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NUCLEAR REGULATORY COMMISSION

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PUBLIC MEETING TO RECEIVE COMMENTS ON THE WASTE CONFIDENCE DRAFT GENERIC ENVIRONMENTAL IMPACT STATEMENT AND PROPOSED RULE

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WEDNESDAY

DECEMBER 4, 2013

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MINNETONKA, MINNESOTA

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The Public Meeting convened at the Minneapolis Marriott - Southwest, 5801 Opus Parkway, at 7:00 p.m., Miriam Juckett, Facilitator, presiding.

NRC STAFF PRESENT:

ALLAN BARKER, Region III/RSLO

TISON CAMPBELL, OGC

DAVID CYLKOWSKI, OGC

JENNIFER DAVIS, NMSS/WCD

SARAH LOPAS, NMSS/WCD

TIM McCARTIN, NMSS/WCD

KEITH McCONNELL, NMSS/WCD

PAUL MICHALAK, NMSS/WCD

PREMA CHANDRATHIL, Region III/PA

T.R. ROWE, NMSS/WCD

MICHAEL WENTZEL, NMSS/WCD

SUSAN WITTICK, NMSS/WCD

ALSO PRESENT:

FRANCIS "CHIP" CAMERON, Consultant to NRC

MIRIAM JUCKETT, Facilitator

P R O C E E D I N G S

7:04 p.m.

FACILITATOR JUCKETT: Good evening, everyone. Welcome to tonight's Nuclear Regulatory Commission public meeting on the Waste Confidence Draft Generic Environmental Impact Statement and proposed rule. My name is Miriam Juckett, and I'll be serving as your facilitator for this evening's meeting. Many of you know Chip Cameron. Chip and I have been facilitating these meetings together, and this one of our very last meetings. We've got one more teleconference meeting, so we very much appreciate that you guys all came out tonight despite the weather and all the challenges of rescheduling, and things like that. We appreciate that you're here.

I just wanted to quickly go over a few ground rules and expectations for tonight so that you'll know what to expect from this evening's meeting.

The objective of tonight's meeting is for the NRC staff to be able to listen to your comments on the GEIS, that's the Generic Environmental Impact Statement and to consider your recommendations and your comments in the finalization of this document. In the presentations that you'll

hear tonight we'll give you several different ways that you'll be able to submit comments, and we do consider all comments equally. And everything that's said tonight on the record on the transcript will be considered equally with written comments and those received at other public meetings.

For our process tonight we'll have a couple of very brief presentations by a couple of the NRC staff members, and then we will go to a couple of questions, if anyone has a quick question that they want to ask about how the document is going to be finalized, or how to submit comments. And then we'll go to the heart of the meeting, which is where we give you an opportunity to come up here to the microphone and speak your comments on the record. And the way that we'll do that is I have a list of the names of those who have pre-registered and those who signed up when they came in who would like to speak, and I'll just call your names one by one. And if you would, just come on up to the podium and introduce yourself and your affiliation, and give us your comments.

For our previous meetings we've had a few more speakers than we will have tonight, so we've been asking people to stick to a three-minute

guideline. Tonight, since we have a few -- a little bit lighter crowd, we'll be able to give you a little bit more time, so if you could stick to about three to five minutes, that would be great. And we just want to make sure that everyone does get a chance to speak who's here.

Just a couple of quick housekeeping items. We have our transcriptionist over here on the side, our court reporter, who will be taking a transcript of this evening's meeting. Out in the foyer we have a number of NRC staff members who are here to talk to you if you have some technical questions, or some legal questions about the GEIS or Proposed Rule. And you're welcome at any time to go speak with them since the NRC staff here in the room are here to listen. So, as you're speaking your comments they won't be responding to the comments, but you're all welcome to have conversations with them out in the hallway. And if we do wind up a little bit early if we run out of speakers and we still have time left, we'll stay here until 10:00, and we'll be happy to talk to you.

Also, there are feedback forms on your chairs or chairs near you; if you want to leave us some comments about how this evening's meeting went,

that would be great. And you can either hand them to any of the NRC staff members here or mail them. There's a postage paid stamp on them already.

And, also, we want to make sure that everyone knows that since -- there are probably some people who you might know that were not able to make it out tonight because of the roads and things like that. Please do let them know that we have another call-in meeting, a teleconference on the 9th of this month, and you're welcome to call in. You're welcome to call in even if you're here tonight. But if you know people who couldn't make it, please do let them know that there is another opportunity to speak comments on the record.

So, I would like to introduce to you the NRC staff who are here. Our Director of the Waste Confidence Directorate is Keith McConnell and the Chief of the Environmental Impact Statement Branch is Paul Michalak. And in the back we have Tison Campbell who's one of our attorneys in the Waste Confidence Directorate. We also have Allan Barker, and in the back we have Prema Chandrathil, and we have a number of our NRC staff who are out in the foyer who will be happy to speak with you tonight.

So, again, thank you for coming and I'd

like to turn the meeting over to Keith McConnell who will be giving our first presentation.

MR. McCONNELL: Well, thank you, Miriam. And as Miriam has indicated, we do appreciate you coming out tonight. I am the Director of the Waste Confidence Directorate at the Nuclear Regulatory Commission, so we in the Directorate do appreciate your participation in this meeting, as well as any participation you might take in terms of providing us written comments, also.

As Miriam has indicated, our purpose here tonight is gather comments on the Draft Generic Environmental Impact Statement and Proposed Rule for the continued storage of spent nuclear fuel after the operating life of a power reactor and before it's disposed of in a geologic repository. And this, in the past, has been called the Waste Confidence Rule. So, that's why you see the slide in terms of -- with the title "Waste Confidence."

These two documents, the Draft Generic Environmental Impact Statement and the Proposed Rule are the culmination of our efforts in the Directorate to respond to the U.S. Court of Appeals from the District of Columbia's decision to vacate, or void, the 2010 version of the Waste Confidence Rule, and

remand it back to the NRC staff to fix certain deficiencies with respect to our impacts analysis under the National Environmental Policy Act.

Given that the purpose of tonight's meeting is to gather comment from you all, the members of the public and other interested parties, what we intend to do is minimize the staff's presentations to just Paul and I so that we can maximize the amount of time that is available for you all to comment. But as Miriam has indicated, what we have provided for is we do have the technical staff out in the foyer who are available to answer any questions you might have.

I would note that, given that the transcriptionist is not out in the foyer area, any comments or questions you might have out there would not become part of the public record.

I do encourage you, though, to talk to these technical staff because these are the staff that have written the draft documents that are before you now, and will be involved in writing the final documents, so it's a fairly significant opportunity to talk to the people that actually are doing the writing.

I do want to take a few minutes and talk

about the NRC's rulemaking process. It's a very important part of our activities at the Nuclear Regulatory Commission. It's how we implement national policy and standards, and it's our vehicle for achieving the NRC's goals of maintaining public health and safety, and security, and protecting the environment.

In that regard, I would note that this meeting tonight is an extremely important part of that process. It's where you all have the opportunity to comment on those documents that the staff has developed and provide those comments to the five Commissioners that will evaluate the final documents when we do the analysis of comment and revise the existing drafts. So, again, I encourage you to participate tonight, or participate in writing, whatever form of comment that you would like to make.

I also would like to note that this is -- this meeting tonight and the 11 others that we've had over the past six weeks or so is just one attempt that we've made in the Directorate to make this rulemaking process as open and transparent as possible. In that regard, we do appreciate those of you who have in the past participated in the scoping process back last October and November, and have

followed along during our monthly public status calls that we held from January through September.

I also want to bring to your attention the fact that the -- in the Proposed Rule, in the Federal Register for the Proposed Rule, the NRC Commissioners asked that the public comment on four specific questions. And those four specific questions are listed in a handout out in the foyer area. So, it would be, I think, worthwhile for you to take a look at those and see if you can provide input on those questions.

By providing a response to those specific questions or any general comments you have, it will help us, the NRC staff, to develop the final documents, and it will be very important for the Commission to have that information when they make their final deliberations on what we provide them probably next summer sometime.

So, with that I'll turn it over to Paul, and Paul will provide some background information on the Proposed Rule and Draft Generic Environmental Impact Statement.

MR. MICHALAK: Good evening. I'd like to add to Keith's welcome, and thank you for coming out tonight. My name is Paul Michalak, and I'm the Branch

Chief of the Environmental Impact Statement Branch in the Waste Confidence Directorate.

At today's meeting, I'll give a brief history of Waste Confidence, outline key aspects of the Draft Generic Environmental Impact Statement, and the Proposed Rule, and explain how you can comment on these documents. And then we'll get to the public comment portion, which is really the heart of the meeting.

Waste Confidence accomplishes two things, it generically addresses the environmental impacts of continued storage and makes a determination about the feasibility of safe storage and the time frame for repository availability. The Draft Generic Environmental Impact Statement satisfies part of the Commission's National Environmental Policy Act obligations for reactor licensing and re-licensing, and the licensing and re-licensing of spent fuel storage facilities.

The Draft Environmental Impact Statement also serves as the regulatory basis to support the Proposed Waste Confidence Rule. The Environmental Impact Statement and Proposed Rule only cover the time frame after the license life for reactor operation. However, it is important to note that the

Proposed Rule on Waste Confidence does not license any particular site or facility, nor does it allow for long-term storage of spent fuel at any site.

The NRC's history with Waste Confidence started when the Commission issued the Rule back in 1984. Since then, the Rule has been changed and updated, most recently in 2010. In 2012, the Rule was challenged, and the Court of Appeals for the D.C. Circuit vacated the 2010 Rule. The Court identified three deficiencies with the Commission's Environmental Analysis to support the 2010 Waste Confidence Rule. The Court found that the analysis didn't evaluate the environmental effects of failing to secure permanent disposal of the spent nuclear fuel.

It also directed the Commission to provide a forward-looking assessment of spent fuel pool leaks, and the environmental consequences of spent fuel pool fires. The Court did conclude that a generic approach either with an environmental assessment or an environmental impact statement would appropriately address the issues associated with Waste Confidence.

Following the Court's decision, the Commission directed the staff to prepare an

environmental impact statement evaluating these issues with the possibility of issuing an updated Waste Confidence Rule.

There are two things that I would like you to remember. The first is that Waste Confidence is just a small part of the overall environmental analysis for reactor or storage facility licensing and re-licensing. Secondly, the Waste Confidence Rule does not license any particular facility or authorize storage after the expiration of a facility's license.

The draft Statement describes the impacts of continuing to store spent nuclear fuel beyond the license life for operation of a reactor whether in a spent fuel pool, or at an independent spent fuel storage installation located either at a reactor, or at an away-from-reactor site.

