# Official Transcript of Proceedings

# **NUCLEAR REGULATORY COMMISSION**

Title: Waste Confidence Proposed Rule and

**Draft Generic Environmental Impact Statement** 

Docket Number: NRC-2012-0246

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Date: Tuesday, November 12, 2013

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1	UNITED STATES OF AMERICA	
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3	NUCLEAR REGULATORY COMMISSION	
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5	PUBLIC MEETING ON WASTE CONFIDENCE:	
6	PROPOSED RULE AND DRAFT GENERIC	
7	ENVIRONMENTAL IMPACT STATEMENT	
8	+ + + +	
9	TUESDAY	
10	NOVEMBER 12, 2013	
11	+ + + +	
12	CHICAGO MARRIOTT	
13	1401 WEST 22ND STREET	
14	OAK BROOK BALLROOM	
15	OAK BROOK, ILLINOIS 60523	
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17	The above-entitled matter commenced a	аt
18	7:00 p.m., facilitated by Ms. Miriam Juckett.	
19	PRESENT:	
20	MIRIAM JUCKETT, Facilitator	
21	KEITH McCONNELL, Director	
22	PAUL MICHALAK, Branch Chief	
23	LISA LONDON, Attorney	
24	SARAH LOPAS, Assistant Facilitator	
25	SUSAN WITTICK	
26	NEAL R. GROSS	

# PROCEEDINGS

(7:07 P.M.)

MS. JUCKETT: Good evening, everyone.

I'd like everyone to take a seat. We'll get started here in just a second.

evening, and Good welcome this evening's Nuclear Regulatory Commission public Generic meeting Waste Confidence Draft on Environmental Impact Statement and Proposed Rule. name is Miriam Juckett and I will be your facilitator for this evening's meeting.

Before we get started, I'd like to over just a few things that have to do with the process and the objectives so that everyone has a good idea of what to expect this evening. First of all, the objective for the NRC is to hear your comments and your recommendations the on Generic Environmental Impact Statement. We'll be calling that the GEIS during this meeting. And the staff will be here to hear your comments and will be taking these comments back to consider in finalization of the EIS.

There are many ways to submit comments on this, and you'll hear about some of that in the presentations. But we want to make sure that

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everyone knows that whether you submit comments in writing or whether you submit comments by speaking them onto the record tonight, all of the comments will be considered the same, all of them will be considered equally. So, we do want to make sure that we get your comments tonight for the NRC staff to consider.

As part of the process for tonight, this evening, we will be going through a couple of very brief presentations by a couple of NRC staff members. And then we'll go to a very short question and answer, we'll take two or three questions, and the main purpose of that is to make sure that everyone understands the process for finalization of the EIS, the schedule and things like that. But we'll just take only a couple of questions since the main portion of this evening's meeting is the comment portion and that's when we'll open up the floor to people who have registered to speak and those who have walked up and said that they would like to And we'll ask you to come and make your speak. comments at the podium.

Now, our court reporter over here, Ron, will be taking a transcript of this evening's proceedings. So, you'll have a chance to speak your

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comments on the record for consideration. When we do go to the comment portion, what I'll be doing calling everyone's name one by one, and I'll call two or three at a time, and if you could make your way to the front and take a couple of seats here for people to get ready to go to the podium. Because we do have so many people signed up to speak tonight, we are very happy that we have a big crowd out tonight, we'll ask everyone to stick to a three-minute limit. And my colleague Pat LaPlante here will be holding up a little sign to remind you when you're at one minute, and that would mean how long your comment has gone and you have one minute remaining. After that one minute, I'll give you a signal to let you know to wrap it up.

So, we do want to make sure that everyone gets a chance to speak tonight. So, I'm sorry in advance if I have to cut you off and let you know that your three minutes are up. But we do want to make sure that everyone gets a chance to speak.

So, with that, I just want to add a couple of other housekeeping items before we introduce tonight's speakers. You have a couple of forms that are on the chairs. If you didn't, we would be happy to provide you one. There's a

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feedback form that just lets us know how you felt about how tonight's meeting went, and you can either give it to any of the NRC staff who are here or if you want you will be able to mail it in postage free. We also have a few comment forms so that after listening to the comments and maybe you already spoke or you think of something that you want to be able to say, you can write down your comments and give them to the NRC staff members, and we'll be happy to take those from you.

The other thing is the restrooms are out the door to the left, right back here just in case. We'll probably take a quick break towards the middle depending on how the flow of the meeting is going and we're getting everyone in to speak.

So, with that, I want to real quickly introduce to you the NRC staff members who are here today. We have Dr. Keith McConnell who is the Director of the Waste Confidence Directorate. And we have Paul Michalak who is the Branch Chief in the Environmental Impact Statement Branch. We have Lisa London who is from our Office of General Counsel. And we would be remiss in not acknowledging Susan Wittick, NTRO, who has done a lot of logistics for this and for really helping us out.

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I want to make sure to mention that you probably got to speak with some of the folks We are only taking that are out here from NRC. questions that have to do with process but we make the staff available to you so that if you do have more technical comments or questions that you want to go up and speak with someone about, you're welcome to, at any time, go talk to people out in the foyer, that's what they're there for. And we want to make we keep the meeting to most sure that comments. That's why we're not going responding to what you say from the podium, it will just be the comments.

So, with that, let's get started with our presentations, and Dr. Keith McConnell will give the first presentation.

Thanks, Miriam, and good DR. McCONNELL: evening, everyone. As Miriam indicated, I am Keith McConnell and I am the Director of Waste Confidence Directorate at the U.S. Nuclear Regulatory Commission. I want to welcome you here tonight for this public meeting on the Proposed Rule called Waste Confidence. The purpose of the meeting tonight is to gather your comments on this draft Generic Environmental Impact Statement and proposed

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rule for the storage of spent nuclear fuel after the operating life of a power reactor and before it's disposed of in a geological repository, otherwise known as Waste Confidence Rule.

Environmental Impact Statement and the Proposed Rule, represent the culmination of the Directorate's activities over the past year to respond to a U.S. Court of Appeals in the District of Columbia 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 that relate to the impact analysis under the National Environmental Policy Act.

Given that the purpose of tonight's meeting is to gather your comments on this draft Generic Environmental Impact Statement and proposed rule, we the NRC staff intend to limit what we say so that we can maximize the opportunity for you all to provide us your comments. And it's our goal to stay here until we hear everyone who signed up to speak. So, we do encourage you to participate.

As Miriam has indicated, we do have a technical staff back in the back of the room and out in the foyer who have written the vast majority of the draft Generic Environmental Impact Statement.

And I encourage you to take the opportunity to talk to those individuals because they will be considering your comments and they will be writing the final draft of these two documents.

I also would like to take a few minutes to talk about our rulemaking process. It's a very important part of what we do at the NRC. It's how we implement national policy and standards. And it's how we maintain and achieve the NRC's goals of maintaining public health and safety and security and protection of the environment.

The meeting here tonight is a very important part of that process. We're here to gather and hear your comments. So, again we encourage you to participate.

Tonight's meeting, which is one of interactions with the public, formal interaction with the public that we're having during this public commentary, is just one of the efforts that we have undertaken to make this Waste Confidence Rulemaking effort as open and transparent as possible. In that who regard, we do appreciate those of you participated in the scoping meetings that occurred last October and November, and also those of you that have followed along the waste confidence activities

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during our monthly public status calls. We do want to hear your comments.

the five Ι would note that NRC commissioners, when they reviewed the draft Generic Impact Statement and Proposed Environmental before it went out for public comment, specifically asked that the public comment on five particular questions. And they relate to the format and content of the Waste Confidence Rule. And those questions are out on the table so you can specifically pick them up and know what they are. We'll be encouraging you to provide your comments on those questions. Those specific questions, as well as any generic comments you have, will help us to improve the final document in order to provide vital information to the commissioners when they consider our final document and how we've done -- and how well we've done to respond to public comment.

So, with that, I'll turn it over to Paul Michalak who will provide us with brief introductory remarks.

MR. MICHALAK: Good evening. I'd like to add to Keith's welcome and thank you for participating today. My name is Paul Michalak and I'm the Branch Chief of the Environmental Impact

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Statement Branch in the Waste Confidence Directorate.

At tonight's meeting, I'll give a brief history of waste confidence, outline key aspects of the draft Generic Environmental Impact Statement and the proposed Waste Confidence Rule, and explain how you can comment on these documents. Then we'll go to the public comment portion of the meeting which is really the heart of the matter.

confidence accomplishes Waste two It generically addresses the environmental things. impacts of continued storage and makes determination about the feasibility of safe storage and the time frame for repository availability. draft Generic Environmental Impact Statement waste confidence satisfies part of the Commission's National Environmental Policy Act obligations for reactor licensing and relicensing, and the licensing and relicensing of spent fuel storage facilities. The generic environmental impact statement also the regulatory basis to support serves as Confidence Rule.

The Environmental Impact Statement and Proposed Rule only cover the time frame after the licensed life for reactor operation. However, it is important to note that the Proposed Rule on waste

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confidence does not license any particular site or facility. Nor does it allow for the long-term storage of spent nuclear fuel at any site.

The NRC's history with waste confidence started when the Commission issued the rule back in Since then, the rule has been updated, most recently in 2010. In 2012, the rule was challenged, and the Court of Appeals for the D.C. Circuit vacated 2010 rule. The court identified 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.

directed the Ιt also Commission 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 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

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Waste Confidence Rule.

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There are two things that I would like The first is that waste confidence you to remember. is just a small part of the overall environmental analysis for reactor for storage facility licensing and relicensing. Secondly, the Confidence Rule does not license any facility or authorize storage at the expiration of the facility's The draft Statement describes the impacts of continuing to store spent nuclear fuel beyond the license life for operations of a reactor, whether it be a spent fuel pool or an independent spent fuel storage installation located at the -- both the reactor and away from the reactor site.

The draft Statement describes why we're revisiting waste confidence. It discusses the alternatives to consider. It describes how the environmental 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 the cumulative environmental impacts of continued storage. And it contains information on the

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feasibility of a repository and the feasibility for safe storage of spent fuel.

The draft Statement assessed impacts of continued spent fuel storage for three time frames based upon when a repository would become available. We evaluated the short term or 60 years beyond the license life or reactor operation time frame. We also evaluated a long-term time frame which is 100 years beyond the short term, or 160 years. And then finally, there was an indefinite storage scenario where no repository becomes available.

The draft Statement the serves as 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 procedures unless the NRC discovers something about the site that would make the application of the conclusions in the environmental impact statement inappropriate.

Proposed Rule would revise The the Nuclear regulations; Regulatory Commission 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

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Commission's determinations that it is feasible to safely store spent nuclear fuel following the licensed life for operation of a reactor. It also states that it's feasible to have a mined geologic repository within 60 years following the licensed life for operation of a 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 are here tonight so you can tell us your comments to the Generic Environmental Impact Statement and the Proposed Rule. Tonight's comments are being transcribed and will become part of the record. You can also leave written comments with the NRC staff located at the registration table and we will make sure that those comments are added to the docket. You may also e-mail, fax, or mail your comments to the NRC. You may also provide comments using the Federal Rulemaking www.regulations.gov.

Thank you for listening to the

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1 presentation. And I'll turn the meeting back over to Miriam. 2 3 MS. JUCKETT: Thank you, Paul. going to go very quickly to a couple of questions 5 people have. Are there any questions that anyone has regarding the schedule or finalization of the Rule? 6 7 And could you please introduce yourself? 8 MR. SCHRAMEK: Yes, Jeffrey Schramek, 9 Is there any possibility you could back the NEIS. slide about one slide so we can see the exact text of 10 what was just verbally described. It was on there 11 12 for two seconds or so. Certainly. 13 MS. JUCKETT: And I just aware that these slides 14 make you 15 available outside, too, like a hard copy of slides. Any other questions? 16 MR. LESHAK: Will the docket be made 17 public? Mike Leshak with Independent Television. 18 19 was wondering if the official docket with all the public comments will be made available to the public 20 or only if you went to the NRC. 21 22 MS. JUCKETT: Certainly. Let me ahead and get Keith McConnell to answer that question 23 The question was about whether or not all 24 for you. 25 the documents on the docket will be made public.

1	DR. MCCONNELL: The answer to your
2	question is yes. All of the documents will be made
3	public. The comments will be public. There will be
4	a comment response section in the final Generic
5	Environmental Impact Statement. And all of that
6	information will be available on our website, the
7	waste confidence website.
8	MS. JUCKETT: Any final questions on
9	process or schedules?
10	MS. THOMPSON: I was wondering, oh, I'm
11	sorry, I'm Tammy Thompson. I was wondering that the
12	spent fuel that you're talking about, will this be
13	coming from other facilities traveling to Illinois to
14	be stored here or is it the waste that's already at
15	the facilities that are here?
16	MS. JUCKETT: Okay, we want to make sure
17	that we're primarily concentrating on the process
18	questions here. But, why don't we take this one to
19	Paul Michalak.
20	MR. MICHALAK: Hi, Paul Michalak. The
21	fuel, the spent fuel that's considered in the
22	environmental impact statement is from commercial
23	reactors licensed by the United States. So, the
24	answer to your question is no, the fuel we're
25	considering is domestic commercial fuel. If the NRC

Or

licensed the facility, that fuel is considered in the Generic Environmental Impact Statement.

MS. THOMPSON: Right. But are we

accepting fuel from other states into our state?

does our stuff stay here?

DR. McCONNELL: This is Keith McConnell. In terms of the impacts analysis, the impacts the analysis considered was generated onsite and was just stored on the site.

MS. THOMPSON: Okay, thank you.

MS. JUCKETT: Okay. And I'm sorry to cut this off. We have to make sure that we go ahead and get to the comment portion. But I do want to make sure that you know that we do have NRC folks available out in the lobby to speak with if you do have more questions. We will also stick around afterwards so that you're welcome to come and ask us questions individually.

So, let's go ahead and enter the comment portion of the program. And when I call your name, please make your way up to the front. We've got a couple of chairs here for -- if you'd care to wait up here as opposed to, it's just a little easier to get out. Please do state your name and affiliation if you can. And also, we need to make sure that, and

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everybody has got differences of opinions and we'll hear a wide variety of opinions today, we'd really like that you be polite to each other and as we need to get a clean transcript of this evening's meeting.

So, one speaker at a time and we'll go in order, and also, if you didn't pre-register, we are still accepting your comments. You're welcome to go ahead and see if you can sign in at the registration desk, or if you did pre-register and you didn't get a chance to check in with the registration desk. That just helps us to know that you're here and you would still like to speak.

So, our first two speakers I'm going to go to are Reed Wilson from the Office of Congressman Adam Kinzinger, and next we'll go to Tom Wolf.

MR. WILSON: Good evening. I'm Reed Wilson representing Congressman Adam Kinzinger representing the 16th District in Illinois.

Dear Commissioners, I have a letter to read here, thank you for allowing my office the opportunity to address this public meeting regarding Nuclear Regulatory Commission Rulemaking to address waste confidence. As many Illinois residents rely on nuclear clean and portable energy, this rulemaking will have an important impact to consumers across the

state. In the 16th District alone, there are four nuclear power plants providing great price stability to consumers throughout our nation. Nuclear power provides half of our state's energy and generates almost 93 percent of the carbon-free electricity produced in Illinois. Without the availability of this baseload power, there is no doubt that prices would skyrocket and energy stability would plummet. In addition, the nuclear energy industry support thousands of high-paying jobs, which in turn supports the tax base of our local communities.

We are here today to discuss the Nuclear Regulatory Commission's Proposed Rule on confidence. The Proposed Rule simply clarifies the issues and processes surrounding the safe and secure storage of spent nuclear fuel. It does not authorize individual licenses. It is only one step in the Commission's National Environmental Policy Act review. And hence, the clarity of this policy will lead to a more efficient licensing process which would benefit consumers throughout our region.

In addition, the NRC rulemaking process is the kind of open and transparent process that should take place in all aspects of government regulation, especially the widespread participation

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of all aspects of government, industry, and the public in order to ensure that all viewpoints are considered. A total of 12 public meetings will take place, and members of the public will have the opportunity to submit comments to the Commission through December 20th of 2013. Upon the completion of this process, it is my hope that NRC will complete this rulemaking in an expeditious manner.

