of the scoping period, the NRC staff and its contractor reviewed the transcripts, and all written material received, and identified individual comments. Twenty (20) letters, emails, or documents containing comments also were received during the scoping period. All comments and suggestions received orally during the scoping meetings or in writing were considered. Each set of comments from a given commenter was given a unique alpha identifier (Commenter ID letter), allowing each set of comments from a commenter to be traced back to the transcript, letter, or email in which the comments were submitted. Several commenters submitted comments through multiple sources (e.g., letter and afternoon or evening scoping meetings).

Comments were consolidated and categorized according to the topic within the proposed supplement to the GEIS or according to the general topic if outside the scope of the GEIS. Comments with similar specific objectives were combined to capture the common essential issues that had been raised in the source comments. Once comments were grouped according to subject area, the staff and contractor determined the appropriate action for the comment.

Table 1 identifies the individuals providing comments and the Commenter ID letter associated with each person's set(s) of comments. The Commenter ID letter is preceded by MS (short for Monticello Nuclear Generating Plant scoping). For oral comments, the individuals are listed in the order in which they spoke at the public meeting. Accession numbers indicate the location of the written comments in ADAMS.





**TABLE 1 - Individuals Providing Comments During Scoping Comment Period**

<b>Commenters ID</b>	<b>Commenter</b>	<b>Affiliation (If Stated)</b>	<b>Comment Source and ADAMS Accession Number<sup>(a)</sup></b>
MS-A	John Grubb	Nuclear Management Company	Afternoon Scoping Meeting
MS-B	Charles Bomberger	Xcel Energy	Afternoon Scoping Meeting
MS-C	Wayne Mayer	Magic Moments Photographic Studio	Afternoon Scoping Meeting
MS-D	George Crocker	North American Water Office	Afternoon Scoping Meeting
MS-E	Lea Foushee	North American Water Office	Afternoon Scoping Meeting
MS-F	Kristen Eide-Tollefson	R-CURE	Afternoon Scoping Meeting
MS-G	Carol Overland	Overland Law Office	Afternoon Scoping Meeting
MS-H	Clint Herbst	City of Monticello	Evening Scoping Meeting
MS-I	Tom Palmisano	Nuclear Management Company	Evening Scoping Meeting
MS-J	Kent Larsen	Xcel Energy	Evening Scoping Meeting
MS-K	Joseph Steffel	City of Buffalo	Letter (ML051960028)
MS-L	Lynne Dahl-Fleming	DESIGN for PRINT [&Web!]	Letter (ML051810330)
MS-M	Alan Loch	Loch Jewelers	Letter (ML051810327)
MS-N	Mike Benedetto	Monticello Public Schools	Letter (ML051810325)
MS-O	Barbara Schwientek	Monticello-Big Lake Community Hospital District	Letter (ML051810324)
MS-P	Dan Olson	State Farm Insurance	Letter (ML051810543)
MS-Q	Mark Ourada	State of Minnesota Senate District 19	Letter (ML052090152)
MS-R	Susan Struckness	Monticello Chamber of Commerce	Letter (ML051810333)
MS-S	Julie Risser	Citizen of Edina, Minnesota	Email (ML052220380)
MS-T	Pat Sawatzke	Commissioner-District 2	Email (ML052220387)
MS-U	Susu Jeffrey	Citizen of Minneapolis	Email (ML052220381)
MS-V	Carol Overland	Overland Law Office	Email (ML052220353)
MS-W	George Crocker	North American Water Office	Email (ML052220384)
MS-X	Justin Eibenholz	Southeast Minneapolis Neighborhoods	Email (ML052220382)
MS-Y	Christine Ziebold	Citizen of Minneapolis	Email (ML052220355)
MS-Z	Bruce Anderson	Minnesota House of Representatives	Letter (ML052220378)
MS-AA	Don Orrock	Big Lake City Council	Letter (ML052220378)
MS-AB	Ewald Petersen	Big Lake Township Board of Supervisors	Letter (ML052220378)
MS-AC	Bruce Thielen	Monticello City Council	Letter (ML052220378)
MS-AD	Tom Fenski	Monticello Chamber of Commerce	Letter (ML052220378)

(a) The afternoon and evening transcripts can be found as an attachment under accession number ML052030005.

The subject areas the comments were grouped into are as follows:

1. Comments in Support of License Renewal at Monticello Nuclear Generating Plant
2. Comments in Opposition to License Renewal at Monticello Nuclear Generating Plant
3. General Comments Regarding License Renewal and Its Processes
4. Comments Concerning Water Quality and Use Issues
5. Comments Concerning Aquatic Ecology Issues
6. Comments Concerning Terrestrial Resource Issues
7. Comments Concerning Air Quality Issues
8. Comments Concerning Land Use Issues
9. Comments Concerning Human Health Issues
10. Comments Concerning Socioeconomic Issues
11. Comments Concerning Postulated Accidents
12. Comments Concerning Uranium Fuel Cycle and Waste Management Issues
13. Comments Concerning Alternatives
14. Comments Concerning Aging Management
15. Comments Concerning Issues Outside the Scope of License Renewal Environmental Review: Operational Safety, Security, & Emergency Preparedness; Cost of Power; Need for Power; Independent Spent Fuel Storage Installation (ISFSI)

Each comment is summarized in the following pages. For reference, the unique identifier for each comment (Commenter ID letter listed in Table 1 plus the comment number) is provided. In those cases where no new information was provided by the commenter, no further evaluation will be performed.

The preparation of the plant-specific supplement to the GEIS (which is the SEIS) will take into account all the relevant issues raised during the scoping process. The SEIS will address both Category 1 and 2 issues, along with any new information identified as a result of scoping. The SEIS will rely on conclusions supported by information in the GEIS for Category 1 issues, and will include the analysis of Category 2 issues and any new and significant information. The draft plant-specific supplement to the GEIS will be made available for public comment. The comment period will offer the next opportunity for the applicant; interested Federal, State, and local government agencies; local organizations; and members of the public to provide input to the NRC's environmental review process. The comments received on the draft SEIS will be considered in the preparation of the final SEIS. The final SEIS, along with the staff's Safety Evaluation Report (SER), will provide much of the basis for the NRC's decision on the Monticello license renewal application.

## Monticello Nuclear Generating Plant Public Scoping Meeting Comments and Responses

### 1. Comments in Support of License Renewal at Monticello Nuclear Generating Plant

**Comment:** I'm here today to provide my support for this request for license renewal from the Monticello station. The mission of everybody who works and supports Monticello is clear; and that's safe, reliable, economic operation of the plant. The safety of the public and the employees being the No. 1 priority. Two of our key values include being a good neighbor, a steward of the environment in which we operate.

(MS-A-1)

**Comment:** In conclusion, the Monticello plant has been a productive contributor to the energy needs of the State of Minnesota and a valuable asset and good neighbor to the surrounding communities. We remain committed to operating safely, reliably, economically, and focus on being a good neighbor and a good steward of the environment. I and the rest of the employees at Monticello look forward to serving you and meeting the needs of the community for many years to come.

(MS-A-8; MS-I-8)

**Comment:** And I would like to share why license renewal is the most economic and responsible energy choice for our million and a half customers here in the Upper Midwest.

(MS-B-1; MS-J-1)

**Comment:** In closing, we believe that continued operation of Monticello is vitally important to the state's energy needs, important to the local economy, and important to more than 500 employees who keep it running every day. We look forward to operating Monticello safely for many years to come.

(MS-B-9; MS-J-9)

**Comment:** The City looks forward to working with Xcel Energy into the future, especially as our city continues its growth and expands its boundaries towards the west. In closing, I would like to commend all personnel working at the Monticello nuclear generating facility for their excellent safety management.

(MS-C-3)

**Comment:** I guess I was asked to come and speak just a little bit about what I feel Xcel has been for the community. And I kind of consider myself an expert, not as far as the day-to-day operations, but being that we moved here in 1972 and I've continued to raise my family here. Also, I feel that it's a very safe operation, a much needed operation, being that now I'm on the government side of it, to see what kind of impact Xcel does have on the community and what kind of impact they could potentially have on the community if there was any problem with relays and things.

I feel very confident that I can speak for previous councils because this is an issue that came up quite some time ago, and Xcel kind of delayed it for some reason. They're looking at different things. But, past councils and the present council, I think are well behind Xcel, hoping

that everything goes well, hoping that they stay a part of, a huge part of the community like they have been.

(MS-H-1)

**Comment:** I'm here tonight to provide my support and comments on our request to renew the operating license for the Monticello plant. The mission of everyone who works at Monticello is very clear and very simple: safe, reliable, and economic operation of the plant. And, quite frankly, the safety of the public and the safety of our employees is the No. 1 priority and has been and continues to be as we operate. And as part of that, two of our key values includes being a good neighbor and a good steward of the environment in which we operate, and certainly that's very pertinent to tonight.

(MS-I-1)

**Comment:** I would like to recommend to the U.S. Nuclear Regulatory Commission that Xcel Energy be granted an operating license renewal for the Monticello Nuclear Generating Plant.

(MS-K-1)

**Comment:** I am writing to express my support for the relicensing of the Monticello Xcel (sic) Energy Nuclear Power Plant. I have been a resident of Monticello for over forty years. During that time, I have had ample opportunity to see the impact of the plant in our community. This impact has been nothing but positive throughout that time.

(MS-L-1)

**Comment:** I am writing to give my support for the renewal of the license of the Xcel Energy Monticello plant. Loch Jewelers has been in Monticello since 1977. Our personal experience with the staff and employees of the Xcel plant has been very positive. They have always worked well with the business community, exhibiting good ethics and sound business practices and putting the safety of the community first.

(MS-M-1)

**Comment:** Please accept this letter as our school district's [Monticello Public Schools] support for the license renewal of the Monticello Nuclear Plant.

(MS-N-1)

**Comment:** The Monticello-Big Lake Community Hospital District Board of Directors and staff members support the license renewal for the Monticello Nuclear Generating Plant.

(MS-O-1)

**Comment:** I have lived and worked in Monticello for the past twenty one years. I am writing you a letter in support of the license renewal for the Monticello plant. I cannot think of any local business who has been a better good neighbor than our local nuclear plant.

(MS-P-1)

**Comment:** I would like to express my strong support for the license renewal application for the Monticello Nuclear Power Plant.

(MS-Q-1)

**Comment:** BE IT RESOLVED, THAT the Monticello Chamber of Commerce, located in Monticello, Minnesota, does hereby take a position of support for the re-licensing of the Monticello Nuclear Generating Plant. The Nuclear Plant and its employees are of great importance to the City of Monticello, and to Minnesota as a whole.  
(MS-R-1)

**Comment:** The Monticello Chamber of Commerce also is a strong supporter of nuclear energy as a power source for our State, thereby working to produce energy with no greenhouse gas effects. Nuclear is a clean, reliable source of energy for our state.  
(MS-R-3)

**Comment:** As a member of the Wright County Board of Commissioners that represents the area in which the plant exists, please let me extend my support to NMC in their efforts to re-license the Nuclear Power Plant in Monticello, Minnesota.  
(MS-T-4)

**Comment:** I write today in support of the Monticello Nuclear Generating Plant and advocate for a license extension for its continued operation.  
(MS-Z-1)

**Comment:** NOW THEREFORE BE IT RESOLVED by the City Council of the City of Big Lake, Minnesota, that the City of Big Lake go on record supporting construction of an Independent Spent Fuel Storage Installation, and License Renewal at the Monticello Nuclear Generating Plant.  
(MS-AA-5)

**Comment:** NOW, THEREFORE, BE IT RESOLVED that the Town of Big Lake, Sherburne County, supports the license renewal to continue operations for up to 20 years,...  
(MS-AB-3)

**Comment:** NOW THEREFORE BE IT RESOLVED, That the City of Monticello go on record supporting construction of an Independent Spent Fuel Storage Installation, and License Renewal at the Monticello Nuclear Generating Plant.  
(MS-AC-6)

**Comment:** We, the Monticello Chamber of Commerce, support construction of an Independent Spent Fuel Storage Installation, and License Renewal of our local Monticello Nuclear Generating Plant, owned by Xcel Energy and managed by Nuclear Management Company.  
(MS-AD-1)

**Comment:** NOW THEREFORE BE IT RESOLVED, that the Monticello Chamber of Commerce Board of Directors, go on record supporting construction of an Independent Spent Fuel Installation, and License Renewal at the Monticello Nuclear Generating Plant.  
(MS-AD-6)

**Response:** *The comments are supportive of license renewal at Monticello Nuclear Generating Plant and are general in nature. The comments provide no new and significant information; therefore, the comments will not be evaluated further.*

## **2. Comments in Opposition to License Renewal at Monticello Nuclear Generating Plant**

**Comment:** And you're going to find that the political support for the commercial nuclear industry may be broad, but it's skin deep. And when that event happens, and when you've made the commitment to keep us committed to nuclear operations, what will happen then is we'll have chaos in the utility industry because we can't use the reactors anymore, and that will be piled on top of somebody's nuclear nightmare.  
(MS-D-14)

**Comment:** Extending the license to operate until 2030 will mean future generations will have to spend valuable resources safeguarding and storing more spent nuclear fuel; this is hardly beneficial to environmental resources.  
(MS-S-11)

**Comment:** Remaining dependent on nuclear power puts Minnesotans at risk for bearing the environmental and economic costs of maintaining toxic waste for centuries; the economic cost of maintaining this waste outweighs the value of the energy generated by it.  
(MS-S-19)

