# Official Transcript of Proceedings

## NUCLEAR REGULATORY COMMISSION

Title: Limerick Generating Station

License Renewal EIS

Public Meeting: Afternoon Session

Docket Number: (n/a)

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1	UNITED STATES OF AMERICA
2	NUCLEAR REGULATORY COMMISSION
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4	PUBLIC MEETING TO DISCUSS THE DRAFT SUPPLEMENTAL
5	ENVIRONMENT IMPACT STATEMENT FOR THE LICENSE RENEWAL
6	OF LIMERICK GENERATING STATION
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8	AFTERNOON SESSION
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10	THURSDAY
11	MAY 23, 2013
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15	The Meeting convened in the Sunnybrook
16	Ballroom, 50 Sunnybrook Road, Pottstown, Pennsylvania,
17	at 2:00 p.m., Richard Barkley, Facilitator, presiding.
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20	PRESENT
21	RICHARD BARKLEY, Facilitator
22	LESLIE PERKINS
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	2
1	TABLE OF CONTENTS
2	WELCOME AND PURPOSE OF MEETING3
3	OVERVIEW OF LICENSE RENEWAL PROCESS4
4	RESULTS OF THE ENVIRONMENTAL REVIEW6
5	HOW COMMENTS MAY BE SUBMITTED16
6	PUBLIC COMMENTS16
7	CLOSING/AVAILABILITY OF TRANSCRIPTS75
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
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#### P-R-O-C-E-E-D-I-N-G-S

2:10 P.M.

FACILITATOR BARKLEY: Good afternoon.

Can everyone hear me okay? My name is Richard Barkley.

I'm the meeting facilitator for this meeting. This is related to the Limerick license renewal and

Environmental Impact Statement.

I actually had a similar meeting when the EIS was initially being prepared back about 20 or 21 months ago. So many of you may know me.

What I'd like to do is just go through a couple of slides here to talk about how the meeting will be conducted. We'll have a short presentation by the staff. Then we'll move into questions. If you want to ask a question, I would have asked that you filled in a yellow card that was up front. There are 13 people at this point in time signed up. If anybody else wants to sign up, please let me know and we'll work through that. I would hope you would limit your remarks to roughly five minutes. I have some flexibility, but if you divide the time up among 13 speakers that's roughly what we have.

And again, I think I've covered most of these. When I call a speaker, I'll actually mention the next two speakers in line so that you have a chance

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to prepare and promptly get up here to the microphone to speak from here. If you have some problem that you have a challenge getting to this location, I can bring the microphone to you. I'll gladly accommodate that.

I would ask that you silence your cell phones at this time so we don't get calls during the meeting. You will see me juggling a cell phone personally during this meeting because I use it as a timer as we go through, but I'm not accepting calls along the way.

Let's go to the next slide.

We would ask that when you're up here you speak very clearly into the microphone. It is being transcribed, so it's important that we speak with clarity and please, when you first come up here, mention your name and if you have an organizational affiliation that would be great, so that he can have that in his notes.

I would ask that you do not interrupt the speakers who are at the microphone. When I did this meeting 20 or 21 months ago, the audience was excellent. I hope we have the same exchange as we did last time.

If you have any problems or concerns with the way this meeting is being conducted, there's an issue with time, there's an issue with the order in

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which I call people because you need to go earlier, please come see me. I'll be sitting over here to the side.

Yes.

MR. PORTZLINE: You had mentioned if we have any questions. So I'm asking if we ask a question can we expect an answer from either the company or possibly the Pennsylvania Department of Environment and Protection.

that, there are company representatives present here and I will not put them on the spot unless they agree to address an issue. I would like to have the questions at the end of the comments, so if you ask a question, I would like you to finish your remarks and your comments, then we'll address that question along the way.

If someone from the State of Pennsylvania can address a particular question related to some aspect that they regulate versus what we do, I won't put them on the spot, but if they're willing to volunteer, that's fine. That's typically the way it's been done at other meetings. Thank you.

Again, if there's no other questions, one thing we do have a camera crew here. This is from a

Japanese TV station and they are actually doing a documentary related to nuclear power, so you will be on film along the way. This is a public meeting and they have discussed this in advance with us. If you have some problem with being on camera, please let me know as well. Thank you.

MS. PERKINS: Thank you, Richard, and thank you all for taking the time to come to this meeting. My name is Leslie Perkins and I am the Environmental Project Manager for the Environmental Review of Limerick Generating Station.

I hope the information we provide at this presentation will help you to understand what we've done so far and the role you can play in helping us make sure that our Final Environmental Impact Statement is accurate and complete. I would like to emphasize that the Environmental Review is not yet complete.

Next slide.

I'd like to start off briefly by going over the agenda for today's presentation. I will discuss the NRC's regulatory role, the preliminary findings of our Environmental Review which addresses the impacts associated with extending the operating licenses of the Limerick Generating Station for an additional 20 years.

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I will present the current schedule for the remainder of the Environmental Review and how you can submit comments outside this meeting. And I will discuss how the waste confidence rulemaking and EIS impact the Environmental Review for Limerick.

At the end of the presentation, there will be time for questions and answers on the Environmental Review process. And most importantly, time for you to present your comments on the Draft Supplemental Environmental Impact Statement.

Next slide.

NRC was established to regulate civilian use of nuclear materials including facilities producing electric power. NRC conducts license renewal reviews for plants whose owners wish to operate beyond their initial license period. NRC license renewal reviews address safety issues related to managing the effects of aging and environmental issues related to an additional 20 years of operation. In our aspects of the NRC regulations our mission is three-fold: to ensure adequate protection of public health and safety, to promote common defense and security, and to protect the environment.

Next slide.

We're here today to discuss the potential

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site-specific impact of license renewal for Limerick Generating Station. The Generic Environmental Impact Statement, also known as the GEIS, examines the possible environmental impacts that could occur as a result of renewing licenses of individual nuclear power plants under 10 CFR Part 54.

establishes the bounds and significance of these potential impacts. The analyses in the GEIS encompass all operating lightwater power reactors. For each type of environmental impact, the GEIS establishes generic findings covering as many plants as possible. For some environmental issues, the GEIS found that an generic evaluation was not sufficient and that plant-specific analysis was required.

The site-specific findings for Limerick are contained in the Draft Supplemental Environmental Impact Statement, also known as the Draft SEIS, which was published April 30th of this year. The document contains analyses of all applicable site-specific issues as well as a review of issues covered by the GEIS to determine whether the conclusions in the GEIS are valid for Limerick. In this process, NRC staff also reviews the environmental impacts of power generation alternatives to license renewal to

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determine whether the impacts expected from license renewal are unreasonable.

For each environmental issue identified an impact level is assigned. The NRC standards of significance for impact was established using the White House Council of Environmental Quality terminology for significance. The NRC established three levels of significance for potential impact: small, moderate, and large, as defined on the slide.

Next slide, please.

This slide lists the site-specific issues NRC reviewed for the continued operation of Limerick Generating Station during the proposed license renewal term. Overall, the direct and indirect impacts for license renewal on all these issues were found to be small which means that the effects are not detectable or are so minor that they neither destabilize nor noticeably alter any important attribute of the resource.