Lastly, I want to talk to the fact that the Nuclear Regulatory Commission has suspended all final licensing decisions while this rulemaking process moves forward. I believe it's time to provide this industry that provides a clean source of energy to billions of consumers the ability to move forward with a greater level of certainty for the long-term operations. Sincerely, Adam Kinzinger, Member of Congress.

MS. JUCKETT: Thank you. The next one is Tom Wolf.

MR. WOLF: Good evening and thank you.

My name is Tom Wolf. I'm the Executive Director of
the Energy Council of the Illinois Chamber of
Commerce, and a proud member of the Illinois Clean
Energy Coalition.

It's clear that for our overall quality

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of life as well as our overall economic well-being that we need a reliable, cost-competitive, diverse, and stable supply of energy. In the past few months, I've been to public hearings on license extensions for nuclear power plants, USEPA regulation on emissions for coal plants, regulations on fracking in Illinois, and permitting for efficient lines that would bring more green energy in Illinois.

Every single energy project that I was at had its detractors at these meetings. Yet no one has come to any of the hearings with the perfect solution, just reasons why the current system isn't perfect. Well, of course it's not perfect. Everyone in this room knows that there is no perfect form of energy. If there was one, believe me, we'd be using it.

So, we're stuck with an abundance of imperfect choices. But we've done pretty well with these and I want to thank the NRC, IEMA, and all those for working with the owners of our nuclear facilities to keep the onsite storage of spent nuclear fuel safe. And it is safe.

Unlikely scenarios that are designed to scare people are not productive to the discussion nor to our energy debate in general. Opponents of

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nuclear energy paint a picture of piles of growing glowing waste sitting out in open air or implying that they're easy targets. All this hyperbole and hot air just obscures the fact that there has never been a single incident where spent nuclear fuel has storage been compromised by any individual or group. It's been safely stored for decades and I believe the NRC and IEMA and the owners of nuclear plants can keep it that way for decades to come.

Of all the reasons people give for wanting to move away from Illinois, I can say that no one has ever talked to the Chamber about the stored nuclear waste as the reason that they moved out of the state. The tax structure, the pension problem, the high workers comp rates, restructured attitudes in Springfield, those are the major active issues that keep businesses from coming to or growing in our state.

In conclusion, we certainly hope that the Federal government will meet its long overdue obligation and will soon figure out a solution to long-term storage of spent nuclear fuel. But until then, we are happy that the industry and its Federal and State regulators have determined a strategy that

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works on many levels, the most important of those is our safety. Thank you very much.

MS. JUCKETT: Thank you. For our next speaker, let's go to David Kraft, and then let's go to Scott Fleming, and then S.Y. Chen.

MR. KRAFT: Good evening. My name is Kraft, I'm Director of Nuclear Dave Energy Information Service. We're an environmental safe advocacy organization based in energy Chicago, Illinois. We represent nearly 900 supporters in Illinois, 34 states, and 4 countries. And we thank Commission for allowing us three minutes of meaningful comment on a problem destined to haunt humankind for tens of thousands of years.

We hope we've demonstrated that people in Illinois, while not having the original NRC list of sites for the GEIS public meeting, are indeed interested in radioactive waste issues after all. And we hope you enjoy Orlando, one of the NRC's originally proposed sites despite the turn out in what was Disney World central.

All right. I'll use my time to summarize the main points that were going to be put in detail in a more elaborate comment which we will put in before the deadline. The first point we want

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to make is that we submit that the GEIS, as written, is inadequate to both the task of satisfying the directives of the 2012 Court of Appeals and it's also inadequate in protecting the health and safety of the public and the environment. For these reasons, we would ask the NRC to withdraw the current DGEIS.

Second point, believe that the we moratorium on licensing of new and the licensing of the currently operating reactors should remain in place until such time as a permanent geological, high-level radioactive waste disposal facility is designed, licensed, built and in operation, not just a theory. We ask the NRC to maintain its moratorium until this condition is reached and ask that the moratorium be extended to include the siting and licensing of any temporary away-from-reactor storage facilities such as those referred to as centralized interim storage facilities. It's irresponsible to continue the production of such waste without a demonstrated and operational means of disposal.

The third point, we ask that you withdraw all statements to the effect that, because of NRC oversight programs, NRC asserts and guarantees that spent fuel can be stored safely at reactor sites indefinitely. Such a guarantee implies that the NRC

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will be providing constant oversight into that indefinite period of time. Yet, one month ago, the NRC could not even guarantee that its workers would be able to come to work the next day. The hubris of such an assertion, therefore, borders on colossal.

And finally, we find that NRC's finding of no significant impact regarding issues like spent fuel pool fires, spent fuel pool leaks, the vulnerability of the spent fuel pools and dried cask sites to natural disasters and terrorist assaults, and the NRC's belief in the adequacy of generic findings of reactors to be unfounded, inadequate to the protection of the public health and safety, and in contradiction to the NRC's own definition of what constitutes a nuclear safety culture.

And I would like to quote to you from a viewgraph that was presented at the Palisades Nuclear Reactor last year, "The NRC version of a safety culture is a core of values and behaviors resulting collective commitment by leaders from individuals to emphasize safety over competing goals of people ensure the protection and the These assertions will be elaborated environment." out in detail in our subsequent submittals. So, I want to thank you for having this time.

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# (Applause.)

MS. JUCKETT: Thank you. Next we'll go to Scott Fleming.

MR. FLEMING: My name is Scott Fleming of Will County Center for Economic Development. let me put my glasses on here, the Will County Center for Economic Development is committed to creating a healthy business environment to attract businesses jobs to Illinois. We know that having a competitive, safe energy infrastructure is a key part of the economic growth equation. We are fortunate to be home to one of Illinois' nuclear power generating stations at Braidwood. This facility employs nearly a thousand people and supports many thousands of additional jobs in the region. Braidwood Station pumps tens of thousands of millions of directly into the area and economy and invests in many worthwhile community causes.

But those of us who live and work that area, especially someone who is looking attract new business in the area would not satisfied with the substantial economic impact that we gain at the expense of our safety. The Center for Development Economic is also а member of the Braidwood Citizens Advisory Panel and have been

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fortunate to closely follow the way Braidwood operates. Its culture of safety and security is second to none, and its transition to dry cask storage of spent fuel is a good example.

Exelon took the initiative to invest in dry cask storage that provides an added level of safety and security, and we applaud them for taking that step. We also encourage the NRC to continue to work with industry to promote innovations that will improve or enhance operational safety and ultimately lead to the creation of spent fuel repository for the storage of this material.

The Will County CED is confident with the safety and security of the storage facilities at Braidwood and we look forward to the continued positive impacts of the station in our community for many years to come.

MS. JUCKETT: Thank you. Next, we'll go to S.Y. Chen.

DR. CHEN: Good evening. I'm S.Y. Chen,
I'm a professor and also Director of the Health
Physics Program at the Illinois Institute of
Technology in Chicago. I appreciate the opportunity
to speak tonight. I have several brief comments here
for the effort that NRC has done and I just want to

go over that briefly.

First is expectations. Confidence, we all know, is in the eye of the beholder. So, sitting here tonight, people have different expectations of what confidence means. Certainly, when the NRC -- limited. We heard about maybe only two, the spent nuclear fuel and the generating site, but spent nuclear fuel goes well beyond that.

And there's just a disparity of expectations because, as we know, until and unless the spent nuclear fuel becomes eligible to be put in the ground in a repository, I'm not too sure how much confidence the public is going to have. Certainly it is not within the scope of the GEIS but, however, they're interconnected. At some point, I think that in a large part either as a constraint or something, the EIS really has to mention automatically the interconnection with the repository which isn't available and we don't even see anything in sight.

So, this is just an observation I have is that what kind of confidence do you have? And what expectations do you come to the public to say I have this confidence, what do you mean by that?

(Applause.)

DR. CHEN: Secondly, we've heard about

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the three scenarios about the fire or things like that. But I'll just tell you, what had happened in the last couple of days, the typhoon Haiyan, 370 kilometers per hour. Climate is changing. So, that means, according to the prediction -- raised maybe half a meter high. What happens is that a lot of plants that we have here are going to completely store the fuel by the shore there and we're going to have problems. But I'm not too sure of all these climate issues after 60 years of operation here, that could become a reality. So, we are assessing the potential risk that's involved and that's the real issue. We don't see that as being analyzed.

The third point I have is actually in the EIS, which I partake a lot in my career when I worked at Argonne, uncertainty of the generic EIS, there's a lot of assumptions coming into that. But every assumption has a lot of uncertainty involved. So, I'm not too sure of how exactly uncertainty has been analyzed much more specifically.

MS. JUCKETT: Dr. Chen, we would ask you to wrap up please.

DR. CHEN: Right, okay. So, that's basically what I have. And maybe the last one would be the site-specific management part of that, how

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that ties into the uncertainties I mean here would be very important. And I'm stopping there.

MS. JUCKETT: Thank you.

(Applause.)

MS. JUCKETT: Let's go to Maureen Headington followed by Lora Chamberlain and Rick Fox.

MS. HEADINGTON: My name is Maureen Headington. I'm a proud resident of Burr Ridge, Illinois. I am a domestic environmental activist -- oops, sorry. Start me over with the time.

My name is Maureen Headington and I'm a resident of Burr Ridge, Illinois. I'm a domestic environmental activist. I am not paid for anything I do, it is totally sweat equity. When I'm not, well, let's put it this way, there's a lot of sweat and no sleep. There's others in the room who have similar lifestyles.

I am a past Director of the Illinois Environmental Council, on this board I served for six years. And I'm coming here today to explain why I do not have the confidence in this Generic EIS and why you shouldn't either. I do not have confidence when I see reactor licenses being renewed without exception regardless of a plant's track record. The APY recently, I discovered the State of Illinois

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reactors racked up 1,120 safety violations. In fact, that was from the period 2000 to 2012, and yet the NRC has never met a license renewal it has not liked and licenses routinely are renewed.

Here in Illinois, I don't know how many people from the NRC come from this state, but we have more reactors than any other state, four are the same make and model as the ones that blew in Fukushima. Again, we have the safety violations which are treated so routinely, they're seldom reported in the news except the headlines at Braidwood. So, I would take exception with how fine Braidwood's track record has been, especially dumping polluted, irradiated water on the community unbeknownst to them for ten years.

In addition to leaks, we also have, in recent days, the felonies created by folks over at Dresden. So, if our futures are in the hands of an entity and we hear that the people that they're hiring are of this caliber, I do not have confidence. I don't have confidence in an industry that relies on our tax dollars to subsidize its own interests, long guarantees to build new reactors, expecting main street to invest in what Wall Street will not. Wall Street refuses to take on the risk and why should we?

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For that, I have no confidence.

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also have no confidence when the President's Blue Ribbon Commission is made up industry promoters like John Rowe, former Chairman of Exelon, and others for whom there is a clear conflict of interest in any decision-making capacity. BRC's recommendation for CIS, centralized interim is no solution, it just puts storage, materials onto our streets and expressways and opens it to traffic accidents and terrorist attacks. because, to the statement I heard, just because we haven't had an accident yet means that it's safe is shortsighted and unrealistic.

I thank the Federal District Court for throwing us a lifeline. The nuclear power industry risk, our families at at risk, us communities at risk. Their claims of infinitesimal risk do not reconcile with the major nuclear accident happening every ten years. Go back and do the math. You need not be scientist for that. I taught Chicago Center City schools for 20 years and my third graders could do that now.

How could anyone have even allowed one reactor to be built with no end plan for waste? Your recommendations are not a solution. There is still

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no end plan. Interim means indefinite, that's not a plan, except to stockpile in facilities beyond the capacity for which they were built.

We citizens are the only ones in this room not being paid to be here. Be mindful when you listen to the accolades of industry or politicos who have been the recipients of campaign dollars in terms of listening to them. These reactors are unsafe and unreliable, they are not clean, they are not green.

I have no confidence in the -- Anderson Act because it's being reauthorized in 2017. It limits the nuclear power industry's liability and it's a pittance compared to what the people in Japan are facing in trillions of dollars. Our accidents will be paid for by our own tax dollars just like the loan guarantees and subsidies that are building these atrocities in the first place. And I thank you.

# (Applause.)

DR. CHAMBERLAIN: That's a harder act to follow. So, the NRC has stated they have a mandate to ensure the protection of the people and the environment. And I want to state here in argument to some of the statements earlier by some of the industry folks, that nuclear power is neither safe, clean, affordable, or cost effective. On the safety

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issue, I merely have to mention Three Mile Island, Chernobyl, and Fukushima. And that's all that needs to be said about the safety issue of nuclear power.

The clean taq on nuclear power absolutely ridiculous when you factor in the carbonintensive and toxicity of uranium in our, stations, areas across the country. And affordable and cost competitive is a joke. As Ms. Headington just said, the loan guarantees and the taxpayer should certainly be subsidies of nuclear power factored in to every kilowatt hour that we think we're getting from the nuclear power plant. assure you that all economists agree that nuclear power without Federal subsidies is neither cost competitive nor affordable.

But about the confidence in the Nuclear Regulatory Commission and their ability to safely store spent nuclear fuel following the licensed life of every operator, or of every reactor, excuse me, and 60 years from now, them finding a safe geological repository really is laughable. I want to just ask the audience right now, who here right this moment feels terrorized, terrorized of what's happening in Fukushima with the spent fuel -- exactly! There we go.

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So, nuclear power is really a terrorist organization. We all feel terrorized by this. accident, a disaster can occur at every nuclear power plant. I have absolutely no confidence that the NRC has investigated every single possibility at every power plant for fires, leaks, disasters, and terrorist attack. So, I for one and every single person that put their hand up has no confidence in the NRC's supposed Environmental Impact Statement. Thank you.

(Applause.)

MS. JUCKETT: The next speaker is Rick Fox.

MR. FOX: Hello there. I'm Rick Fox, I'm here tonight representing the Global Warming Solutions Group of Central Illinois. Our group has, as long as we've existed for the last two years, focused on finding things to address global warming on a local basis. We come out and strongly oppose the nuclear power in general because we feel, despite some of the carbon arguments, that this is not the argument to justify the issue really we're here to talk about tonight, which is our confidence in how you deal with the spent fuel and the hazards that we face with the nuclear energy.

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background, I have an engineering I'm a software guy today but I know a little bit about engineering. My father is an engineer. One of the things, when you look at engineering projects, and this is fundamentally what the argument here is, that we can engineer our way out of this And as was stated before, in any engineering project there's a number of assumptions when you build something particular of to а set specifications. And Ι think that with this particular issue, you can't set the assumptions at a point that's strong enough for us to have confidence that you could come up with, really, a solution that would justify keeping new plants being licensed.

In particular, I think that the EIS does not do enough to address the issues related to the climate change and the things that may be coming along as part of, you know, as our climate is already changing, we're seeing things happening. What happens over the next 60 years, 160 years, and further into the future, I think that there's a lot of question marks there that really have not been adequately addressed.

And then my final point I think on confidence, this is even if we step back and assume

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that the engineers had the perfect solution both from a long-term and a short-term solution, which I do not have that confidence, even if we assume that, the reality is for any of this to work, we've got to have the policy makers and the funding to pay for this. And I don't think that any of us can say that we have the confidence in our government to put the amount of money behind this that really is going to take to address these issues that are in front of us. And that's really one of my biggest concerns with this is simply that we don't have the policies in place and we won't in the future to address this issue.

(Applause.)

MS. JUCKETT: For our next speakers, let's go to Jerry Peck, followed by Linda Lewison, and then Bette Pierman.

MR. PECK: Hello, my name is Jerry Peck.

On behalf of the nearly 4,000 members of Illinois

Manufacturers Association --

AUDIENCE MEMBER: We can't hear you.

MR. PECK: I'm sorry. Hello, my name is Jerry Peck. On behalf of the nearly 4,000 members of the Illinois Manufacturers Association, I appreciate the opportunity to offer testimony today.

