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## U.S. Nuclear Regulatory Commission

Public Meeting

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## LICENSE RENEWAL PROCESS AND ENVIRONMENTAL SCOPING

FOR FERMI, UNIT 2

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Monroe County Community College

1555 South Raisinville Road, Monroe, MI

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Thursday, July 24, 2014

7:00 p.m.

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#### **APPEARANCES:**

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ENVIRONMENTAL ENGINEER

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KELSEY KENEL, ENGINEER

### P-R-O-C-E-E-D-I-N-G-S

7:02 p.m.

MR. BARKLEY: We've got a very bright spotlight in our face tonight. Alright. Good evening. I am the meeting facilitator for this meeting; my name is Richard Barkley. So, I'd like to welcome you here to this meeting. Again, this is for Fermi 2 license renewal, this is an environmental scoping meeting.

I want to talk to you a little bit about how we're going to conduct this meeting and then have a presentation by the staff. Okay. One of the things that I'd like you to do first is, if you could turn your cell phones onto airplane mode or vibration mode, so we don't get interrupted a lot. You'll see me fumbling around with my cell phone a bit because I use it as a timer when we get into the comment period.

In any event, what I'd like to do is actually have a chance to introduce the NRC staff that is present here, and then give you a couple more pieces of guidance regarding how this meeting will be conducted, and then turn it over to the NRC staff to

make their presentation.

First of all, I'd like to introduce the NRC staff that are present here, this evening. First of them is Brian Wittick, he's a branch chief in NRR that oversees this project; Leslie Perkins, she's a project regarding this project; Daneira manager Melendez-Colon, another project manager related to this project; Prema Chandrathil, a public affairs officer out of our region 3 office in Chicago; Brian Kemker -- Brian, he's a senior resident inspector at the Fermi 2 station; Alan Barker, he is a state liaison officer, he deals with the state in the region 3 area which consumes the midwest; Mallecia Sutton, she is a project manager that deals with the Fermi 3 station; Jennifer Dixon-Herrity is her branch chief, again, also involved with the Fermi 3 facility; Russell Chazell, he's an environmental scientist with us, I think he's out at the sign-in desk right now; finally, Kelsey Kenel, she's another engineer working with us this summer, I think she's also out at the front desk.

So, anyway, what we're going to do is have a short presentation by the staff to describe the license renewal project, both the safety side of it, as well as the environmental side of it. After that,

we'll take an opportunity for any questions there are regarding the process. And then, after that, we'll move directly into a comment period where we will take your comments.

If you want to speak, I would ask you to fill out one of these yellow cards. I have over 20 people signed up to speak; we actually had 34 speak this afternoon. So, because of the sheer number, I would ask that you lean -- have your remarks be within roughly three to five minutes; the average person spoke for about four minutes this afternoon, so that's very reasonable, I think. And other than that, if there's any questions regarding the conduct of this meeting, I'll be sitting over here to the side, initially, during their presentation by the project managers. So, feel free to come over to ask me a question.

With that, I'd like to turn it over to the project managers and let them start their own discussion. Thank you.

MS. MELENDEZ-COLON: Good evening. My name is Daneira Melendez-Colon and I'm the safety project manager with the Division of License Renewal, and I'm coordinating the staff's review associated with the Fermi 2 license renewal application. Thank you all

for taking the time to come to this meeting. Tonight, we will provide an overview of the license renewal and review process, which includes both a safety review and an environmental review. We will describe ways in which the public can participate in the Fermi 2 license renewal process. I would like to reiterate that the most important part of tonight's meeting is to receive any comments that you may have on the scope of the environmental review. We also will give you some information about how you can submit comments if you prefer not to speak at this meeting. I hope the information we provide will help you to understand the license renewal and review process and the roles you all can have in the process.

Before I get into the discussion of the license renewal process, I would like to take a minute to talk about the NRC in terms of what we do and what our mission is. The NRC is a federal agency that regulates the civilian use of nuclear material. The Atomic Energy Act of 1954 authorizes the NRC to grant a 40-year operating license for nuclear power reactors. I would like to highlight that this 40- year term was based primarily on economic considerations and antitrust factors, not on safety or technical

limitations. The Atomic Energy Act also allows for license renewal.

The National Environmental Policy Act of 1969, or NEPA, established a national policy for considering the impact of federal decision-making on the environment. Leslie we will discuss NEPA in greater detail.

The NRC's mission is three-fold: ΤО ensure adequate protection of public health and safety; to promote the common defense and security; and to protect the environment. The NRC accomplishes its mission through a combination of regulatory programs and processes, such as: establishing rules regulations, conducting inspections, issuing enforcement actions, assessing licensee and performance. We also evaluate operating experience for nuclear plants the country across and internationally as well.

The NRC has resident inspectors at all operating nuclear power plants. These inspectors are considered the eyes and ears of the NRC. They carry out our safety mission on a daily basis and are on the front lines of ensuring acceptable safety performance and compliance with regulatory requirements.

I would like to mention a few very important areas of the NRC oversight does routinely come up during our interactions with members of the NRC staff addresses these areas performance every day as part of the ongoing regulatory oversight provided for all currently operating power They include: current safety performance as defined by NRC inspection findings, violations, and general assessments of plant performance; emergency planning and security. For specific information on current performance for Fermi 2, use the link provided This is also on your handout. on this slide. The NRC provides regulatory oversight monitors and activities in these areas on an ongoing basis under the current operating license, thus we do not re-evaluate them in license renewal. That's not to say that they are not important; we just do not duplicate the regulatory process in these areas for license renewal.

The NRC received Fermi 2's license renewal application on April 30th, 2014, requesting an additional 20 years of operation. The current operating license for Fermi 2 expires on March 20th, 2025. Licensees can submit an application for license renewal after 20 years of operation. The NRC has

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determined that 20 years of operation provides enough information for the staff to make an informed decision on license renewal.

The first step of the license renewal process is to perform an acceptance and sufficiency review of the application. The purpose of this review is to determine if the applicant has provided the required information. Required information includes technical information about plant structures and components and how the applicant proposes to manage the aging of the structures and components. Technical specifications define the operating parameters of the The application indicates if any changes or additions to technical specifications are necessary to manage the effects of aging during the period of extended operation. The application also includes an which environmental report, is the applicant's assessment of the environmental impacts of continued operation.

If the application has the required information, then it is considered acceptable and it is put on the NRC's formal docket and the staff will perform a full review.

This flow chart highlights that the

license renewal process has two separate, parallel review tracks. The environmental review shown at the bottom of the flow chart perform under the regulations of Title 10 of the Code of Federal Regulations, Part 51, and the safety review shown at the top of the flow chart perform under the regulations of Title 10 of the Code of Federal Regulations, Part 54. The focus of the environmental review stems from the NRC's obligation to protect the environment from the use of nuclear The NRC performs plant-specific reviews of environmental impacts of operating life extension in accordance with the National Environmental Policy Act, NEPA, and the requirements of Title 10 of the Code of Federal Regulations, Part 51, environmental protection regulations for domestic licensing and related regulatory functions.

As part of the environmental review, the staff consults with local, state, federal, and tribal officials. In addition, the staff holds public meetings to receive comments on the draft environmental impact statement. The focus of the safety review stems from the NRC's obligation under the Atomic Energy Act of 1954. The purpose of this review is to make sure and verify that each applicant has fully analyzed the

management of aging effects in sufficient detail to conclude that the plant can be operated safely during the period of extended operation.

The license renewal application must contain technical information and evaluations about the different types of plant aging that might be encountered in the specific plant and how the licensee will manage or mitigate those aging effects. This information must be sufficiently detailed to permit the NRC staff to determine whether the effects of aging will be managed such that the plant can be operated during the period of extended operation without undo risk to health and safety of the public.

After completing the evaluation, the staff's review is documented in the final Safety Evaluation Report, or SER. In addition, a Regional Inspection Report and a regional administrator's recommendation are issued to document the results of inspections conducted on the overall regional oversight performed. Subsequently, the results of the evaluation are reviewed by the Advisory Committee on Reactor Safeguards, or ACRS, and based on their review of the information presented, the ACRS makes the decision to issue a recommendation letter to grant the

renewed license. This step is very valuable since it provides an independent third-party assessment of the review performed. The dotted lines show that hearings may also be conducted if interested stakeholders submit concerns or contentions and the request for a hearing is granted. The Atomic Safety and Licensing Board will conduct the hearings. The Commission considers the outcome of the hearing process in its decision on whether or not to issue a renewed operating license.

Now, I'm going to describe the license renewal and review processes in a little more detail, starting with the safety review. To better understand the license renewal process, it is good to know the safety principles that guides license renewal. The first principle is that the current regulatory process is adequate. The interrelationship between our regulations, licensing, and oversight activities, provide for adequate protection of public health and safety at any point during the plant's life.

The second license renewal principle describes maintaining the current licensing basis for the plant. Operating experience, research results, and other information that support our decision- making also fit into the Aging Management Program. This

information is also used in our licensing activities and as a basis for changes to regulations and guidance.

As a consequence of applicants receiving their renewed license, the Aging Management Program is necessary to ensure continued safe operation of passive, long-lived structures and components, are added to the existing plant's licensing basis. To be clear, aging of structures and components does not start at year 40, it starts on day one, and it's managed by the applicants since the first day of operation; thus, many of the aging management programs are existing programs that applicants credit in their license renewal application.

Applicants also identify enhancement to these existing programs based on operating experience or develop new programs, because new aging mechanisms have been identified at their plants.

The safety review focuses on the aging of classes and long-lived structures and components and systems that the NRC deems important to plant safety. We consider, first: safety-related systems, structures, and components; for example, the reactor containment; second, non-safety-related systems, structures, and components which, if they fail, could

affect safety-related systems, structures, component functions; for example, a piece of equipment directly above a safety-related component. And third: system structures and components relied upon for compliance with regulation -- regulations, such as: qualifications, fire protection, environmental pressurized thermal shock, anticipated transient without a scram, and station blackout.

The staff's main objective in this review is to determine if the effects of aging will be effectively managed by the applicant. The results of the safety review are documented in a Safety Evaluation Report.

Now that you know what it is subject to review, I will talk about how the NRC looks at all the information. The safety review is comprised of The technical staff numerous, vigorous aspects. reviews the applicant's license renewal application supporting documentation to determine and applicant's methodology, to identify the systems, structures, and components within the scope of license renewal, and subject to an aging management review; second, to determine if the methodology has been properly implemented; and third, to determine with reasonable assurance if the effects of aging for certain systems, structures, and components will be adequately managed or monitored by new and existing programs and surveillance activities. The staff uses site audits or visits to verify the technical basis of the license renewal application and to confirm that the applicant's aging management programs and activities conform with how they are described in the application.

The staff documents the basis and conclusions of its review in a Safety Evaluation Report which is publicly available. In addition, a team of specialized inspectors travels to the reactor site to verify that aging management programs are being implemented, modified, or planned, consistent with the license renewal application.