Next slide.

This slides provides a summary of our findings with respect to cumulative impact associated with Limerick. Cumulative impacts include the effects on the environment from other past, present, or reasonably foreseeable future human actions. These

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impacts not only include the operation of Limerick, but also the impacts of activities unrelated to Limerick such as future urbanization, other energy-producing facilities in the area, and climate change. Past actions are those related to the resources at the time of the power plant licensing and construction.

Present actions are those related to the resources at the time of the current operation of the power plant.

And future actions are considered to be those that are reasonably foreseeable through the end of the plant operation, including the period of extended operation.

Therefore, the analysis considers

potential impacts of the end of the current license term

as well as the 20-year renewal license term. While the

level of impact due to direct and indirect impacts of

Limerick on aquatic and terrestrial resources were

found to be small, the cumulative impact, combined with

other resources, other sources such as increased

urbanization and climate change will be small to

moderate for aquatic resources and moderate for

terrestrial resources. In other areas

considered, the staff preliminarily concluded the

cumulative impacts are small.

Next slide.

The National Environmental Policy Act,

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also known as NEPA, mandates that each Environmental Impact Statement consider alternatives to any proposed major federal action. A major step in determining whether license renewal is reasonable or not, is comparing the likely impact of continued operation of the nuclear power plant with the likely impact of alternative means of power generation. Alternatives must provide an option that allows for power generation capability beyond the term of the current nuclear plant operating license to meet future systems' generation needs.

In the Draft Supplement, NRC staff initially considered 18 different alternatives.

After this initial consideration, the staff then showed the most likely and analyzed these in depth.

Finally, NRC considered what would happen if no action is taken. And Limerick shuts down at the end of its current license without a specific replacement alternative. This alternative will not provide power generation capacity nor would it meet the needs currently met by Limerick.

The NRC's preliminary conclusion is that Environmental Impact Statement of license renewal for Limerick would be smaller in loads, seasonal, and commercially viable alternatives. The no action

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alternative will have small environmental impact in most areas with the exception of the social and economic impacts which would be small to moderate. Continued operation would have a small environmental impact in all areas. The staff concluded that continual operation of the existing Limerick is the environmentally preferred alternative.

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environmental impact for license renewal, as well as potential environmental impacts on alternatives to license renewal, the NRC's preliminary recommendation in the Draft SEIS is that the adverse environmental impact to license renewal for Limerick are not great enough to deny the option of license renewal for energy planning decision makers.

Next slide.

PARTICIPANT: Excuse me, could you put that back up again. It was too fast. I couldn't read it. Could you put it back up? It was much too fast to read.

(Pause.)

MS. PERKINS: For the term beyond the 20-year period of extended operations, the NRC addresses the management of spent nuclear fuel and the

Waste Confidence Decision and Rule. Previous license renewal Supplemental EISs noted that the environmental impact of temporary storage of nuclear fuel for the period following the reactor operating license term were addressed by this rule. The Draft Supplemental EIS does not discuss potential environmental impact of storing spent fuel for an extended period after the plant shuts down. That issue will be addressed in the NRC's Waste Confidence Environmental Impact Statement and Rule. The Draft Rule and the EIS is expected to be issued in fall of 2013 and the public will have an opportunity to provide comment. The final rule and EIS is expected to be issued in September of 2014.

Additional information on the Waste Confidence Rulemaking and EIS can be found at the NRC public website at the link listed on the slide.

In August 2012, the Commission decided that the Agency would not issue licenses dependent upon the Waste Confidence Decision until the Waste Confidence Rule is completed. However, the Commission directed the staff to proceed with licensing reviews and proceedings. If the results of the Waste Confidence EIS and Rule identifies information that impacts the analysis and the final SEIS for Limerick, the NRC staff

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will perform any appropriate review for those issues and may supplement the Final SEIS before the NRC makes a final licensing decision as to whether or not to renew Limerick's licenses. If no changes are required, the NRC staff would base its decision on the Final SEIS for Limerick, the Waste Confidence EIS and Rule, as well as the Safety Evaluation Report.

Next slide.

Environmental Review is not yet complete. Your comments today and all the written comments we receive by the end of the comment period on June 27th will be considered by the NRC staff as we develop the Final SEIS, which is currently planned to be issued in November 2013. Those comments that are within the scope of the Environmental Review and provide new and significant information can help change the staff's findings. The Final SEIS will contain the staff's final recommendation on the acceptability of license renewal based on work we've already done and any new and significant information we receive in the form of comments during the comment period.

Next slide.

As many of you know, I am the primary contact for the Environmental Review. Rick Plasse is

the primary contact for the Safety Review. Copies of the Draft SEIS are available on CD and hard copy on the table in the back of the room. In addition, the Pottstown Regional Public Library and the Royersford Free Public Library had agreed to make hard copies available for review. You can also find electronic copies of Draft SEIS along with other information about the Limerick license renewal review online.

Next slide.

The NRC staff will address written comment in the same way we address spoken comments received today. You can submit written comments either online or via conventional mail.

To submit written comments online visit the website regulations.gov and search for the docket ID listed on the slide. If you have any written comments today, you may give them to any NRC staff. This concludes our presentation and I'll turn the meeting back over to Richard.

FACILITATOR BARKLEY: Thank you, Leslie.

Were there any specific questions regarding these
slides? And if not, I'll move into the comment period.

Yes, sir?

MR. WATTERS: When you say move into the comment period, I filled out a yellow card. Is that

where you're going?

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Typically, it's the normal protocol to call any elected or appointed public officials first. We actually have just one person that I know of, Mariea Geho of East Coventry Township, so I'll ask you to come up first. Is there any other elected or appointed officials that would like to speak?

Mariea, what I will do is have Dr. Cuthbert come up next, followed by Charlie Shank.

MS. GEHO: Thank you. Can everybody hear Do I have to hold this? I quess I have to hold me? Can everybody hear me? Okay. Hi, I'm Mariea Geho. I'm a supervisor for East Coventry Township living across the river from Montgomery County. I just have a little blurb to say. The rehabilitation of Frick's Locks Village as a historical site and destination within the township is very exciting. rehabilitation work performed by Exelon has given the village renewed life and has brought our history into The community has benefitted as a result of Exelon's commitment to work with the township on preserving Frick's Locks Village. And they did a wonderful job. We had an opening there last week and it was really great. Thank you.

FACILITATOR BARKLEY: Thank you, Mariea.

Dr. Cuthbert.

DR. CUTHBERT: Thank you, Rich. Members of ACE have reviewed the 585-page NRC Environmental Impact Statement for the Limerick Nuclear Plant. You should be ashamed of this flawed and biased report. The document is incomplete, unreliable, and invalid. Your EIS is riddled with faulty assumptions, unsupported conclusions, glaring omissions, exemptions, delays and deferrals of vitally important and necessary actions and exclusions of numerous environmental factors that will have adverse implications for generations to come.

NRC's callous disregard for public health and safety is shocking. You are guilty of nothing less than regulatory malpractice. This public meeting/hearing has been sprung like a trap on our community. ACE objects to NRC proceeding on this EIS at this time with important questions and issues not yet addressed or answered. There is no need when Limerick's current licenses do not expire until 2024 and 2029.