**Comment:** Given the location of the Monticello plant – upstream from a densely populated urban area, the fact that Minnesota's current economic and political climate is weak, the fact that political leaders from the two major parties cannot function adequately to keep the government running under normal circumstances, and the fact that the soils at Monticello raise the prospects of groundwater contamination, it is clear that relicensing Monticello is inappropriate and irresponsible at this time. The NRC should reject Xcel Energy's application for license renewal.  
(MS-S-27)

**Comment:** We have no guarantees. We do however have a rising cancer rate, relative disincentives for alternative, decentralized energy production, and huge inefficiencies in energy use—accounting for about half of the energy produced according to experts. It would be safer and cheaper to become efficient. Where is the leadership for tightening-up?  
(MS-U-6)

**Comment:** Nuclear technology is dinosauric—it's from the last millennium. It's too big, inappropriate, uncontrollable. Transmitting electricity from big generating stations is wasteful, destructive of the environment, and extremely profitable until something goes wrong.  
(MS-U-8)

**Comment:** Are you the heroes who will say no to nukes and yes to progressive, decentralized, safe energy production? This is America. We invented modern citizen democracy. We are an inventive society. We can supply the world with smart power tools—or continue our decline and deliver to ourselves a dirty bomb of our own making. "The peaceful atom is a bomb."  
(MS-U-10)

**Comment:** NRC currently gravely underestimates the risk of Monticello's operations to human and ecosystem health, uses outdated non-protective radiation standards, procures no tracking of health effects, provides lax oversight over safety and security, and by delivering a flawed alternatives-analysis seeks to ensure Xcel Energy's continued nuclear power operations. (MS-Y-41)

**Response:** *The comments oppose license renewal at Monticello Nuclear Generating Plant and are general in nature. The comments provide no new and significant information; therefore, the comments will not be evaluated further.*

### **3. General Comments Regarding License Renewal and Its Processes**

**Comment:** Because the scope of public outreach was limited to Buffalo, Minnesota and Monticello, Minnesota the Nuclear Regulatory Commission (NRC) failed to provide residents of other effected communities with information and opportunities to participate in the EIS Scoping process; people were denied the chance to weigh in on whether or not the Monticello nuclear power plant should be relicensed. Furthermore the NRC appears to have intensionally (sic) undermined the process for allowing the public to participate at the public meetings that it did hold in Monticello to discuss the EIS Scoping. (MS-S-1)

**Comment:** The residents of the Twin Cities Metro Area have a vested interest in this resource – it is a fundamental component of their survival - and they need to be included in public discussion about license renewal for Monticello. (MS-S-4)

**Comment:** The NRC failed to hold one public meeting in the Twin Cities during the EIS Scoping period.

The NRC failed to publish information about the Open Houses that it held in Monticello, MN on June 30th in both the Minneapolis Star Tribune and the Saint Paul Pioneer Press.

The NRC failed to get any local television stations to provide information about the Open Houses in Monticello.

The NRC failed to get any radio stations to provide information about the Open Houses in Monticello.

The NRC failed to provide transport from the Twin Cities to Monticello for those who do not own cars or have the financial resources to take a taxi to Monticello. (MS-S-5)

**Comment:** During the EIS Scoping period the NRC failed to provide libraries in the Twin Cities Metro Area with any documentation regarding the license renewal for Monticello; the NRC made this documentation available only at public libraries in Buffalo and Monticello.



People who learned about the Open Houses were instructed to contact Jennifer A. Davis 301-415-3835 or Jason Flemming 301-415-5787. I called Jason Flemming long-distance and left messages twice. Jason Flemming never returned my calls even though I clearly stated in both messages that I wanted to participate in the Monticello Open House as a concerned member of the public.

The NRC failed to provide people with a toll-free number so they could learn about the forum; public comments are likely to be skewed toward views of the middle-class and wealthy – the poor were not provided a means to participate in this basic dialog.

The NRC failed to provide people with contacts who would respond to their questions in a timely way; the NRC undermined the ability of the public to participate.

People who were able to make it to the June 30th Open House in Monticello were given a handout "Welcome to the NRC's Open House Associated with the Environmental Review for License Renewal at the Monticello Nuclear Generating Plant" that clearly stated in the first sentence of the second paragraph that the NRC was seeking comments supporting relicensing: "The NRC is gathering information necessary to prepare an Environmental Impact Statement (EIS) *in support of* the proposed renewal of the operating license for the Monticello Nuclear Generating Plant" (I have added the italics). This sentence alone may have discouraged members of the public who showed up intending to make a statement against the relicensing from voicing their concerns or entering them into the record.

In the "Welcome to the NRC's Open House Associated with the Environmental Review for License Renewal at the Monticello Nuclear Generating Plant" the first sentence of the second paragraph makes it clear that the EIS Scoping period was not a time for the NRC to consider the pros and cons of relicensing; for the NRC it was a time to gather information that supported a predetermined course of action – relicense the plant.  
(MS-S-6)

**Comment:** Because the NRC failed to inform large communities that will be effected by the relicensing of Monticello about the EIS Scoping, because the NRC did not demonstrate a credible effort to engage members of the public in the EIS Scoping process, and because the NRC appears to have consciously set out to undermine participation from members of the public who are against the relicensing of Monticello the entire EIS Scoping Process needs to start over. To fail to do so will result in damage to Xcel Energy's reputation and damage to the credibility of all relicensing efforts for nuclear reactors throughout the United States. At this point in our nation's history undermining the democratic process for something as serious as relicensing nuclear power plants could have significant and harmful negative fallout as far as public confidence in the government's ability to put the long-term needs of the people before corporate desires for profit and gaining market share is concerned. Failure to engage in honest dialog regarding relicensing the plant creates the very real possibility that Monticello will be relicensed without the public or the NRC considering very serious problems; this is public policy at its worst.  
(MS-S-8)

**Comment:** I wish to underscore the opening comments made by Christine Ziebold, MD, PhD, MPH, and Julie Risser, who both pointed out ways in which the NRC, and NRC process, worked against public participation. I have an anecdote of my own: I emailed the contact person listed, Jennifer Davis, a day or two prior to the June 30 meeting to verify place and time because it was

listed as "tentative" on the site, and did not receive a response until July 5! I live in Red Wing, and Monticello is a ways away, and I had no way to confirm.

It was not clarified for the audience the purpose of the meeting, that it is for determining the scope of the EIS, and what that meant, what types of Comments were specifically being solicited. Because this is not clear, the record contains comments from people supporting nuclear power (!) and Monticello, but not offering anything relevant to the comment purpose. People attending the meeting were not able to tailor their comments to be effective.  
(MS-V-1)

**Comment:** The Nuclear Regulatory Commission's (NRC) relicensing process has dramatically deteriorated over the past decade. NRC needs to clearly communicate, best establish a SEARCHABLE website, indexed on major search engines regarding Monticello. NRC's EIS scoping is a non-transparent process, EXTREMELY poorly communicated through the media. The search engine on NRC's website will not retrieve the website for Monticello on the first 20 hits, and neither will Google. If NRC wants to enjoy any credibility for its "seeking public involvement" it needs to fix this problem.  
(MS-Y-1)

**Comment:** NRC needs to honestly relate information about realistic health and environmental concerns due to the routine release of fission products to air, water and land and the unsolved long term storage situation, aside from issues due to catastrophic events. The NRC EIS scoping process as is and NRC communications in general keep the public at large uninformed. In my experience NRC meetings are tightly controlled and orchestrated. NRC's public relations have replaced solid information or even public health education. The process is virtually exclusive of the public at large.  
(MS-Y-3)

**Comment:** I kindly request that NRC hold another EIS scoping meeting in the Twin Cities ASAP.

The Monticello meeting on June 30, 2005 serves as a case in point. The public meeting (which really was one, not two as stated in the NRC press release, even though there might have been two basically back to back sessions within the same 12 hours) took place at the virtual exclusion of Twin Cities stakeholders, due to its location at Monticello and its timing. Twin Cities residents are stakeholders too, since a catastrophic event would affect a disproportionately larger number of us.  
(MS-Y-4)

**Response:** *As outlined in the Introduction section, the NRC published a Notice of Intent in the Federal Register (70 FR 32381) on June 2, 2005. This was the official notice to inform the public of its opportunity to participate as the NRC undertakes the environmental review of the request to renew the operating license of the Monticello Nuclear Generating Plant. Every Federal agency is required to publish its notices in the Federal Register, which is issued every work day, to ensure that the public is informed of its opportunity to participate in the work of the Federal Government. In the Notice of Intent, the NRC invited the applicant; Federal, State, and local government agencies; local organizations; and individuals to participate in the scoping process and to provide comments to the NRC about the scope of the environmental review no*

later than August 2, 2005. The NRC staff is supported by its contractors and any interested member of the public in undertaking this environmental review. The outcome is not predetermined, but an environmental review will be performed and an EIS will be prepared to support the review whether or not the request to renew the license is granted. The NRC provided the public with information on the application located in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at [www.nrc.gov/reading-rm.html](http://www.nrc.gov/reading-rm.html), the Public Electronic Reading Room. Toll free telephone numbers were provided in the Notice to assist the public with the use of ADAMS and in contacting key NRC personnel on the project.

Although not required by NEPA, the NRC has elected to take steps during the scoping process to ensure that interested parties have additional opportunities to become informed about the project and to gain access to process and site-specific information to enhance their participation at the level they so choose. In addition to the official source of information in the NRC Public Document Room and ADAMS, the NRC believed that it would be useful to the public to provide a copy of the environmental information associated with the application for inspection at a public library close to the site area; for the Monticello project, two public libraries (Monticello and Buffalo) were kind enough to support our effort. The local libraries also have information to assist the public in using ADAMS if an individual does not have internet access from another source. Consequently, any individual who is interested in obtaining information from the NRC related to any environmental review for any license renewal project can go to any public library and use library resources to obtain access.

The NRC has established an open process to permit all members of the public to participate in the scoping process. Comments can be provided to the NRC in person, by mail, and by e-mail. In addition, the NRC has elected to conduct public meetings during the scoping process to ensure that interested parties have an additional opportunity to gain access to information about the project and the process to effectively participate. The NRC provided the information about the public meetings in the Federal Register Notice and posted the meeting time and location at the NRC's website ([www.nrc.gov](http://www.nrc.gov)). The NRC also published a press release to inform the media about the purpose, time and location of the meetings, but the NRC does not control the actions of the media; consequently, the NRC also pays for advertisements in a reasonable set of local newspapers (the St. Cloud Times and the Monticello Times) to share the information with the public. The NRC meetings were facilitated and, in advance of the meetings, the facilitator contacted elected and appointed officials as well as known representatives of interest groups so that they could inform their constituencies of the opportunity to participate in the meetings. Finally, the NRC placed posters about the meeting in public places in the Monticello site area.

Two meetings were held on the same day to make it convenient for interested parties who had obligations (e.g., work or family) to choose whether they would participate in one or both meetings. Preregistering for either of the meetings assists the staff in determining the quantity of materials that it should bring to enhance the level of understanding and participation. During the days leading up to the meetings, the environmental review team generally conducts an audit in the site area and may no longer have access to office resources; consequently, the public was encouraged to contact the staff by June 23, 2005, to preregister. However, the NRC attempts to accommodate all interested parties at the public meetings whether they were preregistered or not. No member of the public was denied the opportunity to participate in the scoping process. If an individual made the effort to attend the public meeting, then she or he was given the

*opportunity to share her or his views on the record to ensure that it would be captured by the NRC and treated equally as any written comment submitted by August 2, 2005. If an individual was unable to attend the meeting or elected to defer offering her or his comments at that time, then she or he still had the opportunity to share views with the NRC through the end of the comment period as outlined in the Notice. Those who provided comments at the public meetings were not precluded in any way from providing additional comments through the end of the comment period.*

*The comments raised concerns about the additional opportunities provided by the NRC to comment during the scoping process, but do not provide new and significant information. Therefore, the comments will not be evaluated further.*

**Comment:** In a telephone conversation with Jennifer Davis, NRC contact for Monticello on 8/1/05 at 3pm CST I learned that NRC has a generic EIS for all nuclear plants and that "2/3 of the issues contained therein won't be revisited." Even if true, this was not a great motivation to submit comment. This generic EIS however is NOT posted under "Documents Available for Comment" which is the hyperlink provided for Public Involvement on NRC's Monticello website, which I only found today.  
(MS-Y-2)

**Response:** *The impact evaluation performed by the staff and presented in the Generic Environmental Impact Statement for License Renewal of Nuclear Plants NUREG-1437 (GEIS) identified 92 environmental issues that were considered within the scope of a license renewal review. For each of the 92 issues, the staff evaluated existing data from the nuclear power plants throughout the U.S. From this evaluation, the staff determined which issues were amenable to generic consideration and which issues can only be resolved on a site-specific basis. Sixty-nine of the issues were found to be generic to all sites, whereas, 23 of the issues would require a site-specific analysis. Generic issues are termed Category 1 because the conclusions related to their environmental impacts were found to be common to all plants or all plants with certain design features (e.g., cooling towers), mitigation of adverse impacts was considered, and it has been determined that additional mitigation measures are likely not to be beneficial to warrant implementation. Absent "new and significant information" that the NRC may obtain during its independent site-specific review, which includes public comments in the scoping process, Category 1 issues are not reevaluated in the site-specific EIS. Nevertheless, the conclusions from the applicable 69 Category 1 issues are adopted (using a NEPA concept known as tiering) in the site-specific EIS.*

*Category 2 issues are those that require a site-specific review, prepared in the staff's site specific supplement to the GEIS. The NRC staff evaluates site-specific data provided by the applicant, other Federal Agencies, State agencies, tribal and local governments, as well as information from members of the public.*

*The GEIS is available on the NRC's website at <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1437/>. The comment provides no new and significant information; therefore, the comment will not be evaluated further.*

**Comment:** The NRC must evaluate the environmental impact of ownership and operation scheme, in this case, where Xcel is the owner of the plant with full liability for operations as conducted by NMC.