Finally, as I have mentioned, the Advisory

Committee on Reactor Safeguards performs an independent review of the license renewal application, the staff's Safety Evaluation Report, and inspection findings, makes a recommendation to the Commission regarding the proposed action to issue a renewed operating license.

This slide shows important milestones for the safety review process. It is important to note

that the dates in blue are subject to change based on the progress of the review. Scheduled changes may result from a host of reasons. If significant issues are identified, the license renewal review may be suspended indefinitely or terminated.

That concludes the description of the safety review. The environmental review will be discussed by the environmental project manager, Leslie Perkins.

Thank you, Daniera. MS. PERKINS: evening. My name is Leslie Perkins and I will go over the environmental review process. This review is National performed in accordance with the Environmental Policy Act of 1969, commonly referred to as ôNEPA.ö NEPA established a national policy for considering environmental impacts and provides the basic architecture for federal environmental reviews. All federal agencies must follow a systematic approach in evaluating potential impacts and also to assess alternatives to the actions. The NEPA process involves public participation and public disclosure. The NRC's environmental regulations implementing the requirements of NEPA are contained in 10 CFR, Part 51. Our environmental review considers -- considers -- our

environmental review considers the impact of license renewal and any mitigation for those impacts considered significant.

We also consider the impacts of alternatives to license renewal, including the impacts of not renewing the license. We document the review in an environmental impact statement, which is made publicly available. Ultimately, the purpose of the environmental review is to determine whether license environmental impacts οf renewal are reasonable, and in combination with other reviews, to make a recommendation to the Commission whether to renew the license or not.

This slide gives you an idea of some of the areas evaluated. Some of these areas are terrestrial and aquatic ecology, environmental justice, hydrology, and radiation protection.

The license renewal -- the license renewal review, the NRC environmental staff looks at a wide range of potential impacts. Additionally, we consult with various federal, state, and local official, as well as leaders of Indian nations. Examples include:

U.S. Fish and Wildlife Service, the Environmental Protection Agency, Michigan Department of

Environmental Quality, Michigan State Historic Preservation Office, Michigan tribal nations with historic ties to the area around the plant. We gather pertinent information from these sources and ensure it is considered in our analysis.

The environmental review begins -- begins with a scope -- with a scoping process, which is an assessment of the specific impacts and significant issues that the statute consider in preparing a Fermi 2 environmental impact statement. Currently, this is where we are in the process.

Information that we gather from you tonight, and in the next few weeks, will be considered and included in the EIS. We recognize that some impacts are similar, if not identical, at all nuclear -- nuclear power plants; so, to improve efficiency, we develop a generic environmental impact statement that addresses a number of impacts common to all nuclear power plants. The staff supplements the generic EIS with a site-specific EIS in which we will address issues that are specific to Fermi 2. The staff also re-examines the conclusions reached in the generic EIS to determine if there is any new and significant information that would change those conclusions.

For the term beyond the 20-year license period of extended operation, the NRC has historically addressed the environmental impacts associated with the management of spent nuclear fuel and the waste confidence decision and rule, 10 CFR 51.23. In June 2012, the U.S. Court of Appeals vacated the NRC's waste confidence decision and rule. In response, Commission directed the NRC staff to proceed with a rule-making in a generic EIS to address the court's findings. The Commission also directed that no licenses will be issued if the issues related to waste confidence aren't appropriately addressed. proposed rule in EIS were issued for public comment in the fall of 2013. Based on public comments, the NRC staff revised the rule and EIS. The final rule and EIS are currently with the Commission for review. Subject to Commission approval, the final rule and EIS are expected to be issued in the fall of 2014. Additional information on the waste confidence rule- making and EIS can be found on the NRC public website on the link listed on the slide.

The scoping period started June 30th, 2014, when the Notice of Intent to prepare an EIS and conduct scoping was published in the Federal Register.

The NRC will accept comments on the scope of environmental review until August 29, 2014. In looking for information about general, we are environmental impacts from the continued operation of Fermi 2. You can assist in this process by telling us, for example, what aspects your local community we should focus on; what environmental and socioeconomic issues NRC should examine during our review; what other major projects are in progress or planned in the area, and what reasonable alternatives are most appropriate for this region. These are just some examples of input we seek through the environmental scoping process. We're not familiar -- we're not familiar with your community as you are, so your comments today will help facilitate a thorough review.

Public comments are an important part of the environmental review process. All your comments to us, whether provided verbally during this meeting, or in a written letter or email, are considered and addressed. We respond to each comment as a part of the EIS. The -- the EIS is one of the factors, as well as several others shown here, that influences the Commission's decision to renew the license or not.

In addition to providing verbal and

written comments at this meeting, there are other ways that you can submit comments. You can submit comments online using the federal rule-making website, Regulations.gov and enter in the NRC Docket I.D. listed on the slide. Please note that comments will not be edited identifying to remove any contact information. Do not include any information and comments -- in your comments that you do not want publicly disclosed. As mentioned before, the deadline for comments -- for submitting comments is August 29th.

This slide shows important milestones for the environmental review process. The dates for publishing the draft EIS and the final EIS may change based on the progress of the review. Petitions to request for a hearing are due August 18, 2014. Also, the opportunity to submit environmental comments closes August 29th, 2014, as mentioned earlier. Please note that the draft EIS is currently scheduled to be issued for public comment in June 2015 with an associated public meeting to receive your comments on this preliminary document.

Daneira and I are the primary points of contact at the NRC for license renewal issues for Fermi.

Our contact information is provided on this slide and

also in the handout. Copies of the license renewal application and the Environmental Report are available on CD in the entryway. In addition, a hard copy of the license renewal application and Environmental Report may be found at the Ellis Library and Conference Center. The draft EIS will also be available at this library when it's published for public comment.

These documents will also be on the NRC's public website at the web address shown at the bottom of the slide. As you came in, you were asked to fill out a registration card at our reception table. If you included your mailing address on that card, we will mail a CD of the draft and final EIS to you.

This concludes my presentation; I'll now turn it back over to Richard.

MR. BARKLEY: Okay, thank you, Leslie. With this, I -- I want to quick check to see if there's any questions regarding the presentation by the staff regarding the process. If there are no questions regarding how this process is being conducted, then what I'll do is move directly into the comment period.

Again, I'd like you to come up here to the podium to make your remarks. Try to limit your remarks again to three to five minutes. What I'll do is give

the names of three people to come up so that the next two people in line know they're going to be up and so they're not caught by surprise. It worked very smoothly this afternoon and I hope to have it work the same way this evening.

This, again, is, like the afternoon group, not a shy group. We have roughly 40 members of the public in the audience and 21 of you has signed up to speak, so we'll move through and make sure we cover all of you this evening.

So, the first three people I'd actually like to call up here would be Bobby Lambert, Dale Zorn, and then Tim Lake. Okay. Bobby?

We have a much better microphone than we did this afternoon. You can adjust it as need to based on your heighth.

MR. LAMBERT: Thank you. Good evening. My name is Bobby Lambert, I am the vice chairman of the Monroe County Board of Commissioners. I'm here this evening to speak in support of the license renewal application submitted by TE -- DTE Energy to extend the operating life of the Fermi 2 nuclear plant.

Monroe County Board of Commissioners has been steadfast in its support of Fermi 2 since it was

constructed to meet the energy needs of our community.

While we know that the Nuclear Regulatory
Commission will be thorough in its examination of the
license extension application, the Board of
Commissioners has confidence that DTE Energy will do
what is necessary to address any concerns that may
emerge during the course of the review.

The County has had a long partnership with DTE working to help ensure the plant operates safely and meets the stringent regulatory requirements. We have witnessed the response from DTE to any issue that has arisen since the plant began operations.

As community leaders, we are engaged with DTE officials on the important matters involving the plant. We know that the company dedicates significant resources each year to proactive maintenance ensuring that the plan remains capable of producing electricity safely and efficiently.

DTE Energy is the County's biggest employer with roughly 1,500 employees. They earn a living and support their families and support our local economy. The corporation also is the largest taxpayer in the County helping fund critical public services throughout our communities.

While I recognize Fermi's original license doesn't expire until 2025, I, for one, believe it is a wise decision to approve the license extension. Among the many benefits of confirming this direction now, the primary one is the continuance of hundreds of well-paying jobs -- jobs as well, as hundreds of other contractor jobs.

I encourage the NRC to do its part by expeditiously acting on DTE's licensing renewal request. Thank you.

MR. BARKLEY: Thanks, Bobby. Dale?

MR. ZORN: Thank you and good evening especially to the panel. I was expecting to see a -- a panel here tonight. It's a little different format than we've had in the past, but, again, thank you for this opportunity to address you this evening.

My name is Dale Zorn. I've had for the past several years the honor of representing the residents and businesses of District 56 in the Michigan House of Representatives. I have no doubt that the Commission will hear from many Monroe County residents on this matter. The vast majority of these comments, I believe, will be supportive of the license renewal.

I would like to add my own personal

perspective for the record. Like many of the individuals from whom you will hear as the NRC considers the 20-year extension, I am a lifetime -- lifelong resident of Monroe County, a small business person. My father opened a business in 1953 and my brother and I took it over in 1978. I have also been fortunate to have an insider's view of Monroe County's history and development as it has unfolded over the years and decades.

My background includes ten years in local elective office with the Raisinville Township Board, 20 years as a Monroe County Board of Commissioners, and for the past three-and-a-half years as state representative.

While a County Commissioner, I led the reorganization of the Monroe County Economic Development Corporation and created the Monroe First program to assist existing and new businesses and the development in this County.

The term Monroe First is especially important in the context of this matter and I hope the Commission will give extra credence to the views and perspectives offered by residents of this region.

Additionally, I was Chief Executive for

the Monroe County Emergency Operations Center having extensive training in emergency services such as Fermi 2 drills and -- and exercises and have actual experience in emergency events such as Comair Airline accident in 1997.

My perspective is shaped by the experiences as Fermi 1 and Fermi 2 were built and operated. They brought ways of investment, new development and growth to this County. I have seen Detroit Edison and DTE Energy responsibly manage the construction and operation of these plants. In the case of Fermi 1, I have also been witness to its decommissioning.

I have witnessed DTE Energy's stewardship of both the Fermi complex and the Monroe Power Plant property. By virtue of my responsibilities of the local -- as a local elected official, I have been fortunate to have been afforded a special view of these facilities.

In addition to safely generating more than 190 million megawatts of electricity, which is about 20 percent of the total of DTE Energy's generating capacity, it employs about 850 full-time employees and hundreds of supplemental contract workers.

Throughout the years, DTE Energy has proven to be an environmental-friendly neighbor that has taken an active part to protect our natural resources and to improve the quality of our environment.

DTE has exemplified itself by successfully completing a ISO 14001 international standard for environmental quality management in both Fermi 2 and the Monroe Power Plant. It has received the Michigan Occupational Safety and Health Administration coveted Michigan Voluntary Protection Program, the Star Award, by working over five million safe hours. It has -- it has been designated a clean corporate citizen from the Michigan Department of Environmental Quality. It is a designated supporter of the Downriver International Wildlife Refuge and was awarded the wildlife site of the year by the Wildlife Habitat Council.