NRC has failed to acknowledge or respond in writing to substantial written testimony submitted by ACE in October 2011 on 14 major categories.

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Attached to this testimony today are a number of photographs representing display boards along the wall beside part of the audience this afternoon. They are part of our testimony in addition to the written and oral testimony that we're presenting today.

NRC has also failed to adequately respond to a number of additional questions submitted by ACE at your March 2013 annual Limerick performance review meeting for 2012 operations. A number of serious issues are going to be addressed in testimony presented by a number of members of the community this afternoon. Although we did receive a response with NRC, most of the responses were vague, nonspecific and insufficient.

The NRC, in our judgment, is recklessly placing the cart before the horse in this Environmental Impact Statement matter. NRC must stop and delay all activities and actions related to Limerick Nuclear Plant's relicensing including finalizing this EIS until after several issues are addressed or take place. Number one, Limerick's emergency evacuation plan has been revised to include three specific changes: immediate notification of radiation releases through independent monitoring and report; expanding the evacuation zone to 50 miles; and expanding the

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ingestion pathway zone to 100 miles.

Number two, the National Resource Defense
Council legal action appeals on Limerick's severe
accident mitigation analysis requirements have been
resolved. That's an open, legal issue.

Number three, Exelon has completed all necessary inspections, maintenance, and corrective actions at Limerick Nuclear Plant that have been deferred by NRC until some time between 2017 and within six months of the expiration of the current license in 2024.

Number four, NRC's court-ordered high level radioactive waste study has been completed, 2014 or later, and all waste storage issues and rules are in effect, including for Limerick.

Number five. Earthquake mitigation plans have been completed, 2017. And all necessary changes have been made at Limerick.

Number six. NRC required vents have been install to prevent radioactive hydrogen gas buildup and explosions. 2017.

Number seven. Exelon installs filters for those vents to minimize radiation releases during meltdowns. NRC's own staff has concluded the consequences of not installing filters could be so bad

that filters should be required regardless of expense.

Number eight. Exelon installs filtration for Limerick's water intake to reduce harmful air pollution from the cooling towers.

Number nine. Exelon installs filtration for Limerick's radioactive and toxic waste water discharge to reduce contamination of the primary drinking water source for almost two million Pennsylvanians.

And Number ten. Exelon installs filtration for toxic minewater pumped into a drinking water source in order to operate Limerick Nuclear Plant.

This premature and incomplete EIS is a pathetic example of a lack of courage and integrity at the NRC. You have abandoned and violated your own mission to protect public health and safety. You have betrayed this entire region once again. NRC's failure to protect our environment and residents is irrefutable evidence that you no longer have a moral compass. Your rush to rubber stamp Limerick's EIS and license renewals is a cowardly betrayal of every man, woman, and child in this community, as well as future generations that will unquestionably be harmed by 20 additional years of operation at Limerick.

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21 It is our conclusion and recommendation that the United States Senate should investigate the NRC for willful blindness and regulatory malpractice and disallow or forbid all permitting decisions for Limerick Nuclear Plant until all unresolved findings, legal issues, and recommendations including those from your own staff are finalized and implemented. And finally, ACE today is formally requesting on the record that NRC hold a public hearing in Pottstown at some date in the future to address all of the relicensing issues for Limerick Nuclear Plant not specifically or adequately addressed in the

> Our community deserves nothing less. (Applause.)

FACILITATOR BARKLEY: Thanks, Mr. Cuthbert. Charlie Shank. And Donna, you'll be after him.

Environmental Impact Statement.

MR. SHANK: Thank you very much. hoping the lady who was the supervisor from East Coventry would still be here but I see she has left.

My comments concern the groundwater, an issue that is finally getting some attention at U.S. nuclear plants is the leakage of radioactive water into the ground, beneath and around these plants.

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plants leak. These leaks come from pipes, tanks, and many of the plant's systems. The NRC states that events happen at all plants that are often unknown of, unseen, uncontrolled, and unmonitored releases of radioactive liquids into the ground. Exelon spokesmen will tell you that they monitor everything and that they have everything under control. Don't believe it.

The NRC's statement contradicts that propaganda. These radioactive releases are in addition to the known surface spills that frequently occur. In 2006, nuclear plants started a program to check into this mounting leakage problem. Fifteen wells were drilled on Limerick property outside of the power block areas where the reactors and other equipment sit. One well, P12, south and downgrade of the power block area, showed 4400 picocuries per liter of tritium, well over the reasonable European safe drinking water level for tritium which is 2700 picocuries per liter.

Not liking the result, that well was closed and almost immediately a new well was drilled. Well NWRL-9. This well west and downgrade of the power block showed 1700 picocuries per liter. Over the next few years as all 15 wells were tested, they all showed tritium and all showed gross beta emitters. Three

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wells contained gamma emitters, nine had alpha emitters, four out of five wells tested positive for uranium. All the ground around Limerick's plant is radioactively contaminated. Most water flow at Limerick, both surface and subsurface, is to the south and west towards Possum Hollow Creek, the Schuylkill River and yes, East Coventry Township.

Many wells on the East Coventry side of the river are in the same Brunswick fractured bedrock formation.

Recently Exelon re-gifted East Coventry with 154 acres it had taken by eminent domain from private citizens and the townships 30 years ago. This land could have been subjected to possible radiation contamination above and below the surface for many years before it was returned. This story reminds me of the Trojan horse story. With Limerick's renewed license and at least 30 more years of contamination to come, imagine what this land could turn into. No independent radiological study was ever done before this land was transferred. The people of East Coventry should insist on radiological studies now and in the future.

I am very grateful for Mr. Michael Moyer,
East Coventry supervisor, for his ability to see the
possible serious problems with this situation and

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question this decision. I say beware of utilities bearing gifts.

I support Dr. Cuthbert's call for a congressional investigation of the NRC. And I call for the public meeting on the relicensing to also be held right here in Pottstown so we can all attend. I thank you very much.

(Applause.)

MS. CUTHBERT: NRC's Environmental Impact Statement makes illogical, inaccurate, absurd, and indefensible claims, claiming Limerick's environmental impact small is an offensive lie. NRC fails to honestly assess Limerick's past, current, and additive harm since 1985. NRC did not do testing.

ACE repeatedly requested comprehensive, independent monitoring and testing for this EIS.

Instead, we got a despicable whitewash. ACE documented how and why Limerick Nuclear Plant presents unprecedented environmental threats and health harms to our region in written testimony to NRC in October 2011. Based on that, we reject NRC's invalid, unsubstantiated prediction of small future harms from Limerick.

NRC failed to respond to our massive documentation. Would acknowledging facts require NRC

to close Limerick? NRC wouldn't give ACE one hour for a meeting with NRC's Environmental Review Team. NRC clearly doesn't want to face the facts.

ACE's display boards at this meeting are intended to identify significant harms NRC chose to ignore for Limerick's EIS. ACE analyzed Limerick's air and water pollution permits and Exelon's radiological monitoring reports which document enormous harms. NRC's PR people are embarrassingly uninformed about Limerick's air and water pollution. Instead of giving ACE an hour, NRC met with agencies that just issued five-year pollution permits with exemptions for high levels of dangerous pollution in violation of protective laws.