The Illinois Manufacturers Association

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is the oldest and largest state manufacturing Manufacturers in association in the United States. workers employ more than 600,000 contribute the single largest portion of the gross Illinois manufacturers state product. were responsible for over \$92 billion in economic output last year alone. Illinois residents benefit greatly from a quality energy policy.

Our state's energy portfolio of coal, nuclear, natural gas, and renewable sources ensure that we have a strong, stable energy supply at relatively low cost. Reliable and affordable energy is a key factor that helps ensure that Illinois manufacturers can remain competitive in the world economy. Nuclear plants account for 48 percent of electric power generated in Illinois.

We encourage you to carefully consider the economic impact of regulations governing the transportation and storage of spent nuclear fuel. Nuclear power plants were never intended to be permanent storage sites for spent fuel. Since 1983, we have paid more than \$29 billion into the nuclear waste fund, yet no permanent storage site has been built.

As a result, 13 percent of our nation's

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spent nuclear fuel remains in temporary storage in Illinois power plants. It's time to open Yucca Mountain or similar long-term storage facilities. Illinois residents and manufacturers greatly benefit from reliable and affordable energy produced by nuclear power plants. Any efforts to cripple the industry through vexatious regulation is dangerous, not only for our state's economy, but to the long-term health and safety of Illinois residents. Thank you for the opportunity to offer testimony.

MS. JUCKETT: Thank you. Next speaker is Linda Lewison.

MS. LEWISON: Good evening. I'm speaking tonight as a member of, sorry, I'm Linda Lewison, speaking tonight wearing my hat as a member of the Sierra Club. I want to address my remarks especially to speak about Zion.

40 miles up the road at the Zion Nuclear Power Generation Plant in December, over a thousand tons of high-level radioactive waste is going to be transferred into dry casks, as reported by Pat Daley Zion Solutions in August 2013. In the near future, in Fukushima, over 400 tons of high-level radioactive waste were transferred out and into dry 176 **'**78. casks. Zion operating from to was

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Fukushima was operating from '78 to 2011.

What we have here is a situation where we in the Chicago-Milwaukee Metropolitan Area, over six million people, are going to be exposed to comparative or greater risk - from a larger and dirtier radioactive waste fuel transfer, which is projected to take about a year to complete in both places - than what's going to happen soon at Fukushima.

Although everyone is doing their best at Zion Solutions, a shell company authorized through Exelon, the scale of decommissioning fuel transfers has never, this scale of decommissioning has never been attempted before. We the people who live within a 50-mile radius of Zion remain deeply concerned because the public oversight and transparency is far from adequate to the enormity and riskiness of the task. Irradiated fuel transfers have never been attempted before on this scale.

So, where does a generic environmental impact statement figure into the decommissioning process? The situation in Zion and Fukushima changes from moment to moment, not only on the physical level, which we can see, but even more critically at the molecular and subatomic level.

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This is a quote from an authority from Canada, Dr. Gordon Evers:

"The central fact about radioactivity is that no one knows how to turn it off. Radioactive materials continue to emit atomic radiation at a rate which cannot be influenced by any of the usual factors, heat, pressure, chemical reactions, absorption, dilution, nothing can be used to speed up, slow down, or stop the process of radioactive disintegration from occurring."

This central fact means that 'radioactive cleanup' is a very misleading phrase. It suggests to ordinary people that we can somehow get rid of radioactive contamination. But we cannot do so, at least not in any actual sense. All we can do is move the contamination from one place to another. If you decontaminate one site, you must be contaminating another site.

The contamination, whether repackaged, consolidated, or managed are made less available to the environment of living things but it cannot be eliminated. Governments and their electorates have been misled by the nuclear industry into believing false notions about nuclear waste. Lots of impact, millions of dollars spent, they do not know how to do

this. There is no way to clean up or dispose of radioactive waste.

So, how can we ever capture one moment in time with something called GEIS and presume that it will capture what is happening in this everchanging reality? Every reactor site is unique. they were to drop one cask out at Zion, you could punch a hole in the bottom of the pool. It would partially drain and, in a worst case scenario, set fuel on fire in a few hours in an order of magnitude greater than Chernobyl. These are catastrophic risks and we cannot address them through this absurdity of a generic impact statement. And these are sitespecific impacts in this very densely populated area that we need to take into consideration as we make our future plan.

In closing, we oppose the Nuclear Regulatory Commission's waste confidence draft GEIS and ask NRC to withdraw it for a thorough revision. We have no confidence in the NRC's lack of a plan in place. As my colleague Shirley Bain from California put it years ago, why would we ever support an energy source that had no plans and knew that there was no way to safely dispose of its deadly radioactive waste when it began, hidden this from the public, and we

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are now left with the creation of endless waste, endless economic and environmental cost, and endless risk to ourselves and to the plant? Why would we ever pick such an energy source in the first place? Thank you.

(Applause.)

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MS. PIERMAN: Hello and thank you for providing an opportunity for me to speak tonight. My name is Bette Pierman. I'm here on behalf of Michigan Safe Energy Future which is an environmental activist group located in South Haven, Michigan. We formed in January after a number of safety issues in the Palisades Nuclear Plant in Covert, and our focus was twofold. One, to shut down Palisades before it melts down, and the other was to promote alternative clean energy sources.

I come before you today because I had serious concerns. Nuclear waste is toxic. Clean and safe are not terms that you can use to describe nuclear waste or its production. And yet members of the Nuclear Regulatory Commission and their staff are sell repeatedly trying to to the public Therefore, one wonders how the members falsehoods. NRC could determine environmental of the an assessment finding of no significant impact regarding

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nuclear waste and its storage resulting in the recommendation of a generic treatment with no further oversight for a hundred years.

While reviewing the documents for term 'adequate' comment, the repeatedly appears regarding the steps currently used to store toxic nuclear waste. Whenever I hear the term used by NRC staff to describe any of the nuclear plants across the country, excuse me, whenever I hear the term used by NRC staff to describe any of the nuclear plants across the country, but in particular Entergy's Palisades Nuclear Plant, I cringe. I am not sure how the use of this term is supposed to be reassuring to public since it means 'good enough.' The connotation connected with 'good enough' is mediocre.

So, I ask you, how safe would you feel with an 'adequate' pilot on a turbulent transcontinental flight? Or how quickly would you employ an 'adequate' heart surgeon if you required surgery? Yet you throw the word 'adequate' around to the public like that is supposed to reassure us about the safety of these aging, decrepit, nuclear power plants in this country and what you propose as the generic treatment of high-level radioactive waste storage for a number of years far into the future.

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This member of the public does not share your confidence. You write as if you have access to a crystal ball providing you access to the state of our planet for a hundred plus years, when in fact with the accelerating global warming and increasingly apparent climate change, you have no idea what is to come. We are seeing an increasing detrimental superstorms wreaking unimaginable havoc, the level of which has never before occurred.

Supposedly you studied what happened at Fukushima Daiichi, and yet I see no evidence that you have learned anything from your study. If you had, you would be shutting down all of the nuclear plants in this country to halt future production of toxic nuclear waste, and would be devoting your full attention to resolving the problem of current toxic nuclear waste accumulation.

Okay. I have a lot more to stay and I'll submit my written comments, but I'm going to finish with this paragraph. As stewards of this planet, it is time for the members of the Nuclear Regulatory Commission to begin to act responsibly and stop all further toxic nuclear waste production. Your job is not to represent the greedy, reckless, and irresponsible nuclear industry. We need to be

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prepared for a super-storm and how you will handle the consequential impact on nuclear waste storage.

Contrary to what you have presented, each plant's situation and environmental impact will be different, and all will be catastrophic. Climate change is real. Super-storms are occurring along with earthquakes in regions where they did not previously occur with regularity. If you do not begin to make responsible decisions regarding the protection of this planet and its humanity, then you need to remove your NRC motto, "protecting people and the environment," because your 'adequate' effort will have failed and all will be harmed as a result. Thank you.

(Applause.)

MS. JUCKETT: We seem to be having a little bit of trouble with our microphones. If you guys would just hang tight for just a second, we'll try and get this worked out more positively.

This one if you speak loud enough is just fine. So, if you can hold on to this mic while you're talking and project, I think we should be okay.

(Microphone test.)

MS. JUCKETT: Okay. Thank you,

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everybody, for your patience.

(Microphone test.)

MS. JUCKETT: Okay. What we'll do now, and I'm sorry that this is not working out. You never know how these things are going to work out in advance, but for those of you who are kind enough to want to speak, could you just please hold the microphone and make sure you talk into it? From up here, you can kind of hear. However, if you can be heard in the back, then people will give you a thumbs up or thumbs down I'm sure. So, thank you.

For our next speakers, let's go ahead and go to Brandon de Graaf, followed by Kevin Kamps, and Carol Kurz. And as a reminder, since it's been a few minutes, please introduce yourself when you get up to the podium.

MR. de GRAAF: Good evening. My name is Brandon de Graaf. I'm actually an engineer that works for Exelon Nuclear. I have worked in the nuclear fuels department so I have expert knowledge of what we're talking of here today.

To give just a background on me, I have a Bachelor's degree in Chemical Engineering, a Master's degree in Nuclear Engineering. I have been working in the industry for about four years now and

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currently responsible for managing the reload, so, I'm in the class of engineers with Exelon in the nuclear industry.

So, the fundamental question of today's meeting is do we have reasonable assurance that it's safe to store spent fuel beyond the license life of nuclear power plants. And to answer this question, the NRC put out the generic environmental statement which concludes that it is safe to store. And upon reviewing it and using my engineering background and knowledge from the industry, I agree with their conclusions.

The fact of the matter is, even if we never get a repository, spent fuel pools and dry casks are both safe options based on their continued performance. In fact, Illinois has the largest inventory of used spent nuclear fuel and has not had a spent nuclear fuel accident. And that's not shortsightedness, that's proven engineering.

This is because both technologies are designed to be robust. Everyday we think about what's the worst case scenario. That's what I'm trained to do and we design to protect the health and safety of the public. So, for example, spent fuel pools are designed with reinforced concrete walls,

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stainless steel liners, leak-detection systems, redundant monitoring and cooling, and makeup water systems. Dry casks, they are designed with the tight steel cylinders, they're actually welded shut, and they have concrete liners which protect and shield the environment from the radiation.

I walk by these things everyday. I've worked in the spent fuel pool buildings. And I still get more radiation from flying on an airplane to visit my sister in the south.

The casks are also air-cooled and, have no moving parts, and are not dependent on any operator or system actuation to be safe. In fact, in Fukushima, there were casks at that facility, they were knocked over, they were wetted, but they were safe and won't leak any radiation. And the spent fuel pool, as much as some of the media might have said that there was accidents because a spent fuel pool had lost water, none of the fuel became actually uncovered if you actually read the reports from the analysis after the accident.

So, on top of all that, the fuel itself is robust. I mean we take materials so that they can handle the harsh environment of the reactor, so it has to be degradation-resistant. So, once it becomes

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spent nuclear fuel, that's a property that won't actually disappear, it's still degradation-resistant.

So, it comes down to this. I mean as nuclear engineers, the last thing we want to do is cause any harm to the environment. I mean I have a son, and a family, and a home, and I care about the environment as much as you. You know, many of us became nuclear engineers because we know it's a great technology and it's a workable technology today.

So, I hope one day we can actually get one better and reprocess the fuel and minimize the amount of waste actually produced. But until then, there is reasonable assurance that it is safely stored spent fuel in dry casks and pools. Thank you for your time.

(Applause.)

MS. JUCKETT: Thank you.

Hello, my name MR. KAMPS: is Kevin I work at Beyond Nuclear as radioactive waste specialist. We're a national watchdog group on the nuclear power industry. I also serve on the board of directors of Don't Waste Michigan which is statewide coalition. And I represent the Kalamazoo Chapter, which is my hometown. And I was planning to site-specific issues speak about in this some

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country, specifically the Great Lakes Basin.

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as some of the previous speakers have mentioned, there are four reactors in Illinois which are Fukushima Daiichi twin designs. These are Electric Mark Ι boiling water General reactors located at Dresden and Quad Cities. And we've seen on live television what these reactors are capable of in terms of risks if you lose the electric grid and the emergency diesel generators for a long enough period of time. And the pool risks highlighted by what's happened after Fukushima Daiichi.

As Linda Lewison mentioned earlier, the extraction of the high-level radioactive waste from a unit fuel pool is about to begin at Fukushima Daiichi Unit Number 4. It's a very dicey operation. The cooling water at one point was saltwater, so the fuel is likely corroded. The fuel may be bent, it may be damaged, it could fail during this unloading procedure.

There's the largest General Electric Mark I boiling water reactor in the world at Fermi Unit 2 in Monroe, Michigan, and ironically enough it shares a lot in common with Fukushima Daiichi Unit Number 4. Some 40 years ago, the structural welds

were not put in place that can support the crane and the hundred-ton waste transfer casks that would be used to remove the fuel. So, despite having a permit for dry cask storage for several years now, Fermi Unit 2 still has all the waste it's ever generated in its high-level radioactive waste storage pool.

The dangers include just simply dropping one of these heavy loads through the floor of the pool as Linda mentioned. The scenario of partial drain-down is the worst case scenario where you have no air cooling whatsoever. And you could have radioactive inferno in just a few hours time which would dwarf what we've seen at Fukushima Daiichi thus far.

I want to just shift with my remaining time to dry cask storage risks in this part of the country. The way I got involved in these issues 20 years ago was at Palisades near Kalamazoo on the Lake Michigan shoreline. A lot of people, including the Attorney General of Michigan, fought the loading of those dry casks, and for a very good reason. They're a hundred yards from the water of Lake Michigan. In fact, they're in violation of NRC earthquake safety regulations.

This was brought to light in February of

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1994 by the NRC Region III Dry Cask Storage Inspector Dr. Ross Landsman who is now retired. He warned that an earthquake could open up the sand that those casks rest on and they could find themselves on the bottom of Lake Michigan. And in fact, there's enough fissile material still in the waste that, in the presence of water, you could have a chain reaction in the waste. So, that's a risk going on on the Lake Michigan shoreline right now.

Му final point has to do with whistleblower right here in the Chicago area, Oscar Shirani, who passed away a number of years ago, who called attention to the shortcuts on safety going on with the Holtec cask design. In a short three-day inspection, he and a team of experts from across the identified nine categories of country quality assurance violation with the Holtecs. These are deployed at Dresden and he questioned the structural integrity of these dry casks sitting still.

So, for over a decade now, hundreds of environmental groups have called for the pools to be emptied into hardened onsite storage, a major safety upgrade on the status quo of dry cask storage, fortifications against terrorist attacks, safeguards against accidents. That's what needs to happen.

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Thank you.

MS. JUCKETT: Thank you.

(Applause.)

MS. JUCKETT: Following Carol, let's go to Sandy McComb, Doug O'Brien, and then Tom Rielly. This is Carol.

MS. KURZ: Hello, everybody. A lot of the comments that I was going to make had been covered at some point, but I have gone through what I have and hopefully it will be an addition.

I'm concerned about the safety of nuclear energy. It does not have a reliable safety history. There have been 26 accidents in the U.S. since 1961, some with fatalities. That's one every two years, the most notable being with the Three Mile Island.

Fukushima in 2011 is important because we have four Mark I's here in Illinois. Radiation is still pouring into the Pacific Ocean as workers frantically try to keep rods covered with water. Now there's talk of robots to remove rods from the reactor without causing a catastrophic fire. This accident wasn't supposed to happen but it did. And it should be a wake-up call for all of us.

In the U.S., spent fuel pools are even

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COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 more crowded than Japan's. The NRC was -- I'm sorry, I didn't mean to -- okay. The spent fuel pools are more crowded than Japan's. The NRC was to find a permanent site for spent fuel. With Yucca off the map and our nuclear waste growing to 70,000 tons, a Federal court ruled in 2012 that the NRC could not proceed with new licenses or extensions until they completed environmental study the an to show environmental and health effects over time if spent fuel is not stored in a repository.