Let us not forget the proud tradition of the community service by the DTE Foundation and the DTE employees that fulfill public improvement projects such as wildlife habitats, helps with United Way of Monroe County, Habitat for Humanity, Lotus Garden Club, Monroe Red Cross, local public schools, Salvation Army, the list goes on.

There is no doubt that Fermi 2 is a significant economic asset to Monroe County and all southeast Michigan. Like all US nuclear plants, Fermi 2 was originally licensed to operate 40 years which reflects the capital amortization period utilized by most utilities rather than the expected operational life of the plant.

In short, Fermi 2 has many more useful years ahead of it if the, you know, NRC approves the renewal license application as it has for 70 other nuclear units.

Michigan has a well-rounded energy portfolio which includes natural gas, hydroelectric coal, and, of course, nuclear power. In more recent years, solar and wind renewals has made its way into the Michigan energy portfolio. The Michigan renewable energy production is on track to meet to the state mandate goal of 10 percent by the year 2015. Wind energy has been the primary source of the renewal energy in Michigan. At the end of 2013, more than 1,100 milliwatts of utility scale wind projects were in operation in Michigan.

Michigan's wind generation is expected to increase to more than 1,400 milliwatts by the end of

2014. However, renewables are not expected to meet the base load energy demands and with the expected closing of several coal plants in the state due to the federal emission requirements, it is essential to Michigan, especially southeast Michigan, to foster an energy program that will meet the needs of the region without going outside the state to purchase electricity.

There is one last thought that I wish for you to take back to Washington. Expanding America's nuclear energy industry is vital to meeting a growing electricity demand, reducing greenhouse gas emissions, and enhancing the US energy security. Developing advanced technologies and ensuring that there is sustainable use fuel management policy is an important part of America's nuclear future.

Under its own federal law and after collecting 10 billion dollars from rate payers, the federal government has failed to own up to its policy to develop a disposal facility for used fuel and for the nation's nuclear power plants in high level radioactive waste from US defense programs. The law set a 1998 deadline for the federal government to begin accepting used fuel, but has not done so.

In 1987, the Congress directed the DOE to

study Yucca Mountain, a remote desert location, as a site for potential repository for geologic disposal of used nuclear fuel. Extensive study by leading scientists from around the world demonstrated that the site is usable and suitable as -- and in 2002, Congress approved the site. The DOE submitted a license application to the US Nuclear Regulatory Commission in 2008 to build a repository site, however, in 2010, the Obama Administration announced plans to terminate Yucca Mountain -- the Yucca Mountain project and nothing has happened since except to continue to put local American communities at risk.

I have had the opportunity to visit Yucca Mountain twice during the construction and the research phase. I am not a nuclear engineer, but after being there, after extensive personal research, and lobbying Congress to take control of nuclear waste, I am convinced a disposal site such as Yucca Mountain would provide a safe storage environment and I believe someday, maybe not in my day, but in the future there will be a use for stored waste and it could be retrieved to benefit our country. To me, this is reusable energy product.

I encourage the Commission to move quickly

through the process and to approve the requested license extension. As I have commented earlier -- in earlier proceedings involving the application for a construction and operation license for a new unit at the Fermi complex, I believe that nuclear energy is critical to Michigan's energy portfolio.

Again, thank you very much for this opportunity.

MR. BARKLEY: Thank you, Dale. Tim?

MR. LAKE: Good evening. Thank you to the NRC staff for allowing me this opportunity to speak tonight.

My name is Tim Lake and I am the president and CEO of the Monroe County Business Development Corporation. Monroe County has long been viewed as a crossroads for commerce and for more than three decades, our organization, the BDC, has been helping industry and businesses capitalize on the opportunities to grow and expand in this dynamic area of southeast Michigan.

The proposed 20-year license extension for Fermi 2 nuclear power plant is really a remarkable opportunity for us. This is not the first time that I've had the privilege of addressing representatives

of the NRC. I spoke here when the NRC was taking public comments on the draft environmental impact statement concerning the proposed new reactor at the Fermi complex and I offered comments last year during the Atomic Safety and Licensing Board hearing on Fermi 3.

My com -- my comments tonight are equally applicable today in terms of the renewal of the license for Fermi 2.

Fermi 2's economic impact on our region cannot be discounted nor dismissed. It's a source of thousands of stable, highly-skilled, well- paying jobs. The continuance of those jobs for another two decades will be a source of economic stability for hundreds of households in a large number of communities in Monroe County.

And as important as that is, and it is very important, it's the power that Fermi 2 will continue to provide that's even more important. From my vantage point working with small businesses and especially our larger manufacturing concerns, affordable, reliable power is an essential commodity. For some of our companies, electricity represents one of their largest costs. Additionally, some of these companies happen to be among our largest employers. It's vitally

important to retain those that -- those that we have and to attract more of those -- something we work hard at every single day.

Stable, reliable electric rates are critical and nuclear is a path to low-cost, reliable, high-quality power. My personal belief is that nuclear power is one of the smartest things we can do to prepare for the future. My personal fear is that we're falling behind other countries that are developing nuclear power more aggressively than we are.

Nuclear power is so efficient and so clean, it just makes sense to keep it in our portfolio and to even add more when the time is right. I respectfully suggest that the NRC renew the license for another 20 years for the Fermi 2 power plant. Thank you.

MR. BARKLEY: Thank you, Tim. The next three speakers I'd like to call are Kevin Kamps, Jerry Sobczak, and Bonnie Masserant. Kevin? Welcome again, Kevin.

MR. KAMPS: Thanks. My name is Kevin Kamps with Beyond Nuclear and Don't Waste Michigan and I'm just going to pick up where I left off in the earlier session.

So I was speaking about Fukushima lessons

learned and I wanted to mention the Japanese parliamentary investigation of the catastrophe. Their determination of the root cause was not the earthquake, was not the tsunami, but rather it was the complicity and the collusion of a captured regulator with the nuclear industry as well as with elected officials and I would put forth that there is plenty of that right here in Monroe County.

So one example of that, across the country anyway, would be the fact that NRC has rubber stamped 22 of 23 20-year license extensions on these General Electric Mark One boiling water reactors which is quite amazing given their age and demonstrated safety vulnerability post-Fukushima, but not everybody's standing for it and the state of Vermont has forced the shutdown of Entergy's Vermont Yankee Reactor, which is a Mark One.

I wanted to mention that NBC had a headline today and I quote, "Nuclear industry should plan for another Fukushima say experts." And this article was in reference to a National Academy of Sciences report that just came out today, Fukushima Lessons Learned. One of the recommendations that they have made is that beyond-design-basis accidents be taken into

consideration in licensing proceedings as for the proposed new Fermi 3 as well as in license extension proceedings like the subject matter tonight.

Regarding the Mayor of Futaba, the host town of Fukushima Daiichi, Mayor Idogawa -- I needed to finish the thought from earlier today that he was pro-nuclear when I met with him in 2010. He listened respectfully to what I had to say, but he didn't agree. Now, he is a leading outspoken anti- nuclear advocate in Japan and it's a tremendous credit to the Japanese people and people like Mayor Idogawa who have seen the light. And the Japanese has -- the country of Japan has remained largely nuclear-free for the past three years despite the economic and political power of the nuclear industry in that country.

And I wanted to talk about the Fukushima 50, but probably not the Fukushima 50 that you may have heard of at the time of the accident, the workers who stood by their posts, to their credit, to try to prevent things from getting worse. This is the Fukushima 50 who were some of the first to die from the nuclear catastrophe. And I'm reading from Fukushima, The Story of a Nuclear Disaster, by Union of Concerned Scientists.

And I quote, "Hours after the second evacuation notice was issued early in the morning of March 12th, preparations got underway to move the 209 ambulatory patients and staff out of Futaba Hospital located about three miles from the plant. Left behind, however, were 130 bedridden hospital patients and 98 residents of nearby nursing defense forces reportedly were en route to transport them. Owing to a series of bureaucratic errors and communication mix ups, the troops didn't arrive for two days during which time the facilities had no power or heat and caregivers had departed. then, four patients were dead. When the troops finally showed up, the patients began a grueling odyssey spending hours on the road before the troops found a shelter that would accept them. Fourteen more died during the trip, but the 35 patients -- but 35 patients were accidentally left behind, forgotten and not rescued until March 16th. By the end of that month, officials reported that among the Futaba evacuees, a total of 40 patients and 10 nursing home residents had died."

So that's a different Fukushima 50 than was reported about at the time of the crisis -- the

beginning of the crisis.

I mentioned that 12.4 mile dead zone around Fukushima Daiichi. It should be much bigger. There have been radioactive hot spots documented in Fukushima City, 50 miles to the northwest. There have been hot spots documented in southwestern Tokyo, 200 miles to the -- to the south of Fukushima Daiichi.

Fukushima Unit 1 had only recently gotten its license extension before the catastrophe struck. The world was lucky that Fukushima Daiichi Units 4, 5, and 6 were not operating that day. The world is also lucky that Fukushima Daini, located just seven miles south, units 1, 2, 3, and 4, survived this catastrophe by a single off-site power line. Several power lines were lost to the earthquake just as at Daiichi and the tsunami was actually bigger at Daini taking out the diesel generators.

And it was for this reason that another investigation of the catastrophe published by the Rebuild Japan Initiative Foundation documented that in February -- documented in February of 2012 that Prime Minister Khan had contingency plans in place to evacuate metropolitan Tokyo and he has since spoken publicly about this. He had plans in the works to

evacuate 30 to 50 million people from metropolitan Tokyo in the event of Daiichi going up in flames, including the pools. There are seven pools at Daiichi, as well as the four reactors, and four pools at Daini, and then Tokai, one pool and one reactor, closer to Tokyo.

The fear being that as plants went up in flames, they would have to be abandoned and all control would be lost. And I put forth that Fermi 2, the old reactor with the breakdown phase risks, Fermi 3, the new reactor with the break-in phase risks, these are the worst of both worlds on the same site. A multiple reactor accident scenario.

And my concluding thoughts will be about nuclear waste. The nuclear waste confidence report that came out today we look forward to reading and we will be ready to go back to court, if need be. Our coalition of environmental groups and states, including the states of New York and Vermont, are very interested in what the NRC has to say at this point about nuclear waste confidence, about expedited transfer of a radiated nuclear fuel from pools to dry casts.

We call for hardened on-site storage. The NRC staff's study of this issue revealed that

a - - even a small pool fire could render 9,400 square miles uninhabitable resulting in 4.1 million nuclear evacuees. We -- we put forth a petition for rule making earlier this year calling for this license extension proceeding, its rules, to be revised in light of this new information and we called for a stay on this proceeding, but were denied just last week by the Nuclear Regulatory Commission.

So I would just close by saying this is Faustian fission. It's a joyride. It's a power trip. The money's great until it's not as has happened at Fukushima. Thank you.