The application was made in the name of Nuclear Management Company, LLC. Xcel Energy, the owner of Monticello, should also be an applicant.

(MS-V-6)

**Response:** *Nuclear Management Company (NMC) is the holder of the operating license, and has applied for license renewal of the operating license of Monticello Nuclear Generating Plant. NMC submitted the application, dated March 16, 2005, individually and as agent for the owner of the plant, Northern States Power Company, a wholly owned subsidiary of Xcel Energy Corporation.*

#### **4. Comments Concerning Water Quality and Use Issues**

**Comment:** There is (sic) some thermal issues. They may be generic, but they may be pretty specific to Monticello, being as Monticello is really on the upper waters of the Mississippi River. You cannot count on the cooling that this river has historically provided over the forecast period for a re-licensing period.

(MS-D-10)

**Comment:** The NRC analysis on water quality and surface runoff fails to adequately address issues concerning erosion, changing weather patterns we are experiencing in Minnesota, and the risks to ground water contamination.

(MS-S-23)

**Comment:** The EIS needs to define the impact on water. The EIS needs to assess in detail how reactor operations impacts water contamination.

(MS-Y-33)

**Response:** *Temperature effects and other water quality issues were evaluated in the GEIS and determined to be Category 1 issues. Water quality will be discussed in Chapters 2 and 4 of the SEIS.*

**Comment:** And it was '95 -- or '85 or '86, maybe it was '87 when we did experience extremely low flow. Some of you who were here at the plant at that time remember those low flows. 7Q10 I believe it's called, is what we named it. Very, very close to opening up some of the reservoirs in the dams upstream from Monticello certainly, upstream from the Twin Cities to provide greater flows. We're going to see more and more of that. We're going to see less flows with higher temperatures. We know what happened a year ago in France when they had very, very high temperatures and the waters were too hot to take the cooling water from the reactors, and they had to shut the reactors down. Your EIS needs to take much more account of that than I think we historically have.

(MS-D-11)



**Comment:** The NRC does not address the fact that while torrential down pours followed by days of hot dry weather used to be unusual in the state ten years ago, they have become common; cities are scrambling to address rapidly changing water levels that fluctuate from unusually high to unusually low.

(MS-S-24)

**Comment:** Item 12 & 13, Physical Impacts on Water resources, Water Use. Xcel Energy uses water to cool reactors and this topic should be addressed in the EIS, because of the definite and apparent impacts on local aquifers and water resources.

(MS-X-4)

**Comment:** The EIS needs to tabulate concisely how much of which contaminant is estimated to have been released for the past 2 decades of operation. The EIS needs to show water flow rates and respective volumes in which continuous and batch releases have and are expected to occur, and model the effects of these releases, taking into consideration latest scientific evidence (see 3,4,5)- not the references from 10 years ago as in the generic EIS. This modeling should include mitigating factors related to global climate change, such as volatile changes in available water quantity, especially of the Mississippi River. The EIS needs to show how adequate water monitoring would be performed, by whom and who would pay for it.

(MS-Y-35)

**Response:** *The specific impacts of climate change within a particular region or watershed are highly speculative, and are therefore beyond the scope of a NEPA review for reactor license renewal. Furthermore, any changes in watershed characteristics would likely be gradual, allowing water use conflicts to be resolved as needed. Operating license holders are required to submit Annual Effluent Monitoring Reports and are also required to submit event reports during abnormal conditions. Water use conflicts will be discussed in Chapter 4 of the SEIS.*

## **5. Comments Concerning Aquatic Ecology Issues**

**Comment:** The EIS must consider the impact of hot water discharges into the Mississippi river on aquatic plant, animal and human life.

(MS-V-10)

**Response:** *The comment is related to aquatic ecology. Impacts to aquatic species will be addressed in Chapter 4 of the SEIS.*

## **6. Comments Concerning Terrestrial Resource Issues**

**Comment:** Monticello is a strong supporter of the environment. We take great care in our daily activities to ensure that the environment is well protected. Our employees feel fortunate that the location of Monticello rests on the bank of the Mississippi River within the reaches of the Montissippi County Park and the Lake Maria State Park. The site is home to numerous wildlife, aquatic species and plant life. Our efforts have made Monticello a safe and sound habitat for many years, and it remains our commitment to maintain that for years to come.

(MS-A-6; MS-I-6)

**Comment:** Item 25, Nearby resources. First glance appears to be an incomplete list which does not include resources identified by the local community other than one "biologically sensitive area." This section also needs more discussion about impacts in the event of a release or accident.

(MS-X-8)

**Response:** *The comments are related to terrestrial resource issues, which will be addressed in Chapters 2 and 4 of the SEIS.*

## **7. Comments Concerning Air Quality Issues**

**Comment:** The next thing I would like to just mention briefly is that we are moving into a totally different climate paradigm. Global warming is on us. Nuclear reactors were not designed and built, and the functions that are provided within the redundant safety systems and so forth were not designed for the brave, new global warming world.

(MS-D-9)

**Comment:** The EIS must consider the CO<sub>2</sub> releases of the nuclear cycle in comparison with other generation fuels, including uranium mining, milling, and other aspects of fuel production, transportation and concrete CO<sub>2</sub> emissions.

(MS-V-9)

**Comment:** Item 22, Vehicle Emissions. More discussion is needed as this is the only identifiable source of air emissions. Trucks, hauling equipment, and vehicles used to perform ongoing maintenance need to be quantified and compared to USEPA guidelines especially considering the fact that this area is in danger of falling out of "attainment" for ozone. Vehicle emissions are a primary source of ozone precursors as identified by the Minnesota Pollution Control Agency and Xcel Energy in various publications.

(MS-X-6)

**Comment:** Item 23, Stationary Source Emissions. This topic should include a more complete discussion of the radioactive emissions and also the impacts of particulate from construction of cask storage facilities and other activities related to plant operation that are on-going (back up systems for heating, cooling, etc).

(MS-X-7)

**Comment:** The EIS needs to describe the impact on air quality and green house gas emissions.

The specific EIS needs to consider CO<sub>2</sub> production. The EIS needs to include data on CO<sub>2</sub> production numbers by the nuclear fuel cycle. (how much has been released should be concisely presented in table format for the past 2 decades of operation). In comparison to renewable energy, energy from nuclear power releases 4-5 times more CO<sub>2</sub> per unit of energy produced. Contrary to the generic EIS and public belief, CO<sub>2</sub> is emitted at every stage of the 7 stages of the nuclear fuel cycle: mining uranium milling, conversion, enrichment (90% of CO<sub>2</sub> production), fabrication into fuel rods, reactor operations and finally waste "disposal".

(MS-Y-36)

**Comment:** The EIS needs to quantify air releases, show how adequate air monitoring would be performed, by whom and who would pay for it. The generic EIS only admits that small amounts of ozone and smaller amounts of oxides of nitrogen are produced by transmission lines (how much should be concisely presented in table format for the past 2 decades of operation).

(MS-Y-37)

**Comment:** The power created is clean, with virtually no harmful air emissions.

(MS-Z-3)

**Response:** *Air quality issues were evaluated in the GEIS and determined to be Category 1 issues. The comments provide no new and significant information on air quality and will, therefore, not be evaluated further.*

## **8. Comments Concerning Land Use Issues**

**Comment:** The EIS must consider the impact of the growth of the Metropolitan area, which is now encroaching on the plant, putting more people in harms way, downwind and downriver.

(MS-V-11)

**Response:** *Land use issues were evaluated in the GEIS and determined to be Category 1 issues. The comment provides no new and significant information on land use and will, therefore, not be evaluated further.*

## **9. Comments Concerning Human Health Issues**

**Comment:** The second issue I would like to address has to do with, well, this new information out. As we spoke yesterday or the day before, the National Academy of Scientists, it's not the BEIR [Biological Effects of Ionizing Radiation] reports anymore. They don't call them the BEIR, but the panel of the National Academy of Science that looks at biological consequences of long-term, low-level exposure released the next round. And they confirm that there is no safe threshold.

In other words, if you are exposed to the degree that you are exposed, particularly we will find if the exposure is not background, but rather internal because then it's ongoing, it doesn't stop. It never stops if it's internal. And you can't escape it if it's internal, if you've ingested or inhaled beta in particular. There is no safe threshold for that; and the degree of exposure, the symptoms that will be exhibited increase proportional to the amount of exposure that has happened all the way down to zero.

So based on that knowledge, why, we have a problem, in my opinion, with the monitoring that goes on because we don't know -- we do know that these reactors as they explode uranium atoms and provide the entire periodic chart of other elements, including all of their radioactive sons and daughters. And then we release many of them because they're gases in particular.



And we store them for a while. And then we wait for a while. And then at some point we decide it's time to let them go. And they report them to the NRC, and we've got a boxful of reports as to how many curies of this and that went out. And the monitoring looks very convincing if you don't know what you're looking at because it's dominated with TLD's, thermoluminescent dosimeters, which are gamma ray detectors.

Well, that's fine. We have a monitoring system that essentially will tell us when we have an accident. We shouldn't need a monitoring system to tell us that. We should know that from other sources. And what we should know is where are the reported releases going? Because unless we know where they go, we don't know where the receptors are. And unless we know where the receptors are, we don't know what the biological consequences of that reception are.

And so the scope of this EIS needs to include a requirement -- you need to have data included in this EIS if what you're talking about is whether the consequences -- I saw it on the slide. What are the consequences of continued operation? You need to know before you can say with any veracity what the consequences of continued operations are. You need to know where do reported releases go? If you don't know that and if the EIS can't say that, you have no business making any conclusions on whether the consequences, the environmental consequences of your continued operations.

(MS-D-7)

**Comment:** Extending operations at Monticello for 20 more years will also mean more cancer-causing radiation emissions will be pumped into the atmosphere.

(MS-S-10)

**Comment:** As with problems surrounding public involvement, problems surrounding environmental concerns reveal broad segments of the population have been ignored by the NRC. The NRC relies on studies that assume a healthy adult male who weighs approximately 150 pounds is the recipient of radiation emissions.

(MS-S-12)

**Comment:** The NRC does not consider how radiation effects women, children, developing fetuses, the elderly, people with immune deficiency problems, people who are obese, and people who are underweight. The studies of radiation used by the NRC reveals a clear discrimination against well over 50% of the population; it is sexist, ageist, and elitist. On this latter point subjects are assumed to be healthy, i.e., individuals who have the resources to care for their bodies and their diets.

(MS-S-14)

**Comment:** The NRC does not consider long-term radiation exposure. It does not weigh basic facts about human physiology. For example girls are born with all of their eggs intact. What is the effect of long-term exposure to human eggs? Will there be decline in human health and abilities over the next two to ten generations?

(MS-S-15)

**Comment:** Generating electricity from nuclear material requires tremendous amounts of energy to process the uranium. Much of this electricity comes from coal plants which produce high levels of global warming carbon dioxide and high levels of mercury emissions which ultimately

end up in human bodies; the EPA now estimates that one in six pregnant women have levels of mercury in their bodies high enough to jeopardize the development of the fetal nervous system. (MS-S-17)

**Comment:** The EIS needs to acknowledge that there is no safe threshold for radiation exposure. The widely acknowledged absence of a "safe" threshold for radiation exposure should provide a strong reason for NRC not to renew Xcel Energy's reactor license. Its routine operations cause radioactive pollution. "The fact that humans cannot escape exposure to ionizing radiation from various natural sources, is no reason to let human activities increase the exposure."  
(MS-Y-5)

**Comment:** The EIS needs to accurately reflect actual radiation exposure.

The EIS needs to consider the so-called "routine radioactive releases" for Monticello specifically. During Monticello's operation radioactivity is both continuously emitted and periodically batch-released to air and water. It is unclear in what quantities, and how often. These data should be presented in concise table format for the past two decades of operation. Dilution with large volumes of station circulating water into reservoirs, rivers and lakes makes the releases "disappear." This is not "natural background" radiation.  
(MS-Y-6)

**Comment:** The EIS needs to consider that NRC does not tightly regulate radioactive releases. NRC only asks Xcel Energy to "make every reasonable effort to maintain radiation exposures, and releases of radioactive materials in effluents to unrestricted areas, as low as reasonably achievable" (ALARA, 10 CFR 20). This is unacceptably vague and not considered a standard procedure for health risk limit settings in regulatory toxicology.  
(MS-Y-7)

**Comment:** The EIS needs to consider, and if none is available or found, fund the collection of up-to-date, in vivo radiation exposure data. NRC's generic EIS at 4.6.2 "Public Radiation Doses" presents unacceptably outdated, crudely modeled and ultimately uninformative data of "maximally exposed individuals" from 1985-87. NRC's so-called "latest" report, Population Dose Commitments Due to Radioactive Releases from Nuclear Power Plant Sites (1989), is 16 years old. None of the data are actual in-vivo measurements.  
(MS-Y-8)

**Comment:** The EIS must not exclusively rely on projections of radiation exposures. NRC needs to review the population density around the plant. NRC need to review and reference recent health studies that would confirm any low cancer incidence it assumes in the generic EIS.  
(MS-Y-9)