The draft Statement describes why we're revisiting Waste Confidence. It discusses alternatives that were considered. It describes how the impacts were evaluated. It describes what facilities are covered and the environmental impacts of continued storage at reactor sites and away from reactor sites.

It also contains information on the cost of the alternatives to the rulemaking. It describes

cumulative environmental impacts of continued storage, and it contains information on the feasibility of a repository and the feasibility of safe storage of spent fuel.

The draft Statement assessed impacts of continued storage for three time frames on when a repository would be available. There was a short-term time frame, or 60 years beyond the license life for operation of a reactor. There was a long-term time frame evaluated, which is 100 years beyond the short term, or 160 years and an indefinite storage time frame where no repository becomes available.

The draft Statement serves as the regulatory basis for the Proposed Rule. The Proposed Rule would generically address the environmental impacts of continued storage. These impacts would not be revisited in future site-specific licensing proceedings unless the NRC discovers something about the site that would make the application of the conclusions in the Environmental Impact Statement inappropriate.

The Proposed Rule would revise the Nuclear Regulatory Commission's regulations, specifically the citation is Title 10 of the Code of Federal Regulations, Section 51.23. The Proposed Rule

also states that the analysis supports the Commission's determination that it is feasible to safely store spent nuclear fuel following license life for operation of a reactor. It also states that it is feasible to have a mined geologic repository within 60 years following license life for operation of the reactor. We are specifically seeking comment on whether the Final Rule should contain these last two statements.

To ensure that your comments are considered they must be received by December 20, 2013. Mailed comments must be postmarked by December 20th. All comments, whether submitted in writing or provided orally, are considered equally. Of course, we're here tonight so you can tell us about your comments on the Generic Environmental Impact Statement and Proposed Rule. Tonight's comments are being transcribed and will be considered part of the record.

You can also leave written comments with the NRC staff located at the registration table, and we will make sure those comments are added to the docket. You may also email, fax, or mail your comments to the NRC. You may also provide comments using the Federal eRulemaking site which is

www.regulations.gov.

That concludes the presentation. I'll turn the mic back over to Miriam.

FACILITATOR JUCKETT: Thank you, Paul. Is there anyone who has a question about how to submit comments, or how tonight's meeting will work, or anything like that that we can clarify for you?

(No response.)

FACILITATOR JUCKETT: I don't see any, so let's go ahead and go to the comment portion. And, again, I'll just call your names one by one, and if you would come up and speak into the microphone, and please don't forget to introduce yourself and give us your affiliation.

I'd like to open tonight with Ron Johnson of the Prairie Island Indian Community, followed by Ralph Rauterkus of City of Red Wing, and then Phil Mahowald of Prairie Island Indian Community. This is Ron.

MR. JOHNSON: Good evening. My name is Ron Johnson, and I'm here on behalf of the Prairie Island Indian Community Tribal Council.

We want to take this opportunity to thank the NRC for scheduling this meeting in Minnesota to take comments for the Waste Confidence

Draft Generic Environmental Impact Statement.

Like everyone here today, I care deeply about our community, state, and nation. I've served Prairie Island Indian Community as an elected official for more than 12 years, and have seen firsthand the impact of the failed nuclear policy on our people.

Our reservation is right next door to Prairie Island Nuclear Generating Plant. It's independent spent fuel storage installation is about 600 yards from the nearest tribal member's home, less than a mile from our clinic, community center, elder education, gaming operation, and government offices.

Our tribal council chamber overlooks the nuclear plant. One afternoon, someone in a meeting would look at me and say, "Ron, why do you always sit on the opposite side looking out the windows here?" And, you know, I had to think about it for a minute, and it kind of occurred to me I always watch the plant. And I'm not looking for scenery or anything, but I do, I keep an eye on the plant, and that's what I do. And that's part of my position that I do, you know. And it's not the, you know -- to make sure that things are okay and everything for the safety of the community. But then out of concern for the family and

the community here, that's why I encourage the people of Minnesota and beyond that that I'm compelled to be here. So, you know, it's part of what we do.

This past summer, I also participated in a radiation exposure conference in Japan that included an onsite tour of the Fukushima Daiichi facility. I've seen firsthand what happens when design basis isn't enough, when multiple supposedly redundant backups, safety systems, fail. I've seen the devastation and driven to the abandoned villages. My worst fear, and the worst fear of our people is that we will be forced to abandon our homeland because of an incident at the plant. And to be honest with you, my biggest concern isn't with the plant operations, it's with the nuclear waste packed into the spent fuel pools and the stored aboveground dry casks less than a half mile from our lower Island residential area.

That's why our tribe has been actively involved in the Waste Confidence activities. We joined a Coalition of States in a successful challenge last year to the Waste Confidence Decision and temporary storage rule in the United States Court of Appeals for the District Court of Columbia. That successful challenge is why the NRC prepared the

Waste Confidence Draft Generic Environmental Impact Statement, and why we're all here today.

I'm proud of our Tribe's efforts to go forth with this. I'm also thankful for the invitation from the State of New York to join into this challenge. I'd also like to take this time to encourage the State of Minnesota to also get involved.

Our nation's Nuclear Waste Policy Act is a complete failure. The defects of the Nuclear Waste Policy Act were first exposed when the 1998 deadline for the removing of nuclear waste to a permanent repository came and went. More than 15 years later, that's still the law of the land, but now it's simply being ignored.

We cannot accept a newly revised Waste Confidence regulation that continues the fraud of this failed Federal policy, not for our generations, and certainly not for our next seven generations of our people, indeed, of all Americans who will be the first left to face the consequences of our nation's broken promises.

As a Mdewakanton Dakota, we use the term seven generations to refer to a length of time and the success of generations of our people who can be

affected by our actions today, but nuclear waste is more than a seven generation problem. Some of the most dangerous and toxic substances known to mankind, spent nuclear fuel, must be isolated from the environment for tens of thousands of years.

As Dakota people, we know how the world can change in 100 years. Just last year we commemorated the 150-year anniversary of the Dakota Conflict. The Dakota ceded the first tract of land in what is now the State of Minnesota in 1805; 208 years later our land base is reduced to just 3,000 acres, and our reservation is along the flood plain of the Mississippi River. And the Federal government thinks it can make a 10,000-year promise to deal with nuclear waste.

The Draft Generic Environmental Impact Statement has many flaws. It seeks to analyze severe consequences and potential environmental and health impacts generically for all facilities. This makes no sense. We're not aware of another tribal nation whose entire reservation homeland could be rendered uninhabitable by a spent fuel accident.

The NRC must conduct a site-specific analysis of environmental impacts. The Prairie Island Indian Community appreciates the opportunity to be

here tonight. We do have some additional comments to make, and will submit additional written comments during the comment period. Thank you.

FACILITATOR JUCKETT: Thank you. Is Ralph here? Great.

MR. RAUTERKUS: Good evening. My name is Ralph Rauterkus. I'm the Vice President of the Red Wing City Council. I'm here tonight representing the City of Red Wing, Minnesota, which is the host community to the Prairie Island Nuclear Generating Plant which is operated by Northern States Power, or better known as Xcel Energy.

At the outset, I would like to thank you, the representatives of the NRC, for being here tonight and affording the city and other interested parties the opportunity to publically state certain comments and concerns that we have with respect to the Generic Environmental Impact Statement.

As I stated, the city is the host community to the Prairie Island Nuclear Generating Plant. Prairie Island is a dual reactor that is located literally within the city's boundaries. Next to it is the Prairie Island Indian Community. Ron, thank you. Our neighbors who I know share many of the same concerns we have in the city regarding the spent

fuel that has accumulated since the plant started operating in 1973.

The city as the host community is the first responder to any incidents at the facility. The city is obligated to maintain the necessary police, fire, and other emergency personnel, equipment, and facilities to respond in a timely and meaningful fashion. The city is obligated under the NRC and the State of Minnesota regulations to provide reasonable assurance that it can meet the emergency preparedness plan for the Prairie Island Plant, and accompanying independent spent fuel storage systems.

The city as a host community is the recipient of certain tax payments from Xcel Energy that are used to pay for a portion of the necessary public safety services required to satisfy the emergency preparedness plan.

While I'm not going to go into the detail tonight about those taxes, suffice it to say that those have declined greatly over the years. In fact, since 1995 there has been a dramatic shift in the tax base from the power plant to other tax payers in the Red Wing community.

Since the plant started operations in 1973, there has not been one used fuel assembly that

has left the city's boundaries. Every single spent fuel rod or fuel rod assembly is located either in the spent fuel pool or the casks stored next to the power plant. As of today, there are approximately 40 casks that store spent fuel assemblies, and it is anticipated at the end of the plant's operations there will be well over 100 casks that will store the spent fuel assemblies and any additional waste from decommissioning that cannot be properly disposed of.

The continued storage of spent fuel outside the Prairie Island Plant is not something the city or even Xcel bargained for, and they will continue to remain there despite the best efforts of many people without any plausible plan for removal. This is a far-reaching effect that is literally impossible to quantify. It impacts the city and the citizens on every level, and will continue to do so until these casks are removed and the land is restored to its natural habitat. To continue storage now and after operations will have a chilling effect on the city and its long-term urban planning and growth.

At the outset, the GEIS needs to be refocused to separate from a Waste Confidence standpoint the continued operations of the nuclear

power plant from the waste storage. The purpose of the Waste Confidence Rule is to provide a benchmark for the time that the NRC believes the spent fuel can be safely stored.

Assuming that the storage is in dry casks, which the GEIS does, the identifiable time frame that has been selected by the NRC is 100 years; that is, spent fuel can be safely stored for a period of 100 years before a cask has to be replaced. This time frame does not take into account any information from the manufacturer, such as its declarations of warranty or useful life of the cask.

Despite this determination, the GEIS and the Waste Confidence Rule upon which it is based uses as a starting mark the date the plant ceases operations. There is no accounting for the many casks that have been loaded and are sitting for years, indeed decades before the plant operations cease. It would be more appropriate, therefore, for the GEIS to separate operations from storage and focus solely on storage since, after all, that is the reason for the existence of it in the first place. In other words, the statement from the NRC for the confidence in storage should run from the date that the spent fuel is put into a cask, not the date that the plant that

has generated that spent fuel ceases operations.

I'd like to make three other observations regarding the GEIS, and in making these observations I would like to note that the city does intend to submit more detailed written comments in a timely fashion. However, given the limited time I have here tonight, it is impossible to address all of these comments. Thus, I will only focus on three issues.