MR. BARKLEY: Thank you, Kevin. Jerry?

MR. SOBCZAK: Thank you for the opportunity to address you this evening. My name is Jerry Sobczak. I am the chairman of an organization called DTE Shareholders United. This is an organization of more than 12,000 DTE share -- energy shareholders across the country, and when you include spouses and family members, that number is closer to 25,000.

Our organization was formed in 1997 and is committed to making sure that the public policy proposals debated and enacted by public officials treat

customers, employees, retirees, and shareholders fairly and to protect the reliability of the energy delivery system and Michigan's economic security.

The requested 20-year license extension that DTE Energy has put forth is critical to preserving the reliability of the electric service in the state of Michigan and to enhance our state's economy.

I know, from firsthand experience from the Fermi 2 plant, the benefits of nuclear power in terms of diversifying the company's generating portfolio and its impressive service performance. As the EPA action concerning greenhouse gas emissions intensifies, the continued operation of a well- functioning plant like Fermi 2 becomes even more important.

Nuclear plants like Fermi 2 are large base load plants that emit virtually no greenhouse gases. Nuclear energy is an important part of a balanced, common sense approach to clean energy and energy diversity, which means energy security.

Our organization, DTE Shareholders United, applauds DTE Energy for the foresight in applying for the license extension and we support the idea of extending the Fermi 2 operating license to the year 2045.

Thanks again for the chance to present our position.

MR. BARKLEY: Thanks, Jerry. Welcome, Bonnie.

MS. MASSERANT: Hi, my name is Bonnie Masserant and I'm a lifelong resident of Monroe County. I was raised and grew up in the shadows of the cooling tower and always wondered their purpose. Today, I know their purpose.

Unfortunately, I work -- I'm -- I am fortunate to work in the community I live. I have been employed with DTE Energy for almost 29 years. One thing that has not changed throughout the years is safety. Our number one priority at DTE Energy is the health and safety of the public which is good for me because my entire immediate family lives within the five-mile radius of the plant.

I work in nuclear training and I'm well aware of the -- of the regulatory requirements to have qualified employees. Our employees are highly skilled and knowledgeable employees. Every member of our site is a lifelong learner. Every employee, from CNO to our plant cleaners attend annual training. Our operators are in the classroom and simulator every six weeks

continuously learning and improving. We learn from our peers throughout the industry.

Our operational standards are among the highest standards in the world. DTE Energy is lifeblood of the community. My co-workers and I are a vital part of this community and are active supporters of local communities raising funds for local charities and providing countless voluntary hours in local community organizations.

We're an energy of progress. We aspire to be the best operated energy company in North America and -- and a force for growth and prosperity in the communities where we live and serve.

There are no environmental change related to the license renewal. License renewal is a cost effective way to ensure that power and employment will be available for future generations. I am very proud to be part of DTE Energy and work in the community I live.

MR. BARKLEY: Thank you, Bonnie. The next three people I'd like to call up are Bill LaVoy, Greq Brede, and Phil Skarbek. Bill?

MR. LAVOY: Good evening. My name is Bill LaVoy and I thank you for this opportunity to address

you this evening.

I have the honor and privilege of representing families and businesses located in the 17th House District in the Michigan House of Representatives.

Fermi 2, which is the subject of today's hearing, is, in fact, in my district. Perhaps that is the reason why one of the committees I serve on is the Michigan House's Energy and Technology Committee.

As a member of that committee, I've had the opportunity to tour both the Fermi complex and DTE Energy's other major facility in my district, the coal fired Monroe Power Plant. I've had the opportunity to see firsthand DTE Energy's efforts to generate safe, reliable, affordable electricity with as little impact as possible on the environment.

As a lifelong resident of Monroe, I've witnessed and benefitted from the contributions of DTE Energy's employees to our community. This is in addition to benefits in the form of employment and tax revenues to local units of government and school districts and the economic impact multipliers that positively affect the local, state, and US economy.

The license extension for Fermi 2, if

approved, will ensure that those contributions continue for two additional decades. In the fast- paced, rapidly-changing economy, the kind of stability afforded by a facility like Fermi 2 is very welcome and appreciated.

I also want to point out that I'm also raising a family and have lived within the -- the ten-mile EPZ pretty much all of my life. I was born before the plant was actually built, but -- and I chose to stay here and raise my family here.

It is clear that Michigan's fleet of electric generating plants, which is one of the oldest in the United States, will see changes in the years ahead. Older coal-fired units will be retired in favor of natural gas-fired plants and more renewable energy, both of which will reduce the amount of emissions into Michigan's air. I believe that a diverse portfolio of electric power generation is necessary to ensure a clean, reliable, and economically stable energy future for Michigan and the United States.

With your approval and that of the Nuclear Regulatory Commission, I'm hopeful that Fermi 2 will continue to be a critical part of the mix. Thank you.

MR. BARKLEY: Thank you, Bill. Greq?

Here you go, Greg. And after Greg, again, it's Phil.

MR. SKARBEK: Good evening and thank you. My name is Phil Skarbek and I've been a resident of Monroe with my wife, Kelly, and two grown children, Jake and Jennifer, since 1993. I'm also a shift manager at Fermi 2. What that means is that during my operating shift, whether it be days or nights, I'm in charge of all plant operations and the operating crew in the control room producing electricity as the lifeblood of our community.

I spent six years serving honorably in the United States Nuclear Navy aboard Navy submarines where I received specialized training in nuclear power. Then at Fermi after my many years of study and rigorous training and after passing the demanding license test given by the federal government, the Nuclear Regulatory Commission placed a great responsibility upon me to direct and operate the plant with just one overriding concern and that is the health and safety of the public. Nothing comes before that responsibility to me.

I know I speak for every shift manager at Fermi and, in fact, for every Fermi employee that we take this responsibility very seriously. The standards in the nuclear industry are higher because

we know we have to be and those standards are always rising through continuous improvement, sharing lessons learned through the industry, and a constant self-critical assessment of our own performance.

Being self-critical means you can't have thin skin in the nuclear business. We criticize ourselves and our peers with one overriding factor, again, and that is safety.

I'm glad that's the way it is because my family lives right here near the plant and I want the best for my family: the best air to breathe, the best water to drink, the most reliable power and the best community to live in, Monroe. Fermi 2 contributes to all of that. Our energy is clean. Our energy is safe and our energy is abundant. And best of all with a 20-year license renewal, I know that my family will be able to enjoy everything this plant provides the community for many years to come.

That makes me proud and even more committed every day I set foot on the Fermi 2 property to protect it and the health and safety of everyone who lives here in Monroe. I encourage the Commission to renew the license of Fermi 2 and thank you for the opportunity to provide my input and comments. Thank you.

MR. BARKLEY: Okay. Thanks, Phil. I guess I'll call Greg Brede one last time if he's still here. If not, then we'll move on.

Okay. Our next three speakers will be Michael Keegan, Rich Devitt -- or Rich McDevitt and Emily Wood. So, Michael?

UNIDENTIFIED SPEAKER: Mike's not here.

MR. BARKLEY: Mike's not here? Think he's coming back later?

UNIDENTIFIED SPEAKER: No.

MR. BARKLEY: Okay. All right. You're up, Rich.

MR. McDEVITT: Good evening. Welcome everybody, the Commission. We do appreciate your coming here tonight. I, Rich McDevitt, am the vice chairman of the Utility Workers Local 223, the Fermi Division. I represent the leadership of all the organized labors that we have at Fermi for DTE Energy.

I also am a lifelong resident of this community. I grew up there on Brest Bay. I have lived the majority of my life within the five-mile radius, if you want to call it that, and my wife and I are presently building a new house even closer to the plant.

What people talk about when they're

talking about safety of our environment, of our community relies heavily on the shoulders of the men and women that I am one of the leaders of. And it's very important to us, day in/day out, that we do critical self-assessments, challenge each other, make sure that what we do is proper and correct to protect our community.

This is our home. This is where we raise our children and some of us are very fortunate enough to be able to raise our grandchildren here. With that, I'd like to tell you a little bit more about the involvement that we have here at the plant and what we are for your community.

More than anything, we are committed to safety at Fermi. In order for me to be safe and nuclear safety, employee safety, I must be also conscious in safety of my community.

So a little anecdote of that, a few years ago, we had a minor spill of oil on site. We went out and dug the oil loose from the ground. That was in the middle of the winter. The oil that we were concerned about affecting our ground was vegetable oil. We take even the most minute possibility of interference in our environment very serious.

Now, that may sound a little bit trivial, but no, it's not. Each and every thing that we do is to protect this community, to make safe reliable energy for both this community -- the company that we work for -- because yes, we're in business to make money and it's very important to do that, but also for the vibrant communities around us. If you do not have a good power, you are not going to be able to have the businesses that we need in this area.

Along those lines, we have provided electricity for our residents and businesses in southeast Michigan -- we've provided more than 190 million megawatt hours during the past 25 years of good, safe, reliable functioning of a nuclear power plant. When we have challenges, we shut it down and fix it. We do not wait for that challenge to become an issue that will affect our environment. We are very serious about that.

When I look at my operators and that, one thing that I know, their job is to make sure that if there's something of question, before anything else, we put our community as safe. That is of the utmost importance to each and every one of us.

Nuclear energy, when you think about it,

is the only carbon-free based low source of power that we have available for us in this world. I enjoy solar energy. I enjoy wind energy, but I do not have the capability and confidence to give them -- say that they could be a baseline energy because both the sun doesn't shine at all times and the wind doesn't blow at all times. We need a good, safe, reliable energy source for that baseline.

No one in this room or in our communities goes over and flips a switch and not expecting the power to come on. Our job is to give you safe, reliable power, day in/day out. And when I'm talking to my friends and neighbors, even casual acquaintances, you ask me what I'm concerned about in radiation, this is -- this subject has been brought up many times.

Nuclear energy and radiation is something that science and engineering have been dealing with and understands through decades of work. It's something that we can control and we monitor. We make sure of it each and every day.

I work in the plant nearly every day and my total exposure in a given year is a fraction - - think about this -- a fraction of the exposure a passenger receives in a cross-country

airplane flight. We monitor and make sure safety of our community, the safety of our workers, and that is very important to us on each and every day to have a good, safe, reliable power plant.

I, too, am a shareholder. Why? Because I believe in the company that I work for. I believe in the men and women that I work with. generation of employees are coming up. I do believe that they need a good solid place and decent workable In the nuclear industry, it offers that. We are very serious about what we do. We take the best and make them better. Each and every period, every employee of a nuclear power plant goes through rigorous We have to requalify on a regular basis and training. if an employee is not able to make those standards, we seek to try to find other places in the company that they may be available. If it's not available, there's other issues that we deal with, but safety is the utmost concern of each and every one of us.

Fermi 2 is an economic rock for this community. It's important for our community. I do believe that you will be seeing a different story if this renewal doesn't go through because we're looking at what the future is for our children and our

grandchildren. This is something each and every one of us need. We are deeply involved and serious about the energy that we produce in a safe and reliable manner.