Radiation reports for Limerick confirm many radionuclides are in our air, water, soil, sediment, and fish. Yet, NRC keeps claiming Limerick's radioactive releases are just tritium.

Over 100 radionuclides are associated with Limerick operations. NRC looks foolish.

One Limerick radionuclide is confirmed in the babies' teeth of our children at some of the highest levels in our nation. Additive, cumulative, and synergistic harmful since 1985 are unknown, but clearly enormous.

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NRC never did independent testing for each radionuclide or toxic chemical in each round of exposure. NRC's EIS conclusions rely on self-serving biased calculations, estimates, monitoring, and reports totally controlled by Exelon, the company with a vested interest in the outcome that has shown it can't be trusted.

Exelon's deceptive radiation monitoring tactics were identified by ACE. Included radwaste monitoring declared inoperable for over a year.

Exemptions from reporting using lame excuses like misplaced monitors.

To base EIS conclusions on visual site inspections is ridiculous. You can't see, smell, taste, feel or measure radiation or other toxics that are released offsite from Limerick. Thus, confirmed Limerick's environmental harms are enormous, not small.

Limerick is a major air polluter under health-based standards of the Clean Air Act releasing so much air pollution from the cooling towers that a six-fold increase was granted in 2009 for the kind of air pollution that's more deadly than ozone.

Limerick's PM-10 air pollution transports cooling tower toxics, pathogens and radionuclides into our air every day with 44 million gallons of steam.

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Exelon refused to install cooling towers at Oyster Creek citing too much air pollution as the excuse. Need we say more?

Limerick is slowly, but surely destroying the drinking water source for almost two million people from Pottstown to Philadelphia. Limerick discharges a 14.2 million gallons of radioactive heated waste water every day. Limerick drastically exceeds safe drinking water standards. Without filtration Limerick can't meet safe standards and Exelon won't pay to filter.

The river water, sediment, and fish are contaminated with many radionuclides. That includes radioactive iodine like that in Philadelphia's drinking water, plus many others. Limerick's discharges are over heating the Schuylkill River threatening the ecosystem. Limerick discharges up to 110 degrees into a river with an 87 degree limit every day.

Cooling tower water used threatens

drinking water supplies across six counties. Limerick

withdraws more water than three towns

-- doubles what three towns take in, Pottstown,

Norristown, and Phoenixville. Cooling towers

depleted the Skuylkill River since 1985. By 1999,

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there were record low flows in the Schuylkill River. Since 2003, Exelon pumped billions of gallons of toxic unfiltered minewater into the river for Limerick operations. Decades of radioactive leaks and spills contaminated groundwater. Fifteen of 15 wells detect beta radiation. Nine detect alphas. Three gamma. Four uranium. These radioactive leaks were never cleaned up and really this offensive EIS whitewash must be rejected by elected officials and the public.

(Applause.)

FACILITATOR BARKLEY: Thank you, Donna. Betty Shank. And then Steve Aaron is up next.

MS. SHANK: NRC regulations have become as deteriorated and unprotective as Limerick's aging equipment. That equipment is plagued by thinning, pitting, fatigue, erosion, leaching, embrittlement, and GE Mark II boiling water reactor stress corrosion cracking. The list of opportunities for disaster is endless.

Limerick monitoring equipment has been out of service, unnoticed sometimes for more than a year, and automated systems have failed, discovered only after accidents occur.

Public statements by NRC and Exelon following such events are generic and deceptive. The

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Dublic receives no more respect than the river that Limerick is destroying and the air that it is polluting, all for Exelon's profits.

NRC and Exelon have gone through all the motions required for relicensing, but it seems to be all for show. Hollow evacuation plans, lack of meaningful regulation, perfunctory public inclusion, and NRC's willful blindness to the consequences of our routine radiation exposure, increased public risk.

It's a nightmare, affecting the health of our families and the environmental legacy we leave our children and grandchild.

Back in the '80s before Limerick construction was complete, a suit was filed when the public understood that Limerick operations would violate clean air standards and that design alternatives should have been considered. The suit was won in court, but successfully stalled until Limerick construction was complete. Back then, too many officials fell into the trap of weighing economic factors more heavily than public protection.

Elsewhere, more enlightened thinking led to cancelled construction plans and closed plants.

Exelon makes no secret of the fact that its first concerns are profits and investors. Exelon

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executives believe nuclear plants create the profits, but that's because the public has been forced to support nuclear energy and an egregious example of corporate welfare. We get sick. Our drinking water supply is reduced and contaminated. Our air is polluted and still we not only pay for many of Exelon's nuclear business costs, but for its mistakes as well. It is the height of injustice for NRC to allow this corporate abuse to continue when safer electric power is available.

When NRC and Exelon claim that Limerick operations comply with NRC regulations, don't be fooled. There's hardly anything left of them for Exelon to comply with. It's hard to imagine the risks that lie ahead in the decade that's left of Limerick's current license, yet alone 20 years beyond that.

NRC may be approving Limerick license renewal simply because it can, not because it is the only option or the right thing to do. So this extraordinary breach of public trust will allow Exelon to continue its premeditated assault of humanity and the environment purely for profit. What a travesty. I fully support ACE's recommendations.

(Applause.)

FACILITATOR BARKLEY: Thank you, Betty.

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Steve. Following Steve will be Lorraine Ruppe.

MR. AARON: Good afternoon. My name is Steve Aaron. I was born and raised in Montgomery County and now live in Dauphin County, Pennsylvania. Thank you for the opportunity to speak here today in strong support of the proposed relicensing of Limerick Generating Station.

As one of the founders of the Pennsylvania Energy Alliance, I speak on behalf of a state-wide group of independent community, business, and environmental leaders and organizations representing a variety of professional backgrounds. We formed the coalition more than four years ago as a forum for like-minded Pennsylvanians who believe nuclear energy is a critical component of meeting our energy needs and to advocate for the continued operation of clean, safe, and reliable sources of electricity generation all throughout Pennsylvania.

Our members consists of a former Secretary of the PA Department of Environmental Protection, a former Pennsylvania Game Commission executive, a former Secretary of the PA Department of Environmental Resources, and a former Secretary of the Pennsylvania department of Conservation and Natural Resources.

Like me, these environmental stewards all believe

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nuclear energy has an important role to play in our Commonwealth, and a green nuclear facility such as Limerick operates safely and well within environmental standards.

Nuclear energy provides clean energy that helps to power our homes and businesses reliably and safely. I personally have met many of the men and women who work in this industry and I know them to be smart, conscientious, earnest and passionate about the work that they do.

As you know, Pennsylvania is among the nation's largest producers of nuclear energy. To meet our ever-increasingly demand for electricity in a way that does not destroy our environment, we need a diverse energy mix that includes nuclear power, cleaner fossil fuels, renewable sources and energy efficiency. Conservation alone will not offset the expected growth in our electricity use and renewal sources like wind and solar, while certainly important, are often unreliable.