First, regarding emergency preparedness, the NRC has chosen to not include that within the scope of the GEIS. The city believes that this is a mistake. The key factor in any environmental impact statement is to examine the ability to mitigate any potential release or harm that may arise from the activity that is being examined. One of the primary ways mitigation occurs is through emergency preparedness and the response in the event of any incident.

The purpose of a response is not to only mitigate, but also to contain and perhaps prohibit any further damage from any release, or a threatened release. It should be noted that for any operation of an ISFSI, that there is requirement that there be in place an emergency response plan; yet, this is found

nowhere within the GEIS. Instead, the GEIS simply relies upon the robust characteristics of the containment vessels themselves, whether that be a pool or dry cask storage.

Without emergency preparedness, an analysis of mitigation and containment in the event of a release or escape from a containment vessel, the GEIS fails. It must be part of the GEIS in order to be a fair and complete evaluation to be provided.

The second issue, the GEIS in numerous spots references taxes, and how there will be a continued socioeconomic benefit arising from continued storage. This statement is a phantom and does not take into account the continued obligation of a whole city like Red Wing to maintain the necessary public safety services to meet the emergency preparedness to respond to a release or a threatened release. Indeed, in Section 3.2.2, the GEIS cites a number of different of examples of reductions in and taxes from operations to a storage facility alone. This precipitous drop is something similar that the city is looking at when the Prairie Island Plant ceases operations. Yet, as stated before, the city as a first responder is still going to be held responsible for ensuring that it has the

necessary preparedness to respond to an incident. This area of the GEIS must be further developed and addressed.

Finally, the third issue, the GEIS assumes that there is going to be institutional control or a longevity to ensure that all of the obligations associated with the spent fuel left behind are met. The underlying assumption of institutional control is that there will be appropriate funds to insure that these activities of inspection, maintenance, repair, and replacement are taken care of. Yet, nowhere does the GEIS indicate where these funds are, or how they will be provided.

This assumption that the funds will be available at some far future date without actual verification of their existence today represents potentially an intergenerational shift. Those whom receive the benefits of the low-cost electricity from nuclear power will not be obligated for the byproduct of the same. Rather, the cost will be shifted onto the next generation, two, three, or four, or as Ron says, seven, to that it is properly stored and disposed of. Sharing this burden and responsibility as a host city like Red Wing, whose residents many generations down the line will still have the

obligation to maintain emergency preparedness. In the event that there is failure of institutional control, pick up the burden themselves.

The assumption of institutional control, or better yet, financing or money to pay for the storage over the periods of time analyzed in the GEIS is simply too important to assume. The GEIS, or better, the NRC should not assume that this is the case, but rather to start to require that power companies and other generators of spent fuel to create a reserve separate from the decommissioning fund to ensure that there is sufficient resources to meet these obligations.

Again, I want to thank you here at the NRC for all your work, and for putting together the GEIS, for taking into consideration the comments of Red Wing and the others here. On behalf of the City of Red Wing and the citizens, we look forward to continuing to work with the NRC to address these important issues in a meaningful way. Thank you.

FACILITATOR JUCKETT: Thank you. If we can next go to Phil, and then after that we'll go to Wally Taylor, and then Terry Pickens.

MR. MAHOWALD: Good evening. My name is Phil Mahowald. I'm General Counsel for the Prairie

Island Indian Community. I've had the privilege of representing the tribe in the proceedings before the D.C. Circuit Court of Appeals, as well as before the NRC, the Atomic Safety and Licensing Board, as well as the Minnesota Public Utilities Commission. I have a few more comments to add to those already provided by tribal council secretary, Ron Johnson.

The U.S. Court of Appeals for the District of Columbia Circuit rejected the NRC's 2010 proposed Waste Confidence Decision and Temporary Storage Rule because they were based on the hope, the assumption that nuclear waste would eventually be removed to a permanent repository. The Circuit Court remanded to the NRC with a directive to consider the possibility that a permanent repository never becomes available, and to analyze the potential environmental impacts of long-term onsite storage.

The Draft Generic Environmental Impact Statement sidesteps the Circuit Court directed analysis with several assumptions, including an assumption that the spent fuel storage installation will be rebuilt, and that every cask will be reloaded every 100 years. In other words, the NRC purports to analyze the potential impacts of long-term onsite storage of spent nuclear fuel by assuming that there

will be no long-term onsite storage of spent nuclear fuel.

The uncertainties associated with the long-term storage high-burnup fuel are simply wished away. There are known documented problems associated with high-burnup fuel. The NRC has yet to determine precisely how to monitor those effects during the extended storage periods contemplated in the Draft Generic Environmental Impact Statement. But, yet, we're told that there's no need to worry about cask and cladding degradation or the embrittlement of fuel assemblies and internal cask components because the casks will simply be reloaded every 100 years.

The Draft Environmental Impact Statement simply raises more questions than it answers. What is the legal and factual basis for the NRC's assumptions that the casks will be reloaded every 100 years? Considering that the operating licenses for many plants, including the plant at Prairie Island will expire in 20 years, how do we know that the utilities will even be around in 100 years? What if the United States Government reneges on its promise and fails to rebuild the casks, rebuild the ISFSIs and to reload the casks every 100 years? What are the effects of high-burnup fuel on fuel rod cladding and fuel

assemblies over 100 years, over 200 years, over 300 years? What are the effects of high-burnup fuel on the internal dry cask components themselves, the baskets and the separators, again, over 100 years, over 200 years, over 300 years? We don't know. And who's going to pay for this monumental construction and engineering activity every 100 years?

One month ago today Xcel testified in its Minnesota Public Utilities Commission rate case that its installed per cask cost at Prairie Island is $5.96 million, $5.96 million per cask, which includes the cost for cask fabrication, loading, and licensing cost. That's $372 million in today's dollars for the 63 additional casks that will be needed to store all of the waste generated during the PINGP's next 20-year license extension. And that would amount to another $584 million in today's dollars to reload all 98 casks in 100 years.

The plant is only licensed to operate another 20 years. Have these costs been factored into Xcel's rates? Have these costs been factored into the plant's decommissioning cost?

Nationwide at the end of 2011, the United States commercial spent nuclear fuel inventory had reached about 224,000 fuel assemblies. I'm going

to make my own assumptions. I'm not an economist so they're a little bit rough, but I think it gives you a sense of what we're talking about. I'm going to use the Prairie Island model for these assumptions.

So, assuming 40 assemblies per cask, that amounts to about 6,000 casks. And I'm further going to assume that Xcel's per-cask cost at $5.96 million can be multiplied by those casks, so we're talking about $33.6 billion in today's dollars to reload those casks. Who knows what the cost will be in 100 years? But looking back 100 years, $33.6 billion in 1913 dollars would cost $794 billion today. And that's just for the first 100-year replacement.

On what basis can the NRC assume that utilities will pay these costs? Have these costs been factored into the rates for all nuclear power plants around the country? And on what basis can the NRC assume that the United States Government, already more than $17 trillion in debt, will expend or be able to expend these incredible sums every 100 years?

We certainly don't envy the NRC staff. They've been given the impossible task of drafting the Waste Confidence regulations for our nation's failed nuclear waste policy. The District of Columbia

Circuit Court of Appeals struck down the NRC's last revision because it was based on hope and not fact. Unfortunately, the Draft Environmental Impact Statement fails for the same reasons.

Once again, the Prairie Island Indian Community appreciates the opportunity to make these comments, and we will submit additional written comments during the comment period. Thank you.

FACILITATOR JUCKETT: Thank you. Next let's go to Wally Taylor, followed by Terry Pickens.

MR. TAYLOR: Good evening. My name is Wally Taylor. I'm an attorney from Cedar Rapids, Iowa, and I'm speaking on behalf of the Sierra Club. The Sierra Club is the nation's largest grassroots environmental organization with over 600,000 members. The Sierra Club supports sustainable energy alternatives that do not harm the environment.

The Sierra Club opposes nuclear power because its fuel cycle from uranium mining to spent radioactive fuel poses grave dangers to the environment. In addition, reliance on nuclear power unjustifiably delays the beneficial transition to clean and renewable energy.

We believe the DGEIS in this case fails to evaluate an important alternative that must be

considered in the analysis of environmental impacts of radioactive spent nuclear fuel. That alternative is to stop licensing any new nuclear reactors and decommissioning all existing reactors so we are not creating any more radioactive waste. To put it in more colorful terms, perhaps, when you've dug yourself into a hole the first thing to do is stop digging.

The important point to be understood, also, is that the Waste Confidence decision and rule are an integral part of the licensing process of nuclear reactors. Statutes, rules, and court decisions have said that an EIS must discuss reasonable alternatives to the proposed action. The alternatives analysis is the heart of the Environmental Impact Statement. NEPA demands that the agency rigorously explore and objectively evaluate all reasonable alternatives so the agency can sharply define the issues and provide a clear basis for choice among options by the decision maker and the public.

The existence of a viable but unexamined alternative renders the Environmental Impact Statement inadequate. The main point of examining alternatives is to avoid environmental harm, so even

if an alternative might be superior in non-environmental terms, an alternative can be reasonable if it avoids the environmental harm better than another alternative.

Radioactive waste in the form of spent fuel is a dangerous long-term problem. The D.C. Circuit Court decision we've been discussing here this evening described it as follows. "Even though it is no longer useful for nuclear power, spent nuclear fuel poses a dangerous long-term health and environmental risk. It will remain dangerous for time spans seemingly beyond human comprehension." The growing volume of spent nuclear fuel which may reach 150,000 metric tons by the year 2050 is a serious problem. It is clear that no one really knows what to do with the waste. That's the dilemma that the NRC finds itself in, the hole that you've dug yourself in.

"The delay in finding a permanent repository," said the Circuit Court again, "has required plants to expand storage pools, and to pack spent nuclear fuel more densely within them. The lack of progress on a permanent repository has caused considerable uncertainty regarding the environmental effects of temporary spent nuclear fuel storage and

the reasonableness of continuing to license and relicense nuclear reactors."

In addition, the Blue Ribbon Commission on America's Nuclear Future has said that we may already be at a point where more than one permanent repository is necessary. If we keep making more nuclear waste, how many repositories are we going to need that we'll never have a place for, and can never solve the problem.

The Sierra Club and others commented during the scoping process for this DGEIS that the DGEIS must consider the alternative of stopping the production of any more radioactive waste, but the DGEIS has eliminated this proposed alternative from consideration. In eliminating this alternative, the DGEIS posits three arguments in support of the decision to eliminate this alternative.

First, the DGEIS claims that the cessation of licensing and operation of nuclear reactors would not satisfy the stated purpose and need for the DGEIS. This argument is without merit for several reasons. First, the purpose and need as contemplated by NEPA is the purpose and need for the proposed Federal action, not the purpose and need of the EIS. The proposed Federal action in this case is

the promulgation of the Waste Confidence Rule, not the issuance of the DGEIS.