**Comment:** The EIS for Monticello needs to use a dose commitment that integrates radiation dose over time. NRC calculates radiation exposure only for the year of radiation release. In contrast, most European nations use a dose commitment that integrates dose over time, rather than only a one-time release. This non-dynamic modeling is akin to determining the cost of a loan merely on the basis of the principal.  
(MS-Y-10)

**Comment:** The EIS needs to consider the effects and costs of long-term exposures by several radionuclides including tritium. While most radionuclides emitted from Monticellos' nuclear power reactor are relatively short-lived, there are some with long half-lives (like C14), and some with infinitely long half lives (Ur238, 4.5 billion years) that can deliver harmful exposures for months, years, thousands and millions of years. Despite of its relatively short half-life (12 y) tritium is of high concern. It is a highly mobile radionuclide moving anywhere hydrogen does. While it is a relatively weak beta emitter, humans can inhale, ingest and absorb tritiated water and food, where it becomes an internal hazard, irradiating the tissue. Tritium can bioaccumulate through the aquatic foodchain. However, NRC 's generic EIS at 4.6.1.1 (Radionuclide Deposition) argues on the one hand that Tritium is not known to build up, but admits on the other hand that buildup is not explicitly accounted for in the aquatic food pathway. NRC 's tritium release limits remain lax, despite animal, human cell and DNA studies indicating its toxicity. Paragraph 4.6.1 on public exposure falls woefully short on what needs to be considered at Monticello, and seems more intent to deliver assurances than science based information. (MS-Y-11)

**Comment:** The EIS needs to consider physiological or ecological interactions that would mitigate exposures. Radionuclides can unite with carbon in the human body, plants, or animals. Even though Tritium passes through the human body in 12 days, some becomes organically bound and can remain in a person for much longer (450 to 650 days). One study even found traces of tritium in the body 10 years after exposure. Similar processes happen in the natural environment: As released radioactive gases decay, some form particulate and join other persistent radioactive isotopes released as fallout. Long-lived isotopes persist, accumulate and "bio-magnify" in biota through the food chain. (MS-Y-12)

**Comment:** The EIS needs to accurately estimate radiation-induced health risks in the general population both at Monticello and the larger region.

NRC needs to include emerging evidence on health effects in its EIS. More specifically the 1992 Energy Policy Act requires EPA to set public health and safety standards "based upon and consistent with" the recommendations of the National Academy of Sciences. NAS just published their latest report on radiation risk in June 2005 (BEIR VII report). Sixty years after Hiroshima, the full scope of effects of radiation on human beings is still incompletely understood, but progress has been made in the past 10 years since writing of NRC's (sic) generic EIS. (MS-Y-14)

**Comment:** The EIS needs to consider that NRC's radiation protection standards are not protective of the majority of the US population. (MS-Y-16)

**Comment:** The EIS needs to consider that cancer risks from radiation exposure are higher than previously estimated. The BEIR VII report is an improvement in so far as it estimates cancer incidence and mortality according to age of exposure, gender and by cancer type. The average risks to the population are estimated to be 10-15 % higher than the reference value currently used for radiation protection of the general population (565 cancer fatalities per million rem exposure in BEIR VII compared to 500). (MS-Y-17)

**Comment:** The EIS needs to consider non-cancer health risks. Newly emerging evidence points to the fact that radiation can cause a spectrum of effects, such as reproductive and cognitive impairment. We now know that certain life stages and situations exist, when exposure to both radiation and hormonally-active compounds pose an increased risk to human health. As the BEIR VII report does not touch on publications after 2000, it is likely still underestimating the true health impact. See below.

(MS-Y-18)

**Comment:** The EIS needs to show how NRC intends to monitor for health effects in the general population. The EIS needs to specify how NRC would achieve the monitoring rather than relying on projections assisted by third parties with significant interest in a downplaying of effects. In the absence of other tracking systems in Minnesota this should include at a minimum an annual review of data from the state's cancer surveillance and birth defect registry, and the specification as to who would pay for the monitoring of health effects.

(MS-Y-19)

**Comment:** The EIS needs to account for sensitive subpopulations. NRC models still use a hypothetical 154-lb. adult white male for dosimetric modeling and protection standard setting. This does not take sensitive or divergent populations into account, such as

- a) women
- b) infants and children
- c) the unborn
- d) the elderly
- e) immunocompromised

(MS-Y-20)

**Comment:** The EIS needs to account for women's increased vulnerability. Women's critical organ doses and effective doses (as defined in International Commission on Radiological Protection 60) are about 25% higher than for men. Women's gonad doses may even be as much as factors of 10-30 higher than in men. The risk for women to contract solid tumors like lung, breast, kidney, and liver cancer due to radiation exposure is about double those for men. The cancer mortality risks for females are 38% higher. Only for a few cancers, including leukemia, the risk estimates for men are higher. The special hormonal status of females increases cancer risk from exposure to ionizing radiation. Pregnant women appear to have an increased risk of cancer. Furthermore, research in both humans and animals has shown that interactions between hormonally-active chemicals and ionizing radiation may increase some types of cancer. For instance, low doses of neutrons were more effective in inducing breast cancer in female rats in combination with prolactin than without it. Hence radiation during pregnancy, when prolactin is increased is adding to the cancer risk.

(MS-Y-21)

**Comment:** The EIS needs to account for infants and children's increased vulnerability. Current NRC standards and models do not consider newborn's special vulnerability to radiation. Many radionuclides are excreted in breast milk, providing a special exposure pathway for infants. The brain continues to develop during the first 2 years of life. Numerous studies show that ionizing radiation can impair the developing human brain and affect cognitive processes. Further evidence is from children treated for leukemia or brain tumors, although confounding factors cloud the issue somewhat. A recent study from Sweden examined 3000 men who received

irradiation for a skin problem as young children. It clearly demonstrated a significant dose-response relationship for all cognitive tests at doses equivalent to those from computed tomography of the skull. IQ loss is a lifelong health effect. Several longitudinal birth cohort studies have shown that optimal brain development in utero and in the first years of life are a determinant for how well cognitive abilities are preserved in old age. In other words brain development impaired through radiation exposure during infancy and early childhood predicts cognitive decline in old age. Therefore costs from this health effect accrue over a long time. The risk for children to contract radiation-induced cancer is high, even higher than for women. For instance, the same radiation in the first year of life for boys produces 3-4 times the cancer risk as exposure between age 20 and 50. Female infants have almost double the risk as male infants. A study in the August 2003 issue of the Archives of Environmental Health showed that children growing up in regions with nuclear power plants develop cancer twice as frequently as controls/the national average. Milk teeth from the 47 cancer-stricken children contained higher levels of Sr-90. Radiation induced child health effects that need to be considered in the EIS are not merely loss of life and cancer, like leukemia later in life, but also chronic health conditions, such as an increased chance of birth defects, impaired fertility or IQ loss. The societal impacts and costs due to lost earning potential and mental retardation deserve NRC's special consideration. Unfortunately NRC de facto ignores the risk of low dose radiation in its protection standards.

(MS-Y-22)

**Comment:** The EIS needs to account for the increased vulnerability of the developing fetus. Since the bombing of Hiroshima and Nagasaki it is well known that the unborn child is very sensitive to the effects of radiation. One reason is that the cells of the embryo are rapidly dividing and growing into specialized cells and tissues. This is accomplished through a complicated orchestration of high-level hormonal activity. A growing body of literature informs on synergism between hormonally-active compounds and radiation. The hypothalamo-pituitary axis is a major regulator for endocrine activities, which are increasingly impacted by ubiquitous endocrine disrupting chemicals. There is general support for the view that development and programming of this axis during fetal life is the most sensitive window to permanently alter the homeostatic mechanisms of the endocrine system, including the mature reproductive system. Prenatal radiation exposures clearly are causes of endocrine-related cancers or susceptibility thereto. Low doses of X-rays to the fetus, especially during the last trimester, cause an increased risk of leukemia and all other types of cancer during childhood. Even use of therapeutic X ray of infants is associated with thyroid and breast cancer later in life. It is my understanding that current models to calculate internal radiation doses do not permit adequate modeling of the dose to individual organs within the fetus, even though this would obviously be quite important for safety assessments. Very few authors have attempted to make such individual organ dose estimates. However, with each additional study it is becoming clearer that placental transfer and fetal dose estimates have historically been underestimated. For example, the fetus is cradled above and behind the mother's bladder, which concentrates radionuclides and can provide additional radiation exposure, a source previously discounted. Despite available evidence the quantification of the unborn child's health risks from exposure of parents to radiation is a task that NAS still has to tackle. Yet, NRC cannot afford to wait another 15 years for the next NAS report. NRC needs to err on the side of caution and consider birth defects, intellectual and reproductive impairment as radiation related health effect in its impact analysis.

(MS-Y-23)



**Comment:** The EIS needs to account for the increased vulnerability of the elderly. Older age radiation exposures are associated with higher cancer mortality.  
(MS-Y-24)

**Comment:** The EIS needs to account for the increased vulnerability of the immunocompromised. Radiation-induced cell damages are less likely to be repaired by a person with an incompetent immune system as can be gleaned from the secondary cancer rate in cancer survivors after radiation therapy. The number of people whose immune system is compromised is rapidly increasing in our region due to immunosuppressive medical treatments and increased survival of people with infections and congenital immune deficiencies.  
(MS-Y-25)

**Response:** *The comments are related to human health issues. Human health issues were evaluated in the GEIS and were determined to be Category 1 issues. The GEIS evaluated radiation exposures to the public for all plants including Monticello, and concluded that the impact was small. During the plant-specific environmental review of Monticello, the NRC will determine whether there is any new and significant information bearing on the previous analysis in the GEIS. The information provided by the comments will be reviewed as part of that search. In addition, evaluation of new studies and analyses of the health effects of radiation exposure, such as BEIR VII, is an ongoing effort at the NRC. If significant new information is found, the NRC will perform a plant-specific analysis of this environmental impact. This issue will be addressed in Chapter 4 of the SEIS.*

## **10. Comments Concerning Socioeconomic Issues**

**Comment:** On a different note, Monticello is more than a power plant operated by highly skilled workers. Monticello is part of this community. Not only does the plant rely upon many local companies for goods and services, but our employees live in and contribute to these communities and the surrounding communities on a daily basis.

We're proud to participate and give back to the community in a variety of ways, including serving on city and town boards, as leaders in civic and community organizations, as sports coaches, on church committees, boards and councils, and as members of charitable organizations. Our employees also help raise money for our local United Way organizations, the Relay for Life, the American Cancer Society, the Rotary Club, STARS Hockey Association, just to list a few.  
(MS-A-7; MS-I-7)

**Comment:** Monticello provides significant benefits, as John has pointed out, to the local and state economies by providing more than 500 full-time, family-supporting jobs. The plants and its employees purchase numerous goods and services from the local businesses and contribute and support the local charities and community organizations.

The plant also provides significant tax support to the local community. Xcel Energy is committed to being a good neighbor and fostering those continued economic growth in the region.  
(MS-B-8; MS-J-8)

**Comment:** This facility with the 500 jobs it does offer our community offers excellent career growth and retirement for the residents. It brings about economic vitality to all of our community.

Xcel closely works with city officials and county officials dealing with safety and security issues. During refueling, hundreds more contractors and subcontractors frequent our hotel, motels and restaurants, bringing more economic vitality to our community.

(MS-C-1)

**Comment:** Previously you heard many examples of Xcel being a good neighbor. Another example is its commitment to youth and actually other older residents, such as myself. They have provided excellent softball and youth league baseball/softball facilities. It's a modern facility where many residents and non-resident families come to spend quality time. Prior to this location, NSP had provided a men's softball complex adjacent to Montissippi Park. This has now been converted to an area for radio-controlled model airplane enthusiasts.

(MS-C-2)

**Comment:** The plant has provided stable good paying jobs for many people in the community and has aided the community in this respect by bringing many people to Monticello for employment. A great number of these individuals have contributed much to the town in terms of leadership and volunteerism.

(MS-L-2)

**Comment:** Xcel (sic) has made it a policy to aggressively seek to provide sponsorship for a great for a large number of community activities designed to make Monticello a cleaner, safer and better place to live. Their contribution to Monticello's tax base alone has also assisted many community residents by lowering property taxes.

(MS-L-4)

**Comment:** The Monticello Nuclear Plant has been an excellent neighbor to our community and school district for more than 35 years. Over the years many of the employees have resided in our community and sent their children to our schools. In addition, the employees have been civic minded members of our community. Numerous employees have joined local organizations and have served as community volunteers. Members of the Monticello Nuclear Plant have historically supported various community events such as the United Way and the annual River Fest Celebration.

(MS-N-2)

**Comment:** The plant has also provided the area with a substantial tax base for our city, township and school district.