Support for nuclear power throughout the Commonwealth remains strong. In 2012, the PA Energy Alliance conducted a public opinion poll of nearly a thousand Pennsylvanians from all across the state that showed 90 percent of those surveyed believed nuclear

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power is an important part of meeting the country's electricity needs. More than three quarters believe that nuclear is a reliable source of energy and perhaps most importantly for today's proceedings, more than seven in ten support allowing existing nuclear power plants to extend their operating licenses.

We are pleased to see strong support comes from residents who live closest to our nuclear facilities. So on behalf of the membership of the Pennsylvania Energy Alliance, thank you for the opportunity to share these thoughts with you today.

(Applause.)

FACILITATOR BARKLEY: Thank you, Steve. Lorraine. And then Marci Dietrich will follow.

MS. RUPPE: Hi, my name is Lorraine Ruppe. I want to add, too, that today is a really bad to hold the meeting, because most people are either away, on vacation, or getting ready to go away on vacation. I'm concerned about an earthquake triggering one or more meltdowns at Limerick Nuclear Plant. What worries me are the miles of hard to inspect pipes and cables buried under Limerick that can be disrupted and then incapable of delivering vital electricity and cooling water to prevent meltdown. NRC should be worried, too, but instead gave Limerick until 2017 to come up with a new

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seismic risk study or plan. It's beyond negligence for NRC to allow Exelon to wait years to take action.

Limerick is considered a high-risk nuclear plant and earthquake risks are increasing. My search for earthquake fault lines closest to Limerick Nuclear Plant is one big reason I have no confidence in any of NRC's conclusions in Limerick's Environmental Impact Statement. May 2011, I asked NRC how close the nearest fault lines were to Limerick Nuclear Plant. Six months later in September 2011 at the first EIS hearing, I repeated my request. When NRC finally responded, I received a letter and a map showing earthquake fault line 9 and 17 miles from Limerick.

earthquake fault right under the Limerick site and two others within two miles. Local residents discovered a 1974 seismic study for Limerick in the Pottstown Library, clearly identifying these faults. So why did NRC fail to disclose these faults when I asked about the closest earthquake faults to Limerick? Was this a cover up or incompetence? Neither is good.

April 18, 2012, NRC's Andrew Rosebrook, who sent me the map and letter, claimed to be unaware of the fault under Limerick when shown the seismic maps at the library.

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The August 2011 earthquake in Virginia shook Limerick Nuclear Plant and caused a Limerick notice of violation. This should have caused NRC to require Exelon to reduce seismic risk immediately. Rosebrook did admit that the Ramapo Fault just 17 miles from Limerick is active. He also validated my concern about the blasting at the quarry bordering Limerick.

Fracking could trigger an earthquake, disrupting underground pipes and cables. Over 3,000 gas wells were approved in Pennsylvania. Two thousand more are to be approved this year. Structural problems and flaws associated with Limerick construction are of concern. For example, Limerick's PAC 70 fuel pools were constructed with substandard cement. After all of this, NRC isn't requiring Limerick to do important seismic upgrades until after 2017, even though Limerick is considered by some to be third on the nation's earthquake risk list.

By then we can have an earthquake and a meltdown. Limerick should never have been built in the first place. NRC falsely claims earthquake risk were considered prior to Limerick approval. That's not true. The first reactor was delivered to Limerick's construction site in 1972, two years before this 1974 when the seismic study was completed. With

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earthquakes becoming stronger and more frequent NRC owes it to us to shut Limerick down before it melts down. Thank you.

(Applause.)

FACILITATOR BARKLEY: Thank you,

Lorraine. Marci. After Marci will be Kim Murphy and
then Scott Portzline.

DR. DIETRICH: My name is Dr. Marci Dietrich. I'm a physician that's lived always in this area, well, you know -- I wish I was a speechwriter like you. You know? He's written all these speeches and you do a great job for government people, and that's your job.

This isn't my job. I'm a doctor. And I'm not a professional speaker and I'm not a nuclear engineer, but I am a physician. And I'm a physician who has seen lots of patients with cancer and other problems that have increased over the years, even thyroid cancer.

What I'm hoping to do here and I'm winging it because I really wasn't ready to do this, but you had your meeting and I had to be here if I wanted to put my two cents in. I think that we could really simplify, clarify the players in all this because right now this is very confusing. We hear numbers and they

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go right over your head, oh, it's bad. That sounds bad. But then, hey, it's positive and there's tons, 500 pages of this and 500 pages of that. Really, let's figure out what's going on and first we need to know who the players are, okay?

The players are the stakeholders. I'm not a stakeholder, but a stakeholder would be, for example, Mr. Barkley, you're a stakeholder. And Ms. Perkins, you're a stakeholder. Exelon is a stakeholder. The Delaware River Basin Authority is a stakeholder. The previous person from the Commission, a stakeholder.

So now what does that make me? Well, I am a citizen and I am a landholder. And I can be an upholder. And what an upholder is someone who has a purpose who wants to elevate something to believe in, something that is extremely important. And so landholder, so I have land. I have property. And my property could get really messed up by radiation and be contaminated and that wouldn't be good. I own my body, too, and with owning my body and its relationship to being radiated and having other problems, I have concerns for that. So an upholder -- I'm a landholder and an upholder and you guys are stakeholders.

I was going to bring you a stake, as just a visual, but I didn't. I thought, you know. I

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thought about cheese and a mousetrap, you know, and how energy is cheese and then the little mouse wants to get the cheese and he has to take risks to get the cheese and then sometimes the trap is going to close on him and he's going to lose his head. So I didn't do that because I thought we'd get injured with the mousetrap. Think about that, injured with a mousetrap versus getting injured by radiation. You know?

So anyway, there are more stakeholders here, too. Right.

So there's stakeholders and there's upholders and there's landholders. So we're simplifying it a little bit. Now let me see, I'm wondering why do we have to have a relicensing, right now, for 20 more years for Exelon? I don't get it. If it's already licensed now to like 2017 or 2024, 2029, why are we in the world have to do this now unless we're waiting for something bad to happen? We better get the license on board first because if something really bad happens, well, maybe we'll stop to fix it. We can't get shut down if we already have the license. I don't know. I was a naval officer one time, but I'm not someone who knows a lot about systems.

So what's the rush of getting the license right now? Well, I don't know.

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Let's talk about conflicts of interest.

Did you ever hear of the Six Degrees of Separation? An Albright College graduate actually did that. It was about Kevin Bacon. Everything is interrelated like you know this person and then this person knows this person and this person knows this person and this person knows this person. Well, nuclear power is a lot like that in that they're all related by, unfortunately, money, stakeholders, and then there's us. Us, we're over here. No money, no stakeholders.

Now even an NRC employee is a stakeholder beyond it's their job. There are very good benefits to being an employee of NRC, very good benefits.

Vacation, three to five weeks' vacation. Retirement plan, health benefits. So when it's your job, then you're here and you have to be here. I'm here of my own volition. I don't get a dime for coming here and saying what I want to say. However, you guys are getting paid to be here. I don't know that you really would show up, honestly, if you weren't paid to do this job. I just don't think you'd necessarily voluntarily come here and do this if you weren't getting paid.