Therefore, the purpose and need for the Federal action is to promulgate a rule that ensures that reactors are licensed so as not to be inimical to public health as the statute requires, and that there is reasonable assurance that the activities authorized by the operating license can be conducted without endangering the health and safety of the public according to your own regulations.

Because radioactive spent fuel is extremely dangerous and no one knows what to do with it, the purpose and need for the Waste Confidence Rule must include the alternative of making no more radioactive waste.

The NRC's next argument in its attempt to avoid considering the alternative of terminating licensing and reactor operation is that the Atomic Energy Act requires the NRC to license nuclear reactors unless there is a threat to public health and safety, but as presented by the NRC this is a circular argument. The NRC states that it already has regulations in place to provide reasonable assurance of public health and safety, and consideration of the environment, but the regulation allegedly providing

this assurance is the Waste Confidence Rule, which is the rule that's being amended and evaluated by the DGEIS. Therefore, the NRC's argument is circular and self-serving.

It's important to note that the NRC has the authority to stop licensing or relicensing plants, and also to revoke the license of reactors already licensed and relicensed. 10 CFR Section 100 authorizes the NRC to revoke a license for conditions which would warrant the Commission to refuse to grant a license for an original application, and that would include any reason that would make it inimical to public health or that there's no assurance that the activities authorized will not endanger the public health, safety, and the environment.

The third claim by the NRC to avoid examining this alternative is to say that the cessation of reactor licensing and operations would prevent the production of radioactive waste. Other environmental impacts could result from the required development of alternative power sources, or demand reductions. Significantly, however, the NRC does not even hint at what those other environmental impacts might be, that would still be there if nuclear plants are shut down. The NRC should still be considering

how to mitigate the environmental impact of there being no solution to the storage of even more waste.

In discussing the alternative of discontinuing production of spent fuel, the EIS should consider how renewable energy can replace whatever current or future energy needs would have been supplied by nuclear power if nuclear power is discontinued as an energy source.

Numerous studies have shown that renewable energy sources combined with a comprehensive transmission and distribution grid will provide all the power that we need in this country if we just put our minds to it.

The electric utilities and energy companies assert that in order to provide baseload power, they have to use coal, natural gas, or nuclear power. But baseload as viewed by the utilities and power companies is an outdated concept. They are stuck with a narrow view of the electric power coming from power plants, but rather than referring to the term baseload we're really talking about energy and capacity. Energy is the total amount of electricity that is being supplied to consumers. Capacity is the highest level of electricity that can be supplied at any one time to meet peak demand.

Renewable energy can meet the energy and capacity demands of this country if we supply a transmission grid that will allow the energy to be transferred and consumed when and where it is needed. Those steps are being taken already. Many companies and utilities are installing wind and solar, they're installing transmission lines, and that's ongoing right now sooner than any new nuclear plant could be online and at a much lower cost.

So, for all those reasons, we believe that the DGEIS in this case should thoroughly examine the alternative of making no more nuclear waste. And the Sierra Club will be submitting more detailed written comments before the end of the comment period. Thank you.

FACILITATOR JUCKETT: Thank you. Next can we go to Terry Pickens.

(Applause.)

FACILITATOR JUCKETT: Following Terry, we'll go to Lea Foushee and George Crocker.

MR. PICKENS: Good evening. My name is Terry Pickens. I'm Xcel Energy's Director of Nuclear Regulatory Policy. Xcel Energy would like to thank the Nuclear Regulatory Commission for holding these public meetings and for the important work it has

done in the area of Waste Confidence.

It is important because nuclear energy plays a vital role in meeting the nation's and Minnesota's energy needs, electricity needs. With the diversity of supply providing balance, flexibility, and protection from price volatility, Xcel Energy is among the nation's leaders in delivering affordable, reliable, and clean energy to residents and businesses in Minnesota.

Our Prairie Island and Monticello Nuclear Plants provide a steady baseload of carbon-free energy and play an important role in our ability to meet our customer's needs.

In Xcel Energy's Upper Midwest Service Territory which includes customers in Minnesota, Wisconsin, North Dakota, South Dakota, and Michigan, our nuclear generating plants have safely and reliably produced clean energy for our customers for more than 40 years. In 2012, they generated nearly 30 percent of the total electric energy used by our customers and produced 60 percent of the carbon-free energy that we provide our customers.

We believe that the United States must effectively, efficiently, and safely manage the byproducts associated with the use of nuclear energy,

and the Federal action is long overdue.

The Federal government is required by contract and law to remove used fuel from our plant sites in Minnesota, and we are committed to working with the Prairie Island Indian Community, the cities of Red Wing and Monticello, the counties of Goodhue, Sherburne, and Wright, and our State and Federal legislators and regulators to see that this is accomplished.

Having confidence that the Federal government will live up to its commitment to safely manage and dispose of used nuclear fuel generated at commercial nuclear power plants is essential to our energy security.

The NRC correctly concluded that it is feasible to have a mined geologic repository available within 60 years after the licensed operating life of a nuclear power plant. There are no technical obstacles to achieving this, nor are there any financial obstacles. Xcel Energy's customers have paid more than $400 million into the Nuclear Waste Fund, and along with payments from customers of other U.S. nuclear power plants, have accrued a balance in the Nuclear Waste Fund of more than $26 billion.

There is strong international scientific

consensus that geologic disposal is the best solution to permanently isolate used nuclear fuel from the public and the environment. Studies by the National Academy of Sciences and the International Atomic Energy Agency have confirmed this conclusion.

Sweden and Finland are developing geologic disposal facilities, and are expected to begin disposal of their used fuel by the early 2020s. France has selected and characterized a geologic region and is working to identify a site. Belgium, China, and the United Kingdom plan to start geologic disposal by 2050. The United States made significant progress towards geologic disposal. The Department of Energy documented its safety case in a license application and Final Environmental Impact Statement submitted to the Nuclear Regulatory Commission in 2008.

From 2008 to 2010, the NRC conducted an exhaustive review of these documents and sent the Department of Energy more than 600 detailed scientific and technical questions. DOE answered all these questions to the NRC's satisfaction, and the NRC was preparing its safety evaluation report when the process was stopped in 2010.

President Obama then appointed a Blue

Ribbon Commission to examine nuclear waste management issues. The BERC concluded that a deep geologic repository is the scientifically preferred approach, and it recommended finding two or three alternative sites using a consent-based process. Legislation is pending in the United States Senate to begin the process of selecting alternative sites.

Recently, the U.S. Court of Appeals ordered the NRC to resume the Yucca Mountain licensing process which will further inform our efforts towards geologic disposal. Even if development of the Yucca Mountain repository is not resumed, the NRC has directed its staff to complete the work on the safety evaluation report on the Department of Energy's construction authorization application for the proposed Yucca Mountain Repository.

The United States was the first country to develop commercial nuclear power plants. We have the largest nuclear program in the world, 100 reactors with five more under construction. Having once been a leader in this technology, we're at risk of losing our competitive edge and our nation's credibility on commercial nuclear power issues. We have the technology to safely develop a geologic

repository for used nuclear fuel and we have the money to do so. The only thing blocking the United States from building a geologic repository is the political will to move ahead.

The analysis contained in the Draft Waste Confidence Generic Environmental Impact Statement supports what nuclear experts have long contended, used nuclear fuel is, and can continue to be, stored on site at commercial nuclear power plants in a safe, environmentally sound manner for a long time. However, just because it can be done does not mean that it should be done. A schedule needs to be established and then adhered to leading to the removal of used nuclear fuel from commercial nuclear power plants in a reasonable period of time.

Until the Federal government fulfills its obligation to remove the used fuel from our plant sites, we are committed to responsibly operating used fuel storage facilities safely and to ensuring we have adequate funds to decommission our plants, and to safely maintain our storage facilities for as long as used fuel remains at our site. In the meantime, the NRC can, and should, issue its Waste Confidence Rule.

FACILITATOR JUCKETT: Thank you. Can we

next go to Lea Foushee, followed by George Crocker.

MS. FOUSHEE: That's the nuclear waste confidence. I'm Lea Foushee. I'm the Environmental Justice Director for the North American Water Office.

I think that cost should not be the measure. When you look at site-specific detail that should be required for every facility across this country… cost. We're always worried about the money, but do we ever really think about the children; the animals; the plants; the birds; the water, sacred water without which we cannot live. If we poison the water at the head of the Mississippi River with our nuclear insanity we will, in fact, poison this continent. We will poison the continent.

And I have no confidence whatsoever that the Nuclear Regulatory Commission or Xcel Energy, or any of the other multiple nuclear industries in the corporate reich have any concern for the sacred water because they dump their poison in it on a routine basis every single day, every single day.

And we know what to do with the waste, we do it all the time. We kill people with it, our adversaries, our enemies. We put it in their bodies and we watch them die. And then we track them all over the world after we've killed them with it, so we

know what to do with nuclear waste. We do it very nicely.

Now, to say that none of these impacts are anything but small in all of the work in this Generic Environmental Impact Draft, it's not credible, it's not credible. On the one hand you say it needs to be put into a deep geologic repository for 10,000 years or more, and then you say the impact is small. Somebody's lying. Somebody's lying, and it's not the children, and it's not the water, and it's not all the living things. I think it's the Nuclear Regulatory Commission, and I think it's the nuclear industry. Thank you for your time.

FACILITATOR JUCKETT: Thank you. Next can we go to George Crocker. And after George, we'll go to Kris Cummings.

MR. CROCKER: My name is George Crocker. I'm the Executive Director of the North American Water Office, and I think I'd like to start by thanking Mr. Johnson and the Prairie Island community for all that they've done for all of us to represent the interests that we all share, and some of us have maybe let others of us carry a little more weight towards those interests than perhaps we should. So, thank you, Mr. Johnson, thank you, counsel, for the

work that you've done, and we look forward to more of that good work in the future.

(Applause.)

MR. CROCKER: I'm having a hard time trying to sort out where the farce stops and reality begins. And recognizing my quandary with that question, it's hard for me to focus on the set of assumptions that we find in the Executive Summary.

Now, these things have been mentioned before today, and I'm grateful to be in a situation where I'm not the first one bringing them up. But institutional controls, we have a definition of what that means provided for the record this evening from the City of Red Wing, what that means.

What it means at just a very superficial level, where's the money? Considering the rate at which we are eroding the ecological foundation of this society, not just with the reactors but with central station energy, in general, in 100 years, in 50 years, in 200 years, by what right do we claim there will be a United States of America? By what right?