(MS-N-4)

**Comment:** The Hospital District provides several programs such as Home Delivered Meals, Childbirth Education Classes, and music therapy for our Nursing Home residents that receive financial support from the United Way. Employees of the nuclear plant have supported the United Way. Plant employees are a part of our volunteer activities for our patients and residents. The local economy is better with the tax support provided by the nuclear plant. Monticello is

growing rapidly and having the license renewal for the nuclear plant will provide stability for our community.  
(MS-O-3)

**Comment:** I also operate a local business and we say that many of our best customers are employees of the plant. They have been known to hire first class people and pay a very nice wage. In addition you will find employees to be active in local churches, coaching a youth hockey and baseball team, president of a local group like rotary. They do a wonderful job of having a quiet and almost invisible physical location while being very visible around the community. In addition to the employees it is easy to see and notice how the plant itself prides itself in supporting a whole variety of local efforts and charitable type events.  
(MS-P-3)

**Comment:** Last but not least is that I know they pay a whole lot of money in taxes. This is critical for all of us locally here in Monticello, but also spreads much further throughout all of Minnesota.  
(MS-P-4)

**Comment:** The plant employs nearly 500 people with an annual payroll of over \$50 million dollars, which is of course of great benefit to our community. But these employees are also a wonderful asset to the spirit of Monticello with their generosity, volunteerism and support of our local business and school district. Both the employees and the Company have been extremely generous to the United Way and many additional local charities in our continuing quest for an active and vibrant community.  
(MS-R-2)

**Comment:** Beyond this fact, there are many local benefits to the Nuclear Plant in Monticello. It plays an important role in the local economy, both as an employer and taxpayer to local families and governments. The company and its employees have demonstrated their support to the community through donations and volunteer efforts to various local groups, organizations and charities.  
(MS-T-2)

**Comment:** The plant is a vital asset to our state and important to my community. More than 500 people are employed full time at the plant.  
(MS-Z-2)

**Comment:** WHEREAS, a reliable, low cost and environmentally sound electric supply with a diverse energy mix is critical to economic well-being;  
(MS-AA-1; MS-AC-1)

**Comment:** WHEREAS, the Monticello Nuclear Generating Plant provides nearly 500 full-time jobs and contributes significantly to the local and state economy;  
(MS-AA-3; MS-AC-3; MS-AD-4)

**Comment:** WHEREAS, the Monticello Nuclear Generating Plant is now, and will continue to be, a significant contributor to the local tax base,...  
(MS-AC-5)



**Comment:** WHEREAS, nuclear power is a reliable, low cost and environmentally sound source of electricity, and is an important factor in a diverse energy mix that is critical to our economic well-being;  
(MS-AD-2)

**Response:** *The comments are supportive of license renewal at Monticello Nuclear Generating Plant, and are general in nature. The comments provide no new and significant information on socioeconomic issues, and therefore, will not be evaluated further.*

**Comment:** The EIS needs to assess the negative socioeconomic impacts on Monticello

a) The EIS should specify Monticello nuclear plant tax payments as the percentage of the total city and county revenue. The data under 4.7.2 Taxes in the generic EIS show tremendous variation and are not helpful (<1 –88%).

b) The EIS should specify how many jobs and how many families depend on the Monticello nuclear plant as the percentage of the total city and county population. This would better illustrate an impact that needs to be explicitly considered, not projected. Dependence on the nuclear plant is a risk factor to the region.

c) The EIS should provide actual details about the change in land use pattern since licensing of the reactor. The generic EIS paragraph 4.7.4 Off-Site Land Use is insufficient in judging whether sprawl with all its negative human and ecosystem health impacts is a result of the plant. The area to the immediate southeast of the reactor is one of the fastest growing communities in Minnesota.

(MS-Y-32)

**Response:** *The comment is related to socioeconomic impacts on taxes, employment, and land use issues specific to Monticello. Socioeconomic impacts such as taxes, employment, and land use are Category 2 issues. These issues will be addressed in Chapters 2 and 4 of the SEIS.*

**Comment:** It's interesting as the severe accident mitigation alternatives, whatever that is, we have a substantial southeast Asian immigrant population in Minnesota, and they don't speak English and they eat a lot of fish. And so if we have a severe accident at Monticello and we contaminate a stretch of the river, we need to have a specific methodology of notification of all those communities and those individuals that may fish in the upper reaches of the Mississippi.

And so that includes like four southeast Asian languages and all that type of thing. And they don't necessarily follow the strict rules and regulations that we might have. And so it's going to be a substantial effort of notification. Otherwise you're going to have missed a large population that would be directly impacted. And also a large Hispanic, Latino community as well that in fact probably also does not speak English. And so you have all these groups that you must include in your analysis.

(MS-E-3)

**Comment:** The NRC also fails to address how low-income people in the Twin Cities Metro area would be able to procure safe drinking water in the event that the Mississippi River became contaminated by nuclear material.

(MS-S-13)

**Response:** *Environmental justice is an issue specific to Monticello and will be discussed in Chapter 4 of the SEIS.*

## **11. Comments Concerning Postulated Accidents**

**Comment:** I also work with the North American Water Office, and my primary interest is that the Monticello Nuclear Facility is upstream from water intake, drinking water intake, for the Minneapolis city. And it is the only source of drinking water.

And so I would charge the NRC in their EIS analysis if there is an accident and there is a substantive discharge into that waterway, we have no alternative drinking water. And I would charge you that it is a severe environmental justice issue because people can't go and buy bottled water. Who is going to supply the water supply for 2 million people? And what are the costs of that, and how are you going to protect the water supply of Minneapolis?

St. Paul also gets a substantive percentage of its water from the Mississippi. They do have some deep wells and some lakes that they can also -- that they do also use. And so there is an additional exposure for St. Paul that you must consider.  
(MS-E-1)

**Comment:** So I'm inquiring about the severe accident mitigation alternatives. I found the analysis in they call it consequence bins quite helpful and, you know, easy to follow. But what was very unclear to me when the EIS explained these different categories of release potential, extreme, more than 50 percent of the inventory of cesium iodine being released. And then large, between 20 and 50 percent, which, of course, is really a huge range I think in terms of impact. Medium, small and negligible.

It explained that the severity depends upon the amount of the release in relation to the time in which general emergency was declared and people were alerted and were able to be, mitigation measures were able to be taken.

What was completely unclear to me in the environmental review is whether or not the NRC has any specific standards for this. How that decision is made? Who makes the decision as to whether the general emergency is declared? When people are notified? Whether they're -- and I think this bears upon the question of the water supply as well. I became aware of this question when I was sitting in on a technical representatives meeting, which they have monthly in the Environmental Quality Board.

And I think it's the Health Department. I'm not sure if it's the Health Department or the PCA, but many of the agencies are involved right now in a review of protections for service waters that serve as drinking waters under the EPA requirement, voluntary requirement.

And there were ten -- this has been like a six-month or eight-month, year-long process identifying the inventory, the service water inventories. And then determining what the priority contaminants

were that they were going to consider. And one of those priority contaminants was specifically radioactive contamination from Monticello plant. And so this is something that is on the docket in this review, EPA review.  
(MS-F-1)

**Comment:** The Monticello nuclear power plant is located upstream from the Twin Cities on the Mississippi River. Residents of Minneapolis, St. Paul, as well as substantial numbers of people who live in sections of first-ring suburbs such as Edina get their drinking water from the Mississippi.  
(MS-S-2)

**Comment:** The NRC has failed to adequately address risks to ground water contamination. According to the NRC's own study the soils at the Monticello site are primarily Hubbards which are highly permeable and also have limited available water capacity. These soils readily transmit rainwater and surface water to groundwater supplies. In the event of radio-active material seeping out of containment units it is quite likely that groundwater sources and even aquifers could become contaminated.  
(MS-S-25)

**Response:** *The comments are related to the impacts of design basis accidents and severe accidents. The impacts of design basis accidents were evaluated in the GEIS and determined to be small for all plants; therefore, it is a Category 1 issue. The GEIS evaluated severe accidents for all plants including Monticello, and concluded that the impact was small. However, alternatives to mitigate severe accidents must be considered for all plants that have not considered such alternatives. During the plant-specific environmental review of Monticello, the NRC will determine whether there is any new and significant information bearing on the previous analysis in the GEIS. Section 5.1.2 of the plant-specific SEIS for Monticello will address severe accidents. The applicant provided a severe accident mitigation alternatives (SAMA) analysis as part of the license renewal application for Monticello. The NRC staff's review of the SAMA analysis will be discussed in Section 5.2 of the plant-specific SEIS for Monticello.*

## **12. Comments Concerning Uranium Fuel Cycle and Waste Management Issues**

**Comment:** Relicensing Monticello will result in more spent nuclear waste being generated near this valuable water resource.  
(MS-S-3)

**Comment:** The NRC makes no provisions to ensure that the energy needed to process uranium, and extract uranium is generated by sources such as wind or solar that do not produce harmful mercury, carbon dioxide, and nitrogen oxide emissions.  
(MS-S-18)

**Comment:** The NRC fails to acknowledge that there is no way to access accurately the true cost of securing and storing spent nuclear fuel for future taxpayers. Such an exercise is futile as there is no way to know how strong future economies will be.

The NRC fails to acknowledge that a large percentage of our financial resources will be diverted from other areas in order to provide financial resources for securing nuclear facilities and storing nuclear waste.

(MS-S-20)

**Comment:** An obscure amendment to the federal energy bill (S706, HR2189) just passed 7/29/05, eases the restriction on overseas export of bomb grade uranium. (Sorry, I don't have the section number.) Exporting toxic and hazardous waste is a common practice for a rich country such as ours.

With the clear and present threat of nuclear terrorism, exporting bomb grade uranium would be unthinkable if it were not real. Amassing deadly bomb-grade materials tempts corporate decision-makers to take the export "solution." What guarantees exist to keep this waste in our own state or nation?

(MS-U-1)

**Comment:** There is an assumption that the federal government will somehow "take care of" the N-waste. However, since the last century when nuclear weapons/power came on-line there is no clear solution about long term storage. There has been a lot of money spent and rhetoric said, but nothing is settled.

(MS-U-5)

**Comment:** The EIS must address the environmental impact due to continued operation for an extended (sic) license term, where there is more radioactive material to be stored, higher burnup rate waste is dangerous for longer periods, more casks needed, etc. Assemblies will increase from 1630 to 4512, nearly tripled, by 2030.

(MS-V-8)

**Comment:** Is this temporary or permanent storage? The EIS must determine what will happen to the nuclear waste at the end of the term of licensure. If there is no answer, a number of reasonable scenarios must be fully analyzed, with caretaking of waste and maintenance of casks and facility assured to end point.

(MS-V-13)

**Comment:** Additionally, due to the fact that a long-term storage facility is unlikely to be built anytime soon, and that facility will not have room for additional waste from Monticello, this issue will be affecting generations of Minnesotans and metro residents.

(MS-X-1)

**Comment:** Item 28, Infrastructure impacts. More information needs to be included including impacts of transporting nuclear fuel to the facility by truck or rail and explanation of why the plant needs electricity, it is a nuclear power plant after all.

(MS-X-9)

**Comment:** Item 30, Social, Economic, and Community impacts (Other). There needs to be a discussion of the larger impacts of transporting nuclear fuel into the Monticello Community and

metro area, the ongoing operations of the plant, and the long term impacts of storing highly reactive nuclear waste at a site for 200-10,000 years.  
(MS-X-11)

**Comment:** The long-term ability of humans to store, contain, and manage nuclear waste is something yet untested. While some may argue that we have done so effectively for the most of the last 50 years there are numerous case studies to argue the opposite point (e.g. Three Mile Island, Chernoble Disaster). Since the production of nuclear electricity is non-sustainable in its current form and since there are no methods to properly address long-term storage of deadly nuclear waste we think it is fairly myopic and somewhat reckless to move forward unless all risks are clearly delineated in the public's view.  
(MS-X-12)

**Comment:** The EIS needs to consider transportation accidents involving nuclear material.  
(MS-Y-27)

**Response:** *The comments are related to the environmental impacts associated with the uranium fuel cycle, which were evaluated in the GEIS and determined to be Category 1 issues. The GEIS evaluated impacts associated with the uranium fuel cycle for all plants including Monticello, and determined that the impact was small. During the plant-specific environmental review of Monticello, the NRC will determine whether there is any new and significant information bearing on the previous analysis in the GEIS. If significant new information is found, the NRC will perform a plant-specific analysis of these environmental impacts. Chapter 6.0 of the plant-specific SEIS for Monticello will address these issues. The comments provide no new information and, therefore, will not be evaluated further.*

### **13. Comments Concerning Alternatives**

**Comment:** Our analyses show that keeping Monticello and Prairie Island as part of that diverse energy mix will benefit our customers by an estimated \$1billion in today's dollars during the life extension periods, compared with the next best replacement options. Our analysis also shows that keeping the plants running will result in significantly lower air emissions than would occur if they were shut down and replaced with the only realistic alternatives, which are coal or natural gas-fired plants.  
(MS-B-5; MS-J-5)

**Comment:** And it's incumbent upon the Nuclear Regulatory Commission in its scoping of a commitment for an additional 20 years of reactor operations to at least be mindful of what's happening in the next five years relative to how electric utility services are going to be delivered.

CBED stands for Community Based Energy Development. And what it means is that we have an opportunity of taking advantage of the modern technologies, as opposed to the obsolete ones, which we're talking about here today, to look at the distributed dispersed capacity that can and will be coming on-line very rapidly in the next five years.

CBED enables those energy systems to come on line in a way that we've never experienced before. It provides a negotiating framework for the power companies to negotiate power

purchase agreements with independent qualifying producers of energy. Locally owned, community-based energy. The type of energy development that will have to happen if we are ever to get out of our commitments to central station power and all of the problems that that represents in terms of how you manage nuclear waste for 140,000 years or more. What do we do about the mercury contamination? What do we do about global warming in particular from the coal chain? What about all the security threats from the nukes and all of the routine releases from the nukes and the catastrophic threats that nuclear power represents?