This is where I work. This is where I live with my family. I am proud to say that I, like every Fermi employee, take the serious commitment to protect our environment. It's not a slogan. It's a commitment that we live to day in/day out.

With that, I thank you.

MR. BARKLEY: Thanks, Rich. Emily?

MS. WOOD: Good evening. My name is Emily Wood and I appreciate the opportunity to share my viewpoint as an employee, a North American Young Generation in Nuclear member, a Women in Nuclear member, a customer of DTE Energy, resident and active member of the Monroe County community.

I was born and raised in Monroe, Michigan.

For me, Fermi 2 is a familiar place. My father has been working at the plant for the past 35 years. In 2008, I graduated summa cum laude.

As most of you know, it was the worst economic time to be a recent college graduate. Never in a million years would I have anticipated having such

a difficult time finding full-time employment. After countless hours of searching, I was forced to leave my hometown of Monroe and relocate for an employment opportunity.

While living and working outside of Monroe County, I met someone who is now my fianc0. When we met, he was enrolled in college and I told him about the field of nuclear power which he was unfamiliar with at the time. He thought it sounded interesting and I told him to look into it. He graduated from the Monroe County Community College's nuclear engineering technology, NUET, program, and was hired into the Fermi 2 nuclear power plant. Shortly thereafter, I was hired into Fermi, too.

With both of us being fortunate enough to have job opportunities in Monroe County, it allowed us to move back to my hometown. The Fermi 2 nuclear power plant brought me back as a resident and acquired him as a new resident to Monroe County.

We have truly been blessed economically by the employment opportunities. Last year, we built a beautiful brand new home only three miles from the Fermi 2 nuclear power plant. The plant is literally in my backyard and the backyard of all my neighbors.

When I'm talking to friends and neighbors, they are proud to live by a nuclear power plant and realize that Fermi 2 is an economic rock for Monroe County and all of southeast Michigan providing well-paying jobs for thousands of employees contributing millions of dollars in tax revenue and donating millions of dollars to nonprofit organizations that nurture our community. These are all things that I am proud of and I know my neighbors are proud, too.

Although I work in human resources, I am the president of North American Young Generation in Nuclear, also known as NAYGN. It is a group of young nuclear workers who will be the ones operating the nuclear power plants across the nation for decades to come and let me tell you, your nuclear power plants are in good hands. Our young professionals are dedicated and intelligent. We are an innovative group and we bring many new ideas to make nuclear power more efficient and reliable for the customers of southeast Michigan.

In addition to NAYGN, I am the vice president of Women in Nuclear. Each year, the members of WIN, Women in Nuclear, participate in the women's

build week for Habitat for Humanity to give back to other women in the communities in which we live and serve.

Fermi 2 employees, myself included, are active supporters of the local community raising funds for local charities and providing countless volunteer hours with local community organizations. License renewal is critical to the future success of Monroe County and the surrounding areas. That is why every day at Fermi 2, we maintain the safety of the public and the environment as our top priorities.

Through my recruiting efforts, I've seen firsthand what the closing of a nuclear facility does to the community and surrounding areas: economic devastation. Businesses are forced to close and people are forced to leave and relocate the area. I never expect or want this to happen in the area I call home. I am thankful to know that Fermi will continue to operate and support Monroe County and southeast Michigan.

My passion for clean energy starts and ends with nuclear power. I look forward to the future of Fermi 2 as a safe, clean, and reliable source for base load power generation.

Okay.

Thanks again for your time and have a wonderful evening.

MR. BARKLEY:

people in Monroe County.

Thank you, Emily.

Our next three commenters this evening will be Valerie Crow, David Schonberger, and Lynne Goodman. Valerie?

MS. CROW: Good evening. My name is Valerie Crow. I'd like to thank the Commission for coming to listen to what all of us have to say, even those of us who aren't employees, government representatives, or business owners; just the common

I'm coming also to speak on behalf of myself, but also mother earth because if we ruin the mother, we won't -- we will be homeless and soon gone the way of the dinosaurs, a failed experiment, which leads to my complaint that's been the same ever since Davis-Besse and Fermi 2 were built. What are you going to do with the waste?

We're almost through a license period and we still don't have that answer. We were all told that they'll build a place for it. Of course, we weren't in that mentality of not in my backyard. It wasn't going to stay here, but it sure looks like it's going to stay here, and until we know what we're doing, you

know, we're sitting right on Lake Erie. The chance -- if we have an accident, what happens?

I'm sure you're all knowledgeable people with credentials and quite bright, but I have to question even more then: what are you thinking? Is this the legacy you want to leave for your kids and your grandkids, truly?

I guess my final word is if you don't know what you're going to do with it, don't make more. Thank you.

MR. BARKLEY: Thanks, Valerie. David?

MR. SCHONBERGER: Hello. My name is David Schonberger. I live in Ann Arbor, Michigan. I'm speaking today as an individual member of the general public.

If this -- if this were a meeting about jobs, you lose the argument, but this meeting is actually about NEPA and there are many issues of contention and I would like to focus my five minutes on one environmental issue and one or two safety issues.

First, for Ms. Perkins, overseeing the NEPA environmental review, I'd like to discuss the impact of authorized routine radioactive releases at Fermi 2. I'd like to submit new and significant

information into the official record, a study by Joe Mongano, NPH, of the radiation and public health project who has refuted the clean power argument.

He has documented that from 1979 to 1988, before Fermi 2 began operating, the cancer death rate among Monroe County residents under age 21 was 20 percent below the US average. However, from 1989 to 2005, after Fermi 2 became fully operational, the cancer death rate for a similar population rose to 45 percent above the US average. From 20 percent below to 45 percent above the US average, so nuclear is not clean and that should be in the public record.

For Ms. Colon, pertaining to the safety review, I contend that any intellectually- honest review of the Fermi 2 license renewal application must include a hard look at risks and uncertainties pertaining to multi-unit system failures given that DTE electric company is seeking approval of the Fermi 3 COLA.

Currently, the ACRS is independently reviewing multi-unit concerns as part of the Fermi 3 COLA safety review and my point today is that an entirely separate analysis of multi-unit concerns is necessary as an integral part of the Fermi 2 LRA safety

review.

The -- the safety review must start with assumption that Fermi 2 might not remain a the standalone reactor for the remainder of its licensed operating life and indeed I believe that the Fermi 3 COLA review is proceeding quite hastily. So I submit consideration of such inherent risks uncertainties are well within the scope of today's meeting and as referenced by Mr. Kevin Kamps earlier, I would like to submit into the official record of these proceedings a new report released today by the National Academy of Sciences committee on the implications of Fukushima Daiichi, specifically for US GE Mark One and Mark Two boiling water reactors.

The analysis, recommendations, and conclusions of this NAS report inherently pertain to the scope of today's NRC meeting on Fermi 2. Today I contend that the applicant's Fermi 2 environmental report is inadequate because it fails to accurately and thoroughly provide a severe accident mitigation alternatives analysis, a SAMA analysis, that addresses the well-known and unresolved design vulnerability of the GE Mark One boiling water reactor pressure suppression containment system and severe accident

consequences.

And I would also like to submit onto the record the following comments from an NRC Region Three administrator, Mr. Chuck Casto, C-a-s-t-o, March -- March 16th, 2011, at NRC's Fukushima operation center. To quote Mr. Casto, "If we end up with a molten core and then you talk about the time for the concrete to dissociate, you know that new reg says it's a couple of inches an hour, you know, and of course that Mark One containment is the worst one of all the containments we have and it's literally -- you know, this -- this new reg tells you that in a station blackout, you're going to lose containment. There's no doubt about it," unquote.

I submit that Fukushima Daiichi lessons learned including station blackout have not been incorporated into the Fermi 2 design. Thank you.

MR. BARKLEY: Thank you, David. Lynne?

MS. GOODMAN: Hello. Good evening. My name is Lynne Goodman. I'm an employee at Fermi and a resident of Monroe relatively recently, only 26 years ago.

I've been working in the nuclear field for about 40 years. I work on the license renewal project

for Fermi 2. I asked to work on this project because I think renewing the license will provide continued use of safe, clean, nuclear generated electricity. That's base load electricity.

I'm glad my company is using renewables. We have about 10 percent renewables now in our electricity mix. I personally have a geothermal system in my house, so I really do believe in renewables and I've had an earth-sheltered house in the past, but we also need base load power.

We need power when the sun isn't shining and the wind isn't blowing and wind won't do that now. That's why I think we need to continue to use the nuclear power as the best clean source and safe source of -- of electricity that we can generate.

I do know that we have performed a thorough environmental review for our license renewal and based on that, I just think that continued operation of Fermi 2, if our license is renewed and should be, will provide the cleanest available base load that there is. Thank you.

MR. BARKLEY: Thank you, Lynne. The next three people I'd like to call up are Mark Farris, Eric Dover, and finally Jessie Pauline Collins. So, Mark?

MR. FARRIS: De ja vu everybody. My name is Mark Farris, lifelong resident of Monroe County. I wanted to comment on a few things. I didn't really polish up what I had to say. It's going to be a little herk and jerk, but I wanted to clarify some points.

In regards to waste storage in Yucca Mountain, we've got to realize that not only are we dealing with spent fuel rods, but you all have to understand the reactor cores themselves become high level radioactive waste. No -- I don't hear anybody talking about this. Nobody has an answer for this.

These reactors are not going to end up at Yucca Mountain and, you know, for an example of a decommissioning of a plant, the shipping port reactor, the first commercial reactor in America, a tiny reactor -- I think it was 60, 61 megawatts -- was hauled to the state of Washington for burial. Now you're not going to do that with a Fermi 2 reactor, 1,140 megawatts, whatever.

My understanding is the building -- when decommissioning comes -- rolls around, the reactor building will have to be flooded and the reactor core will have to be cut up with torches underwater and then we still know -- you know, nobody knows what's going

to happen.

So Yucca Mountain is not a solution either and actually if -- even if Yucca Mountain were in operation, let's say we're going to haul some fuel rods out to Nevada. I can imagine sitting in a construction zone on I-75 next to a semi carrying a - - a bunch of casts. I guarantee you're going to get a whole lot more than a dental x-ray.

And as far as jobs, the issue of jobs, my gosh, in my opinion, nuclear energy has destroyed the economy of the state of Michigan. I worked in the auto industry. I retired out of the auto industry and, you know, over and over the auto industry used high electric rates as one of the reasons to leave the state of Michigan. Michigan is the only state in the union that is losing population. The only.

You look at Detroit, at one time 1.8 million people. It's struggling to maintain 700,000. It looks like a war zone and interestingly, I understand today the Canadians came over with drinking water for the people of Detroit. This is amazing.

Nuclear energy is not a solution. If you talk about jobs, let's take a look at Germany. The employ about 250,000 people building alternative

energy and I'm going to go back to a comment earlier. General Electric are manufacturing wind turbines. They're putting them up here in the thumb area. The problem is those GE turbines are manufactured in Germany and Holland.