As seal levels rise, food sources diminish because we Fukushima-ed them, there's no more food in the Pacific. And as that circulates

through the globe, what happens when there's less and less food because of climate chaos and irradiation? And what happens when there's less and less space for the people to live because the sea levels are rising, and we have the chaos in society degenerating. Institutional controls, and that's an assumption that you guys need to go forward with this. I think you need to reconsider your institutional control assumption.

Dry transfer systems. I remember talking about dry transfer systems during the Prairie Island nuclear waste fight in `94, in `88, in `90, throughout that whole time, first in administrative proceedings, then in the courts, then in the legislature. We talked about it, because that was clear at the time that the waste could not remain in the casks -- that something would have to happen with the waste in the casks. It would have to be transferred. How do you do that? Well, at the time they called it a dry box, and it cost about $100 million a copy, as I recall.

Well, maybe we've figured out how to mass produce those gadgets and maybe they won't cost so much, but we've also done a really remarkable job of diversifying the fuel that these reactors are

burning. And when you have the higher burnup rates and the mixed oxides in the reactor fuel, and all the other stresses that happen uniquely cask by cask to say nothing about site by site, and then you assume that you're going to be actually able to transfer this waste. What happens if it disintegrates? What happens if one-half of 1 percent of the fuel assemblies at the end of 100 years, or at the end of 150 years, or 200 years, or 20 years, whenever we get to the repository, if we ever get there, what happens if one-half of 1 percent of those fuel assemblies disintegrates? What happens to your assumption then? How do you manage that? What does it cost to do so? None of that's in here. There's no mention of it. We just assume we're going to do it. That's preposterous.

I think trying as hard as I can to be constructive to the attempt to protect society from the destruction associated with irresponsible or mismanaged irradiated fuel, in my attempt to be as respectful as I can to this process you're going through to try and make a rule to deal with the utter absurdity; well, I would encourage you to recognize that generic is out of the question. There is no generic here. There is no generic.

(Applause.)

MR. CROCKER: Every one of these sites, every one of these casks, every one of the fuel assemblies in the casks, every single fuel rod in every single assembly is unique with a unique set of stressors that have been acting on it over whatever period of time you care to assume. And those stressors on every rod, in every cask will cause every rod in every cask potentially to act differently than the others. And you need to account for that, or your rule is bullshit.

FACILITATOR JUCKETT: Okay, thank you.

(Applause.)

FACILITATOR JUCKETT: And can we next go to Kris Cummings. And following Kris, we'll go to John LaForge.

MR. CUMMINGS: Thank you very much. First off, I'd like to thank the NRC for providing the opportunity for the public to comment during this process. My name is Kristopher Cummings. I'm a Senior Project Manager with the Nuclear Energy Institute in the Used Fuel Program. My educational background includes a Bachelor's degree in physics and mathematics from the University of Washington, and a Master's in nuclear engineering from the University

of Wisconsin.

My technical expertise is specifically in used fuel management and criticality, radiological, and shielding analysis associated with storage and transportation casks. During my 15-year career, I spent 10 years with one of the cask vendors and recently four years with the fuel manufacturer, Westinghouse.

The design of fuel assemblies and storage casks have undergone significant developments over the 15 years of my career with a primary goal to improve the safety and security of managing used nuclear fuel. First has been a transition from bolted cask designs to welded canister-based systems. These welded canisters are tested with liquid penetrant exams, radiography, and ultrasonic hydrostatic and helium leakage tests. These designs are now implemented in over 1,600 of the approximately 1,900 loaded storage systems.

Second, there's been an evolution to larger canister-based systems, larger capacities. Canisters that were originally designed to contain 24 PWR assemblies can now hold 37. There's also 40 at the Prairie Island that they can hold. Those that were designed contain 44 BWR assemblies can now hold

89. Higher capacity casks result in a reduced number of handling operations, reduced dose during loading, and eventually a smaller number of shipments.

Third, the fuel assembly burnup has steadily increased. Higher burnups allows more energy to be extracted from a fuel assembly for the same amount of volume. This leads to a smaller amount of used fuel that needs to be managed.

Fourth has been the development of more sophisticated cladding materials that can perform under longer exposure times with less susceptibility to cladding breaches. Over the past 20 years, the number of fuel assemblies with leaking rods has been reduced dramatically. The industry now maintains a small fraction of a percent of fuel rods that developed leaks in the reactor.

There's been much discussion of the challenges associated with high-burnup fuel during this comment period. NEI has previously provided information on this issue to the NRC which can be found in ADAMS under the accession number ML13084A045. This letter identifies areas where the industry and NRC are addressing are addressing this challenge to assure the long-term safety of managing high-burnup fuel.

Recent experiments have questioned whether the drying process during storage may cause cladding to become more brittle. However, these experiments have been performed at conditions that are not representative of the majority of used fuel assemblies.

First, the hydrogen content in the cladding used in these experiments is at or exceeds the NRC established limit. Second, the simulated drying conditions in these experiments are performed at or above the cladding temperature limit of 400 degrees Celsius. Finally, all of these experiments have been conducted by pinching the fuel rod. In reality, the loading during transportation would be axial compression or bending of the fuel rod which is less severe.

In conclusion, the recent experiments are not -- are highly conservative with respect to the fuel condition and structural loads expected during used fuel management, and are not representative of the majority of the fuel in storage or in the spent fuel pools.

Moreover, there are some simple solutions that can be implemented to safely accommodate high-burnup fuel. High-burnup fuel can be

placed in individual cans inside the canister. Alternatively, the allowable cladding temperature during drying can be reduced to prevent embrittlement and hydrate reorientation. Additionally, there needs to be a recognition by the NRC that a cask is never loaded with a heat load more than about 90 percent of the licensed limit, thereby reducing the cladding temperature during drying.

All of these conclusions are further justification why storage and transportation of used nuclear fuel continues to be conducted in a safe and reliable manner. Thank you again for the opportunity to make these comments today.

FACILITATOR JUCKETT: Thank you. And can we next go to John LaForge. And after John, let's go to John Biersdorf.

MR. LaFORGE: Thank you. My name is John LaForge. I'm a co-director of a small non-profit environmental group called NUKEWATCH in Wisconsin where I've worked since 1987 and edited the newsletter since 1992.

It appears that the danger of radiation from nuclear waste depends on your clothing. With NRC's representatives and representatives from industry in suits and ties, the waste is evidently

quite safe, but people in lab coats know even the tiniest exposure is dangerous. Every U.S. agency that monitors radiation says this. The National Council on Radiation Protection says, "Every increment of radiation exposure produces an incremental increase in the risk of cancer." The National EPA says, "There is no firm basis for setting a safe level of exposure above background. Based on current scientific evidence, any exposure to radiation can be harmful or can increase the risk of cancer. No radiation exposure is completely risk-free. There is no level below which we can say an exposure poses no risk. Radiation is a carcinogen. It may also cause other adverse health effects, including genetic defects in children of exposed parents, or mental retardation in the children of mothers exposed during pregnancy."

The National Academy of Sciences in Bier 7 says, "There is a relationship between exposure to ionizing radiation and the development of radiation-induced solid cancers in humans. Current evidence suggests that any exposure to radiation poses some risk; that is, there is no level below which we can say exposure poses no risk."

The United States Department of Energy says, "U.S. Government regulations assume that the

effects of all radiation exposures are cumulative and should be limited as much as reasonably possible." Even our own Nuclear Regulatory Commission says, "Any amount of radiation may pose some risk for causing cancer and hereditary effect, and that the risk is higher for higher radiation exposures. Any increase in dose no matter how small results in an incremental increase in risk."

The Nuclear Regulatory Commission's Waste Confidence principles were struck down by a Federal court, as has been discussed, because there is no foreseeable solution for long-term radioactive waste storage that would meet three necessary requirements; namely, that it be scientifically sound, environmentally responsible, and publicly acceptable. Even the shorter term programs now in place for radioactive waste fail to protect the public, and fail to offer the requisite confidence that would justify continued generation of reactor waste.

Nothing in the NRC's draft NUREG-2157 changes these facts. Rather than managing a thoughtful reexamination of the NRC's radioactive waste policies and priorities which would have taken considerable time and effort, the NRC chose to

hurriedly slap together a document whose only purpose is to provide a paper rationale for lifting the agency's moratorium on reactor licensing and renewal procedures.

The NRC is surely the only regulatory body in the world that would argue that indefinite and essentially permanent storage of highly radioactive waste in cooling pools and dry casks creates confidence that this waste will never threaten the public and the environment with radiological disasters. Neither dry casks, nor cooling pools are designed for permanent high-level radioactive waste storage. Rather than insist on a robust waste management system designed to handle conceivable accidents, whether through equipment failure, natural disasters, operator error, or other causes that could release radioactive materials to the environment, the NRC's draft document ultimately relies on the low probability of an accident to justify its position that reactor licensing and relicensing should resume.

Low probability is not a substitute for protection. As we all have learned from the disastrous spread of radioactive materials from reactor disasters at Windscale in England in 1957,

Three Mile Island, Pennsylvania and Church Rock, New Mexico both in 1979, Russia's Chernobyl in 1986, and its 1993 waste explosion in Tomsk, and the unending radiation geyser catastrophe in Fukushima today.

Ending the generation of radioactive waste is the essential first step that we can take to reduce the risks of its storage. The Nuclear Regulatory Commission should revise its Waste Confidence document to insure the speediest possible end to waste production, a phase-out of nuclear reactor operations.

In the interim, NRC must mandate the immediate movement of high-level waste that has been sufficiently cooled out of the fuel pools to dry storage containers, and those should be hardened onsite to improve safety and security. Thank you.

FACILITATOR JUCKETT: Thank you. Can we next go to John Biersdorf.

(Applause.)

FACILITATOR JUCKETT: And following John, let's go to Alan Muller.

MR. BIERSDORF: Good evening. My name is John Biersdorf, and I would like to start by thanking the Commission for the opportunity to offer my comments here tonight.

I have been a passionate supporter of nuclear power since I began researching possible career paths in high school. That passion has drove my acquisition of a nuclear engineering degree, a career in the nuclear industry, and allowed me the opportunity to speak to you today as a member of the North American Young Generation in Nuclear, or NAYGN. NAYGN is a group of over 10,000 young professionals who are passionate about assuring that the myriad benefits of safe, responsible application of nuclear science and technology are enjoyed by generations to come. And on behalf of our membership, I would like to applaud the NRC on completing a Draft Generic Environmental Impact Statement and convey our support for the proposed action of issuing a revised Waste Confidence ruling.