However, I am not getting paid a dime and so here we go. I don't get benefits. I don't get healthcare from NRC.

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Now that lady earlier that was from East Coventry who basically was lauding how nice Limerick was and everybody did wonderful things. What she didn't ask for, she should have asked that East Coventry actually be moved to a whole new part of another state because that would be the safest thing for East Coventry, to pick up, move East Coventry and move it to another state that doesn't have nuclear power in it.

Now when say nuclear power is clean energy, what do we mean by clean? When you're leaving basically excrement from your nuclear waste facility and you're burying it on site, I don't know how clean that is. Clean would be to me it actually really is clean. It's very good ecologically and yes, for the moment, perhaps as long as no nuclear problem would happen, it's a very clean energy up to a point. But if a problem happens and then what's going to happen? Well, it's not so clean if there's a Fukushima to happen. No so clean anymore. We're not safe. Okay?

-- there's definitions of risk and nuclear energy often has their own ideas that it's really good for risk. Low risk, well, there's a couple different types of risk. There's manufactured risk which is Limerick and nuclear power plants, Exelon. Manufactured by man, it's not

So then I looked up what risk is and risk

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natural risk. It's not naturally-occurring radiation. And then there's natural risk, i.e., unfortunately the tornadoes, problems with hurricanes. Those we have to deal with. They're natural and they're devastating and they hurt a lot of people, but why in the world are we dealing with manufactured risk in the way say as we are dealing with the idea of other risk? Why should we have manufactured risk and make that part of our benefit when we look at the benefit of nuclear energy?

So getting back and I'm sorry I'm skipping around like this. As I said, I'm not as well prepared as I'd like to be. Getting back to the politics of this again and the money, Exelon, many, many millions of dollars or basically \$8 million in political contributions, PACs, you name it, to all the congressional people out there. And then I'm wondering about poor old ACE here talking about its special investigation. Fat chance that's going to happen, not with Gerlach and the governor even taking some money from Exelon indirectly, but from Exelon employees. So why in the world -- how are you going to have a congressional investigation when basically there's so much money being poured into Congress that's really from the nuclear energy industry. I don't think

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there's easily going to be a congressional investigation about the NRC.

So I have so much that I could talk about and what I really want to put at the last part of this, that I didn't get into is basically we have a way of quantifying and qualifying the risk now to humans and that is genetic testing. We can actually test the genes and do studies now of the people that live in the region of a nuclear power plant. We know that nuclear energy or nuclear problems occur in damaged chromosomes. We now have the technology and medicine and research to actually look and take blood from people that live in a region of nuclear power and actually demonstrate what is going on inside that person's body, things that just because we don't see it on the outside of a person, does not mean that there is not chromosomal damage already that we can quantify, qualify in their blood.

Why there has not been any research ongoing about that, I don't know. The good old Tooth Fairy test of strontium-90, that sort of has been pushed to aside, but we have had the technology to actually do research on genetic changes in people's blood from radiation and let's look at the results of that. Let's have tests done about and let's see what's going on and we can

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actually really take note of this and go from there about what damage is really occurring and that's not from a meltdown. We know that happens. We know there's breakage of chromosomes and such. But what really -- we can look at the silent damage that's occurring from just the normal use of a power plant.

So just some ideas. Sorry I was a little bit blunt. I have more I can say, but I'll leave that to another time. So I hope you got something out of that.

(Applause.)

FACILITATOR BARKLEY: Thank you, Marci.

MS. MURPHY: Good afternoon. And thank you for the opportunity to speak to you today. My name is Kim Murphy and I am president of the Berks Conservancy. The Berks Conservancy is a 501(c)(3) nonprofit land trust and conservation organization based in Berks County, Pennsylvania.

I am here to testify on behalf of the Schuylkill River Restoration Fund that Exelon supports. The Berks Conservancy has been a successful annual award recipient and implementer of the Schuylkill River Restoration Fund grants for agricultural best management practices since the

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Kim.

inception of the fund.

The implementation of agricultural best management practices directly affect the quality of water in the Schuylkill River watershed and are done to positively impact the drinking water for hundreds of thousands of people who live in our region. The Schuylkill River Restoration Fund grant awards have been critical to the completion of dozens of agricultural best management practice projects on 11 different farms in Berks County. These projects are done in prioritized subwatersheds of the Schuylkill River watershed, generally those where they are ranked as the most impaired.

The Schuylkill River Restoration Fund as a private grant fund has granted us over \$1.3 million since 2008 and has enabled us to leverage larger, significant public funds including USDA Natural Resource Conservation Grants.

Our Schuylkill River Restoration Fund

Agriculture Best Management Practice Project has taken
a holistic approach to water protection utilizing
conservation and nutrient management planning. The
north storage barnyard patrols, stormwater controls,
segregating clean rainwater from surface manures,
stream bank venting, prescribed grazing, and riparian

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buffer restoration.

Investment in conservation measures on Schuylkill River watershed farms is critical on numerous fronts: upgrading farm facilities, especially in regard to the manure management and fertilizer dollars helps to keep farmers competitive and successful. When farms are competitive and successful, conversation of farms to development is less likely to occur, thereby retaining fields capable of groundwater recharge as opposed to the impervious surfaces of housing and commercial ventures which generate serious stormwater and water quantity impact.

Proper management and timing of application of manure by segregation from surface waters on farms and stormwater generated on farms is not only beneficial to farmers' time management and bottom line, but it's also beneficial to plant growth and production and to water quality as nutrients are utilized by crops and not lost in streams, thereby protecting water quality.

The implementation of this agricultural best management practice, Schuylkill River Restoration Fund Project has also served as the impetus for public drinking water suppliers to participate and invest in these projects as additional funders and has been an

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exemplary model for public/private cooperation and a successful mode for accomplishing the work on the ground for water quality.

The Schuylkill River Restoration Fund has positively influenced the water quality and quantity of the surface water of the Schuylkill River watershed utilized by local and regional drinking water suppliers like Philadelphia Water Department, Aqua PA, Reading Area Water Authority, Western Berks Water Authority, Birdsboro Water Authority, and Kutztown Borough.

The Berks Conservancy strongly supports the continuation of the Restoration Fund for its benefit to the food and water supplies security of the Schuylkill River watershed and welcomes Exelon's continued support. Thank you.

(Applause.)

FACILITATOR BARKLEY: Thank you, Kim.

MR. PORTZINE: Hello, everyone. My name is Scott Portzline and I'm from Harrisburg,

Pennsylvania in Norfolk County. I see everyone is from Norfolk County.

Steve, you're working with some outdated data on the expected growth of energy use. It's been declining. The growth is only occurring about one third of what it used to be. And wind power is actually

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Reliability Council testified to the Nuclear
Regulatory Commission that they'll probably have to
turn down some of their nuclear plants because of all
the new wind power coming on line. I think that's not
an exaggeration about the amount of power, but it
doesn't understand that nuclear power plants are not
going to back down on their power output. That would
be a dangerous thing to do that from a day-to-day basis.

But the point is that the expected growth is not occurring in Pennsylvania or around the country. And in Pennsylvania, we export power. So if we were not to have the use of several of our nuclear plants, it would not affect the grid.