There's something wrong here and I -- I would really appreciate the state representatives to publicly state -- to chastise these US corporations like General Electric and Verizon and Bank of America who don't pay any taxes. There's something wrong here. There's something seriously wrong here.

Some of the waste is being removed.

They're -- they're -- they're dumping it in Iraq.

They're using it as munitions, the depleted uranium munitions. We're spreading this stuff in the Middle East and the birth defect rate is skyrocketing. I think it's criminal. It's criminal.

We have to look at some of the reactors, you know, with the global disruption of weather. We're going to see as we have in the past, some nuclear power plants have had to shut down for a lack of cooling water. River levels drop. The water warms up and some nuclear plants have had to be shut down and I think that that's an issue we're going to be seeing a whole lot more of

down the road.

just think that the issue of decommissioning -- going back to the issue of decommissioning, this is going to be a financial crisis for the United States of America when all these reactors reach their end of their operating lives. When we -- America has to start decommissioning plants the size of Fermi, we're going to see -- it's going to probably cost more to decommission a plant than it did to build the thing in the -- in the -- you know, to -- to start with. And I just -- I just don't think that everybody has really thought this all through.

The few jobs created here in Monroe County, That's fine; however, we've got the that's great. tower -- the tower factory here in Monroe. I think it employs about 140 people. They're making over 20 bucks an hour. We should be manufacturing those GE turbines at the -- maybe -- maybe at the empty Ford factory down here and put those jobs in down here and employ people doing that. solution. It has its flaws and you know, we also have to look at the -- the Germans are using solar and, you know, so that's the direction they're There -- there's advances taken off like qoinq. gangbusters there and fortunately, the sun doesn't have

to be shining for solar technology to work. Of course, it works best without clouds, but it'll work with cloud cover also.

After my comments earlier, I talked to one of the folks here and they told me that Germany has a lot of problems now with particulate matter and, you know, gaseous emissions because of shutting down nuclear plants. Well, that's true, however, we have to keep in mind that Germany made the same mistake that Detroit Edison made by not putting scrubbers in when they could have. The scrubbers out here at the coal burner, you know, that's a step in the right direction and I'm sure the Germans will be working on that also.

So anyway, that's about all I have to say.

I think nuclear energy is a mistake. It's ruined the economy. It's good for the -- the economy here in Monroe, however, it's not the solution that I'm looking for and thank you very much. Have a good night.

MR. BARKLEY: Thank you, Mark.

MR. FARRIS: Thank you.

MR. BARKLEY: Eric?

MR. DOVER: Good evening. Oh, crowd's getting light tonight. Again, I'd like to thank the NRC for giving us the opportunity to speak today. I

think it's great that we have the opportunity for all of us to voice our opinions and I appreciate all the comments we've had tonight.

I am a local boy. I'm also a member of the Fermi 2 family. I'm very proud to be a part of the Fermi 2 family. My family's been a part of this community for a very long time. In fact, my grandfather, soil conservation state of Michigan, was the first one to take soil samples when they were first thinking about building Fermi 2. Now, my father was part of the construction crews that actually built the plant and today, I'm part of the maintenance crews that maintain the plant.

What I really want to talk about is not what I do, not my family's history at the plant, but I want to talk about the environment around the plant.

My father was an avid boater. He passed that on to me. I love the Great Lakes, especially Lake Erie Basin. Unfortunately, in the past, we've had to make a sacrifice for the environment, for the economy. It's either one or the other.

At Fermi 2, I see firsthand -- I'm proud of the fact we don't have to sacrifice our environment to have a strong economic engine that we do have at Fermi

2. The part of that, why it's so important to me, is not just that I live here, my family lives here, my friends lives here. It's the fact that I enjoy spending time out on a lake that has improved over the years in part because we have an industry in the Fermi 2 nuclear power plant that leaves it -- the area better than it found it.

My maintenance crews, we go out to a jobsite and our goal is to leave the jobsite better than we found it. Our wildlife programs are leaving the area around the plant better than we found it. Our care for the waters around the plant, we're leaving it better than we found it. This is our goal. I believe in this. I enjoy the fact that we do this, but that is probably the aspect of my job that I'm most proud.

I love spending time on the lake. My wife and I are actually moving even closer to the plant. I live 13 miles away. Now, we're going to live three miles away just so we have the opportunity to enjoy the lake even more and I strongly believe that keeping the Fermi 2 power plant operational for an additional 20 years will allow us to continue to enjoy these things because the alternative industries that might come in here might not be as good of environmental stewards as

we are to our environment.

So with that, thank you for the time.

MR. BARKLEY: Thanks, Eric. Jessie? Welcome again.

MS. COLLINS: My name is Jessie Pauline Collins. I am not a lifelong resident of Monroe. I graduated high school in Belleville in 1961. Recently, I moved to Redford, but I'm still concerned about the safety of the Fermi plant because my daughter and her family still live in Sumter Township, but I'm concerned about environment, period.

I'm a member of Citizens Resistance at Fermi 2, but I'm entering my own comments tonight. I will -- by the deadline, I will file for them in a lead to intervene in a public hearing.

Everybody seemed to introduce theirself, so I want to. I have no political power besides -- but they talked about their activist and community support. I'm a member of the Eastern Star. I'm on the advisory council of the Indian Center. I make quilts to donate to environmental groups that raffle them for -- and so I, too, am active, but this is not -- and I appreciate that you all are concerned about your jobs and -- and I'm sure that you do your best for safety, but I'm sure

that the Japanese workers did their best at Fukushima, too.

You know, they had no clue something like that was going to happen. Over 3,000 years and it's still going on, but that's -- griping about Fukushima's not what this is about. Having a pep rally for Detroit Edison is not what this is about. Detroit Edison's not going anywhere. They're going to convert to sustainable energy eventually. They might as well do it in the next 11 years, but what this about tonight is the scoping process to talk about what's supposed to be in the environmental impact statement and so these are the things I want to put and have the environmental impact statement look at.

The first issue is the continued degradation of the safety rules. Just this week, the NRC approved DTE's request to relax the in-service testing program and I quote the document after they killed all those trees to print it all off and then they say, "All periods specified may be reduced at the discretion of the owner." There is no minimum period requirement.

I read the document to say they'll only have to test once every 10 years. Once every 10 years

on faulty, old, defective equipment and just today a report came in. There was a license event report that GE is making more bad solenoids and sure enough, they're at Fermi.

It seems that publicly the NRC states they want to be sure this reactor won't be dangerous to run another 31 years with parts not designed for that length of service and then privately, they allow DTE to do less testing, more cover-up.

I want to put in the scoping process another issue to -- another study on the Fermi 2 cooling water intake's fish kill. The 2009 study showed that they sucked up 3,102 live fish, 62,566,649 fish eggs and fish larvae in less than a year. Another study needs to be a part of this environmental impact statement to see how many fish - - is there any left -- I hope so -- in the ocean -- or lake.

The next issue I want in the record is why Walpole Island First Nation, which exists on unceded lands and is within the 50-mile evacuation zone, is not allowed to have input into the proceedings.

DET -- DTE also needs to document the viable alternatives to operating Fermi 2 another 31 years instead of doing it by a coal-fired plant

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somewhere else comparing it to -- I want them to actually do the -- the figures on -- in windmills, solar

panels, sustainable energy. Do that now, not - - okay.

There's also a great number of people within a 25-mile radius of the plant that are no longer allowed to use their water wells. They have to either buy their water or hook up to a public water supply. Why are their wells contaminated?

There's also the bad parts issue that I told you about, the solenoid. These are the things the environmental impact statement should look at, not just yay, DTE has provided good jobs. Yes, they're good jobs, but there will also be more jobs in sustainable energy. Thank you.

MR. BARKLEY: Okay. Thank you, Jessie. I'm distinctively interested in the issue of the well contamination that you mentioned. I hopefully can talk to some folks in the state to find -- learn more about that.

We have six other people who would like to speak, so let's call the first three and then we'll go to the last three. Gabriel Agboruche. Is that how you say it?

MR. AGBORUCHE: Agboruche

MR. BARKLEY: Agboruche. Okay. Jessica Miskena and Carol Izant. Okay. Gabriel? I ought to just call people by their first names and not butcher the last ones.

MR. AGBORUCHE: Hi everybody. My name is Gabriel Agboruche. Just for the record and I wanted to speak more today about safety. That seems to be the theme that we're talking about here today.

I'm a nuclear engineer in the area of cybersecurity at Fermi 2 and I'm speaking on behalf of the NAYGN, the North American Young Generation in Nuclear, and I guess just to start off, to give some background information about myself, I grew up in Detroit, Michigan. I've been a customer of DTE and the power that they provide all of my life. I went to Detroit Public Schools and from there, I matriculated to college at Michigan Technological University, which is in the upper peninsula of Michigan, where I studied engineering.

And as I started my course work going into study, I learned a lot about -- a lot of different ways to produce energy and one specifically was nuclear energy. Then kind of going into that class, I had a mindset of preconceived notions that I was given

concerning the nuclear industry such as individuals glowing green or people touching nuclear waste and gaining super powers or even irresponsible nuclear operators that eat doughnuts named Homer Simpson.

These were some preconceived notions that I had, but as I studied more and more on the subject of the way that the power is generated that I learned that through a technical understanding of the subject, engineers and scientists are able to safely harness nuclear energy for the benefit of us all.

I guess even giving some more background infor -- information about myself, as I went through college, I had several internships and co-ops in different industries. One was Ford Motor Company, automotive industry. Another, I worked for Compuware, a software company down -- downtown Detroit. Also worked for Caterpillar in Peoria, Illinois in the construction industry and then I went to the Department of Defense in Warren, Michigan. I worked at the Detroit Arsenal for a company -- for a division of the government called TARDAEC, Tank Army Development and Engineering Center, so And then after I graduated, I worked for government. Yazaki, which is a automotive supplier, so back to the

automotive and now I'm at Fermi 2.

And one thing that I can say is that out experiences working for these different of industries, that the nuclear field has had the greatest focus upon the safety of its workers and for the general public. I mean, every -- every single day we come into work, we -- we have a safety message, a safety brief every single morning that the supervisors do with the employees and we also go through strenuous training. I'm sure Bonnie can speak more upon that or has spoken more upon that about the training that we go, CBTs, computer-based training. We also have hands-on training, classroom training, and we have to go through this in order to have a focus of safety for the employees, our co- workers, and for the environment.

And I guess one thing that I can definitely say and a concluding thought is that through -- through working for multiple industries, I can say that I feel extremely comfortable and secure to know that I work for a company and industry that prioritizes my safety as number one and the safety of the environment, so I am in support of the renewal of the Fermi 2 contract -- its renewal. Thank you.

MR. BARKLEY: Thank you, Gabriel.

Jessica?