If we're going to work out of those binds, we will need to make a transition. And CBED is a profound tool that will enable that transition to happen. Right now it's true. It's for wind, and we recognize that wind can be an intermittent resource, not a base-load resource. And we all like to have the lights turned on even when the wind isn't blowing.

But it's also true that CBED projects provide an opportunity for us to now move forward to the hybrid systems where wind is married to combustion technologies. And right now -- well, there is the Public Utilities Commission meets next week, where we will be authorizing a test burn of a 2-megawatt diesel generator to a wind system in Southwest Minnesota in Rock County by Luverne.

And what will happen there is we're going to figure out how, as the wind tapers off, the combustion capacity can come on. And before very long, before this year is out, we'll have a pretty good handle on how to handle about 600 megawatts of peak during the year, which will be extremely lucrative to power producers because having 600 megawatts -- 600 hours, having a megawatt available on demand for 600 hours a year, your call utility, that's worth about six or seven thousand dollars a month, in addition to the energy, to have the capacity.

So we have the economic opportunity for this development to happen. And before two or three years are up, we'll be down on the shoulders of that peak. We'll be up to 14, 16, 1800 hours a year. And before this plant gets renewed, we're going to be swinging with a load duration curve just like Sherco 3 does. And then we're in business.

(MS-D-3)

**Comment:** And as an afterthought, we go through the IRP, the Integrated Resource Planning process, to figure something out about conservation, because that's in the public good. Well, we're going to figure out at some point it is my fondest hope -- well, maybe second fondest -- that we figure out how to tie the financial health of the utility systems to what we all really want, which is the efficient use of resources, rather than the wasteful consumption.

And when we do that, we're going to find that we're wasting right now well over 50, 60, 70 percent of all of the kilowatt hours we consume. We don't need to if what we're focused on is how to get us the light that we want, or the refrigeration that we want, or the industrial drive that we want, rather than just selling bulk kilowatt hours.

So these are changes that are coming at you, NRC, in the time period that you're looking at for renewing this license. And I'm just really, I'm confused as to how you are going to evaluate that.

(MS-D-5)



**Comment:** But when you consider alternatives, which you need to do, I would like to urge you to consider putting coal gasification that is slated to go elsewhere in Minnesota down here instead of nuclear. You preserve the jobs. You get rid of nuclear. You don't have to deal with those types of environmental issues, and I'll submit information in detail about that.  
(MS-G-1)

**Comment:** I am also concerned about alternatives. And again I live in Red Wing, which is right by Prairie Island, down river from Prairie Island, and also down river from this plant. So I would urge you to consider everything that Kristen particularly was talking about, and I will just give details on this later. But in alternatives, there are options being considered for Minnesota that would work really well here. This site is set up for it. It's time to consider some of those.  
(MS-G-3)

**Comment:** The "permanent" solution is transition to gasification, wind, solar roof panels, weather stripping, tighter windows—a thousand improvements to improve our quality of life and also boost local employment.  
(MS-U-9)

**Comment:** No Action Alternative. Comment 1: EIS must consider current levels of load and generation in the region and state.

Comment 2: EIS must consider load and generation to evaluate impact of no action alternative:  
MAPP 2004 Load and Capability Report  
MAPP Form 3 (most recent version)  
NERC 2004 Long-Term Reliability Assessment Report  
CapX2020 Report

Rationale for Comments 1 and 2: The Federal Register notes that the "No Action" alternative will be considered. As a part of this alternative analysis, the NRC must consider the current levels of load and generation in the region and state to put the "No Action" alternative in context, including, but not limited to the MAPP 2004 Load and Capability Report and the MAPP Form 3 list of generation, the 2004 NERC Reliability Assessment Report, particularly the MAPP and MAIN sections, and the CapX2020 report claiming a "need" of 6,000MW and the MISO queue with 16,712MW in generation waiting in line.  
(MS-V-2)

**Comment:** Reasonable Alternative Energy Sources. Comment 3: The EIS must consider reasonable alternatives including natural gas fueled combined cycle plant as a reasonable alternative to Monticello.

Comment 4: The EIS must consider the Mesaba coal gasification plant as replacement, electrically and physically, for Monticello.

Comment 5: The EIS must consider the efficiencies and environmental benefits of utilizing pre-existing infrastructure and plant components in replacing Monticello with the Mesaba coal gasification generation balanced against continuation of Monticello nuclear generation and construction and operation of Mesaba elsewhere.

Comment 6: The EIS must consider system wide distributed, renewable generation as a reasonable alternative to Monticello.

Rationale for Comments 3, 4, 5 and 6: Rationale: Xcel claims it needs generation and that it should rely on coal and nuclear. The coal gasification option was mandated by the legislature, yet because of the market realities of high electrical availability, a power contract was also mandated. Because of these mandates, Mesaba should be analyzed as the first replacement option for nuclear power. Monticello relicensing is before us right now, and the Mesaba application to the EQB is imminent.  
(MS-V-3)

**Comment:** Comment 7: The NRC must evaluate, as reasonable alternatives, combinations of different intermittent generation, such as wind with gas and/or biomass, to give capacity equivalent to capacity percentages of "baseload" coal and nuclear.

Rationale for Comment 7: Xcel unreasonably relies exclusively on coal and nuclear when combinations of other fuel options could provide generation equal to, for example, the 70% or so availability of Monticello (40% wind plus just 30% gas = 70% capacity! See, that wasn't so hard.).  
(MS-V-4)

**Comment:** We would also suggest that alternatives to continued operations at the Monticello facility be properly evaluated, particularly part 5 titled "Systemwide Renewable, distributed generation" which could include the construction of wind farms, solar farms, or other renewable energy sources where the fuel is present locally and the method of generation not inherently dangerous. The # four option of "Wind and Gas" would also be a much more benign scenario to continued operations and infinitely long storage of nuclear waste on-site.  
(MS-X-3)

**Comment:** WHEREAS, replacement of the Monticello Nuclear Generating Plant would result in an electric rate increase and significantly increased emissions of carbon dioxide, nitrogen oxides, and sulfur dioxide.  
(MS-AA-4)

**Comment:** WHEREAS, replacement of the Monticello Nuclear Generating Plant would result in an electric rate increase and significant increased emissions of carbon dioxide, nitrogen oxides and sulfur dioxide...  
(MS-AC-4; MS-AD-5)

**Response:** *The comments are related to the environmental impacts of alternatives to license renewal at Monticello. The GEIS included a discussion of alternative energy sources. Environmental impacts associated with various reasonable alternatives to renewal of the Monticello operating license will be evaluated in Chapter 8 of the SEIS.*

**Comment:** The latest scientific evidence needs to be researched and referenced. The references of the generic EIS are testimony that the document is at the minimum 11 years old and largely outdated when it comes to renewable energy literature. The EIS needs to show, for example, that solar power holds tremendous promise in our region now, as there is increased



PV efficiency, state governmental support, and PV panel costs continue to decline an average of 5% annually. The argument of land use and solar is incredibly exaggerated, as PV-panels in urban areas are readily mounted on existing buildings. Solar energy has one of the highest job intensities per unit of output of any energy technology, and thus has huge benefits to the local economies that adopt them. In addition to jobs from the contractors that install systems, the Minnesota economy is projected to benefit from an expanding solar energy manufacturing industry including growth in such areas as semiconductors, plastic films, electronic equipment, instrument measuring, switchgear and switchboard apparatus, wiring, storage batteries, sheet metal, and flat glass.  
(MS-Y-39)

**Response:** *The GEIS is subject to periodic review and update; in 2003, the NRC initiated an effort to update the GEIS. As new information becomes available, the NRC determines whether it is sufficiently significant to change a position. In Section 8.3 of the GEIS, the staff described the alternative energy technologies and evaluated the environmental impacts of supply and demand alternatives with the focus of "... the purpose and need of the proposed action [i.e., to provide an option that allows for power generation capability beyond the term of a current nuclear power plant operating license to meet future system generating needs as such needs may be determined by state, utility, and, where authorized, federal (other than NRC) decision makers]...." The staff focus is on the power generation capability of a baseload nuclear power plant. Alternative energy sources will be discussed in Chapter 8 of the SEIS.*

**Comment:** The EIS needs to be sensitive to the issue of CO2 reduction.  
(MS-Y-40)

**Response:** *The comment raises issues related to alternative energy sources, which will be evaluated in Chapter 8 of the SEIS.*

**Comment:** The EIS needs to present a fair and accurate alternatives analysis.

The energy alternatives need to be discussed in an impartial manner. The generic EIS has a definite inherent pro-nuclear spin. Could it be because the nuclear power industry has been given more taxpayer dollars for research and development than any other energy sector?  
(MS-Y-38)

**Response:** *The comment is outside the scope of license renewal related environmental impacts. The NRC's regulations in 10 CFR Part 51 require the NRC to consider all reasonable alternatives to a proposed action as part of its NEPA review. The license renewal review evaluates a reasonable range of alternatives to supply baseload electric power generation. The analysis of alternatives to license renewal presented in the GEIS will be supplemented by a plant-specific alternatives analysis of license renewal at Monticello. The comment fails to provide any new and significant information, and will not be evaluated further.*

#### **14. Comments Concerning Aging Management**

**Comment:** The Monticello plant has also been well maintained over its lifetime. Approximately every two years we perform a refueling and maintenance outage, in which we typically carry out

over 2,500 individual maintenance and inspection activities. This is in addition to the ongoing maintenance, inspection, and rigorous testing activities that are performed at the time the plant is operating on-line.

Over on the years, we have continued to invest in a wide range of equipment improvements to take advantage of technology and materials to ensure future reliable and safe operation. As computer training methods have evolved, we are able to broaden the training available. As we move forward, we will continue to upgrade the equipment and technology at the station.  
(MS-A-4; MS-J-4)

**Comment:** And then we get to the aging issues for these reactors. Now, I understand, as I said in my opening remarks, I understand the commitment of the work force and the intent of the work force. But I also know that we have part of the fail-safe systems bolted to the packing crate at Monticello as well as at Duane Arnold for 35 years before it was discovered. Never took the bolts off.

So just because you're good and paying attention doesn't mean things can't happen. I know what happened at Davis Besse, where they were looking really hard, and they didn't find it because they weren't looking in the right place. I know it happened at Point Beach when the nuclear physicists forgot their high school chemistry and they caused an explosion in a cask. Damned near tipped the lid into the pool, which could have drained the pool; and then we would have some fire works. It didn't happen, fortunately.

But these are all examples; and there is many, many more. NRC knows them, so I won't bore you with them, but we're pushing the envelope with all of this stuff. You guys got to do a better job of figuring out where to look when. You have to have more different ways of -- you have to find more diverse ways of looking at things. You've got to figure out not only where to look, but when to look. And you have to do that in a way that provides more assurance, than we have in the past, you're not overlooking things.

Things age. As things age, I mean it's the bathtub curve. Are you familiar with the bathtub curve concept? Things of life where in the early -- using a human example, there is a death mortality rate for infants which is higher than for juveniles and adults. And then it goes up again at the end, and in the long run we'll all be dead.

Well, the same with reactors or any other piece of equipment. It goes through a curve. And now that we're doing re-licensing, you see we're getting into the tail end of that curve, and that's why we look at aging things. But you're not looking at them good enough is the point. And the unfortunate point is that there is no way that you can look at it good enough because you can't always look everywhere.  
(MS-D-12)

**Comment:** Objectively, relicensing an old nuclear power plant beyond its expected peak performance is an accident waiting to happen. Picture a Bell Curve, problems with a complicated energy plant occur at the beginning and end of its production-time. Where is Monticello on that curve? Three Mile Island, Chernobyl—the lesson will be repeated until it is learned.

(MS-U-7)

**Response:** *The NRC's environmental review focuses on environmental impacts relevant to the extended period of operation requested by the applicant. Safety matters related to aging are outside the scope of this review. An NRC safety review for the license renewal period is conducted separately, and will be documented in an NRC staff Safety Evaluation Report. The comments provide no new information and will not be evaluated further in the context of the environmental review. However, the comments will be forwarded to the project manager for the license renewal safety review for consideration.*

**Comment:** In addition, it has recently come to our attention that there are some age related component degradation (sic) issues the EIS needs to address. Specifically, the potential of mounting base plates, grout, and/or mounting hardware for pumps, heat exchangers, compressors, tanks, turbines and motors to fail due to age-related degradation needs to be examined.

Further, valve stem and pump shaft packing and gasket material, and other sealing materials required to prevent system leakage to the environment where shafts penetrate through a pump casings, valve body/bonnets, and other components needs to be analyzed for age-related degradation.

Further, consumables such as lubrication media including oils and greases must be analyzed from the perspective of age-related degradation.

Finally, valve internals flow isolation sealing subcomponents such as valve discs, plugs, and/or gates must be analyzed from an aging management program perspective.

(MS-W-1)

**Response:** *The NRC's environmental review focuses on environmental impacts relevant to the extended period of operation requested by the applicant. Safety matters related to aging are outside the scope of this review. An NRC safety review for the license renewal period is conducted separately, and will be documented in an NRC staff Safety Evaluation Report. The safety review looks at the applicant's aging management programs for passive long-lived systems, structures and components. The comments provide no new information and will not be evaluated further in the context of the environmental review. However, the comments will be forwarded to the project manager for the license renewal safety review for consideration.*

#### **14. Comments Concerning Issues Outside the Scope of License Renewal Environmental Review**

##### **Operational Safety, Security, & Emergency Preparedness**

**Comment:** Our roughly 500 employees are highly experienced. They're well trained; and they're committed to the safe, reliable, economic operation of our plant and to the continued operation of that plant. All of our employees go through rigorous training to continuously hone their skills and to learn new procedures and information. Absolutely no one is exempt from the training or testing to ensure that our entire work force is at its best.  
(MS-A-2; MS-I-2)

**Comment:** Our emergency response procedures and drills, for example, examine just how our employees react in the event of an emergency. The emergency plan has only one focus, that being safety; safety of the public, safety of our employees, and safety of the plant. Emergency response drills are conducted several times a year to test our abilities and carefully examine areas in which we can improve to prevent situations based on a formal plan which is thoroughly reviewed and monitored by federal agencies. The rigorous standards we abide by are set and reviewed thoroughly by the NRC and FEMA, the Federal Emergency Management Agency.