As a member of the nuclear industry, I realize the significance and impact that both the Draft GEIS and the revision of the Waste Confidence ruling will have on the growth and sustainability of this industry. As our current nuclear fleet ages and the continued need for carbon-free energy increases, it has never been more imperative that these issues are addressed.

Allowing for the continued storage of

spent nuclear fuel onsite will allow the industry the flexibility to maintain our current supply of spent nuclear fuel in a safe and effective manner until a final repository or alternative solution can be agreed upon without the added pressure on license renewal. It will also lift a burden not only on the industry, but the country as a whole by allowing sites with proven track records to maintain their fuel on site.

The industry has shown that it is fully capable of maintaining spent fuel safely and effectively for over 50 years. It can and will continue to do so.

Allowing for the NRC to complete this study will open the doors for the industry to grow and provide new, safer, and more efficient plants to be built that would help sustain this country's need for carbon-free electricity. Nuclear is just one answer to solving humanity's need to offset our carbon emissions, albeit an important one. And any delays in the implementation of well-rounded carbon-free portfolio could hinder this country's ability to adapt to our own energy needs, or even possibly cause irreparable damage to the environment in which we live.

As a member of NAYGN, I have come to understand that there is both a technical and political solution to this problem, and I, as well as all NAYGN members are passionate and willing to be a part of the conversation.

In short, I support the NRC's findings in both the GEIS and the Nuclear Confidence ruling. These findings will allow the industry the flexibility to deal with its own spent nuclear fuel until a finalized solution can be agreed upon, while also allowing the industry to grow and meet the demand for carbon-free electricity using proven methods for spent fuel storage in the interim. Thank you.

FACILITATOR JUCKETT: Thank you. Can we next go to Alan Muller, followed by Kristen Eide-Tollefson.

MR. MULLER: I'm Alan Muller. Most of the time I live in the City of Red Wing. Within the city limits, as most of you probably know, are two pressurized water reactors, spent fuel storage capacity, and a dry cask parking lot that is forecast to eventually contain at least 99 casks.

I also own a residence in Port Penn, Delaware which is within a couple of thousand meters

of two pressurized water reactors and one boiling water reactor, so I've had occasion to give some thought to the issues we're discussing tonight.

I'm very pleased that the City of Red Wing and the Prairie Island Indian Community are actively engaged in this issue, appreciate their comments, and I endorse their comments.

We're here tonight in a proceeding that, to me, is a little bit muddled because we're talking about a GEIS, we're also talking a Rule. It seems to me, I have here the Executive Summary and the GEIS, that with all due respect to the folks in the room who produced it, is an exceptionally weak, inadequate, and unconvincing document.

I won't go on at great length about that, but I'd like to read to you at Executive Summary Section 20, the question is asked, "Are there any remaining issues to be resolved?" And the answer is, "The NRC believes there are numerous sources of the requisite technical data and information available. Therefore, there are no remaining issues that require resolution." That's a rather irrational statement, in my opinion. It's indefensible, and this and many, many other sections of this document need to be revised.

I'd like to bring to your attention now one section here, Section 8.4, Survey of Environmental Impacts and the section heading is "Relationship Between Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity." And it goes on to say, "In addition, the long-term productivity period evaluated in this chapter is the time period beyond continued storage (i.e., based on the NRC guidance in NUREG-1748, the period beyond the action under review.) As discussed in Chapter 1 in this draft GEIS, the NRC believes that the most likely outcome is that a repository will become available to accept the spent fuel generated by a reactor by the end of the short-term time frame, or 60 years after the end of the reactor's licensed life for operation."

And I won't continue, but I read this page several times trying to understand what, if anything, it actually meant, and I still don't know what it means. And if this was a sort of hearing where one was allowed to summon a witness and question that witness, I would like to ask somebody from the Commission staff just what this does mean, because with all due respect, I don't think it means anything.

If there is one thing that we all know regardless of what side of the issue we're on, regardless of whether we think the issues are primarily technical or primarily political, we all know that we can't have any confidence in effective management of nuclear waste, particularly spent nuclear fuel rods. We all know that. So, you know, my recommendation to you would be that you extend the time line of this process, and that you go away and you involve an appropriate spectrum of stakeholders in developing a GEIS that has some meaning and some substance to it, and addresses the issue that preoccupy us in connection with the nuclear industry.

Just a couple of more thoughts. It's been stated, it's stated in the PowerPoint that you presented earlier that this GEIS is what it is, and we're not going to have environmental assessment, environmental review of individual storage facilities. That's an absurd position, and absurd conclusion because as various people have already pointed out, these facilities vary greatly one from another.

The city in its comments has pointed out that the Red Wing nuclear parking lot is at such a level that it's likely at some point in the future to

be inundated by the Mississippi River. Now, I don't know whether the design basis of those casks makes provision for them to be flooded without significant harm occurring, but that's certainly something that would need to be looked at. A desert facility might have other issues, such as the degradation of elastomeric parts due to high heat. So, this is -- you need, in my opinion, to abandon the claim that any GEIS can be sufficiently adequate to give us comfort with regard to individual nuclear waste storage facilities.

I don't think that this document addresses the reality of global climate change, and the high probability that our society is going to be severely disrupted by it, that we're going to see great increases in, for example, the frequency of flooding and social disruption and discontinuity of business and security programs and so on. And all of this needs to be taken seriously when we consider the likely trajectory of nuclear waste management problems.

I think I will close with that. There's a lot more that could be said. There are probably others waiting to talk, but I do have a procedural question. You've identified December 20th as the end

of the public comment period. Could we have some assurance the transcript of this meeting will be available, say a week before that deadline, so that use could be made of it in preparing supplemental comments?

FACILITATOR JUCKETT: Yes, the transcripts are being made available as soon as available, which is usually about a week after the meetings.

MR. MULLER: Okay. All right. I think I'm done for the moment. Thank you for listening to my comments.

FACILITATOR JUCKETT: Thank you. Can we next go to Kristen.

(Applause.)

FACILITATOR JUCKETT: And after Kristen we'll go to Sam Wagner, and Carol Overland.

MS. EIDE-TOLLEFSON: Thank you. My name is Kristen Eide-Tollefson, and I'm appreciative of the opportunity, and how broadly the opportunity to comment has been presented by the NRC, but my real gratitude goes to those whose efforts made this necessary, and particularly to the Prairie Island Indian Community and Red Wing, and all of the partners in that process.

I am a resident of a small township just south of the Prairie Island plant, and one of the original members of CURE which is Communities United For Responsible Energy, whose pretty much sole focus for almost 20 years now has been responsible nuclear waste management. And we followed very closely, as closely as we can, all of these proceedings and the different iterations in the legislation.

I think this is a historic document. In so far as it -- it finally carries the claims of nuclear waste confidence to its ultimate conclusions, which are somewhat absurd. I think that's well recognized and documented. I mean, we're no longer playing a game of what short-term, long-term, and indeterminate storage means. That's laid out in the charts there, and I'm really grateful for that, because we've been sort of working with that bean game for a long time. So, I think what I really appreciate about this document is that it lays out the reality of the situation we're in.

And what I'm deeply concerned about about the document is that with my focus on responsible nuclear waste management as a citizen and as a township planning commissioner, all of the necessary ingredients for responsible long-term

storage are essentially scoped out of this document by the assumptions that it makes.

Now, it's taken me many years to try to wrap my head around the way that NRC thinks about these things. And the -- my major -- and the assumption that we make that nothing will go wrong until it does is a really disabling assumption. And I think it disables not only NRC, but disables the utilities, and the communities, and everyone else who really cares. And I know that the utilities care, I know the NRC cares, and I know that the communities all care about responsible nuclear waste storage. But, unfortunately, the approach that is taken here undermines our ability to actually grapple with those very specific steps that would, in fact, come as close as we can as human beings in this time frame to ensure responsible nuclear waste management.

The -- my notes are really quite complex here. I think that the -- there is a positive strategy. I'm going to address first very specifically two things that you've asked us to address. I am speaking almost exclusively to the third point that was made by the court of the need to evaluate the environmental effects of failing to secure permanent disposal. I'm very specifically

addressing that. And I have an opinion about the alternatives, whether or not that the GEIS would be useful in creating a framework for scoping, and for addressing site-specific long-term storage issues.

I'm confused about the fact that the GEIS-only alternative appears to do this but is named GEIS-only alternative. I have an enormous number of questions about this, but I think that a positive use of the GEIS process would be to begin to scope and establish some very essential parameters for addressing -- for responsible waste storage.

So, instead of saying that we assume, we will assume that institutional controls will remain in place, what this document -- what I, as a citizen of the United States need this document to do is to lay out guidance for institutional controls for each of those storage periods. What I need as a citizen is for the GEIS to create some minimum standards and criterion for long-range at-reactor and indeterminate reactor site storage. I need this GEIS to create a foundation to support the utilities and not avoiding long-range planning, but to do long range planning specifying what technologies, what casks, what facility design, what funding will be in place to insure responsible nuclear waste management; to

direct -- to facilitate the ability to support utilities in creating long-term storage fund assurance.

The premise in the GEIS that the costs that need to be considered are the regulatory costs of environmental review is not the kind of costs that the GEIS should be addressing. The GEIS should be addressing what are the costs of long-term nuclear waste storage, and how do we support the utilities in determining what those guidance, what those costs might be, and how to assure long-term funding for storage. So, I think that there are some really critical functions that this GEIS needs to -- can address if it were not assuming that all of the things that are necessary for responsible nuclear waste management are already taken care of, because they're not. They're not taken care of, and we don't have those frameworks, and we don't have those pieces in place that we very much need.

So, that is my sort of -- my constructive request for how the GEIS might actually gain a sense of purpose, and a sense of direction, and a sense that the NRC is actually connecting this GEIS process to the mandates that it has to protect the public health and safety, and the environment.

I would have a very specific recommendation that I've made a very long time ago, and have continued to make, and that is that in 2002 and 2004, the NEPA Task Force Council on Environmental Quality created a report about modernizing NEPA implementation. And one of the things that it highly recommended was to incorporate adaptive management and monitoring strategies into these kinds of challenges, long-term challenges that we face.

In Canada, their council there is using adaptive management and monitoring for their permanent storage facility, and I think that at the very barest minimum the NEPA recommendations on adaptive management and monitoring should be seriously considered by the NRC in addressing -- in this GEIS in evaluating the GEIS, and that adaptive management and monitoring guidance should be applied to precisely the timeframes that the GEIS address, which is short, long-term, and indeterminate storage.

I believe that is the extent of my comments. Thank you very much.

FACILITATOR JUCKETT: Thank you. Thank you very much. Can we next go to Sam Wagner. Sam, and then to Carol.