The NRC's draft waste confidence GEIS skirts the issue of long-time storage safety by fuel casks assuming and dry can be managed indefinitely for hundreds of years. Ιt considered an impossibility, but imagine the impacts of pool leaks, especially tritium where there is a significant history of such accidents nor concern for earthquakes, tornadoes, floods which grow stronger with climate change. In addition, the waste problem is further convoluted by NRC's proposal to include in reactor licenses their idea that spent fuel can be stored safely aboveground forever which would end any public discussion about permanent storage and creation of more waste since there is no problem.

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There is talk about Illinois becoming a centralized interim storage site although interim seems to be taking on a new meaning of possibly forever. Maps from Oak Ridge National Laboratory put Illinois number one and all but a few, because of our centralized location. We also have the most reactors and the largest amount of waste. We don't want interim storage here. Fuel should be moved only once on the way to the repository. Interim storage wastes time and money and we'd be a prime destination for terrorists.

The cycle of making waste that we can't dispose of is insanity. There is already enough waste for one Yucca, now we're working on two. We should follow the lead of recent events and bury it. Aging nuclear power plant licenses should not be extended nor new ones built until a permanent repository is built. We ask that the NRC withdraw its proposed DGEIS until the NRC provides substantial proof and scientific evidence of the safety of their conclusions. Thank you.

(Applause.)

MS. JUCKETT: Next, we'll go to Sandy McComb, followed by Doug O'Brien.

MS. McCOMB: Good evening. I do like

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speaking in microphones. The Federal courts have said NRC must have a valid and realistic assessment of the environmental impact of long-term storage of spent nuclear fuel. In response, the NRC plans to take only two years for the EIS, and more correctly, the environmental review. NRC's own staff says it will take seven years to do an EIS.

The two-year time frame NRC is using has been only enough time to summarize the currently available information about the risks of long-term storage and the existing information is inadequate. One study that's looking at the long-term storage has been started but it will take until 2019 to finish.

NRC is currently assuming what will happen in the distant future. Assumptions on the effect of climate change, for example, and some of these we can already see are wrong, for example, the GEIS says a meter rise in water level won't endanger any plant. There are in fact three plants that would be impacted by this rise in water level. NRC also has not adequately studied the environmental impact of fuel degradation and cask deterioration over time.

Finally, since the NRC is doing, engineering, an environmental impact study, the site-specific issues, of which there are several major

issues, aren't being addressed. It sounds to me like we're inviting a catastrophe. Is this what we want? Should NRC be licensing and relicensing plants based on their grossly inadequate GEIS?

The answer is a resounding NO! They must not be allowed to just say they are confident that waste will be safely stored without any basis in fact. NRC's response in their GEIS is not any better than their past position of just stating they were confident that waste could be safely stored. I don't feel safe.

(Applause.)

MS. JUCKETT: Next will be Doug O'Brien, and following up we'll go to Tammy Thompson, Amanda Stenson, and Edward Smith.

MR. O'BRIEN: My name is Doug O'Brien,

I'm the Executive Director of the Illinois Clean

Energy Coalition. And I appreciate the opportunity

to speak at this hearing today.

When it comes to the rhetoric of a lot of the activists who oppose nuclear energy, the story always remains the same. There is some hypothetical scenario or red herring issue concocted to represent the immediate peril supposedly created by nuclear power. But as always, upon closer examination, the

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story unravels.

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The storage of spent nuclear fuel has been taking place in Illinois for decades, in fact for half a century since the first commercial reactor went online in Illinois. In that time, there has not been a single breach at a spent fuel storage facility. There has not been a single case of public injury or contamination as a result of spent fuel storage facility failing. There has not been a single incidence where any person or group has been able to obtain spent fuel for nefarious purposes.

Now, of course the past is no quarantee of what's to come in the future. These are facts, plain and simple. To try and counter these facts in the overall safety record of nuclear energy with scenarios worthy of the most inventive Hollywood screenwriter is to irresponsibly distract from what should be a serious discussion of the important role of nuclear power in creating а diverse and independent energy supply for our country.

These tactics also divert attention from the growing forest of support for nuclear energy from the environmental movement itself. Among those who realize that if we are going to reduce our carbon footprint in a meaningful way, we must rely on the

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single great source of carbon-free emission, nuclear. There are many examples in the recent media about the environmental leaders, about how the global warming and the leaders in the environmental community wisely embrace nuclear power, and the Energy Secretary who states that nuclear power will play a key role in the fight against climate change.

Now, we can juxtapose the hypothetical scenarios that try to paint spent fuel storage as some impending doom with some very tangible data. According to NASA Climate Sciences James Hansen who is a leading voice in the battle against global warming, the use of nuclear power generation has globally prevented the emission of over 60 billion tons of greenhouse gases and has prevented as many as one million premature gas globally. This is quantifiable. It's not based on what ifs, maybes, theoreticals, or scenarios.

The Illinois Clean Energy Coalition promotes the use of clean energy sources in a competitive and sustainable marketplace that will fuel our economy while benefitting our environment. The coalition supports the Proposed Waste Confidence Rule because the facts show that spent fuel can be, and is, safely and securely stored in Illinois. We

further urge the NRC to move forward expeditiously with the construction of a central spent fuel repository which will help us further develop potential nuclear energy and nuclear science across the nation. Thank you.

(Applause.)

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MS. THOMPSON: Hi, I'm Tammy Thompson. Everybody hear me? No? I'm Tammy Thompson, can everybody hear me?

Who here is a nuclear neighbor? If you live in Illinois, you're a nuclear neighbor. If you live in the United States, you're a nuclear neighbor.

Ιt is insane previous to me, the gentleman that was up here talking about Mr. Hansen. I've seen him speak before. I have some respect for He doesn't live in a nuclear neighborhood, him. never has, doubt that he ever would, considering He has leaks out there and water still hasn't been fixed for the people that have the leaks. The moms can't explain why their kids are leaking from their eyes, and the parents are paying really high medical bills for dentistry to have their jaws wired shut for kids in the 4th and 5th Grade because their teeth are separating due to radiation exposure. Not to mention all the kids that keep showing up at

the Mayo Clinic that have radiation overdoses and nobody knows anything about it.

People quote movies, but this one I'd like to quote, "What we have here is a failure to communicate." This NRC meeting, I can't thank you for, it's a farce. It was not publicized. told that they had paid to publicize this. There's many newspapers and organizations that would put it And I guarantee you that if the public out there. exactly what was going on at all facilities, they would say no to this.

How many people do you know have died from radiation, or excuse me, exposure to solar panels? How about wind? Think if they had solar and wind backup rather than diesel and that was only a limited amount of time, what would have happened in Japan? I do have friends and family in Japan, and what they're living through is a living hell. What these communities are living in in Braidwood and Dresden, which by the way do, you know, on occasion shut their emergency alarm systems off but it doesn't get reported, it's just wrong for you to even consider this and call it something that is safe.

It's not safe. It was designed to be a bomb. It was designed to kill, and kill it does.

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I don't want it in my state, I don't want it in my country. And there's better alternatives than that. We are smarter than this. We are Americans and we can do better.

(Applause.)

MS. STENSON: Hi, good afternoon, or good evening, everyone. My name is Amanda Stenson.

I am at Braidwood Station this woman was just talking about seconds ago.

I've worked in radiation protection for three years and to a lot of people it may not seem like a very long time to really gain a grasp on how serious it is to work in the nuclear industry. I've talked to a lot of you before the meeting and I appreciate all of those that did come up and talk to me about their opinions on the nuclear industry.

I want to talk to you about my opinion on the nuclear industry and what I've worked with in the three and a half years. I have confidence in my plant. I have confidence in our safety. There are a lot of different examples I can give you, but one of them -- we were mentioning terrorist attacks.

Every three years, the government comes up with a team of military individuals to break into our power plant called -- and every year since I've

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been, or for the last ten years, Braidwood has been successful in passing that. They, like, really try to break in, they break down wires, they shoot fake weapons at each other, kind of like really high-tech laser tag. But that's really safe. I mean we've come up with scenarios, we try to put it on ourselves against terrorist attacks.

I also wanted to bring up operating experiences. We learn from our mistakes. TMI happened in 1979, and out of that INPO was created. And I don't know any other industry that is open to other businesses talking to each other about their problems as the nuclear industry.

We have forums set out across the country to discuss with each other whatever problems they might be having to kind of gain insight to all those. And that's unheard of in any other industry. That's why I have confidence. We're not afraid to say that we made a mistake and we fix it.

Another thing about safety is that Braidwood has created a VPP star safety site. And that's not something that corporate pays for, that's something that comes from the people that work there. A lot of people have jobs in other manufacturing industries, you may have to wear a hard hat, you may

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have to wear safety glasses, you may have to wear steel-toed shoes. Those are just requirements to work in our plants. And it goes beyond just those things, too. It goes to the level of checking components to a degree that you never would have thought that we actually do. So, that's another reason why I have confidence in our station's safety.

first The week that Ι started at Braidwood, I started in radiation protection as I mentioned before, the first for me was on dry cask storage. And it wasn't because I was on a team, it was because I work for a power plant and they wanted me to understand what they were going to be doing outside. And that's the kind of level of effort that our company puts on its employees. They want us to understand what's going on and how to explain to other people, I give a lot of tours and, you know, watch citizens come in and talk to them about the safety of the plant and just really answering any question that they have. I've also talked to college students as well about this as well. And that's why I'm confident.

I thank you, the NRC, for having this meeting. And I urge you to finalize the Waste Confidence Rule in a timely manner to help our

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company work to its best. Thank you.

MS. JUCKETT: Thank you.

(Applause.)

MS. JUCKETT: After our next speaker, we're going to go to Jeff Dunlap, Jan Boudart and Kristin Gregory.

MR. SMITH: Hello, everybody. My name is Ed Smith. I work for the Missouri Coalition for the Environment in St. Louis, Missouri as the Safe Energy Director.

St. Louis purified the first uranium self-sustaining nuclear chain reaction. We have some of the oldest radioactive waste on the planet and it doesn't take a nuclear accident to have to worry about cleaning it up. We're still dealing with it. So, regardless of a hypothetical accident, release of radioactivity into the environment is a significant challenge that takes decades to address.

One problem we have, just so everybody knows, is some of this radioactive material, a significant amount of thorium-230, made it into a landfill in the Missouri River, unlined, which is currently experiencing a surface landfill fire a thousand feet away from the radioactive wastes. And we're bickering with the EPA and other government

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agencies on exactly how to disposition these radioactive wastes. There's actually people who want to leave it there.

We can't find the proper solution to deal with this so-called low-level ionizing radiation in the landfill, what the heck are we going to do with the stuff that's sitting in the spent fuel pools, like the 2,363 fuel pools at the Callaway I nuclear reactor that my organization is legally challenging the license extension of.

(Applause.)

MR. SMITH: But when we went to go challenge the license extension, we faced challenges including challenges with respect to nuclear fuel pool. We'd have to prove that there were sitespecific degradation to the fuel pool is my understanding. I'm not a lawyer but we couldn't comment or challenge the future integrity of that unless we had experienced issues.

So, the NRC incorporates the draft GEIS into every reactor license, the conclusion that spent fuel, excuse me, with the conclusion that spent fuel can be safely stored aboveground indefinitely with future analyses of spent fuel and reactor licensing actions like ours, silencing the concerns of growing

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populations around nuclear reactors. The draft GEIS reinstitutes 'kick the can down the road' approach that has failed to address the magnitude of our nuclear waste problem and legacy.

Assuming that institutional controls will work is absurd. Like this landfill that I mentioned, the Environmental Protection Agency doesn't know our pile of radioactive dirt land. It said so in its documents. It's ridiculous to think that institutional controls will work for centuries let alone a couple of decades.

Putting the GEIS into effect after the operating life of a nuclear reactor is a sham and in no way a proper approach to spent fuel management. I say this because reactors are licensed to operate for 40 years and then they are going to retire. The NRC has allowed reactors to operate up to 60 years and possibly 80. That means it will be 140 years or longer before we figure out where that stuff is going.

It's important to get this right because the nuclear industry wants thousands of small modular reactors around the world, which means at least hundreds if they get their way around the country. And this will be the guidance for hundreds of small

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modular reactors. It's important that they get it right, which is why they should be withdrawing this current plan and going back to the drawing board.

Underestimating the risk puts taxpayers, as some of the folks said, to significant risk due to the liability factor. Just because we haven't had one doesn't mean one can't happen. There's tons of unknown unknowns out there, and one accident will cap the liability of \$21 billion -- I believe it is. And with Congress not being able to allocate funding to Sandy, how are we going to expect them to fund a nuclear disaster? Thanks.

(Applause.)

MR. DUNLAP: Good evening. I'm Jeff Dunlap, I'm a manager in the area of spent fuel at Exelon. And I appreciate the opportunity to provide these comments on behalf of Exelon.

What we have shown and continue to show as an industry is that we safely store fuel at our sites, both dry and wet storage. It is important to continue progress on a permanent solution of the storage of spent fuel. Exelon supports the development of the GEIS as a stepping stone in this process and supports and agrees with the conclusions in this report.

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The draft report is а rigorous examination of the environmental impact based on 50 years of research and operating experience. report draws on industry, government, and academic compile a complete view references to of the potential impacts of spent fuel storage. The report appropriately looks at bounding conditions over the time periods in question, and the conclusion forms a sound basis for continued nuclear fuel storage and disposal.

As a generic report, we understand the use of bounding assumptions. These types of assumptions result in a conservative approach being used on a generic basis. But it also may not be fully representative of what will occur at a site with fuel storage in the future.

For instance, the report assumes that a dry transfer facility will be built at all dry cask storage facilities, and that all dry casks will be replaced every one hundred years. While the conditions of the casks will of course be closely monitored over their lifetime and a rigorous aging management program is already in place, it is unlikely that wholesale replacement of all casks would be required and the transfer facility may not

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be needed at all sites.

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Furthermore, NRC is correct in concluding that it is feasible to have a mined geological repository available in 60 years after the license operating life of a nuclear power plant and the analysis of a short-term impact in the GEIS. There should be no technical obstacles to achieving this, nor are there any financial obstacles given that the nuclear waste fund now has a balance of more than \$26 billion.

Despite delays in the process because of political and legal maneuvers, progress is being made in establishing a permanent repository. resuming the licensing proceedings with the Yucca Mountain application which will further in developing a geological repository. efforts Legislation is pending in the Senate to begin the process of selecting alternate sites using a consentbased approach consistent with the recommendations of the Blue Ribbon Commission. This progress supports the conclusion of the draft GEIS.

We have the technology to develop a geological repository for spent nuclear fuel. And we have the money to do so. The only thing blocking the United States from building a geological repository

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is political decision-making.

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In the interim, for storage at the reactor, as I have said, we continue to safely store fuel in both wet and dry storage. And just to add a little perspective, the amount of storage required is very small. If you stacked all the stored fuel in Illinois up to the height of the average person, it would only fill up half of one football field.

environmental of NRC assessment nuclear fuel storage accurately reflects the environmental impacts, which is small for the continued storage at plant sites and away-fromreactor storage, even with many bounding assumptions that may overstate the impact. This conclusion is based on storage systems for nuclear fuel that are proven technology with robust design and safety features that prevent environmental impacts. The analysis contained in the Draft Waste Confidence Generic Environmental Impact Statement supports what the industry has long known. If necessary, used fuel can be stored in a safe, environmentally sound manner for a long period while we wait for the political process to reach agreement on a disposal solution. In the meantime, the NRC can and should issue its Waste Confidence Rule. Thank you for the opportunity

to comment.

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(Applause.)

MS. JUCKETT: And after Jan, let's go to Vincent Headington and Susan Korn.

MS. BOUDART: I'd like to start with a basic question about the fact that there has been some anecdote testimony here about the effects of living near nuclear power plants, and the people who come to represent the industry have nothing to say about the anecdotal evidence, the stories about what happens to families and children who are living near these plants and the possibility of birth defects that are almost unbelievable. So, I'm asking this question really because there was an earlier comment about this. Residents around reactor sites may not signed store radioactive have up to indefinitely, but they also did not sign up for 20year extensions of operating licenses. Yet the NRC imposes that on communities without pause and without exception.