We have a collaborative approach to emergency planning in Monticello. This results in a team effort between employees, Wright County, Sherburne County, the State of Minnesota, and the Nuclear Regulatory Commission. All totaled, over a thousand people are part of these emergency response teams.

We have consistently demonstrated our ability to protect the health and safety of the public and our employees, and we will continue to work with our partners at the NRC to maintain the highest standards for safety and excellence.  
(MS-A-3; MS-I-3)

**Comment:** Monticello has operated safely and reliably for 35 years. And we at Xcel are committed to maintaining safety and environmental excellence to operate for an additional 20 years. Our No. 1 priority is and has always been the health and safety of the public. Every day Monticello employees come to work with the serious mission of working safely and maintaining the environment in which we work, live, and watch our families grow.  
(MS-B-2; MS-J-2)

**Comment:** Before we turn to Page 2, I would like to also recognize that the work force that we have at Monticello, fortunately, is very conscientious, very well trained; and we recognize that.

I've had opportunity to observe other nuclear work forces in the course of the Westinghouse lawsuit that Xcel filed in 1995 or '96. My organization was responsible for intervening in that court case. And in the course of that process, we reviewed over a million pages of internal documents that talked about the problems with pressurized water reactors and their steam generator problems.

And in the course of doing that, we looked at what other work forces at reactor sites around the country did and did not do. And so we have an appreciation for the work force at Prairie Island.  
(MS-D-1)

**Comment:** And when you're dealing with a technology that is so terribly unforgiving as a boiling water reactor, unless you're always looking everywhere, you're going to miss something. And when you do -- you may not miss it here, but somebody at Duane Arnold will miss it or somebody at some other of the 400-some reactors around the globe will miss it, and one is going to head south. And then everybody will say, "Oh, how could it have happened?"  
(MS-D-13)

**Comment:** Over its tenure of operation, I have had the opportunity to tour the facilities. On these occasions I have had conversations with the staff about Monticello's operations; plant safety; training and certification; and their employment in general. Generally, everyone was well trained and very professional.  
(MS-K-2)

**Comment:** At the same time, the plant employees and management have worked very hard to maintain an excellent safety record and to communicate openly with the community about plans, processes and the challenges confronting the nuclear power industry.  
(MS-L-3)

**Comment:** As a resident of our community for more than 30 years, I can attest to the quality of the plant's safe operations. It is the overwhelming feeling of the community that the plant is a safe facility.  
(MS-N-3)

**Comment:** The medical staff and district employees receive annual emergency preparedness education. Following the education, an emergency preparedness drill/exercise is held. Working with the plant employees on this exercise is a first hand opportunity for us to see how well the plant is run and the importance they place on safety.  
(MS-O-2)

**Comment:** For twelve years I lived next door to the facility, not one single moment of concern of safety. I believe their safety record has been excellent.  
(MS-P-2)

**Comment:** The NRC does not have a plan to provide water to residents who live down-stream from the Monticello nuclear power plant; the Twin Cities Metro Area is not considered part of its scope.  
(MS-S-16)

**Comment:** The NRC fails to acknowledge that the number of people needed to effectively address release of toxic substances is lower than it would have been before the September 11th terrorist attacks. The NRC has failed to determine how it can make up for this short fall and what it intends to do if numbers of reservists present in the state continue to decline. Many members of the National Guard are not in Minnesota – they are serving our country in an ongoing war with Iraq and an ongoing peace-keeping mission in Afghanistan. If indeed there

was an accident at Monticello, a fire, or other emergency it is questionable whether Minnesota would have enough individuals with the training and the knowledge needed to effectively address the catastrophe.  
(MS-S-22)

**Comment:** The plant is reliable, efficient, and most importantly managed in a manner to uphold the highest standards of safety. As a Public Information Official (PIO) of the Wright County Nuclear Emergency Response Team, I know first hand the efforts in place to assure safety at the plant under the unlikely scenario of a system malfunction.  
(MS-T-3)

**Comment:** Item 20, Solid Waste, Hazardous wastes, Storage Tanks, section c, "Emergency Response." While there may be no above ground storage tanks of hazardous chemicals it seems reasonable that some mention of the nuclear waste and emergency response measures needed in case of a release should be addressed under this point. To overlook this part in the scoping would be equivalent to stating that there is nothing stored at the facility more dangerous than water.  
(MS-X-5)

**Comment:** The environmental committee I represent does not endorse generation of power from non-sustainable sources and sources that have the potential to hurt or kill residents in the Minneapolis area in the event of an accident or failure.  
(MS-X-13)

**Comment:** The EIS will need to address emergency preparedness: The generic NRC EIS does not address the issue under 4.7.3.3 Public Safety. To this date there are no NRC regulations requiring nuclear plants to prepare for an attack by aircraft, boat, or truck. The EIS needs to show how adequate emergency preparedness training would be performed, by whom and who would pay for it.  
(MS-Y-26)

**Comment:** The EIS needs to show the intent of a strengthened inspection program: NRC almost never conducts unannounced inspections for safety and security problems. NRC regularly minimizes the significance of problems it finds in its annual inspections of the Monticello Plant by classifying them as so-called "non-cited violations." This means Xcel Energy is not required to respond in writing and NRC inspectors don't have to verify that the problem has been corrected.  
(MS-Y-29)

**Response:** *Operational safety, security, and emergency preparedness are outside the scope of this review. An NRC safety review for the license renewal period is conducted separately. Although a topic may not be within the scope of review for license renewal, the NRC is always concerned with protecting health and safety.*

*Emergency preparedness is an ongoing process at all plants, including Monticello. Each nuclear plant must have an approved emergency plan, as required by 10 CFR Part 50, that is revised periodically and required to be updated. Licensees are required to frequently test the effectiveness of the plans by conducting emergency response exercises. Emergency planning*



*is part of the current operating license and is outside the scope of the environmental analysis for license renewal. The comments did not provide any new and significant information and do not fall within the scope of license renewal as set forth in 10 CFR Parts 51 and 54; therefore, the comments will not be evaluated further.*

**Comment:** Security at plants across the nation has received increased emphasis and scrutiny since the tragic events of September 11, 2001. The security at Monticello is no exception. We've taken extensive precautions to implement new policies and procedures to ensure that the safety and well-being of the community and our employees is ensured. This includes several million dollars in additional resources and equipment. We continue to work with the NRC to review and evaluate our security procedure to make sure the most effective methods are being used.

(MS-A-5; MS-J-5)

**Comment:** The third one gets into security issues. Now, I appreciate that there has been an elevated recognition of this issue. I remember a time when I was accused of providing a road map for talking about security issues. It wasn't that long ago. Somehow I'm complicit because I didn't put my head in the sand and talked about it.

Well, now we all know that it's the issue. And what I'm here to tell you, in spite of what has been done, is that we have security at all of these reactors that is very, very good at keeping out the graffiti man. That's it. You saw the Time Magazine article, right? I'm not making this up.

Representative John Kline, Prairie Island representative, he wants to get it out of Minnesota really quickly because of security issues. That's why he's pushing Yucca Mountain. He thinks that's a solution; but the point here is that even people like John Kline, bless him, understand that nuclear operations have grave security issues that are not being addressed.

The EIS needs to do a much better job of analyzing and accounting for the Design Basis Threat. And it needs to be at least in two parts. It needs to at least -- you've got to acknowledge that if something has been done, it's possible. Twenty people were possible. Twenty people did it once. They were all up in the air at the same time. Twenty people could assault. That needs to be in your design basis, and you need to have the security to thwart it. And you need to pay to do it. And that's one scenario.

And the other scenario is the stand-off attack in which a single, shoulder-mounted weapon with a grenade has no problem with a DU warhead penetrating three feet or more of tank armor. You're uncovered. These things can be guided with joy sticks from Montana with the modern weapon systems. Certainly you do not need lines of sight to do it. You're wide open. You're flapping in the breeze.

Now, part of the problem is that, in order to provide adequate security, two things would happen. One is that you would drive the industry out of the market because it would be too damned expensive. And the second thing that would happen is all of the rest of us would say, wake and up say, "Holy, moly, look what they have do to protect us. Are we really sure we want to live with that kind of thing?" Well, unless you get serious about this, it's a charade. And I don't expect you to get serious about it, but you have to expect me to call it a charade when you don't because I will.

(MS-D-8)

**Comment:** If we have some type of terrorist attack on those casks once you put the waste outside containment where they are vulnerable, right close to the water supply, what are you going to do? How are you going to do it? We would have a disaster that nobody would recover from anytime soon.

(MS-E-2)

**Comment:** A Mississippi River nuclear site-- what a tempting target, the drinking water source for 18,000,000 Americans.

What was Zacarias Moussaoui training for? For a fictional treatment of an attack on N-waste casks see, HEADWATERS, a suspense novel by Bloomington, Minnesota insurance agent Jerry Leppart, Galde Press, Inc., Lakeville MN, 1998 (3-years before 9/11.) The 240-page paperback novel goes directly from the Amiriya Shelter bombing in Baghdad (2/13/91) to Prairie Island.

A single person with a shoulder held launcher can breach cask security without trespassing. Nuclear site security is relative—at best. The fewer the nukes, the less the threat. Nuclear pollution has now infected the southern hemisphere's jet stream.

Please crunch the numbers—it only takes one "accident," one terrorist incident—and it's just a matter of time. Don't roll the nuclear dice at Monticello, upstream of the Twin Cities water intake system, upwind of half of North America.

(MS-U-2)

**Comment:** Particular areas of general concern that have been removed and should be addressed in the scope of the EIS that are of paramount concern to the community at large are (Section IV.)

- 2) Radiation and Safety,
- 3) Storage technology, Accidents & Terrorism
- 6) Transportation of Spent Fuel from Monticello

These sections and others (i.e. Radiation and Radionuclide testing) need to be closely evaluated for their impacts on millions of people who live in the metro area and could be affected (killed) in the event of an accident or act of terrorism. To omit them from the EIS scope would be to prepare an incomplete Environmental Impact Analysis and a misrepresentation of risks to the surrounding communities.

(MS-X-2)

**Comment:** The EIS needs to address security planning and oversight with more transparency, not less: NRC recently found significant weaknesses in more than half of the nuclear facilities it evaluated under its "Operational Safeguards Response Evaluation program." The United States General Accounting Office Report to Congress from September 2003 was aptly titled "NRC Oversight of Security at Commercial Nuclear Power Plants Needs to Be Strengthened." This is especially important at Monticello, since NRC recently relinquished oversight of security at Monticello: It allowed Wackenhut Corp. which guards the reactor, to test itself at the site.

(MS-Y-28)

**Comment:** The EIS needs to calculate the impact of an armed attack. Guards at commercial nuclear power plants are prohibited by federal law to bear and use automatic weapons, although terrorists are likely to have them.  
(MS-Y-30)

**Comment:** The EIS needs to consider the minimal deterrence effect of present lenient punishment for security violations: The maximum prison sentence for causing the death of a U.S. worker by willfully violating federal safety regulations is only 6 months and in no proportion to its potential public health impact. The EIS needs to indicate that NRC will fix this, so that sentences for much smaller violations, like the 12 month-sentence for chasing a wild burro on federal lands does not make this law look out of proportion.  
(MS-Y-31)

**Comment:** Since water is the main path of radionuclide dispersal in the event of releases, the EIS must show how many people and jurisdictions, from Monticello to Prairie Island, and further south to Dubuque and beyond are affected by contamination of water supply due to dilution of ongoing releases and in the event of an accident/sabotage.  
(MS-Y-34)

**Response:** *The Commission has determined that issues related to terrorism are beyond the scope of the NRC staff's safety review under the Atomic Energy Act. NRC and other Federal agencies have heightened vigilance and implemented initiatives to evaluate and respond to possible threats posed by terrorists, including the use of aircraft against commercial nuclear power plants and Independent Spent Fuel Storage Installations (ISFSI). In addition, the Commission has determined that malevolent acts remain speculative and beyond the scope of a NEPA review. NRC routinely assesses threats and other information provided to them by other Federal agencies and sources. NRC also ensures that licensees meet appropriate security levels. NRC will continue to focus on prevention of terrorist acts for all nuclear facilities.*

*The NRC has taken a number of actions to respond to the events of September 11, 2001, and plans to take additional measures. However, the issue of security and acts of terrorism at nuclear power plants is not unique to facilities that have requested a renewal to their license; therefore, security and terrorism will not be addressed within the scope of the license renewal SEIS. The comments did not provide any new and significant information and do not fall within the scope of license renewal as set forth in 10 CFR Parts 51 and 54; therefore, they will not be evaluated further.*

### **Cost of Power**

**Comment:** Last November, Xcel Energy submitted its latest integrated resource plan to the State of Minnesota. All of our studies and forecasts show that the best way to maintain a reliable and cost-effective energy infrastructure in Minnesota is to use a diverse fuel mix that includes the emission-free nuclear power generated at Monticello and Prairie Island.  
(MS-B-4; MS-J-4)

**Comment:** Monticello is an essential base-load component of our generation fleet in Minnesota that has allowed Xcel Energy to economically meet our customers' daily generation needs. Without it, you would have to build new generation plants and new transmission lines, and we

would not have access to the affordable energy that we enjoy today. License renewal will allow Xcel Energy's customers to use the economical power generated by Monticello for years to come.