Good evening ladies and MS. MISKENA: I'm here to please ask that you do not gentlemen. relicense Fermi 2. I think enough is enough and the reactor has had too many close calls with disintegrating water pump, a bird mishap, you know, all of these unplanned shutdowns in which, by the way, the lights were still on.

So I could go on and on about that and I could have stood here and gave you a list of all of them and their dates, but I'm not going to do that because DTE knows, the NRC knows, I know, and a lot of people know these facts.

So what I fear is that if you relicense Fermi 2, it will melt down, as its predecessor has and as Fukushima Daiichi has. Fermi 2, as most of us know here, is the world's largest GE Mark One reactor and it melted down three years ago and all of that radioactive waste, you know, that's been dumping into the ocean has completely contaminated the Pacific Ocean and there are a lot of fish that, you know, you can't eat anymore and that's a shame because I love fish and I'm sure some of you love fish.

And when you look at Fermi 2, there's over

600 tons of radioactive waste which is high level and it is sitting outside of the containment many stories up in a very precarious vulnerable condition and we could have our very own Fukushima right here. That's more tons than what blew up at Fukushima.

So that wouldn't be a very good thing for the Great Lakes because that is, you know, arguably, the world's largest fresh source of water and, you know, I'm practicing to become a naturopath and I'm always advising people, you know, be careful what kind of seafood you're eating nowadays because, you know, the Pacific Ocean is contaminated. And I fear one day maybe we'll be saying that about the Great Lakes, you know, I wouldn't really want to eat fish from Lake Erie anyway at this point.

And so right here in this town we have all of that radioactive waste and the reality is that meltdowns have occurred. So Fermi 1 happened. There was book called "We Almost Lost Detroit" that was written about it. Three Mile Island happened. Chernobyl happened. Fukushima all happened. And meltdowns will continue to occur because if you keep relicensing them, the decrepit facilities will melt down. It's only a matter of time. I think we're

playing a game of Russian roulette here, you know, like, let's see who's going to melt down first.

I think that the foreshadowing has been well established. This isn't like one of the final environmental impact statements or a nuanced English literature book we're talking about here. We're talking about unstable radioactive isotopes, widespread contamination, places that are completely uninhabitable, an entire ocean's population affected, fish that you can't eat or have been killed off, more cases of thyroid issues, more children dying from environmentally-induced rare cases of cancer and that's been documented right here in Monroe.

This is all real. It's not a document. People shouldn't have to live even for a moment of their lives as an example of Fermi 2's destructive power or any nuclear reactor's destructive power for that matter.

Speaking of jobs, yeah, a good job is a truly clean job and nuclear power is not clean. There are other options to take into account. First of all, energy efficiency. There's solar, there's wind, there's hydroelectric, there's geothermal. Somebody here who works for Fermi 2 has geothermal and more and

more people will be starting to come off of the grid as well and then what are you going to do about that?

So why are we discussing the relicensing of Fermi 2? It can't be for money; right? That's not the reason.

So because it's a safe way of creating energy? Nope. You can never guarantee the safety of a nuclear reactor.

Because it's a cheap way of creating energy? No. Guess again.

Because it will never kill or injure a living being? No. And I'm an Iraqi by blood and I take it personally that we are using radioactive waste in military weapons and causing all of these birth defects. If you've never seen any of them, I would really advise you to go and look them up, please.

Nuclear power is not clean. The uranium mining is not clean and it is not carbon free. High level radioactive waste is not clean. Allowable, low-level, radioactive releases into the environment, into the water, into the air, and people breathing it downwind is not clean.

So I would ask that you please find it within yourselves to do the right thing and honor this

mission statement of protecting people and the environment and do not relicense Fermi 2. Thank you.

MR. BARKLEY: Okay. Thank you, Jessica. Carol? While Carol's making her way down here, the final three people who have to come speak are Manfred Klein, Hedwig Kaufman, and Emilio Ramos.

MS. IZANT: Good evening. My name is Carol Izant. I co-chair the Alliance to Halt Fermi 3. I live in the 50-mile radiation zone from Fermi 2. I'm -- my colleagues have been able to point out time and again that nuclear power is not a clean source of electricity, know it's dirty, dangerous, exorbitantly expensive. It has a significant carbon footprint and leaves its legacy of deadly radia -- radioactive material for tens of thousands of years.

The continued operation and relicensing of aging nuclear reactors leaves us at risk for catastrophic accidents.

Nuclear power is not sustainable because it's not economically viable without subsidies. The -- the irradiated, quote, "spent fuel" can continues to collect in leaking cooling pools near major water bodies and along fault lines. Phasing our nuclear power makes sense when we replace it with 100

percent energy efficiency conservation, clean, renewable energy.

It's time to retire these old nuke plants. In fact, the former NRC Chair, Gregory Jaczko, a year ago, March of 2013, called for a complete phase out of the existing nukes and because of safety concerns. This is one of your own who has come out now in public and is calling for a complete phase out.

Now, I've got to ask myself if Fermi 2's license to operate doesn't expire until 2025, why are we here today, 11 years ahead of the game, if this is such a viable source of, you know, producing electricity and a viable business, why -- why are we here 11 years before we need to be? There's something fishy going on. There's something that the, you know, Board of Directors of DTE, people that operate seriously behind closed doors know that we don't know and all of you that work, you know, for the company, you don't know.

You know, I guess -- I would guess because it's all about the money, that it's all about the money and there's a good likelihood that because of the amount of money that it's going to take to decommission Fermi 2, you know, maybe they haven't -- maybe they haven't

earmarked and don't have the 400 million to a billion dollars earmarked for decommissioning.

You know, it could be that they are rethinking the proposed Fermi 3 and so, you know, they're going to try to get in now, you know, and they're also trying to get in because they know that the ruling that was handed down two years ago regarding waste confidence is very problematic for an industry that in 70 years hasn't been able to figure out what to do with even a cupful of radioactive waste.

Yeah, I have a lot of questions. We will be, you know, submitting our formal comments before the August 18th to petition for a hearing and we'll be able to, you know, spell these out point by point.

But I -- I'm not insensitive to, you know, the -- the economic impact of a closure of Fermi 2. I -- I understand the economic impact that it would have on this community, but I also know that, you know, as we speak, more and more people around the world and in the United States are figuring out -- the cost of solar panels is coming down, wind, the whole -- the cost of the renewables is coming in cheaper and cheaper and more and more people are going to start to move off of the grid. It is -- we are going to move away from the, you

know, a centralized grid and move into more of a distributed grid of energy.

And, you know, more and more people, the -- the -- you know, the low-hanging fruit of energy efficiency, I'm -- my husband and I had a very thorough, you know, attic insulation done a couple years ago and duct ceiling and air ceiling and our energy bills, our heating bills, now are 30 percent less than -- than what they were. And this was even after this cold winter that we had this last year.

And -- and also, as kind of a side perk that I never even considered, it -- it keeps the house so much cooler in the summer so that -- and I don't have A/C, but I haven't hardly -- I mean, I haven't had to run my ceiling fans. I mean, it's been -- now granted, we've had a pretty mild summer so far, but nevertheless, you know, and more and more this is what people are going you know, nuclear power is such heavily-subsidized industry. If only, you know, we could have the same opportunity to subsidize some of these other ways of generating electricity, I mean, you would see a far different, you know, picture.

And again, I -- I know, you know, the younger generation is coming up. They are definitely

connecting the dots on all of this and the Passive House Movement which is a net zero, you know, way to build a house so that it, you know, it doesn't consume any energy. If anything, it -- it produces electricity and that's -- that's going to start to happen more and more.

D -- DTE knows all of this information. I mean, they -- they are well ahead of, you know, the whole game here and again, that's why I would ask -- I mean, all of us, we need to ask ourselves why are we here 11 years prior to, you know, the -- the expiration of this license?

You know, you know and -- you know, I mean,

I -- I don't -- I don't mean to be cynical, but, you

know, it's like -- you know, I was here earlier today

and, you know, we listened to the 34 people, you know,

present and this -- this evening another 20 people have

presented and, of course, the majority are all Fermi

2 employees, representatives of, you know, nonprofit

organizations that I know are funded heavily by DTE.

So, you know, I mean, it's a -- you know, this -- this has to be more than just a pep rally, you know, for -- for Fermi and I would -- I'd like to believe that the NRC is going to take a serious, you know, look at some of the actual serious concerns that we have

about the ongoing, you know, operation of Fermi 2.

You -- you again, it's just -- it's wild, you know, when you think about the fact that there's 600-plus tons sitting up in those pools and not a -- not a single ounce of it has been removed and placed into some kind of hardened on-site storage. I mean, there's no talk of that. It's -- you know, and to continue to just continue to produce more and stockpile it on site, this is -- this is not logical; and I thank you.

MR. BARKLEY: Okay. Thank you, Carol.
Manfred?

MR. KLEIN: Good evening. I -- I think I'm addressing a loaded situation here, but you will forgive my somewhat informal attire. I wasn't expecting to speak, but all the same, I'm one of the people in the target zone. I'm -- as the crow flies, I'm probably about two-and-a-half miles away from Fermi.

And I have not so much statements as questions that are unanswered and let me just go down the list. Jobs at Fermi, well and good. The only problem is that those jobs can evaporate in an instant and become meaningless if something goes wrong. I will become meaningless. My -- my family will become

meaningless and so will my grandchildren. If anybody has any visions of evacuation in the case of a disaster, please, I have a bridge I want to sell you. Let me go on.

The other thing is the electricity that comes from Fermi mostly does not benefit the residents of this area. It goes elsewhere. So in short, we're taking the risk for somebody else's electricity elsewhere.

Number three, somebody spoke about loving the lake, as I do, even though I'm not a long- term resident of Monroe. We've only been here about 16 years. The fact of the matter is that the -- the temperature -- the cooling water that comes out of Fermi is above the water temperature of the lake and it contributes to the algal blooms. If anybody would like to seen one or would've liked to have seen one last year, I could invite them down to my place and you could smell it before you got there.

Number four, Germany is getting away from nuclear power and plans to have it completely phased out by I believe -- I believe 2050 at which time I'll probably be pushing up the daisies, but all the same, the Germans have made some notable mistakes in their

history, but being stupid is not one of them. So what is it that they know that we don't know or what is it they're looking at that we're not looking at? They're, after all, a highly- industrialized nation. They depend on their exports, so they're -- they're not doing this willy-nilly.

Number five, the Fukushima disaster -- excuse me -- was attributable as much to the failure of their supplemental -- supplemental generators as it was to the tidal wave that came over the seawall and which means in our terms, if something were to go wrong with the supplemental -- in the case of an emergency at Fermi, without electricity, the storage pool will begin -- will begin to disintegrate in about four hours and twelve minutes. This is from DTE documentation. All right.

Number six, in 2010, the tornado that we had damaged the power plant, damaged Fermi 2 to the point where it had to be shut down. Keep that one in mind. We're not -- we have not seen the last tornado or any other natural event for that matter.