MR. WAGNER: Good evening, everyone. Can everyone hear me all right? I'm here affiliated with this planet. I'm representing this planet, representing a young generation that's future is seemingly being thrown away in the pursuit of profit. I'd like to be able to discuss briefly a series of documents that was released by the NRC in response to a Freedom of Information Act request, and were subsequently certified by a court reporter in Washington, D.C.

There are a number of transcripts included showing dialogue between individuals making decisions on behalf of the NRC and corresponding with TEPCO, the Tokyo Electric Power Company in Japan immediately following the earthquake and subsequent tsunami that struck the Fukushima Daiichi power plant on the coast of Japan in March 2011.

Up until now, TEPCO, the NRC, and a number of notable news outlets have been reporting that the unit fuel pool at Reactor 4 escaped the brunt of the storm relatively intact, and that fuel rod removal was to begin in the third week of November of 2013. Inside the transcripts contain statements, "I know we're under a belief that Unit 4, the wall had been blown out, but regardless of that,

someone would have to tell us of Units 1, 2, and 3." That quote was by a man named John Monninger. It's on page 390 of the FOIA documents that were released.

Later on, a man named Chuck Casto, on page 403 said, "We need to probably let Bill and the Chairman of the NRC know that on yesterday we're going by what we thought, that with the explosion there was structural damage to the Unit 4 fuel pool. We don't really know if there's any integrity in that pool or not."

And then one of the more damning documents enclosed shows that as of March 18th, 2011, a document titled, "Fukushima Reactor and Water Pool Release Considerations," shows that "adding to the uncertain situation cooling has been lost in the fuel storage pools in Units 1-4. The NRC believes that water from the Unit 4 storage pool completely drained and a violent zirconium and water reaction occurred resulting in the significant release of radioactivity to the atmosphere."

Now, I'm going to pose a question that I know probably won't be answered, but it's one that I think that the employees of the NRC should consider. Using deductive reasoning, one could assume that the knowledge the NRC had since March 18th, 2011 has and

was spun for public consumption. I want to know, and I know that others would like to know why have the actions of the individuals with -- inside the NRC and TEPCO been contradictory to the information known in March of 2011?

The majority of the planet still thinks that there's a fuel rod removal going on, and it's not. It's a complete sham. I'm pissed off about this. I don't know about you guys. I think that these documents released by the NRC completely -- this Commission right here is completely illegitimate.

(Applause.)

MR. WAGNER: It's responding or submitting comments to the President that aren't factual in many cases. The lying needs to stop. These nuclear power plants need to be decommissioned. I don't see any safe nuclear alternative from my perspective, which admittedly is very limited. So, as much as I would like to say thank you to the NRC for having this public comment period, I think that creating this, what is it called, the Environmental Impact Statement, it's a sham. And I'm going to continue to fight and speak out against this.

I'd like to just direct people for reference that if they want to know more about these

documents that I'm referring to, to Google the word "Plume-Gate." It's arguably the largest active coverup taking place on this planet. Thank you for listening.

(Applause.)

FACILITATOR JUCKETT: Thank you. And can we next go to Carol, Carol Overland. And after Carol, let's go to Ben Gerber.

MS. OVERLAND: I'm terrified of heights. Anyway, my name is Carol Overland. I'm an attorney from Red Wing. I live in Red Wing. I have standing -- closer to the microphone. I have standing. And, also, living in Port Penn right across the river from the Salem Plant, have standing there, too.

I did -- I'm an attorney and I've represented Florence Township when NSP then wanted to put nuclear waste in Florence Township. I am here, though, very clearly speaking as an individual, not in the course of representing anyone. I am greatly appreciative to the City of Red Wing, my city, for its shift in position regarding nuclear issues, and I'm really glad to see Red Wing standing up, appreciate that. And I'm very grateful for the work of the Prairie Island Indian Community to protect their community, and by extension, to protect us who

live near the plant.

I'm concerned about a number of things. We have this additional issues for public comment where there are four issues laid out, and this is, as others have said, this is very circular. And if you look at issue 1, and issue 2, or issue 3, the NRC has prepared an Environmental Impact Statement to support the Rule. Well, that's not, like, how you prepare an environmental impact statement. You don't prepare it to support the rule. No. You do the environmental impact statement, you know, and see what it says, see what issues are raised, not to support the rule. You're going about this backwards. It's not going to work, it's backwards engineered.

I grew up playing with a Geiger counter. My father designed part of the Elk River Demonstration Plant. It's not there anymore, it's a garbage burner now, go from one bad to another bad. But he also designed the solar for the zoo, so there's hope there. But we didn't agree on much, but one thing that me and dear old dad did agree on was they really had no plan for what to do with nuclear waste. And he recognized back in the early `60s that they hadn't a clue. Well, still don't have a clue, you don't know what to do. And there are only so many

ways, people have done it very eloquently, but there really are so many ways to say that this is bullshit. It's what it is. It's backwards engineered.

And I have a few things, though, that I do want to introduce. Are you in charge of the record, or do I give them to you? Okay, a couple of documents. First, there were some comments earlier, I believe it was Mr. Mahowald talking about degradation. So, I've got this cute little report that I found called, "Premature Degradation of Spent Fuel Storage Cask Structures and Components from Environmental Moisture." And this is specifically dealing with TN casks, which is what we have at Prairie Island, so I want to put that in.

And then another one, and I will have more detailed comments. I haven't had any time to really look at this, so I'll have written comments by the 20th. Another one, "Spent Fuel Integrity During Dry Storage," and it talks about things like leaks. And this is about krypton levels, so that can tell if the casks are leaking or not. And they're talking about the work that they've done to determine whether or not casks are leaking. And it says, "Before this test," this is like this one test, "four cask performance tests of similar duration and scope had

been performed. Only two indications of release were observed," two out of four. Well, don't we have a problem there? I want to introduce that. And that's a study by M.A. McKinnon. McKinnon has done a lot of these studies.

And then I also want to introduce this -- it's hilarious. It's the Keystone Cops, and I'm sure some of you are familiar with this. I got this in a brown envelope when I was representing Florence Township. INEL did a study where they tried -- well, not a study, an attempt to unload a cask, and it's Keystone Cops. It's -- they tried to pull -- it had been in storage for not that long. They tried to pull it out, and it got stuck. They tried to pull it in, they couldn't get the thing back in. And they tried to pull -- and it sat there for a while until they finally figured out what to do, and they rammed it back in and shut it up, and put it away.

As far as I know, no casks have actually been unloaded. Is that -- like have any of the TN-40s on Prairie Island been unloaded since `95? I don't think so. Have any TN-40s anywhere been unloaded or 29s? It's a problem. So, I want to introduce this.

Another problem, do you all remember the exploding cask at Point Beach? This is where they

took the cask, filled it up, picked it up, let it sit there. Well, the cask had a zinc basket in it, and it had boric acid sitting in it, and the shift went home. And like 8 hours, 12 hours later the shift -- another shift comes in and they go to load it up, and so you've got fire and zinc and boron which is -- you end up with hydrogen, kaboom. And a big old what, I don't know how many tons it was, 9-inch-thick cover bent up, the shims that were in holding the basket in flew up, landed on the floor. I'm sorry, I don't have confidence in nuclear waste storage if this is the kind of thing that happens.

How many of you remember all the failed welds that have been addressed over the years? So, we should have confidence because someone takes an x-ray of it? No, the welds fail, it happens. So, I have no confidence. Or something even simpler, when Monticello's rotor was going down the railroad, going back to somewhere in Illinois, probably where it was made, they low bridged it in downtown Minneapolis. Did you even hear about it? This is about 1997. I mean, something that simple. I'm sorry, you know, I don't have confidence in this industry.

So, let's see. Oh, this was a good one. Okay. My involvement with nuclear, other than playing

with the Geiger counter, started in 1994, in December, so we're looking at now almost 19 years. And that was just kind of scary concept for me. And before that, actually at that very time I was still being a truck driver trying to raise money to open up my office, and so this is December `94, and we're having this little meeting sponsored by Northern States Power, and we're trying to figure out where to put the nuclear waste. And, Kristen, remember this? And so we're sitting there trying to figure out, this is an NSP-sponsored committee, and they were describing the casks. And, you know, I'm a truck driver, and they were talking about the seals on the casks.

Well, so I was like excuse me, don't you have to change the seals? Like ehhh, didn't know what to say. It's like yes, those seals have to be changed. They have to be changed every 20 years. Okay. First cask was loaded 1995, and now here we are, we're coming up on 10 years, 20 years isn't that far away, no cask has been unloaded. How many seals have been changed? What's the process for doing that? Does anybody know? So, you think it can be safely stored there for 100 years? Right. So, I have no confidence, and we know what this is, we've called it

what it is, and we hope you do go back and do it over, because it doesn't cut it. So, on that happy note I'll leave you with some documents. Thank you.

FACILITATOR JUCKETT: Thank you. I believe Ben Gerber left.

(Applause.)

FACILITATOR JUCKETT: I think Ben Gerber left so is Davis Leslie here?

MS. OVERLAND: Leslie Davis.

FACILITATOR JUCKETT: Oh, Leslie Davis, sorry. It's on the sheet backwards.

MR. DAVIS: Good evening. My name is Leslie Davis, and I'm here to represent the Earth Protector Environmental Group, which is the smallest environmental group in America because we don't have members, because I don't like to write everybody and ask them for money every month. But, you know, I've always been afraid of radiation and nuclear power.

I remember as a child during the second World War, I was in elementary school, and one of the things that I was allowed to do was help paint the lines in the halls that we would run to in the event of an air raid and sit between the wall on those particular lines. And I carried that concern with me all my life.

So, lo and behold, they bombed the Japanese in 1945 when I was still in elementary school, and we read the horror stories about the radiation and all that. And then it became part of my makeup, and the years went along, and I raised a family. And around 1978 and `79, I read an article in the paper about nuclear waste storage. So, it confused me a little bit, so I called Northern States Power Company and I asked them about that. And they had guy named Dr. Max DeLong, a professor guy, called me and counseled me on the phone that they know what to do with that stuff. They wouldn't be producing it if they didn't. We're going to fuse it in glass, or bond it together in some way, and render it inert, and haul it down to I think it was New Mexico in the salt caves and entomb it there, and that'll be the end of the radioactive waste problem. So, I was satisfied with that until I ran into Dr. Charles Hoover, who is a former tenured professor and he knew a lot about this, and after he got done laughing at my telling him the story, he told me the truth about nuclear waste.

So, I formed together with Dr. Charles Hoover and Steve Chapman, and Patrick Reagan, and Steve Gadler, and I'm the only survivor. We formed

together in 1979 and 1980 to fight certain environmental issues, and expose this whole nuclear power thing, and then you'd think people would rise up if they knew what was going on about it.