(MS-B-6; MS-J-6)

**Comment:** You need to be mindful of that, NRC, as you scope this. How things develop, how things can develop. You need to be mindful that some of us are figuring out that when you tie the financial health of a power company to the sales of kilowatt hours of electricity, what you're going to get is sales of kilowatt hours of electricity.

(MS-D-4)

**Comment:** And so I want you in your scoping to help us understand how you evaluate the alternative, the no-action alternative, considering the other action that is ready and right and coming forward and will be here in the face of that reactor, and we're going to put it out of business before your 20 years are up.

And what does that mean in terms of our ability to do the economic analysis of what is cost/benefit, just in the straight-out cost/benefit analysis, never mind some of these other issues that we'll be getting to. So to help understand your scoping, how you evaluate the alternative scenarios, I don't understand how you do that. And what I do understand is that this is a process intent on doing a re-license. Not on evaluating alternatives. So help us with that.

(MS-D-6)

**Comment:** What is the Full Cost Accounting of storing toxic and hazardous waste for 200 years? Full Cost Accounting would include: on-site storage; decommissioning expenses; clean up costs for expected releases, spills and accidents; health cost for workers and their families, etc.

If the company goes out of business and abandons the N-site, which seems to be the industry pattern, who pays? If there are not criminal statutes prohibiting corporate officers from taking the money and running, they will run and leave us with a domestic dirty bomb site and the bills.

(MS-U-4)

**Comment:** Furthermore, the electricity created is among the lowest priced power of all of Xcel Energy's resources.

(MS-Z-4)

**Response:** *The economic costs and benefits of renewing an operating license are specifically directed to be outside the scope of license renewal in 10 CFR 51.95(c)(2). The comments provide no new and significant information and, therefore, will not be evaluated further.*

**Comment:** Comment 16: The EIS must specifically address benefits provided to local communities, including taxes, jobs at various wage rates, and other quantifiable contributions to the local economy.

Comment 17: The EIS must address Xcel's commitment, at the time of original licensure, to the community to provide specific benefits to the community in exchange for hosting the plant.

Comment 18: The EIS must develop a chart setting out all the specific benefits provided by the Monticello plant.

Comment 19: The EIS must develop a chart, similar to that in 17, setting out all the specific costs incurred by the community as host of the Monticello plant.

Rationale for Comment 16, 17, 18 and 19: These benefits are not well documented and is exaggerated by Xcel. For example, Minnesota utility personal property tax rates have been slashed from 4.6% to 2.1% or so in the last ten years, and nuclear plants, or any large electrical facility, does not provide the revenue/benefits that were agreed upon at the time of original licensure. It is not clear what Xcel's commitment to provide the revenue or benefits was at the time that the County, City and School District agreed to host the plant. The EIS must substantiate these economic and social benefits provided to local communities, from prior to building Monticello, through the years of operation to the present, and extending through the anticipated life of the plant.

(MS-V-12)

**Response:** *The calculation of benefits to local communities since original licensure is outside the scope of license renewal pursuant to 10 CFR 51.95(c)(2). The purpose and need for the proposed action (renewal of an operating license) is an option that allows for power generation capability beyond the term of a current nuclear power plant operating license to meet future system generating needs, as such needs may be determined by State, utility, and where authorized, Federal (other than NRC) decisionmakers. The applicant is not required to include a discussion of economic costs and economic benefits of the proposed action or alternatives. The comments provide no new and significant information related to any Category 1 or Category 2 issue and, therefore, will not be evaluated further.*

### **Need for Power**

**Comment:** In addition to ensuring that Monticello operates safely and reliably, it is also Xcel Energy's responsibility and obligation to ensure that our customers have the safe, reliable, environmentally sound, and affordable energy that they need.

Monticello is integral to meeting the needs of our residential and business customers whose demand for electricity is growing at a rate of nearly 2 percent per year. In order to acquire needed generation, we have an extensive resource planning process mandated by the State of Minnesota that takes many factors into account including: fuel supply, infrastructure capabilities, environmental impacts and proximity to customers, as well as cost.

(MS-B-3)

**Comment:** Access to this economical and reliable generation is vital for continued economic growth in Minnesota. While the state has many natural resources, fossil fuel is not one of them. We must import all of our fuel requirements, and keeping nuclear as part of the mix is key to helping us maintain that fuel diversity. Fuel diversity is the backbone of our goal to provide affordable energy to our customers while continuing to reduce the environmental impact of our operations.

(MS-B-5; MS-J-7)

**Comment:** I am pleased to have had the opportunity to work with NSP and Xcel for transmission out of Southwest Minnesota to bring the renewable wind energy that was mandated as a part of the Prairie Island issue to market. So I say these things for the record, so that I hope the record recognizes that you're not looking at an ideologue. You're looking at somebody who really tries to understand problems and how to find solutions to those problems that enable society to go forward as constructively as possible.

We recognize that we all use electricity. That we all use it 24 hours a day, 7 days a week, 365 days a year, 8,760 hours a year. So we're all part of the problem. And those problems are huge and daunting. Not just on the nuclear side, but on the electric utilities side in general. And as we are all part of those problems, why, in my view, we all have an obligation to be part of the solution to it as well.

(MS-D-2)

**Comment:** In addition to ensuring that Monticello operates safely and reliably, it's also Xcel Energy's responsibility and obligation to ensure that our customers have safe, reliable, environmentally sound, and affordable energy that they need.

Monticello is integral to meeting the needs of our residential and business customers, which demand for electricity grows at a rate of 1.6 percent annually. In order to acquire needed generation, we have an extensive resource planning process that takes many factors into account, including fuel supply, infrastructure capabilities, environmental impacts, proximity to customers and costs.

(MS-J-3)

**Comment:** In my twenty five years of utility experience I have experienced the evolution of electrical generation and energy marketing. Our quality of life is built upon having an adequate and economical supply of electricity for all of our communities. Regardless of if we receive our electric energy directly from this plant or not, we need the Monticello Nuclear generation plant to be a part of the base load supply grid for the growing needs of this area.

(MS-K-3)

**Comment:** During the meeting members of the public were told that demand for electricity would rise by 2% annually. The NRC did not clarify that this figure may be inflated; the Minnesota Department of Commerce projects a 1.6% load growth as the median forecast for electricity demand. In short the NRC may have skewed data to make it appear that the need for plant relicensing is greater than it actually is.

(MS-S-7)

**Comment:** Obviously there is a huge need for electricity in the Minnesota Region that could be difficult to replace with the loss of this facility.

(MS-T-1)

**Comment:** Nuclear power is not only affordable but is also reliable; the Monticello plant runs essentially year round, 24 hours a day.

(MS-Z-5)



**Comment:** WHEREAS, the Monticello Nuclear Generating Plant generates 610 megawatts of electricity, providing approximately 10% of the energy used by Xcel Energy customers in the State of Minnesota;  
(MS-AA-2; MS-AC-2; MS-AD-3)

**Comment:** WHEREAS, the Monticello Nuclear Generating Plant (the plant) produces a reliable, reasonable cost, environmentally sound electric supply, and is an important component to a diverse energy mix that is critical to the Community, State and nation; and

WHEREAS, the plant generates about 600 megawatts (MW), enough power to supply about 600,000 homes or 10 percent of the energy used by Xcel Energy customers in Minnesota;  
(MS-AB-2)

**Response:** *The need for power is outside the scope of license renewal pursuant to 10 CFR 51.95(c)(2). The purpose and need for the proposed action (renewal of an operating license) is to provide an option that allows for power generation capability beyond the term of a current nuclear power plant operating license to meet future system generating needs, as such needs may be determined by State, utility, and where authorized, Federal (other than NRC) decisionmakers. The comments provide no new and significant information related to any Category 1 or Category 2 issue and, therefore, will not be evaluated further.*

#### **Independent Spent Fuel Storage Installation (ISFSI)**

**Comment:** And there is just a number of issues that, you know, I'm thinking back when I represented Florence Township, and they tried to put nuclear waste in. Here you have the cask sitting on -- except this is not the cask proceeding, right, so you can't really get into that. But your releases, how are you going to contain that? Are you going to put things like a clay liner underneath the slab?  
(MS-G-2)

**Comment:** The ability to keep Monticello operating, including legislative authority for dry cask storage, was a key provision in our 2003 Energy bill. The 2003 law was passed on a bipartisan basis with large majorities in both houses.  
(MS-Q-2)

**Comment:** Extending Xcel's license to operate the Monticello Nuclear plant for 20 more years will result in 25 more dry cask storage containers of spent nuclear fuel along the banks of the Mississippi; contact with spent nuclear fuel can be fatal – renewing the license to operate puts people in danger.  
(MS-S-9)

**Comment:** The NRC fails to acknowledge the fragile political nature of Minnesota's present State government. Minnesotans are experiencing government cutbacks and recently Minnesotans experienced an unprecedented State government shutdown; Minnesota lacks the stable economy and political climate necessary to bear the responsibilities of nuclear power plants and spent nuclear fuel.  
(MS-S-21)

**Comment:** The NRC fails to acknowledge that the soils at Monticello are highly susceptible to wind erosion which could also lead to problems with storing spent nuclear fuel in containers on a cement platform, i.e., cracking and buckling of the cement platform.  
(MS-S-26)

**Comment:** Public information has been limited to industry spin regarding the CON, the appropriate acronym for Certificate of Need for continued nuclear generation, the most expensive form of electricity. Further work needs to be done regarding informing the public about storing retired nuclear fuel rods above ground in the Mississippi floodplain.

For example, state Rep. Michael Beard (R-Shakopee) said during a Regulated Industries committee hearing that he did not “believe” there was plutonium in spent nuclear fuel rods. Beard is a Christian publisher who believes in the virgin birth but somehow missed the contents of hot, used N-fuel rods. If state representatives who make financial decisions for the people, the environment, the future of the state, if such people do not know what’s inside a dry storage cask, you are outreaching with a very short arm.  
(MS-U-3)

**Comment:** Xcel operates on an assumption that we might as well relicense Monticello and build a dry cask storage facility now and continue operating, and the environmental impact of this assumption must be analyzed.  
(MS-V-5)

**Comment:** The EIS must address the Minnesota Wild and Scenic designation of the area of the ISFSI. Xcel claims that the area is not a designated park, recreation area or trail, and a Wild and Scenic designation is indeed a state recreation area.  
(MS-V-7)

**Comment:** Item 29, Cumulative Impacts. As this topic relates to the cask storage, the current treatment is inadequate.  
(MS-X-10)

**Comment:** The EIS needs to consider indefinite radioactive waste storage at Monticello. Highly radioactive nuclear waste at Monticello will need to be isolated from the environment for thousands of years with the ever-present possibility of contamination and fatalities without there being long-term U.S. Nuclear Waste Repository.  
(MS-Y-13)

**Comment:** The uncertainty of the true scope of radiation related health and environmental impacts from continued or expanded storage of dry casks at Monticello needs to be weighed in by erring on the side of caution in the specific EIS.  
(MS-Y-15)

**Comment:** Finally, as we have seen with storage at the Prairie Island Nuclear Generating Plant, the waste generated can be managed in a safe and secure manner.  
(MS-Z-6)

**Comment:** WHEREAS, the plant spent fuel is stored in a pool within the plant. NMC is planning to construct a temporary storage facility, Independent Spent Fuel Storage Installation (ISFSI) on the plant site; and

WHEREAS, the ISFSI is needed whether plant operating license renewal is granted or the plant is decommissioned;

(MS-AB-2)

**Comment:** BE IT FURTHER RESOLVED, that the Town of Big Lake strongly supports, and recommends construction of an Independent Spent Fuel Storage Installation (ISFSI) at the plant site to be used until a National Storage site is selected and constructed or reclamation technology is developed to reclaim energy from spent fuel.

(MS-AB-4)

**Response:** *Comments regarding Xcel Energy's Certificate of Need application currently before the Public Utilities Commission to establish an independent spent fuel installation at the Monticello site are outside of the scope of license renewal. License holders are permitted to store spent fuel onsite as part of their 10 CFR Part 50 license. Xcel Energy has filed a certificate of need, in which they have selected an NRC-certified cask design under 10 CFR Part 72, Subpart K, General License Application. The NRC has completed its environmental assessment and safety review of the NUHOMS 61-BT design which was selected by Xcel Energy. Additional review is not warranted. Inspections will be carried out by NRC resident inspectors, as well as, Region III inspectors. The comments provide no new and significant information related to any Category 1 or Category 2 issue, and therefore, will not be evaluated further.*

## **Summary**

The preparation of the plant-specific supplement to the GEIS (called a SEIS) for Monticello Nuclear Generating Plant will take into account all the relevant environmental issues raised during the scoping process that are described above. The draft SEIS will be made available for public comment. Interested Federal, State, and local government agencies, local organizations, and members of the public will be given the opportunity to provide comments to be considered during the development of the final SEIS. Concerns identified that are outside the scope of the staff's environmental review have been or will be forwarded to the appropriate NRC program manager for consideration.