Number seven, there's a huge nuclear complex, which I'm sure most of you are aware, up near Goderich, Ontario, on Lake Huron. That project is

proposing to bury its nuclear waste within I think about a five-mile radius of Lake Huron. The US is strenuously objecting. The state of Michigan is objecting. However, the nuclear people operating that plant assure us that this is all completely safe. Does that sound familiar?

In short, if something goes wrong there, the entire lower lakes are contaminated. So we're resisting that, but we're proposing to relicense Fermi 2 and possibly build Fermi 3. Not logical. Okay.

Number eight, Davis-Besse. A few years ago, the reactor cap of Davis-Besse came within a few inches of being eaten through by an acid that had not been detected. Now you can say, "Okay, that's Davis-Besse. We're better than that." I'm not going to argue that. We may be better. The fact of the matter is there are always possibilities for errors or unforeseen circumstances and the consequences are unimaginable.

And finally -- and well know this or if we don't, we should. If anything can go wrong, it will. So something going wrong at Fermi 2 or perhaps its successor is not a question of ifs, but when. Thank you.

MR. BARKLEY: Thank you, Manfred. Hedwig? Welcome Hedwig.

MS. KAUFMAN: I didn't -- wasn't planning on saying anything, but I've got a lot of messy notes here. Well, I live next to Fermi as well. I lived there before there was a Fermi plant. I lived there before there was a Fermi 1, a Fermi 2, and -- well, I hope there won't be a Fermi 3, but anyway I live there.

I've lived there all my life and I'm grateful for people like Rich and for all the employees who say that they're committed to safety. I believe that they are. I believe every word they say. I know they work hard. I know Rich. Maybe he doesn't know this about me, but now he does. And they are committed to safety not only for the public's good, but for their own. They wouldn't go home at night if they weren't committed to safety.

I live in a part of Frenchtown where we have septic tanks. Now, what does that have to do with Fermi? Not a whole lot, but flushing your toilet's a pretty important part of your life. Being able to flush it and have things go where they're supposed to go is pretty important and I think we're flushing the toilet of nuclear waste and we don't have a seepage bed

for it. We don't have a sewage treatment plant and we don't have a seepage bed.

I don't think we should play political games with nuclear waste as I heard earlier tonight.

I don't think we need to blame one party or another.

I don't think that's the answer. The government unwisely assumed the job of disposing of nuclear waste from nuclear power plants a long time ago.

The -- I -- I do feel that if the nuclear power plants had to take care of their own nuclear waste, we wouldn't be here. I've also heard talk about reprocessing nuclear waste. That's not a very good answer. Look it up on the internet. You can find out a lot more about it. Bomb grade plutonium is one of the byproducts of the reprocessing of nuclear waste as is a lot of pollution of water and the bomb grade plutonium is piling up and who knows who'll get a hold of it if things go bad.

The -- oh, there -- there was talk about Yucca Mountain. There's more nuclear waste in the United States that can fill Yucca Mountain. So Yucca Mountain, even if it were filled up, wouldn't be the answer to the nuclear waste that are sitting right in the United States as we talk.

Let's see here. Oh, Manny already mentioned that the Michigan State Legislature opposes the disposal site in Ontario while they approve of a place like Fermi 2 and it's a little bit inconsistent as far as I'm concerned. I'm wondering what other industry in our country has the opportunity to have its waste products taken care of by the government? That's us, folks.

Even DTE coal plant here in Monroe is responsible for their fly ash and their emissions and they've built that responsibility into their rate structure. We're paying for it. It's being -- it's being controlled. It's meeting standards that have been set by the EPA, so I say that the cost of disposal of nuclear -- if -- if the costs of the disposal of nuclear waste were part of nuclear power's operating expenses, I doubt if we would be here.

And I hope that the environmental impact statement considers even though it isn't really legally a part of the whole picture, the fact that we do have the problem of nuclear waste. It's going to affect the environment somehow somewhere, even if -- if it isn't in the official statements. Thank you.

MR. BARKLEY: Thank you. Emilio, you're

the last person up. If anybody else wants to speak, please see me. Otherwise, we'll wrap up with Emilio.

MR. RAMOS: Good evening. Like the previous few, I wasn't planning on speaking, but after listening to other people talk, a few things came to mind that I wish to talk about.

One is, if I understand the point of this meeting correctly, is to question the safety and environmental going forward with extending Fermi 2's license. And to the NRC and to DTE, I would ask that -- them to remember that knowledge is safety. How many -- you, the NRC, how many statements have you heard from other people that you know is not to be true? If we would be educating the community around us, we wouldn't be having these problems. They would better understand us. We would have less problems.

I know the NRC's plans for everything. We have to plan if every single one of our systems fail. Why are we not informing the 10-mile radius of everyone in our community that yes, we have blackout procedures? We have blackout procedures before Fukushima. We even have more blackout procedures now. We have an entire flex program where we can call up additional resources to either drive or fly additional supplies to our plant.

How come the people in the community do not know what we're doing to protect them?

I've lived in -- I've lived in Monroe most of my life. My father is former nuke Navy and was a -- apparently a nuclear ops trainer at Fermi. In my entire life, I've been dealing with people when I tell them where my dad works, they ask all the same stupid things: does he grow -- glow green? Isn't it harmful? And I've had to explain to these people that no, that just isn't how nuclear power works.

I mean, just listening to other people -- the bird mishap. That is a safety system. We lost -- a bird actually somehow flew into one of our transformers off-site and was able to shut it down. And as a safety precaution, the entire plant of the emergency diesels start up to make up the power and we shut down. It's a safety system. How come the public doesn't know that we are protecting them? All these things they think that we're not doing, we are doing.

I plan -- I'm in the NUET program here and I plan to eventually go into Fermi or another power facility, but we have to inform the people around us. Why doesn't the community know the difference between Fermi 2 and Fukushima Daiichi? How do they not know

the facts of Fukushima Daiichi? Why are they just going off of the initial news reports? I just read the INPO report last week. There were 70 people that stayed behind. The highest rates was with two operators: 60 REM and I believe 67 REM. When I tell someone in the community that, they should know what I'm talking about.

They don't have -- when I tell people that currently, they're surprised of how high it is, but they have no idea how that actually affects them. They do not understand the difference between radiation and contamination areas. Yes, they're related, but they're slightly different. A contamination area is just where radiation where we don't want it to be. It may not -- not necessarily be high radiation.

And -- excuse me -- another difference -- I'm addressing the public now -- between Fukushima Daiichi is that they kept their emergency generators below grade. So when the tsunami hit, their generators were flooded out. That was a safety flaw they didn't consider. Our diesels are built in a separate seismic category one bunker. There's no other word for it. It is a bunker. Your -- I'm pretty sure that thing can take missile heads and it's designed

to be that way for your safety.

With the people in Chernobyl, when Chernobyl happened, we started reviewing it, you guys, the NRC, INPO, WANO, all those organizations started observing it, get as much information as we can and we create new policies, but we didn't really inform the community that we were doing that. Even now, most people don't realize that a lot of people moved back to Chernobyl.

There's people living within the Chernobyl evacuation zone because it's low enough levels. Yes, there are still parts that are high radiation, but a lot of it you can still live one. They garden there. They make all their own food in the gardens. They have their own animals there in the contamination zone. No increase in cancer.

Now, that's not like me just saying there's That's INPO, NRC, the World no increase in cancer. Health Organization has reviewed this. Fifty people died because Fukushima of the I'm not -- sorry -- fifty people died because of the Chernobyl accident. That's it. The thousands of people that they talk about dying are the people that were evacuated safely.

It just -- being a NUET student and having to go through all of this NRC, INPO, all this regulation, it doesn't make sense to me that you're not relating any of this to the community. I understand Fermi 2 used to have a information center. Actually, when Fermi first opened, you could actually do -- take tours of the actual plant. You could go, just drive up into the information center. Since September 11, of course, since it was on-site, they closed that down.

Shouldn't we still be informing the community? Shouldn't we still be reaching out teaching them about radiation? Concerning they're ready -- even if there wasn't a nuclear power plant, it would still be getting 700 millirem of radiation. That's -- that's perfectly acceptable. You have people think that's ridiculous. They panic.

So the point of this meeting was to review the safety of it and I would encourage you guys to look more on educating the community because if something were to happen, people in the community need to know what to do. Thank you.

MR. BARKLEY: Thank you, Emilio. Emilio, you did make a number of good points regarding education of the public. We do have a lot of information on our

we have a regulatory mandate versus a promotional mandate, so the ability of us to actually do educational efforts is somewhat limited as well as limited by whatever funds we would need to do something at that level, but I would encourage you to look at our website for a range of information that's available out there on -- on many of these topics.

So anyway, I'm very pleased that we had a good turnout tonight. We did have 23 speakers tonight. We had 34 this afternoon, so 57 people took time out of their day to sit through, think through their remarks, write them up carefully. A number of you are going to submit written comments separately. I will look forward to them. We'll evaluate the remarks that have been provided and the staff will address each of those comments in the course of doing their review.

Unless there's somebody else that wants to make a last minute comment, then what I'm going to do is turn over the microphone to Brian Wittick for him to make a couple closing remarks. Brian?

MR. WITTICK: Good evening. My name is Brian Wittick. I'm the branch chief for the environmental projects breach in the division of

license renewal.

I'd like to thank Rich for facilitating the meeting this evening and for Leslie and Daneira for their informative presentations. Mostly though, I'd like to -- to thank everyone here in the -- the audience that took time out of their -- their busy schedules to come out and -- and provide your -- your valuable comments and insights for the consideration and scoping for the -- the Fermi 2 license renewal application.

We -- we take all the -- the comments seriously. Where we go from here with the -- the comments is once we get the transcripts, we take those, we take the -- the written submissions and Leslie will break them down and work with the -- the technical staff and headquarters and wherever else, different regions, if necessary, to -- to disposition and figure out how the -- the comments relate to the license renewal application and -- and disposition them.

They'll be dispositioned in -- in -- in a scoping summary report which will come out probably early next year and as well as show up in the -- the draft environmental impact statement.

Earlier in the discussion, it was mentioned with regards to -- to waste confidence.

Leslie mentioned in her presentation that in 2012 the waste confidence rule was vacated. Staff has been working on that for the last couple years and this past Monday, the new draft final waste confidence rule was provided to the Commission for their consideration, along with the -- the generic environmental impact statement. The Commission made that public this afternoon, so anyone that would like to review that, you can find that on NRC's website. Just click to the -- the -- the waste confidence links.

The reminder -- upcoming dates. The 18th of August is the -- the closing date to submit petitions for -- for hearings with regards to the license renewal application and the 29th of August is the closing date. If you have any particular comments going forward, questions, please feel free to contact the -- the project managers either Leslie or Daneira at the contact information provided here.

And following this meeting, if anybody has any immediate follow-up questions or comments, please feel free to contact any of the -- the NRC staff. We'll be around for a little bit as we -- we wrap things up.

With that, again, I thank you for your participation this evening and the meeting is

adjourned. Thank you.

(WHEREUPON, the Public Meeting was adjourned at 9:27 p.m.)

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