So, I'm very moved by the anecdotal evidence because the anecdotal evidence from Chernobyl was cut off and the difficulties of tracing the effects of the exposure at Chernobyl were massive and eventually the strong scientific minds says,

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well, gee, you're just giving us anecdotal evidence, when it was all the evidence that they had. And I have a question. Why can't insurance companies insure these sites? If the nuclear power plants are so safe, then there should be a way for insurance companies to insure them. But that doesn't happen because the consequences of accidents at nuclear power plants run into millions. I thought it very interesting that the last speaker said, well, we've got \$26 billion to take care of nuclear waste.

I believe that the cost of Chernobyl has exceeded a trillion at this point. And nobody ever mentions the first responders there at Chernobyl that are now all dead and the effects of the whole nuclear power project is having in the world. We're very, very much against having Iran developing nuclear power of their own because we know that the byproduct of a nuclear reactor is plutonium that is used in atomic bombs. And this is the most dangerous element or it's the most dangerous isotope in the world. And it had to be gone from the earth before the biosphere could develop. Now that the biosphere has developed, and we're bringing the plutonium back to our enormous risk.

(Applause.)

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MS. JUCKETT: Thank you.

MR. HEADINGTON: I'm Vince Headington, citizen, a resident of Burr Ridge. And can you believe it? Can you really believe it? Sometimes listening to the comments here tonight of the proponents of nuclear power, I think they're from another planet.

(Applause.)

MR. HEADINGTON: Can you believe that we are supposed to believe that nuclear power plants can continue producing waste without an adequate plan for its disposal? This toxic radioactive waste, we're supposed to go along on this gamble, on this grand experiment, that an industry can produce waste in a way when it doesn't know how it's going to handle it. In the meantime, we are exposed to the possibility of a nuclear accident. Nobody here in this room can say with assurance that there will not be an accident.

We have the evidence of Fukushima. I listened to the proponents. They downplay the effects of Fukushima. They downplay the accidents that can happen. And we're supposed to bear that kind of a risk.

I refuse to bear that kind of a risk. What needs to happen, we need to stop producing the

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waste. We need to stop licensing nuclear power plants and their relicensing. We need to stop this insanity. Thank you.

(Applause.)

MS. JUCKETT: Next, we'll go to Susan Korn. And after Susan, we'll go to Corey Conn and Dale Lehman.

MS. KORN: Good evening. Can you hear me back there? A little louder? Okay. My name is Susan Korn. I'm a director in the nuclear project management organization at Exelon. My project team is responsible for the construction of spent fuel storage infrastructure at our sites.

First and foremost, I just want to say that I am extremely proud to be an Exelon Nuclear employee. I have a degree in nuclear engineering. I've worked in the industry for 25 years. And a side note, I have had three children, I had been pregnant. Through working at the plant, I have three healthy young adult women, so on the testimony that working in the plant and being pregnant has no impact on bearing healthy children.

What I would like to tell you is I have worked for a long time in the industry and I can tell you that the folks that I work with throughout the

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organization from top to bottom have an appreciation that nuclear power is special. We get that. We understand it's special. And it's our priority every day in what we do to ensure that we operate these plants in a manner that protects the health and safety of the public.

We do live in the vicinity of plants.

We have family, we have friends, we have our colleagues we care about deeply. We would not put any of those people in harm's way.

an employee, we are committed to that our plants run safely. Our plants operate 93 percent of the time, regardless of the weather or the time of day, providing a reliable baseload output greater than any other generation source. We understand that the decisions we make on a daily basis have a potential to impact the lives of our coworkers, our families, and the surrounding communities. Because of this, we hold each other accountable. We challenge, train, we and continuously improve.

You spend a day with us in our facilities, it would be apparent to you, we take nothing for granted. We get independent expert opinions on technical issues. You would see that our

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employees are encouraged to and are comfortable with challenging each other. You would hear every morning across our organization industry experience being shared and actions taken to ensure that we mitigate potential issues.

We take our jobs seriously, and its essential to the design, building, maintenance, and security of our spent fuel storage system. Our dry cask storage containers, they're lined, they're steel lined with thick concrete post structures. They are designed to improve and to protect the fuel under the most extreme weather conditions or other destructive forces.

I personally have no doubt that this passive technology offers a long-term solution that will protect my colleagues, my family, and my neighbors. And I fully support the Rule. Thank you.

(Applause.)

MS. JUCKETT: We'll go to Corey Conn followed by Dale Lehman.

MR. CONN: My name is Corey Conn, I'm a resident of Chicago for the last 17 years. And we know a lot of defective casks arrived from Holtec at Dresden and were loaded after some welding was done without -- in violation of 10 CFR 50 Appendix B, a

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lot of those casks that lead to the reasonable expectation that they do not have the strength that the original designs have. I'm sure you've heard of -- dirty operation.

Years ago, I read a phrase that startled me, and I mentioned it to a friend who was also actively concerned about nuclear waste and the reactors which made it. I was equally startled by my friend's reaction which was don't even say that. That phrase was "nuclear waste tends to remain where it's first placed." Now a dozen years later, I'm getting the exact words from NRC. As my friend may have then foreseen that it is being offered as a foundation for licensing decisions - - so don't say that at this time.

In the original waste confidence, the decision was published and the NRC believed and assured us that a repository would be available in just 24-25 years into the future. Soon, the belief receded to a repository available 41 years after the Waste Confidence Decision was first articulated. Now, the NRC assures us that a suitable repository will be available when necessary, a term which I took to mean repository availability prior to onsite storage failure.

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That's just in time, JIT, just in time inventory management. I've always understood that term to be a euphemism for almost too late. An available repository is actually of little value if the thousands of tons of freshly radiated fuel remains precariously perched in elevated pools. It matters not that the waste may also be stored in dry casks as every operating reactor must also have its pool.

As a conclusion, the updated decision is not even a reality, when necessary it's science fiction or fantasy. The Commission hasn't performed a thorough and comprehensive analysis of the future dangers and consequences on the site, onsite storage only 60 years after cessation, and offers Yet, all retrospective we know that performance is not necessarily indicative of future results. So, pool breakdown -- comprised of natural end state for which nuclear -- are naturally drawn by the great fact of the natural course of things. ongoing interventions of dutiful through the employees has it been forestalled like jugglers -for reasons of their own.

Where are the NRC's thorough, comprehensive, and informed analyses of the future?

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Should we expect to find such dutiful employees six decades after the nuclear supply business has gone bust? I'll just make a casual reference to Michael Burn, the convicted masked gunman, car-jacking senior operator with the six years unescorted access to Dresden, it's a big waste policy, licensing and relicensing --

Is it true that the hazards and its security of pool storage are so great that they must sacrifice security? Could anyone possibly believe that redacted material supports NRC's finding of those significant impacts? We require a much larger margin of safety about spent fuel pool fire to make better decisions about plutonium, NRC should perform Court-ordered analysis.

MS. JUCKETT: Thank you.

(Applause.)

MR. LEHMAN: My name is Dale Lehman, I'm a citizen of Chicago. I appreciate the chance to speak to the NRC's, or in the NRC's confidence game.

The fact is that this kind of meeting and conversations pro and con took place in Japan not so long ago where the technicians and the proponents of nuclear power assured the public that they were informed, that things operated carefully, well-

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designed, highest technology, security, no previous accidents. All that is gone now. Japan itself almost became a failed state. It remains to be seen whether they can sustain themselves.

heavily irradiated in Tokyo was the The Japanese government lied about that because of business interests. Japanese government elevated the standards of radiation allowable for children to address the severity of the contamination rather than evacuate them because the main concern was money. A healthy business climate, which was addressed earlier, is not necessarily a healthy future for mankind. Business operates generally in a current state at the expense of the public's health and the future of the planet.

A lot of people think that this is hyperbole. Yet we cannot act to deal with climate change in a meaningful way. The NRC has no ability to assure me with confidence that a super-storm, a super tornado will not pass over any of the proposed future storage sites indefinitely. Can you guarantee me that 200 mile-an-hour winds will leave those fuel pools unaffected? Will you force the operators of those plants to upgrade to a level to ensure that? I don't think so, because they don't want to spend the

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money necessary to make an unsafe technology theoretically safe.

a question of There's whether going to survive as a society just like Japan in the event of regional super-storms coming from increasing disturbances in the Arctic -- are big news, a real time website of observations documents what's happening there now and how it's affecting the Northern Hemisphere, especially over Continent. We cannot be assured that a major, extreme freak storm will not pass over a nuclear power plant and drain a fuel pool of its water.

What happens then to your promises about safety? To your families and to the legions which will be exposed to the same type of radiation that spewed from Fukushima? I think you should think twice about whether the food you put on your table because of the industry you work for is worth the future that you threaten without the industry. I mean no disrespect for people who work for nuclear industry. It's not a personal issue. It's a systemic issue and the fact that this country has been overwhelmed by corporations and businesses whose first concern is profit over safety. Thank you.

(Applause.)

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MS. JUCKETT: Okay. I know everybody has been very patient and we want to do a very quick break. We'll come back in, let's say, ten minutes. We'll start promptly at ten minutes, so if you can come back a couple of minutes sooner that will be great.

### (Short recess.)

MS. JUCKETT: Let's go ahead and go to Ashley Kovacs. And after Ashley, we'll go to Douglas Ower, and Christopher Rosso.

MS. KOVACS: Good evening. My name is Ashley Kovacs. I'm an engineer for nuclear fuels department at Exelon. I'm responsible for managing and designing the fuel reloads -- sorry. We are all here to comment on the Proposed Waste Confidence Rule and the draft Environmental Impact Statement. The Rule discusses the long-term storage of spent nuclear fuel. I'd like to give some insights on why I support the Rule.

I have spent some time in my career working at the nuclear station and I have first-hand experience with spent fuel storage. I personally walk down the dry cask storage area and work next to a loaded dry cask, and I have spent considerable time working near spent fuel pools. Storing fuel in the

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spent fuel pool or in dry cask storage is very safe.

First, I'd like to discuss the spent fuel pool and spent fuel storage, the dry cask storage. I have spent many hours working near spent fuel pools, observing the fuel and the actions of moving the fuel. This is a safe location designed to withstand severe natural accidents including floods, tornadoes, and earthquakes. The safety of the spent fuel pool is ensured by maintaining sufficient water level above the fuel, even during -- This pool is designed to be about 40 feet deep, and to maintain about 20 feet of water above the fuel in an accident condition.

Everyone involved with the spent fuel pool recognizes the importance of spent fuel pool.

And as an employee, I can tell you we consider safety in every decision that we make.

Next, I would like to discuss dry cask storage. Dry cask storage is proven safe technology that is designed for long-term isolation of spent nuclear fuel. The casks themselves are robust concrete in steel structures with no moving parts. These casks are engineered to monitor and protect 10 tons of spent fuel per cask. Over the last 30 years, the nuclear industry has over 1,700 dry cask storage

1 systems. All these systems are still in service and have had zero release of their radioactive contents. 2 I personally have worked near dry casks and I feel 3 confident in their design and safety. 5 Throughout my career, I have learned that Exelon Nuclear values the health and safety of 6 the public above all else. 7 Safety is infused in everything that we do. I would like to end on a more 8 9 personal note. have been an Illinois resident 10 entire life. Everyone I know and love, including all 11 12 my family and my friends, live here in Chicagoland area. My husband and I live near these 13 plants and this is where we plan to raise our family. 14 If this technology was not safe, I would not be here. 15 That is all. Thank you very much. 16 17 (Applause.) MS. JUCKETT: Next we'll go to Douglas 18 19 Ower. Good evening. 20 MR. OWER: My name is Douglas Ower and I'm a resident of Zion, Illinois. 21 MS. JUCKETT: Talk into it. 22 I'm a resident of 23 MR. OWER: Illinois and it was mentioned earlier that 24 25 Nuclear Plant is permitting the decommission and actually fuel transfer should be starting at any time. So, Zion is going to have 65 casks of high-level waste sitting there for a total amount of at least a minimum 35 years. That's if they can open a storage facility now, it would be 35 years from now for that fuel to be moved out of Zion. So, that's the best-case scenario.

It just to me makes no sense to continue producing more waste when we don't have storage facilities. So, I don't think there should be any licenses or license renewals until permanent repository is established. This GEIS has scenario where there is no repository at all becoming available. Again, why do we generate more waste when we're not going to have storage facility as one possibility? And changing out these casks every hundred years, I mean a thousand years from now, what kind of shape are these casks going to be in if we have to change them all, you know, every hundred years? Thank you.

(Applause.)

MS. JUCKETT: Thank you.

MR. ROSSO: Hi, my name is Chris Rosso.

I'm a construction engineer out of Iowa State and I

work at the Braidwood Station Nuclear Power Plant

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down southwest of Illinois. The comments that I want to bring forth here are just based on my experience with the safety culture at nuclear power. I know a lot of the criticism we've had has been based on some, to put it pointedly, lack of morality of some of the people in the nuclear industry. And I just really don't think that's true.

Again, a lot of the folks sitting here can call us young and naive but I do represent part of the young generation in nuclear and actually NAYGN is exactly what it means, the North American Young Generation in Nuclear. And really, my perspective is just a shocking safety culture, especially considering what industry I was planning on going into, which was in construction industry.

I understand that all the talk here is, in part, borne from the events in the past, but again I'd like to talk about the recent performance based on my experience of the nuclear industry. And I believe that it's safe to say that thinking that workers would value their own personal safety is really indicative of workers who also value safety culture and their perspective of the effect that it normally has on themselves while they're working, but the public when they meet that work environment.

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So, something I haven't heard a lot of to throw out some actual facts and statistics. So, I'll try to give a little bit of that right now. So, earlier this year, I gave a speech to some high school kids who are looking at going into trades. And one of the things I tried to advertise to them when they were looking at what trades they wanted to pursue is to look into the nuclear industry because really what they want to do is contribute longevity and in order to do that you want to work in a safe environment.

So, just pulling straight from the Bureau of Labor Statistics, looking at injuries per 100 full-time workers, the nuclear industry is, it's actually pretty shocking how much better we are as far as just personnel safety. Per 100 full-time workers, we get 0.3 injuries. To compare that to other generation really don't, the only next closest generation activity you can compare that to is fossil that's 2.1 injuries per and 100 full-time So, several times higher. workers.

The industry that I thought I was going to into, construction, 3.7, so even higher. And stepping up to another industry which is the industrial sector, manufacturing, at 4.3 injuries per

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100 full-time workers. So, I really think anybody that, I really think that people who would value their own personal safety, it's just a cultural norm that they're going to also value the safety of the public.

So, one thing I did want to respond to that I saw and I heard mentioned a couple of times response to criticisms of casks falling was through to the bottom of the spent fuel pool. a great challenge. So, the question is why the heck would we lift these heavy structures over a spent fuel pool, and the answer is we don't. They're designed so that we don't lift heavy structures near these safety critical systems. And I've actually went over that several times when development plans because we have to keep these, anything over 2,000 pounds, you know, a set distance away from safety critical things such as spent fuel pools. So, again get educated and find some facts before you jump up here and thank you.

(Applause.)

MS. JUCKETT: Our next speakers are Marilyn Shineflug, Gail Snyder, and Tracy Fox.

MS. SHINEFLUG: Is this okay? Louder?

Is this okay? Okay. My name is Marilyn Shineflug

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and I'm a former mayor of a small town in Northern Illinois. And I'm also one of the original interveners when the Byron Plant was built in the 1970s. So, I've been concerned about nuclear issues for many years.

Briefly, I'll respond very specifically to the issues tonight. It's not that I'm in favor of these things supportive of these but I'm alternatives. The first one is to implement dry spent fuel storage in hardened onsite casks, which was mentioned earlier. Immediate efforts should be made to transfer spent fuel sufficiently cooled from wet pool storage to onsite at-reactor dry storage and so-called hardened casks. This approach would avoid the need to have additional away-from-reactor interim spent fuel installations.

And recommended as by Dr. Arjun Makhijani, the Federal government should purchase land adjacent to reactor sites to accommodate this process. Currently, the Federal government is paying very large fines to utilities because of its failure to accept spent fuel for long-term storage by 1988. other words, because Yucca Mountain was finished, the Federal government is, they have to pay Once spent fuel comes under Federal control, fines.

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the government no longer will be required to pay these fines.