I want to remind you that Three Mile Island warned the world that Unit 2 was dangerously faulty and of course, that's where we had an accident. I'm not saying that the Limerick plant is faulty in the sense that it's about to have an accident, but it does have some safety deficits that could be just as dangerous as what happened at Fukushima with the explosions that occurred there due to the vent problem.

And I want to agree wholeheartedly with what the spokesman from ACE said. Very good. Exactly right. It's premature. The data doesn't support the

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conclusions that are all throughout that document.

And I could focus on a whole bunch of them also as the two previous speakers said. But I'm just going to talk a little bit about the vents.

The plants are no longer required to have hydrogen recombiners. So during an accident event, much hydrogen is created. But they no longer are required to try to eliminate that problem that leads to an explosion. The vents that were used in Fukushima did employ the fix that was recommended here in the United States by the Nuclear Regulatory Commission. One hundred percent of those vents failed. It's a very similar vent that's here at Limerick.

In an accident scenario, the releases could be much more dangerous than what these reports assume. This is one of the faulty data sets that I'm going out. This conclusion should not be accepted by anyone because the assumptions that are made are not conservative meaning on the side of safety. They are sometimes at best protective of their interest rather than the health and safety of the people.

Paul Gunter and I knew during the Fukushima accident that they were going to have an explosion.

And we talked about it the day before it happened. Paul Gunter is here in the audience. He'll be speaking in

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a little bit, probably. And Paul Gunter got to say that on CNN the day before the explosion that there was going to be a hydrogen explosion because of the melting fuel in the fuel rods.

Well, I'll tell you the rest of the story another day, but you can see the transcripts on CNN. Paul got blasted for that. So sometimes people dismiss what anti-nuclear people or safety critics have to say. I'm telling you, coming from Three Mile Island, heed warning the people from ACE are saying. I really agree that this whole licensing process shouldn't even be happening right now.

Concerning evacuations, well, let me go back to radiation. You had radiation detectors in the building. You have hydrogen that's not being accounted for properly. The Nuclear Regulatory Commission no longer has their own monitors that they maintain for radiation at nuclear plants. They're relying on the states to do that and the licensee to do that. Fortunately, at Three Mile Island, we have our own radiation monitoring network from the citizens.

Evacuations. A year ago, I provided documentation that the severe accident -- well, it's called a state-of-the-art accident consequences analysis, showed that it was rigged. There's probably

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going to be an investigation into that. May end up being in Congress, possibly bordering on the criminal investigations, whatever regulatory agencies, whatever that would be called.

The premise that there's no undue risk, that's what this is all about. Is there undue risk associated with this relicensing? The answer is yes. The premise that no undue risk will occur is always about a timely evacuation. The NRC is not charged with protecting your property. They're charged with making sure you get out of town if something terrible starts to happen.

Could somebody show me one accident that happened in the world where a timely evacuation occurred? Or even where one was ordered in a timely way? It's not going to happen. Because what will happen is that people at the plant will finally realize, wow, the conditions are such that we've got to order an evacuation which did not happen at Three Mile Island. The reactor was already in the condition that the evacuation should have been ordered. It was pre-agreed. Yet, they didn't follow that guideline.

So the plant will call the governor's office and the governor will say okay, thank you.

He'll take ten minutes to think about it. He'll start

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getting some phone calls saying now wait a minute, we think we got this going for us. And it gets delayed and it gets delayed. Next thing you know evacuation gets ordered and people are going around with higher degrees of radiation because they waited too long. That happened at Three Mile Island. Fukushima, plenty of disagreements of when evacuation should have taken place, let alone the cleanup.

So I guess lastly I want to talk about sabotage because that's what I mostly do at every nuclear power plants and counterterrorism issues since 1984. Never went public until 1993 as a result of an intrusion where a man drove a station wagon into the nuclear plant at Three Mile Island into the turbine building itself. It took four hours to find him and of course everything was fine according to the NRC report until the federal hearings came up and made them reconsider security.

Well, things are a lot better in the security state, but there's still some problems. But I want to point out one specific issue using their report and it's in Section 5.2. This will be the last thing I have to say. In Section 5.2 regarding severe accidents, they did an analysis of sabotage and said that core damage and radiological release from such

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acts would be no worse than the damage and release expected from internally-initiated events. Well, first of all, that wording should be changed.

Internally initiated could indicate sabotage even from an insider. So that should be accidental events rather than internally. We're talking about sabotage versus accident.

The second and most important of what I'm saying is they say they could identify no issues that were greater than internally-initiated events. What if the containment building is no longer intact? What if the saboteurs found a way of nuclear transport -- there's that nuclear term, engineering term -- of radioactive material outside the containment building during a sabotage event. Well, that happened at Three Mile Island, not from sabotage, but the valves in the drain were already lined up, where radioactivity was escaping the building early.

What if you had a hole in the containment building like at Fukushima or from a saboteur? The SOARCA study that was rigged continued the analysis to scenarios where the containment building remained intact. I have the email from the Nuclear Energy Institute stating this would solve some of our problems if we just leave the containment building intact.

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That's why this study is wrong. Thank you.

(Applause.)

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FACILITATOR BARKLEY: Our next speaker will be Shirley Whyte, followed by Tana Rinehart. Shirley.

MS. WHYTE: It is my feeling, and a lot of other people I know, that the NRC should not even be considering relicense of Limerick nuclear power plant considering the density of our population and the increasing risk that exists for a meltdown.

Limerick is the second most densely populated nuclear plant in the nation. Relicensing would be a major adjustment to millions of people in the greater Philadelphia area. Evacuating from a meltdown would be far worse than any evacuation portrayed by Hollywood. There would be traffic gridlock, accidents, panic. It will keep people directly exposed to massive radiation for far too long, increasing the risk of immediate radiation sickness and eventually cancer and other disease and disability. People could become so radioactive they might be turned from a hospital. The hospitals here are not equipped or prepared to have such a disaster. They train for natural disasters, but not massive radiation exposure.

Reality suggests that the population could

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evacuate safely. I mean it can evacuate safely. Montgomery County officials basically confirm that in the 2011 testimony to you to the NRC that they already knew in 1980 a public hearing on evacuation, the NRC said Limerick could take double the population that could be safely evacuated within 30 miles. And now they know 30 miles is not nearly enough, even close to the safe distance to avoid radiation plume.

The NRC allows Limerick to move forward, despite risk to so many. And now the NRC plans to relicense Limerick knowing the population density is four times than the original number that they thought they could evacuate safely.

I have devastating caused by evacuation decisions by the Japanese government at Fukushima.

NRC was supposed to approve Limerick's evacuation plan by looking at the population growth and the distance needed to escape the radioactive plume. Instead, NRC is dismissing lessons learned from Fukushima, trying to deceive us about radiation impact, weakening evacuation plans and failing to expand evacuation zones.

In 2001, the ACE reported "Exelon seeks to cut costs in planning for emergencies." The NRC allowed PECO and Exelon to cut corners at the expense

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of public interest. NRC's new rules make no sense.