So, I survived them and go on today, and I say well, let's see what we can do about this radioactive waste problem, this nuclear problem, because they talk about we want to be carbon-free, but they don't talk about conservation and efficiency that can automatically reduce your carbon footprint by 30 or 40 percent cost-effectively. That's probably a better way to reduce the carbon footprint than mining, milling, transporting, enriching, processing uranium and winding up with this problem today.

But I know that nothing is going to be done about it because we have a society that is so stupid that they would even pay the phosphate fertilizer manufacturing industry for their waste so they could put it into the public water supply in order to help the black children's teeth improve. That's basically the plan behind the dumping of phosphate fertilizer hydrofluoric salicylic acid into public water supplies. Now, it doesn't get any more insane or stupid than that, so I've been looking into that. And you call people, you know, like I did about

radioactive waste, and they say oh, no, we're the American Dental Association, or we're the University of Minnesota, and all these folks line up behind that stuff. So, I don't think there's really any hope for us as we immerse more and more as the wave of problems from Fukushima, Japan comes over.

It wasn't enough of a lesson for Chernobyl, or Three Mile Island, and now Fukushima is not enough because you're talking about licensing more nuclear plants. But, on a lighter note in my closing, I went when I was campaigning a little bit with a couple of folks to try to prevent the Yucca Mountain thing. I don't think the Yucca Mountain deal is a good thing, because water leaks in there, and you don't want to have water around leaking in when you have radioactive waste. So, I'd go with my sign to a small college in Minneapolis, and one kid comes over to me and he says what are nukies? I said well, I said nukies are something we all probably need a little more of. But these are not nukies, these are nukes, and nobody needs any of them. And if you continue licensing them, and permitting them, and giving them a chance to get out of it, you're dooming the society. This is an unfair, unconstitutional, outrageous hearing, but I do appreciate the chance to

be here and give my testimony. Have a good night.

(Applause.)

FACILITATOR JUCKETT: Thank you. And can we next go to Colleen Bonniwell, followed by Michael Cavlan.

MS. BONNIWELL: Good evening. I'm really out of my element here. I have to consider the effects of nuclear power and fossil fuels on our governance, the governance where the people get to choose. Here I see the NRC, I'm not just addressing you, NRC. I'm addressing the President, I'm addressing the Senate, and I'm addressing the whole Congress.

I'd like to support the move to amend that gives the right of corporations the rights of individuals. That's why we're here today. 1876, that's when the government of the people, by the people, for the people was destroyed. There is no conscience in these industries. These industries are going to have to be forfeited by the greedy ones who have encouraged this and allowed this to occur to all life, allowed this to occur to our water. That's the greatest thing they've done. The greatest thing they've done is they forget where everything they ever had, have, or will have comes from, and they're

destroying it. The pipelines, the fracking.

Right now there's two leaks, oil leaks that they can't -- scientists can't turn off. All of industry can't turn it off. Fukushima, these are human beings. You are defying human rights. You are in default against all of nature. You've heard it before. Tesla told you ones who want to want to fix it, you ones who think you can do something about this, I would encourage you, I would encourage you at this late hour.

All directions, all the elements, sacred elements, plutonium is the first manmade element, and it's changed the whole course of humanity through time forever. And all life waits, waits for the human beings to come forward in the best of their nature to fulfill their purpose here, to protect all life, to participate with all life.

I don't know how to recover it for the human beings, for the people. I've heard you. I heard you say that society is sick, granted the society is sick, we're all human beings here. What are we going to do with the best of our nature? How are we going to turn this around? What are we going to do? Why aren't we helping Fukushima? Why aren't we helping? Russia went. They offered it. There's nothing they

can do. And we can sit here and act like the profits are going to continue? There is no profit. True cost has never been considered because true cost means all life, all the future.

So, I would propose, NRC, you make this a military issue. I would propose that you nationalize this issue. I would propose that you recommend that the United States acknowledge the fact that poison is the enemy of all people. It's spewed from the hearts of the human beings who aren't any more because you can't be human and let this happen. And everybody that's not here, look at this, this is what we come up with. This is how many people we come up with to try to understand and remedy something.

Everybody that's not here, and all of Minneapolis, and all of Minnesota, and all of the United States, and all around the world, everybody that is not here has a right to be represented.

I would also propose that the NRC begin to adjust to the concept of an international uranium mining moratorium, and an international nuclear waste moratorium.

Colonial oppression, colonial domination by corporation Fukushima, the today people with the mining, the mining that's gone on in Northern

Saskatchewan, and the nuclear waste dumping threat in Minnesota, Wisconsin, Michigan, Ontario, and Manitoba. As we speak, they're planning to put a nuke dump right on Lake Huron. The Pacific Ocean, is it going to support life, questionable, very questionable. And then the two oil spills, the Gulf is dead.

I came here tonight to make a plea for Lake Superior, to make a plea for the children, to make a plea for the future. That's why I kept going through the whole way down here through the blizzard because the blizzard is nothing compared to what threatens. And I would come here to you today and say kill me now because your politics behind this industry is so corrupted, and so vile. And I would say kill me now and spare the future. But guess what, where's our future? Where are we going?

The water is sacred. NRC focus on the water, the children, and the future. You know, I was going to come up here and say I'm going to have a three-minute meditation and have everybody just meditate on the children, the children that are here, the children that are coming, just meditate on them. What do you want to do about this situation for them? Brainstorm, pray, whatever you can do to come up with

a solution to the hopelessness that they're going to feel when people wake up and realize what has happened.

No more nukes, no more nukes in Siberia, no more nukes anywhere. Our people around the world are human -- the whole human family, the NRC, Confidence Rule, denies them confidence -- denies the confidence in the people around the world, in the scientists around the world. It denies the confidence of the people to create something better, and I'm asking you please use your conscience and do the right thing at every turn.

You can't have a generic code or whatever. And, too, you know, my own self, I feel like, you know, this prior free informed consent governance that so many people have sacrificed so much to hold on to, we're slaves to poison. We're slaves to poison that's spewing from the hearts of men, men who forgot where everything they ever had, have, or will have comes from.

And I want to thank our children for their forgiveness because all they have to hope for is us, all they have. And this, this is what we have, a nuclear police state. That's what we get, that's what they inherit unless we get real, every one of

us. There is no profit in nuclear power. There is absolutely no profit, but if you can come up with a way to deal with it in a compassionate -- with a compassionate understanding toward life, do it. I challenge you to do that. I will pray for that myself. I haven't seen a way to shut down Fukushima. It's like little bitty suns burning themselves through the earth, and you might live in some kind of bubble, but people out there know, they know what they're facing. And my suggestion would be to focus on an economy that is sustainable, with sustainable agriculture, with sustainable health care, and that would work. That would work.

All this time we could have had vegetable cellulose. We didn't need petrol, but they cut it off. They cut it off. Ford tried in the automobile, they cut him off. The fossil fuel industry, the nuclear power industry, those industries move to amend, take their right to do this to the people away from them and give the people the confidence they need to deal with their future in a compassionate, kind, responsible way.

FACILITATOR JUCKETT: Thank you, Colleen.

MS. BONNIWELL: Thank you.

FACILITATOR JUCKETT: Thank you.

(Applause.)

FACILITATOR JUCKETT: And can we go to Michael Cavlan.

MR. CAVLAN: Karen Silkwood. Karen Silkwood knew just exactly how evil, and corrupt, and gangster-like is the nuclear power industry. The environmental movement knows exactly how evil, and corrupt, and gangster-like is the nuclear power industry. And we now have the United States Nuclear Regulation Commission working with the nuclear power industry.

Somebody killed Karen Silkwood. A lot of us environmentalists in this room know exactly who that was. We know which power brokers and which power industries killed Karen Silkwood.

My name is Michael Cavlan, and I'm speaking as a member of Occupy Minnesota, as well as a very broad non-indigenous ally of the Idle No More Movement.

You know, we're here right now in Minnetonka. That makes complete sense. Minnetonka is the area of the monied wealthy elite of the State of Minnesota, and it's that very self -- same monied elite that owns our government. Actually, it's not our government, it's your government, their

government.

To even be talking about this issue of nuclear power given what's going on in Fukushima right now as we speak, is beyond insanity. It's beyond insanity. And let's all remember, folks, that the Monticello Nuclear Power Plant is the exact same model, the exact same type as the Fukushima plant.

I have a question, actually, for many of the people here in this group, here in this room. How many of us here have any faith at all in this process, that process being where we come here, come to a little public forum and we pretend that you hear us, governmental officials, and you get to pretend that you're listening to us.

This is much like, for example, the Public Utility Commission's hearings going on in St. Paul on the Enbridge XL Tar Sands Pipeline, Clipper number 67 going through Norton, Minnesota, or in Dade, Governor Dayton's little environmental roundtable discussions, which was going on about six, seven months ago. All of this, all of this is a sham. It is a complete sham. We know you don't give a shit what we say. We know that you don't care what our views are.

The Occupy Wall Street movement came

into existence precisely because of the failure of the current political structures. That's why Occupy Wall Street hit the streets in Zuccotti Park, and it spread all throughout this country. And even though we were beaten off the streets in an obvious coordinated campaign by the money that owns the political establishment in this country, we're still there. We're still there, and we're still building, we are still organizing.

You know, in this moment, I think one of my favorite quotes has become to quote George Orwell from 1984. "Telling the truth in a time of universal deceit is a revolutionary act." Long live Occupy, and long live Idle No More. Thank you.

(Applause.)

FACILITATOR JUCKETT: Thank you. I don't have anyone else on the list that had signed up, but I do have a few names from our pre-registrant's list, Sheryl Senkiw, Somenath Dasgupta, Peggy Rehder, Lisa Pritchard, or Geri Eikaas.

Okay. There's going to be some closing remarks by Keith. I just wanted to real quickly thank all of you again for coming out, and I really appreciate how polite all of you were to all the speakers, especially when people had differing

viewpoints. You guys are an exceptional audience in that regard, and I appreciate that. And I'll turn it over to Keith for some closing remarks.

MR. McCONNELL: Well, thank you for coming. What we're going to do is pause the meeting because we feel it's our obligation to stay until 10:00, but we do encourage you, those of you that had questions and suggested you wanted some answers, again, to talk to the technical staff that are out in the foyer, because they can help you, I believe, in terms of at least understanding the positions that we took in the Draft GEIS. And we want your comments, we do want your concerns, so we appreciate you being here tonight. Thank you.

(Whereupon, the proceedings went off the record at 9:23:56 p.m.)