Second thing is limit spent fuel transportation. Onsite storage also would save unnecessary transportation costs and reduce radiation exposure risk to the general population during highway road and barge transit. These risks could be significant because even undamaged transport casks do not have enough shielding to prevent gamma and X-ray radiation from escaping through the vault. Thus, ... I'll skip some of it.

The third thing is reduce Illinois' chances of becoming the nation's dump. Illinois already is home to over 9,000 metric tons of used nuclear fuel, more than in any other state. The previous two alternatives would work to minimize Illinois' chances of receiving an even greater proportion of the nation's spent fuel.

According to an Oak Ridge National Laboratory report, as a totally separate analysis, a consolidated independent storage site in Illinois is the single optimized site for an independent spent fuel installation and only SNF reactors is considered relative to siting itself. In other words, it's a lot of tech speak in that particular paragraph but

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what it's saying is that Illinois is in a position to become the site of one of these independent spent fuel storage facilities. And, of course, we have a nuclear plant already, a nuclear spent fuel facility at Morris, Illinois.

We should locate a geological spent fuel repository based rigid scientific storage on criteria. Maximum efforts should be made to thoroughly investigate the least-damaging location for a permanent repository, and preferably one that allows for retrievable storage. The Blue Ribbon Commission proposed heavy reliance on a consent-based approach, but that reliance may not lead to the safest long-term solution. While local consent important, that consent should be based on scientific knowledge on improperly perceived rather than opportunity to obtain money, jobs, and other items.

In a nutshell, I'll finish up, the Waste Confidence Proposed Rule here tonight lacks any sufficiently thorough scientific analysis with many options, especially considering spent fuel pool and cask fires, leaks, and waste storage. How can long-term, let alone indefinite, waste storage even be considered credible? How disintegrated will spent fuel rods be, particularly those with high-product

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fuel when the need for transfer to new casks arises every many years or so? One last sentence.

Lack of assurance exists that institutional controls will be in place 240,000 years or more in the future, the half life of plutonium is only 40,000 years, to oversee continued safe storage.

Nuclear power needs to be phased out. Thank you.

(Applause.)

MS. JUCKETT: Thank you. Next, we're going to go to Gail Snyder followed by Tracy Fox.

MS. SNYDER: Good evening. Can you hear me back there? My name is Gail Snyder and I'm on the board of Nuclear Energy and Information Service. And I'm a resident of Illinois living in the southwest suburbs of Chicago. I'm circled by nuclear facilities in Illinois all the way to Michigan.

The residents of Illinois do not agree to become the nation's nuclear waste dump. But slowly and ever so quietly over time, the residents of Illinois have come to live with the largest amount of high-level radioactive nuclear energy waste of any state in the country. If the NRC's draft Generic Environmental Impact Statement and Rule are adopted, all nuclear facilities will officially become permanent nuclear waste dumps.

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Discovering that no real individual environmental impact study has been done as to how 30 plus years of nuclear waste will impact an area makes the current situation even more unacceptable. shocking more is the government and nuclear industry's current plan to plan that the waste may end up staying onsite forever. I, of course, realize NRC's - and I would add DOE's - unrealistic handling of the nation's nuclear energy waste and are forcing them to face reality which unfortunately is not accomplished in the NRC's draft GEIS and Rule.

In the movie Pandora's Promise, what I believe to be the most important statement in the movie is made by pro-nuclear Mark Lynas, while turning to the nuclear disaster in the area of Fukushima, Japan, he says, "this was not supposed to happen to a reactor." All the things that are not supposed to happen are exactly the problems with storing nuclear waste. In fact, this is something that nuclear industry operators, investors, governments, and their agencies that facilitate nuclear energy as well as companies that build nuclear reactors are concerned about. They know things that aren't supposed to happen do happen. They also know this risk creates a great liability.

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So, just like stockpiling the nuclear energy waste so quietly, stockpiling risk and liability has happened equally as quietly, and has put upon the public unbeknownst to them a burden. The public is carrying a portion of the liability and risk for the nuclear industry. This is happening on a global scale.

Last week, the U.S. Department of Energy Secretary Munoz went to Japan to offer to Fukushima - - as long as Japan signs on to the convention of supplementary compensation for nuclear energy - - removing the liability for nuclear construction companies and other nuclear vendors from nuclear accidents. If you think the same will not apply here in the U.S., think again.

As all those involved in facilitating nuclear power seek to extend the time that nuclear waste stays in our communities, they also seek to reduce their own liability and responsibility to the public. Worse yet is they seek to silence us by including this Generic Environmental Impact Statement into the reactor licensing and effectively preventing the public from raising concern and being able to question the storage of nuclear waste forever onsite at individual nuclear reactor facilities in our home

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communities. Thank you.

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(Applause.)

MS. JUCKETT: Thank you. Next we'll go to Tracy Fox followed by Rod McCullum, Kathleen Rude and Samantha Schussele. I apologize if I'm mispronouncing it.

MS. FOX: My name is Tracy Fox, I work as a volunteer with Peoria Families Against Toxic Waste. We normally work with hazardous waste on heavy metals and PCBs and other things that stick around for a long time, but, boy, all of that pales in comparison with nuclear. When I reviewed the draft EIS, the first thing that I was taken aback by was the fact that it was a generic EIS and at some point we authorized that we can have one EIS that would cover what really is a relatively small number of nuclear plants, a discrete hundred or so.

And so, I thought, all right, I'll give you the benefit of the doubt and I opened up the big document and started to page through it. expected to see tables and charts that might tell me here is where we're at as far as filling up these spent fuel pools, here is where we are using dry quidelines casks, and here are some for best And I didn't find any of that. practices. I found

that kind of quirky.

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And then I thought, well, we're going to have practices certainly some best and some quidelines that are going to underlie these But I didn't find any of that. assumptions. I had been to some information sessions by NEIS and I learned about hardened onsite storage and I expected that would be included in the document, but again, I didn't find any of that.

Instead, I just got some things that are echoed in the executive summary tonight categorizing everything as small risk, small risk, small risk.

And I've done quite a bit of technical writing in my life and I was a little bit concerned as to how is that risk laid out and how are they analyzing it?

And I didn't really find any metrics they gave me to my confidence. I didn't see that they had looked beyond just stating, hmm, infinitesimal possibility of this happening, therefore, we should dismiss it.

To me, when we're looking at risk, we need to look at what's the probability that it's going to occur, how severe will it be if it occurs, and how likely is it that we can detect it early and put a stop to it? But I didn't see any of that kind of analysis done at all. And that's the kind of

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analysis that should underlie engineering. And it was painfully absent.

I'm also interested in the issue of climate change and I looked in a little bit more detail as to what they did in that section. And I saw that they had forecasted temperature range of about 5.5 degrees Celsius, and they were considering all up to that. So, I expected to see, okay, I've read the book Six Degrees and I know that when you get up to six degrees it gets pretty gripping.

But I didn't see any analysis of water I didn't see anything about the increasing usage. temperatures and how those would affect water I didn't see anything about the push cooling. between climate change and water availability. Again, all of that seemed to underline the fact that I don't believe there was any scientific basis whatsoever for the risk analysis in this document.

And to me, in order to have any kind of waste confidence, confidence in any kind of exclusion, you have to have an underlying risk-management system that makes sense. This doesn't seem to have a system at all. Instead, I think they want to conflate waste confidence with, as my husband terms it, waste arrogance, and that's really all this

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is, the belief that we can just say, whoosh, we've got a solution, we will continue doing as we are and it will work great and everyone will be happy.

Instead, I think about the very real engineering nitpicky details, things like fatigues, stresses on metals that begin to fail, the impacts of corrosion. When things are designed for a 30-year-life or even a 60-year-life, they do not last for 100 years. Otherwise, then they are over-designed and that doesn't serve shareholders so it never, ever happens.

I believe that we are making a lot of choices here that are not only endangering us but also putting off better choices that we could be making. For every dollar that a taxpayer has to sink into nuclear power in dealing with its waste and dealing with its risks is a dollar that we can be spending on renewables and things that will really move us forward.

(Applause.)

MS. JUCKETT: Next we'll go to Kathleen Rude.

MS. RUDE: Good evening. I'm Kathleen Rude and I'm here speaking on behalf of my nieces and nephews and for future generation in all walks of

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life. As I was thinking about what I wanted to say in response to this hearing tonight, reminded of a story of a young person with clothes. It's a story of a vain emperor who cares about nothing except wearing and displaying clothes. Не hires two swindlers who promised some of the finest best clothes with a fabric invisible to anyone who is unfit for his position or hopelessly stupid. The emperor's ministers could not see the clothing themselves but they pretend that they can for fear of appearing unfit for their positions, and the emperor does the same.

Finally, the swindlers report that the suit is finished and they mime dressing the emperor and he marches in procession before his subjects. And the townsfolk played along with the pretense not wanting to appear unfit for their positions or stupid. But then there's a child in the crowd and he's too young to understand the desirability of keeping up this pretense and he blurts out that the emperor is wearing nothing at all. And he frees everyone else in the crowd who start realizing that the emperor is naked.

This is a fable that is an apt description of the nuclear industry and the issue

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before us tonight. It's the feasibility of safely storing nuclear waste. The nuclear industry has dressed this operation in a sham of safety, claiming that nuclear power is safe, and spent fuel rods can be contained, and so posing no threat to life on the planet.

But that simply isn't true. The emperor has no clothes. Nuclear power plants produce the most deadly waste imaginable. We have already created enough radioactive waste to destroy life on Earth. And the hard truth is we don't know what to do about it.

Fukushima is not hypothetical. It is not theoretical. It is not science fiction or a made-up story. It's real. And it is proof of the fallibility of nuclear power and protection of spent fuel rods. The experts don't know how to keep us safe from it. And yet the NRC and the nuclear industry is acting as if we do. We're looking at the naked emperor and praising his imaginary outfit.

Why? I believe it's because when we look at the truth, the real truth of what we've created, we are terrified. Terrified of the magnitude of dumping radioactive waste that we have created and are continuing to create. We are

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terrified of the certainty of contamination that's already happening and the destruction of life. The USGS is already finding polar bears and seals with skin rashes and diseases and open sores. Our fish are contaminated with nuclear radiation from Fukushima.

And so, we need to face the scary and embrace it, because then you can take off the blinders that are keeping us in denial of the truth. We need to pay attention to the boy in the stable. He speaks the truth we are afraid to see. The emperor has no clothes. We do not know how to protect ourselves from radioactive waste. We need to stop making it now.

Germany has already done this two years They are now supporting energy generated from ago. solar power and other sources. So, we need to stop pretending that this is safe and that we know what we are doing. Knowing when we embrace this difficult have truth really start to an we can discussion that will find some solutions. The emperor has no clothes. Thank you.

(Applause.)

MS. SCHUSSELE: Good evening, everyone.

My name is Samantha Schussele. I am in the reactor

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engineering department at LaSalle Station. And I am responsible for providing technical guidance for a nuclear power reactor and also managing and tracking fuel and all the other nuclear waste and the nuclear material that's onsite.

And as a fairly new face to the nuclear power industry, I would just like to take a moment to speak the issue of culture shock that I had when I arrived. A shock at, you know, the seriousness that we take with every decision that we make, and at the attention that we continuously give to safety. The safety culture that's established at our plant and all the Exelon plants and all of the nuclear plants, at least in the U.S. and across the world, it's held to the highest standard. So, it is always on top of our mind in every decision we make and I never ever question my personal safety when I'm at work.

This safety hundred one percent translates to nuclear Ι our waste program. personally work with the dry cask storage campaign at LaSalle and I can testify that those casks are far more robust than you can imagine. Over a hundred tons of steel and concrete form engineered structure to protect the fuel that we And I have walked past those loaded place inside.

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1 casks many times, and I assure you that I get way more radiation from the sun that's shining down on me 2 3 than from those casks. They've been proven to survive severe 5 hurricanes and earthquakes, aircraft crashes. They have flown planes into those concrete cask storage 6 the plane was 7 disintegrated with the remaining intact. And we've also tested missiles 30 8 9 times more powerful than a typical antitank weapon. And all this has been done to keep the casks intact. 10 I currently live within 50 miles of 11 12 three nuclear power plants as I'm sure many of you I plan on remaining there. I plan to get 13 married there. I plan to raise my family there. 14 15 I have the utmost confidence that my future family and I will live in a safe and happy community even 16 with these nuclear power plants, enhanced by these 17 nuclear power plants. 18 19 I have confidence in the draft GEIS and I would urge the NRC to adopt the Rule. Thank you 20 all for your time. 21 22 (Applause.) 23 MS. JUCKETT: Thank you. Next is Rod McCullum, and after Rod, we'll go to Tina Seastrom. 24

MR. McCULLUM:

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My name is Rod McCullum

and I work at the Nuclear Energy Institute, the industry--

AUDIENCE MEMBER: Can't hear you.

MR. McCULLUM: My name is Rod McCullum and I work at the Nuclear Energy Institute based out of Washington, D.C. where I have spent the last 15 years of my career working on these issues including the Yucca Mountain, and more specifically the Yucca Mountain repository.

But today I can say it's good to be back in Chicago, because before I went to Washington to work on this issue, because I believe it's important, I spent a good portion of my life in this area working in Argonne National Laboratory, working at the Department of Energy, working at a couple of Exelon's nuclear plants. I'm very familiar with what Illinois is capable of in the area of nuclear spent fuel management. I'm very familiar with the world-class expertise that exists in this area.

Illinois has 50 years of experience managing spent nuclear fuel and has done so safely.

And I believe that's only going to get better.

Illinois has loaded 120 casks, safely stored in pools for 50 years including the only independent spent fuel storage installation – that is the Morris

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facility - which was recently relicensed, a very tough, highly specific process like all NRC process just to use an example.

Illinois leads the nation and has a chance to lead the world in reaping the benefits of this experience. 50 percent of your electricity, 5,000 jobs, \$400 million in annual payroll, and \$170 million in taxes. Most importantly though, the nitrogen oxide pollutions that are avoided by using all this nuclear energy is the equivalent of 4.3 million cars. A lot has been said here tonight, a lot of speculation, a lot of them are flat out untrue. But 4.3 million tons of nitrogen oxide in the air, we know what that does. A very real health situation about air pollution.

I want to talk about two things specifically that's been mentioned a lot, the safety culture and climate change. I see these things becoming intertwined. Safety culture is not about rhetoric. It's not about anecdotes. It's not about speculation.

It's about facts. It's about analysis.

It's about questioning the facts and doing more analysis. This is what nuclear engineers do. This is why the young people who got up here are so

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confident. This is why we have achieved the safety record we have.

A lot of young people today are looking into facts about climate change. They are asking the hard questions. They're deciding to become nuclear engineers. If we were to turn our backs on nuclear energy, it is the best weapon we have against climate change. Yes, solar should play a role. Yes -- should play a role -- based on large-scale electricity generation.

If we were to turn our backs on our biggest weapon against climate change, I would question the safety culture of our nation. But I know we won't do that. I'm heartened to see, when I come to Illinois, so many young people getting into this business and letting their safety culture drive our nation in the right direction.

Now, I could get up here and tell you how Chernobyl or even Fukushima could happen in this country, but I won't do that because safety culture, my safety culture won't let it.

For all we have achieved, for all the record of safety, I believe it's going to get better.

I believe young people are going to be better. \$26
billion on the nuclear waste fund, the courts have

asked NRC to do this. I would also ask the NRC to restart the Yucca Mountain licensing process. And they're also looking at what the Department of Energy is doing with that money.

Our government works and I really am gratified not by just hearing my friends and supporters out here, but all the commentary, all the discussion. This is our process at work. This is us asking questions. I'm confident NRC will come up with the answers. I look forward and I support this process. Thank you.

MS. JUCKETT: Thank you, Rod.

(Applause.)

MS. JUCKETT: Next we'll go to Tina.

And after Tina, we'll go to Shari Katz.

MS. SEASTROM: I'm Tina Seastrom, I'm here representing myself and -- Nuclear Energy Information Service. We know that you represent the industry and not the consumer or the people of the Earth. We feel -- don't need or want to be at great risk due to the ways of the Nuclear Regulatory Commission. Please change your ways. Nuclear is not the way to go while we have geothermal, solar, and wind, and who knows what else? Waste confidence, I have no waste confidence.

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MS. JUCKETT: Thank you.

(Applause.)

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JUCKETT: Sheri Is Katz Sheri? She had to leave, thanks. I just want to remind you all that you can still submit comments I know we're having to cut them short, I'm very sorry we have to do that to get through everybody, but you can still submit comments online or by e-mail or in writing. There's many other ways And also, if everyone could, please to comment. check your cell phones real quick and make sure that they're off?

AUDIENCE MEMBER: How many more?

MS. JUCKETT: 15 left. For our next speakers, let's go to Liane Casten, Stephenie Bilenko, and Lisa Donovan. I'm sorry. This is Liane.

MS. CASTEN: Can you hear me? Yes. My name is Liane Casten. I am a journalist and author. I'm going to tell you for a second about my breast cancer book. Two elements - nuclear and treating breast cancer. I won't go into the first, the second is nuclear radiation.

I can only quickly tell you that after ten years, the women in Nagasaki developed a mass of

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breast cancer. It's a long-term effect. It doesn't immediately pop up. You will see it eventually if you have been exposed over a period of time. Therefore, I'm going to start out by telling you this is an issue of madness dealing with a dangerous technology, dangerous, notwithstanding the word safe, it isn't.

It's a dangerous technology that costs way too much; that threatens the lives of thousands of people; that generates poisons even in low-level emissions; that generates lies and false statements to lull the public into their sense of safety, as a clean technology and nuclear power is not; that we lull ourselves into denial to justify our cool homes, while corporate executives take home their salaries, and while millions and millions of dollars are invested in this technology, while PR firms promote this technology and frankly it's become a mad world. Any time we think it's okay to allow some exposure to radiation through accidents, which are many, or any releases, and any time someone is harmed, that's evil.

Let's deal with facts. After Chernobyl,

I heard the Russian equivalent of the EPA come to

America to warn us about the dangers of nuclear

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radiation. He talked about the thousands of people who were harmed and died, thousands. He finally actually admitted that there were millions, and he also admitted the Russian government lied. They didn't want to admit this, they were avoiding it, and he died two years later. He was involved with the cleanup.

No human life is expendable or

No human life is expendable or collateral damage. No one. Accidents will happen. No one must deny this. How can anyone justify harming just one human being when less toxic and more sustainable technology is available?

This whole mindset is morally indefensible. If I take a gun and randomly shoot bullets into a crowd, I'd be called insane, criminal, and evil. This technology is no less. Let's just stop making the waste.

(Applause.)

MS. JUCKETT: Thank you. Next we'll go to Stephanie Bilenko.

MS. BILENKO: My name is Stephanie Bilenko. And I am part of the Near West Citizens for Peace and Justice. That group is part of a larger group of the Illinois Coalition of Peace, Justice, and Environment.

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Illinois is not a waste dump. want any more high-level radioactive waste coming to, or through, Illinois. Nuclear waste is still a problem without a solution. No technology has been proven capable of containing radioactive waste for the hundreds of thousands of years necessary to environment. Debates continue protect the whether it is even possible to do so. And unfortunately, the United States has failed even to identify the vital site for nuclear waste repository despite millions of dollars and the Federal mandate to do so.

Mass transportation of nuclear waste is sheer volume of nuclear waste will The insane. require thousands of shipments on our roads, rails, and waterways. Nationwide, there is well over 80,000 tons of spent nuclear fuel, with plutonium that will remain toxic for 240,000 years. Other elements in the radiated fuel will be dangerously radioactive for No storage facility has been designed even longer. that can contain radioactive waste for such periods since spent nuclear fuel contains large quantities of fissile fuel or -- material that can be used to make nuclear weapons. So, they also must be safeguarded to prevent theft.

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Proponents of nuclear power treat radioactive waste as a minor matter. It is not. nuclear fusion reactor produces waste so lethal that it has to be isolated from the rest of existence for a quarter of a million years. In theory, containing high-level waste is possible. In practice, Murphy's Law is the safer god. In the real world, it certain that sooner or later things go wrong. Ву accident or passiveness of nature, that waste going to leak into the biosphere. And once that happens, anyone and anything that comes into contact with even a few milligrams of it will suffer a miserable death.

The more nuclear power we generate now, the more of this ghastly 'gift' will be stockpiling for the people of the far future. A basic concept of morality is that each of us ought to leave the world a better place for those who come after us. If we know better, we ought to do that. One of the essential boundaries of appropriate tech is the boundary between the kinds of matter you can change with tools you have on hand and the kinds you can't. And if you can't change it into something safe, it's a bad idea to produce it in the first place.

It really is that simple. If you can't

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transform it, don't produce it. Radioactivity from atomic power will pose a threat to life on the Earth for the next million years. We are confident that NRC and the waste generators can never contain this waste for as long as it poses a hazard. But to continue making more of it is not just insane, it is irresponsible and should be illegal. NRC abandon its waste confidence policy and stop using it to license nuclear power plants. There is no safe dose of radiation and to pursue licensing it on the basis of waste confidence is immoral. And now, I'm speaking as a citizen now.

And now, I'm speaking as a citizen now. For my children's future, no more nuclear power. These are my grandchildren. Thank you.

(Applause.)

MS. JUCKETT: Thank you. Our next speakers, we'll go to Joyce Good, Clare Tobin, and Robert Schwartz. Is Joyce still here?

MS. GOOD: Yes, I'm still -- can you hear me? Okay, hi, everybody. Thank you so much for coming, everyone. And I thank you so much for your talking.

I just want to clarify a few things that came up about safety concerns and the facts. Well, one of the facts that are to safety concerns is Three

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Mile Island. And I have a very conservative accountant who in every way is very conservative. But when it comes to Three Mile Island, he shakes his head and he hates nuclear. Why? Because his relatives are there and they're dying. That is a is not safety concern, that's fact. Please say it as it is. My next-door neighbor, who gets sick constantly, a beautiful young man and at most he's in his early 30's, he was a victim of Chernobyl. He lived in Poland. He constantly gets ill. He does not know how to solve it. That is not a safety feature. That's a fact, and that's a fact we have to look at and we have to look now.

Now, the young lady who came up from Exelon, all the people from Exelon, thank you. You're very nice. I like you. I'm sorry you work for Exelon and I'm glad your organization and company provides you with experiences that you feel make things safe. Exelon gets cited many times for doing wrong things. So, don't forget that. But they have never put you in a situation with a tornado or a typhoon or an earthquake. How about that for pools of radioactive waste? You've never experienced that. So, you really can't stand up and say confidently they have done everything and I do feel safe.

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And lastly, I'd like to say 60 years from now we're going to have a repository? That is totally irresponsible. A repository should be now. And the other part that should be now, to reiterate what my good friends have said, is to stop producing this highly dangerous waste. We are people, we want to live, give us a chance! Thank you.

(Applause.)

MS. JUCKETT: Thank you. Next we'll go to Clare Tobin.

MS. TOBIN: Hi, I'm Clare Tobin. And I'm here as a mother and a grandmother, and someone who is really very concerned about the actions that are taken by our government. We want to believe that you all represent us and represent our interests, but the history of the nuclear age is not like that. It started off with a bomb, and that was more than 60 years ago. And then it was sold as a peaceful way of getting, you know, nuclear energy, that it was a peaceful thing.

Well, it's still а horrible, toxic, if haven't found a dangerous process. And we of solution to the waste out 60 years, confidence do you have that we would have the notion to solve it now. No, we don't. It's just like the

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government, once it starts on one direction, it's so difficult to change it. And all the subsidies that you're getting for it, why can't we put those subsidies into good, renewable energy? All that money, we could be free and we could be healthy and we could be safe, and so would our children.

And for you young people there working, I would implore you to read this book, "Full Body Burden" by Kristen Iversen who worked in the 60s and 70s in Rocky Mountain Flats or whatever you call that dump. And the number of commissions and the secrecy and the illnesses and the coverup, and all of the hearings that were heard and that went nowhere, and her life is a testimony. And all the people who are sick and who got ill, you've got to wake up and read those.

And let us be courageous and do what we need to do, and it's move away from nuclear forever. It's dead.

(Applause.)

MS. JUCKETT: Thank you, Clare. Next speaker is Robert Schwartz followed by Fran Celle, I apologize if I mispronounced that. I'm having a hard time reading some of the writing. And also Bridget Rorem.

MR. SCHWARTZ: I'm Robert Schwartz. And I do have confidence in the NRC's rulemaking and policies and procedures. I reside at, well, with this crowd, I don't think I'm going to tell you where I reside it. But, as the crow flies, I live eight miles downwind of Dresden Nuclear Power Plant. And there are nuclear spent fuel storage casks there that have been there for years. And my -- isn't wired shut and I haven't lost any teeth either.

I feel safe that the fuel is stored safely and not a threat to my safety or my family's.

And I live downwind of the casks. And I represent one of the neighbors and we know the casks.

I have witnessed the fuel being put into I have witnessed the welding of casks. And I have witnessed the inner cask being put in the outer cask, and I have witnessed the two feet of concrete, the new product concrete poured around the inner casks and the outer lid welded on. confidence that NRC's all the the design engineering will keep the fuel safely stored with all the criteria and the most stringent standards. inch is reviewed. The casks are made of neutron material.

I have confidence in the NRC's expertise

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in continuing to develop policies and procedures to protect us as they have done in the past. And I'm not moving. And I challenge the previous speaker who contested the safety of the casks and the building of the casks in the parking lot after this meeting. Thank you.

(Applause.)

MS. JUCKETT: Next we'll go to Fran.

MS. CELLA: I'm Dr. Francine Cella, and I'm a member of the League of Women Voters of the Elgin area, and I'm also the issue specialist on fracking for the League of Women Voters of Illinois. The League, although the League opposes increasing reliance on nuclear fission, it recognizes its place in the nation's energy.

I'm not going to give, partly because a lot of the points have already been covered, but also because I'm realizing that really the issue here is that what we're looking at is confidence in the NRC. And regardless of that, I am so happy to hear about the culture of safety that is in place in the existing plants, but regardless of what efforts are being made within the plants by all you people who are working there and doing such a fine job, and I trust that you

are all very capable, if the structural integrity of the plant is not sound and the only ones that can solve that are NRC. They are the agency that is responsible for addressing safety problems,

So, global and safety -- identify problems, but the NRC is basically designated by the Federal government as the responsible agent for correcting the problems or seeing the problems are corrected. And there has been some history that they have always done that.

Several decades ago, the government determined that nuclear plants in seismic presented specific increased risks. So, in 1996, the NRC required that new reactors built in seismic areas be designed with protections against earthquakes. took almost nine years, however, for the NRC to begin assessing the potential risk and existing reactors that were already operating in seismic areas. In 2005, NRC identified its 27 most vulnerable reactors, two of these are in Illinois, the two Dresden units, and eight years later there still has not been any corrective action on those.

You know, in this world where, you know what, and I don't think anybody in the world disagrees that there is a high risk of nuclear

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fission. It's like every conceivable effort has to be made to ensure that absolutely nothing goes wrong. The Feds have designated the authority for the safety of our nation's nuclear plants exclusively to the NRC. There are some questions about their track record with that.

So, regardless of how hard you're working in these plants, there's questions, there are serious questions. So, the League does not have confidence in the NRC's waste confidence and draft Generic Environmental Impact Statement, and document should be thoroughly revised on the basis of objective or review of scientific data which includes NRC's performance data. And Ι have been own observing, and differentially are kind of - - - I know we're at the end of the evening now.

(Applause.)

MS. JUCKETT: Our next speaker is Bridget Rorem followed by William Jones.

MS. ROREM: Hi, I'm Bridget Rorem. The nuclear industry and the Nuclear Regulatory Commission, formerly the Atomic Energy Commission, have had nearly 60 years to come up with a permanent solution for nuclear waste, especially spent nuclear fuel generated by nuclear power plants. I've been

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involved in nuclear issues to a greater or lesser extent for more than half that time.

Some 34 or 35 years ago, I was in a meeting similar to this one. But whether it was called by Commonwealth Edison or an agency set up to oversee and regulate it, I cannot remember. One person commented, made mention of all the methods he knew under consideration for long-term disposal of high-level nuclear waste: shoot it into space, bury it in salt mines, et cetera. Someone from either the NRC or ComEd responded that we have high hopes currently for the VDH concept.

A year or so later, I received from the NRC a large book addressing the concerns about high-level nuclear waste. This was in the wake of the accident at Three Mile Island, and I assume that every citizen intervening in a licensing procedure or otherwise involved in the nuclear issue received such a copy. Therein I discovered exactly what VDH meant, a very deep hole.

The industry and its watchdog have tried to convince the public for half a century that a solution is on the horizon. They have used jargon and acronyms to sound more authoritative and knowledgeable on the subject than they really are.

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And nuclear waste continues building up, so nuclear spent fuel is now stored in dry casks at nuclear plants while they work on the problem.

It is as simple as this. Everything leaks eventually. Everything leaks. And nuclear when it leaks, contaminates matter, that contains it and everything far, far beyond. Leakage cannot be controlled or contained. Enough! Stop making nuclear waste! There are better, safer, cheaper ways to supply our energy needs. How much will it cost to contain, watch over, move, clean up leakage for hundreds of thousands of years? Enough! Everything, everything leaks.

(Applause.)

MS. JUCKETT: Thank you. William Jones?

AUDIENCE MEMBER: No, he went home.

MS. JUCKETT: Let's next go to Debra Michaud, followed by Jeffrey Schramek and Terry Gallagher.

MS. MICHAUD: My name is Debra Michaud. I'm a citizen and a business owner. And thank you for this opportunity to speak, yet for the record I want to mention that the only way I found about this meeting was just I have friends who are in environmental organizations. So, I don't believe

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that this was widely announced. And the fact that there is no mainstream media here is evidence of that.

At this time, there are no facilities permanent storage of high-level radioactive for Since the only way radioactive wastes finally become harmless is through decay, which for some isotopes containing high-level waste can take hundreds and thousands of years. The waste must be stored when we have adequate protection for various point in times, but at this time there are no facilities for permanent storage. That actually comes from the NRC website.

So, the industry folks and the politicians who spoke tonight and who stand to personally gain from nuclear power through their paychecks and other issues are talking about the next 50 to 100 years. And even that they cannot predict what is the future as Fukushima has taught us.

So, my question, based on the NRC's own figure, I have a bunch of them actually, does the NRC have a plan for the next 250,000 years of nuclear waste storage and disaster response? Does the NRC have a financial plan to manage nuclear waste for 250,000 years? Is the NRC prepared to consider

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potential disasters for the next 250,000 years? Does the NRC feel confident that factors of climate change, change into its 250,000-year plan which would include predicting water shortages, super storms, increased flooding and droughts? Has the NRC planned for the likely population explosion over the next few hundred years?

Considering how fracking has been proven by the USGS to produce earthquakes in previously inactive faults, has the NRC figured a way to predict that future generations won't be fracking within a region of nuclear waste storage? Can the NRC prove that humans will be in existence in 50,000, 100,000, 200,000 years to manage this waste?

"The problem with nuclear," says Hubert Reeves, an astrophysicist, "is that it mortgages the future." Between the time you launch a reactor and the time you dismantle it, more than a century can go by. As a political -- more than a century, there are very few of them in history. We can't talk about political stability on the scale of a thousand years. Imagine the Egyptians had stored nuclear waste, who would manage it today? It's outrageous to think we can manage the future at such times as these. When we look at the history of mankind and all its in our

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peoples, it's totally outrageous.

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Can the NRC morally defend its position of bequeathing the problem of radioactive waste for thousands of years? The hubris we have as humans, to legacy for 6,000 leave this of waste human generations for a single generation's comfort, it is immoral and arrogant. And I have no confidence that the NRC represents the interests of the future and life on this planet. Thank you.

## (Applause.)

MS. JUCKETT: Thank you. Next we'll go to Jeffrey Schramek. Is Jeffrey here? We'll go to Terry Gallagher.

REV. GALLAGHER: Good evening. I'm Reverend Dr. Terry Gallagher, I'm a public theologian with a Ministry for a Sustainable Earth. And first of all, I want to express my gratitude that you all stuck through this this long, to have this kind of conversation to kind of explore where we're at and where we're going. I appreciate the NRC offering and inviting us to discuss.

As a theologian, I often remark it's interesting that every major world religion has some form of the golden rule. Every single major world group has some form of "don't do unto others that you

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wouldn't want done unto you." There is something about that that just resonates with our humanity. That we're called to care for others. That we're called to care beyond short-term economics. That we're called to care for our future.

So, I'm here to speak for our future. And I'm here to tell you it's unethical to require future generations to handle the waste that we're generating. It's unethical to put this burden on the future generations. We wouldn't have wanted it done to us. Where do we get off thinking that we have the right to do it to others?

So, the short-term approach to handling nuclear waste is unethical. If we're going to have nuclear power, then we need to be honest and face it and handle it within our generation. The answer is we haven't found a way to do that here. So, until we do, we need to stop. It's unethical to put our generation to the future generation. It's in our humanity.

We're addicted to cheap fossil fuel and cheap power. We need to look beyond short-term economics. We need to think about what is truly human and what we would want future generations to have to bear because we wanted the lights on.

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There's other ways. Thanks for having me.

(Applause.)

MS. JUCKETT: Thank you. Next we have Margaret Aguilar to be followed by Evan Craig.

MS. AGUILAR: Some people have not been able to channel their inner Tina Turner here but I'm going to give it a shot. My name is Margaret Aguilar. I've been in Chicago since 1981. I come from Denver where we had gone and dealt with --plants, or didn't deal with it.

And I just want to give some numbers and some people did give already, and one is the 240,000 years that we're talking about when plutonium generates to the point that it doesn't pose a significant threat. And the other is how old is the homo sapiens as a species. And that's probably -- that was jacked up from 150 million to about 200 million. And it may go a little higher, but in fact this stuff is going to be around and be very dangerous longer than we've been a species on this Earth.

The second number I would like to tell you is the sample size. The engineer that was here that said that she was a sample of one and she had three daughters, that makes it a sample of four.

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That's not considered scientific evidence to any real scientist who is doing any real research on the effects of nuclear energy.

People have put in pieces and bits and kind of thrown away things like Yucca Mountain. Ι suspect many people here realize that Yucca Mountain for political rather than scientific was chosen The site has been subject reasons. in the last 15 years, one of which earthquakes partially destroyed the building that was built on there. So, it's really not a seismically stable area to be a real resource to store or be a real storage thing.

I quess I'm obviously demonstrating the confidence fact that Ι have no in the confidence, and that as a person who has lived in this kind of nuclear necklace of 11 nuclear power plant sites, I am feeling, I really feel trapped by planned releases of nuclear gases, by millions of gallons of tritium-contaminated water that was released to the Kankakee River and then to groundwater on Kankakee from the Braidwood Plant, and for all of the other kinds of oopsies that were not acknowledged by the plants, by Exelon, and by other companies that run nuclear power plants. And the NRC

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hasn't seemed to have done a real good job of protecting us from this.

And so, as a mom and a potential grandma and a person who lives here and pays taxes and just retired working as a nurse for 40 years, you know, I object.

# (Applause.)

MS. JUCKETT: Thank you. We'll go to Evan Craiq.

MR. CRAIG: I thought I had plenty of time to draft my comments. So, my name is Evan Craig. I'm an engineer and a volunteer with the Sierra Club.

I remember adults telling me in 4th Grade that I should hide under my desk and to protect myself from nuclear fallout. In 8th Grade, I didn't understand yet and I built a model of a nuclear reactor as a science fair project. It wasn't until I started to build a working model that the dangers of nuclear energy became clear to me.

While earning my engineering degree, I worked at no accelerated test without data from a non-accelerated test. I'm concerned that life test data for existing plants in Illinois is not available, and that this data is only now being

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generated as the licenses for these plants are extended. Without it, we're guessing.

In the late 80s, I worked for a company that designed control valves. The valves designed by my older colleagues for the nuclear industry were already antiquated. And the redundancy in the designs struck me as Rube Goldberg embarrassments to satisfy bureaucratic requirements to make a fundamentally dangerous process appear safe.

Perhaps the most alarming evidence I have seen convincing me to oppose this GEIS is the excessive confidence demonstrated by the comments of some of the enthusiastic employees here tonight.

'None have broken yet' is an unsafe approach to terrestrial nuclear power and it ignores basic engineering discipline. I'd be less concerned if more had a healthy fear.

I find the term "generic environmental" an oxymoron. Environment is the essence of site variability. So, I find the proposition absurd and reject any GEIS for nuclear waste. Without a waste solution, like everybody else has said, I oppose the creation of more nuclear waste.

I see few in this room who will be around to fulfill the promises to replace casks in

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the 60 or 100 years, let alone 250,000 years. I've seen promises to protect the public abandoned in the face of extreme events, like the increasingly extreme weather events we can expect or more frequently -- gives me pause. NRC should stop jeopardizing future citizens without their consent and should not be allowed to issue new licenses or extensions. Thank you.

# (Applause.)

MS. JUCKETT: Thank you. Next we'll go to Carol Stark, Karli Grace, and Saman Shafaie.

AUDIENCE MEMBER: Carol Stark had to leave.

MS. JUCKETT: Okay, thank you. So, Karli Grace?

MS. GRACE: I'm Karli Grace and I live in Tinley Park but I'm a citizen of this planet. And there has been a lot said and the longer I listen the more absurd all of it sounds. I can't believe that we even have this discussion.

Why are we even having this discussion?

I invite everyone that works at Exelon and any other nuclear regulation commission to go off, plop themselves down right now in Fukushima. I want you to be first responders there right now. I want your

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bill to be paid off so that you can live there. I want your wives who are pregnant to be brought back there so that they can have a free house. I want you all to have a Geiger counter and have all your processed. I want you to start eating the tuna off the West Coast that is now highly radioactive.

I want you to be involved because what you do, you do with great care. You take safety to the fact that you've got like plagues into your buildings because what you have, I don't care what the cask looks like, how well it's built, within it is death!

Chicago originated this and in 70 years they haven't been able to figure out how to neutralize or put this back into the bottle. I don't need this about facts. I don't need to hear either side's facts. It's true that it's death. And I don't care if someone said, well, people are going to have to do without their TVs. You're darn right we may have to do without some stuff. It's either that or the planet.

I don't know about you, I don't have kids. You have kids, you have grandchildren. I have me and I've lived a good life and I'm grateful for that. But we are depriving the future. When the

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Pacific is already trashed, it's not a bathtub. Who is going to be drinking that water? Who is going to surf in it? Who is going to fish in it?

I want the safety to go right to the heart of it. Go back and live in Chernobyl. Go back in Three Mile Island and see that damage. There is moral integrity that is missing and there shouldn't even be a conversation because this shouldn't even have to be on the forum for a discussion.

The water resources that are going to be so very terribly at risk that it takes to keep anything cool, all right, is it going to be let's cool the plant or let's have some water to drink? All you have to do is, look at what happens in the Philippines when you have people without water. And you can be smug and laugh, then I want you to sign up right now and go to Fukushima.

Those of you who have been sitting here laughing and just chortling at this need to be doing some soul-searching while you still have a soul left, while there is a planet for us to inhabit. There isn't a plan B, and you can only go underground for so many years if you think you've got that kind of self-repository built with food. You come up and there won't be anything.

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I do not support and have absolutely no confidence, and when there was a slight mishap here, I got involved because I called the governors, I called the senators. They didn't know what had happened. I called and they said talk to the DOE. DOE said you got to talk to Emergency Management. They have no clue. I did not like have people, like Tim and I were some stupid idiot. I am not and neither is the rest of this planet.

MS. JUCKETT: Thank you.

(Applause.)

MS. JUCKETT: Is Saman Shafaie here?
Beverly Walter?

MS. WALTER: Well, I'm Beverly Walter and I'm a member of groups, some of you are in the same groups I am in, NEIS, Kapow, and West Suburban Coalition for Peace and Justice. All of you, I want to thank for your comments. I hope they are heard, not just pushed aside. I don't want this to be a show. And all of you lovely people who work for the industry, I did appreciate that you would support the industry. But I think it is a statement of where we are at that almost everyone except me, one person, who has testified on behalf of this and on behalf of the NRC are with the industry.

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Now, that should tell us something. That should tell us that they are not speaking for the public, and that those people who are here who have spoken before me who are incredibly knowledgeable are the ones that are speaking facts, not claims but facts. And I think that's what we should listen to.

And I want to quote, although there is a lot that could be said, a lot of it has already been said, what it needs to be is taken to heart. urge those members of the NRC to remind themselves that they also are people and that their mission is to serve the people of this country and beyond that of the planet and not the business. Let's repeat that, they are there to serve the people. remind them of that. And if they do not serve the people, they are betraying their job, betraying their country, and they are betraying their planet. And let us remind ourselves that technology, which is being so touted by some of the members and so say as demonstrably and too that some say, and in addition to that it's old technology, isn't it? Isn't it time we really look and say, hey, let's move into the 21st century. Let's decrease our consumption. Let's not be pigs about how much energy

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we use or waste. Let's turn to renewables because we can. And all of the engineers and all of the safety people, you can have a marvelous career, a green career in solar and geothermal and all the kinds of cold fusion, all these kind of incredible discoveries that have been suppressed.

We have a future to look for. Let's turn our back on technology that is dangerous and is poisoning people and the planet. And let's move to the future. And nuclear industry has got millions, billions of dollars from the U.S. taxpayers. Let's put that into renewables. Let's look to the future. Thank you.

(Applause.)

MS. JUCKETT: Thank you, Beverly. Next we'll go to Jill Paulus.

MS. PAULUS: I thank everybody who spoke tonight. It's been a long night. I would rather not be here myself. Can you hear me? No. Can you hear me now?

Okay. You know, I'd rather be home doing other things, enjoying my family. I feel for the last year I have been in places where I didn't want to be. I'm involved with -- Green I'd rather not be dealing with energy issues. I guess it would

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be a fairy tale to me if we would proceed with clean green energy, I'm talking about wind, solar, geothermal. For my children, I would be out there every day working for free.

These are the words I've heard tonight, stepping stone, that was from Jeff Dunlap, a stepping stone is fair. We wouldn't have a plan or proposal except for college. Well, that's the same thing with fracking. It's a stepping stone and it's --politics, we would have better regulations.

Let's talk about regulation. Jerry Peck said, he's from the Illinois Manufacturers Association, and considered the impact of regulations on the economy. Well, I don't know that much about this except it's poison. That's what I know and that's why I'm here tonight.

We have weak regulations for verv fracking, that I do know. And we call them the best in the country. Well, this is the same. We might have the best in the world but it's still poison. We're dealing with a toxic waste that has to be carefully dealt with. And Mr. Gallagher is right, giving it children. Ι to don't have grandchildren and I may never, I don't really want I don't tell my daughters that I don't. them.

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The last thing I want to say is Tom Wolf said nuclear gives us a quality of life and economic well-being. I would like to think that the quality of my life was not hurting other people, not causing climate change, and that my economic well-being was just part of a world where I live in and we're nice people and we're not at each other's, you know, throats. I mean we're -- we don't need to do this. We just don't. And it's all the same, the same things that we talk about, our food, our water, this is all the same thing, and I'm very sorry for it.

(Applause.)

MS. JUCKETT: Thank you. Do we still have Frank Costanza? Frank Costanza and then Hannah Welsh.

MS. WELSH: I'm not signed up to speak.

MR. COSTANZA: I'm going to be very brief. This is all kind of new to me. I've been reading about energy and nuclear for a while but I'm certainly no authority on it. But I can't give any confidence on this idea NRC has, mainly for the reason that even though people work really hard and do a good job, human means aren't infallible. And it doesn't seem like it's all up to us, we don't have everything under control what we think we have under

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control. And it's getting less likely to be able to do that in the future.

So, I think the only thing this would do is perpetuate something that we can't live with anymore, never could live with it, but I don't want the effects -- have on people who are relying on it but I think there's no other choice. So, that's pretty much all. I think we have to stop doing it and I don't know of a solution to all that. The only non-detrimental source of energy that we have, I think, is photosynthesis and we seem to have moved beyond that for some reason.

So, I don't think I should say anything else because I'm tired and I think everyone else is. Thank you.

(Applause.)

MS. JUCKETT: Thank you. Is Hannah here? That concludes the list of people I had signed up to speak. Is there anyone who didn't already get a chance that wanted to come up and your name wasn't on the list?

MS. BLUSTEIN: Hi, my name is Bonnie Blustein and I hope I never get a call to respond to a nuclear accident, a radiological incident. I hope that I will never have to go, I hope that I will

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never be woken or called at any time to go to talk to people who have been through a disaster. I can only imagine how horrible it is to the people that lived through that experience in Fukushima.

My heart goes out to them. I wish there was more I could do for the people living that suffered. And I hope that there is never another incident like this. But I know there is one if we continue to develop this technology, it's going to be a possibility.

We have to take responsibility for the mess we already have. I'm sure there are many, many jobs for all you bright young people who are working in the industry to take care of what's already been created. And I ask that we all put our heads together to search for better solutions for the rest of us, for all of us, and for all time. And I hope that God helps us to solve the problems that we've already created and I hope we find better solutions while working together.

(Applause.)

MS. JUCKETT: Thank you. Anyone else?

AUDIENCE MEMBER: I didn't use all my
time. Can I just make one more comment?

MS. JUCKETT: Unfortunately, we can't go

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to seconds, but thank you so much for coming, for making your comments. And we want to go ahead and close the meeting tonight after a brief statement by Dr. Keith McConnell, the Director of the Directorate -- oh, I'm so sorry, please do.

MR. KALAS: My name is Mike Kalas and I'm with Chicago Independent Media. I just want to address the fact that there is no mainstream media reporters here covering the story. You would think that this would be on the front page of every newspaper. We're talking about an issue that's going to affect people for perhaps hundreds of thousands of years, things that are happening right now with this conference, and yet almost nobody has known about it.

And, on top of that, even though no one is getting the word out, I think it's worth noting that there is an overwhelming majority of support here from people who are against nuclear waste, concerning this nuclear issue. The only people that have really shown up here are representing the industry that they're in favor. They all have a bias because they're getting paid. There's a profit motive there. Pretty much unanimously, all the people who are not getting any money are against this proposition, I think that should be stated for the

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record.

I also personally think that the title of this, Waste Confidence, is very misleading. That's kind of an Orwellian title so that nobody really can understand what's happening right here. We're talking about nuclear waste dumping. If you're not putting that in the terms of this, no one is going to know what you're talking about and people aren't going to come out and express themselves.

So, I think that just the title itself shows a certain lack of transparency that we need to look at. How can we have confidence in the system when they keep using words like Waste Confidence? We need to have a very descriptive title of what's going on so people can have a real understanding, and then we can have an honest debate.

Furthermore, I'd like to say that I think it's a bad idea. We can't put this burden on other generations. We can't put a burden for people 250,000 years down the line. That's just totally irresponsible, immoral, unethical, you know, for people to sort of really believe that.

You know, for one generation's worth of energy consumption, we're creating a life-long problem for hundreds of thousands of years. Human

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145 civilization is not that long. I believe Debra mentioned it, what if the Egyptians were using nuclear waste? Would you want to be responsible for maintaining that waste disposal in modern times and for generations and generations to come? I think if you do the math, you'll realize that it's not economically efficient, it's not safe, it's not wise. We need to take that money and we need to reinvest it into renewable energy,

(Applause.)

renewable resources.

future. Thank you.

MS. JUCKETT: Thank you. Okay. Now, we'll go to Dr. McConnell for his closing remarks. Thanks everybody for coming this evening.

That's the way to go for the

DR. McCONNELL: Well, thanks to Thanks for your participation tonight. everyone. Thanks for coming, I know it's an effort to come out, and I also thank you for staying within the threeminute time limit. It totally helps everybody in terms of allowing everybody to speak. So, thanks again and we will close the meeting. Good night.

(Applause.)

(Whereupon the meeting was concluded at 10:50 p.m.)

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