NRC now allows emergency drills to be run without

practicing for radiation releases. NRC requires fewer

exercises for radiation accidents. NRC's

recommendation is fewer people evacuate after an

incident to avoid a gridlock. So they'll do it in

stages.

Is the NRC abandoning the public safety for NRC's profits? Changes need to be made to minimize the risk of innocent people becoming nuclear refugees, losing their homes and all their possessions. This kind of risk cannot be dismissed for any corporation's profits. In 1980, at the evacuation during PECO's VP plant an evacuation could never be needed. That was the same thinking about TMI in 1979. The same thinking at Fukushima until it happened. It is ironic that we only have to say TMI, Chernobyl, Fukushima and everyone knows what happened at these places. No other explanation is needed.

So I'm asking the NRC to close Limerick before this area is known only as the next nuclear disaster, before this area is known only as Limerick. Thank you.

(Applause.)

FACILITATOR BARKLEY: Thank you, Shirley.

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Tana. Paul Gunter is up next.

MS. RINEHART-ULLMAN: First I want to apologize for my little noisy guy. I just want to say I'm a local resident. I've been born and raised in Pottstown. My name is Tana Rinehart-Ullman. I'm raising — I obviously have a little guy here. I run a local daycare as well. We have toured Limerick, have taken the children on field trips there and they've always had such excellent field trips. The kids always enjoyed going there to learn about Limerick and learn about nuclear power and how it benefits our community.

Also, they support local children's organizations such as soccer clubs and other -- baseball teams and things. They have been great supporters of the community. I would have no problem. I like the safeguards. We have a very comprehensive plan in place in case something would happen with Limerick, what to do with the children and how to get them safely out of the area. But I have no doubt that we will ever, ever have to use that plan and I've been working in this industry for 21 years now. Thank you, Limerick.

(Applause.)

FACILITATOR BARKLEY: Thank you. Paul.

MR. GUNTER: Thank you. My name is Paul

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COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 Gunter. And I am director of the Reactor Oversight
Project at Beyond Nuclear and that's in Takoma Park,
Maryland. And I come three hours north here because
the Limerick license extension process is, in fact, not
a local issue. It is a regional -- it is a national
concern and risk and threat.

I'm here to speak in opposition to the Limerick relicensing primarily because the NRC, following the Fukushima accident, should suspend all relicensing license extension reviews, particularly this is important because the Limerick unit is similar to the General Electric boiling water reactors that exploded at the Fukushima Daiichi nuclear power plant site. So it's a concern that the Agency and the industry are proceeding with a conveyor belt-like process that is ignoring the environmental impacts. It's failing to consider the environmental impacts that are still coming out, that are still being revealed by the accident at Fukushima.

I can tell you that the concern goes far beyond just the fact that the NRC is ignoring these concerns. The problem is that the NRC doesn't have the ability or the will to actually challenge a license extension for any nuclear power plant, let alone the Limerick plant as it is a sister plant to Fukushima

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Daiichi.

The problem is also that we've got

-- the NRC has already relicensed 75 nuclear power

plants in the United States and they are proceeding.

They have yet to significantly challenge or stop a

license extension for any of these plants despite all

the questions. But for the Limerick plant, it's

particularly egregious because the NRC knows that this

power plant is in violation of its license agreement.

So they're talking about extending a license agreement

violation. And I'm specifically referring to the

general design criteria.

Let me read you what the general design criteria says according to the NRC's own requirement.

"The principal design criteria establish the necessary design, fabrication, construction, testing, and performance requirements for structures, systems, and components important to safety. That is structures, systems, and components that provide reasonable assurance that the facility can be operated without undue risk to the public health and safety." How can this Agency proceed with licensing, relicensing in view of the dramatic failures that we all witnessed world-wide on television at the moment at Fukushima Daiichi and those series of explosions which now

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demonstrate that the General Electric Mark I boiling water reactor containment system is a 100 percent guaranteed failure. Three operational units at the time, Units 1, 2, and 3, 100 percent failure under severe accident conditions. Multiple explosions, massive land contamination, marine contamination, groundwater contamination, and that's the evidence. That's what we all witnessed.

But it doesn't stop there. The NRC's own general design criteria focuses on the containment design itself for this nuclear power plant. These two units. And that is general design criterion 16. again, this is the NRC's own language. "Containment design. Reactor containment and associated systems shall be provided to establish an essentially leak-tight barrier against the uncontrolled release of radioactivity to the environment and to assure that the containment design conditions important to safety are not exceeded for as long as a postulated accident condition is required. The NRC knows that the Limerick Units 1 and 2 containment design is very likely to fail if challenged by a nuclear accident. the NRC's own staff in a paper prepared for the Commission, SECY-2012-0157, identifies that for the General Electric Mark II boiling water reactor at

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Limerick, involving core damage, there is roughly a 50-50 chance of recovering from the nuclear accident within the pressure vessel with no significant reactor release from containment. That's their language.

The flip side is that it's a 50-50 chance that the vessel will fail with a significant release from containment.

It goes on to say, this is the NRC staff that "if the vessel fails, there's a 25 percent chance that the operators might cool the molten core inside the containment with no significant release to the environment." Okay, the flip side of that is there's a 75 percent chance that they will recover, that there will be a release, a significant release. This is the NRC's own estimate of Limerick 1 and 2.

That said, NRC states there is an 11.8 percent chance that a severe core damage sequence will lead to early over pressure containment failure where there is a 90 percent chance the molten core will bypass the containment system, principally the suppression pool because it will burn through seals in the containment and there will be a catastrophic release of unfiltered radioactivity into the environment and to the population down wind. That's you. That's us.

That's miles and miles and miles away. This is the kind

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of gambling that the Agency and the industry are engaged in for the emolument of a few men. We don't need this plant to be operating at that risk.

In fact, this plant should not receive a license renewal and should be put into a phase out just on the fact that they are in violation of their license agreement. So the concern here is that we are not being provided a process that fairly evaluates the risk to the public health and safety and to the environment and in this instance NRC stands for the Nuclear Railroad Commission. Thank you.

(Applause.)

FACILITATOR BARKLEY: Okay, thank you,
Paul. We have about 20 minutes left in the meeting and
I have three speakers left to call. If there's anybody
else who would like to speak, please come see me. The
next person up is Alisa Otteni and that will be followed
by Less Rinehart.

Alisa.

MS. OTTENI: Hello, there. I'm Alisa
Otteni and as some of our previous speakers mentioned
I wear multiple hats. Unlike some of you guys who have
come three hours and thank you for coming three hours,
I'm a local resident. I live in Chester Springs. I'm
raising my kids here. I have three children at Owen

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J. Roberts School District which is a local school district. I am a trained certified environmental auditor. I have 25 years of international auditing experience. I've seen quite a lot out there, trust me. I have stories. But currently, for the last two years I have been employed by Exelon. I work for Corporate Environmental. I sit in the Kennett Square campus and I support and assist Limerick Generating Station.

Part of my job responsibility is to provide governance and oversight related to environmental complaints and make sure the site follows the environmental regulations and stays compliant. believe the station has a very strong environmental program based on my history, my understanding of the rules and audits down by international, internal agencies. We get audited by more people than you've probably ever imagined with acronyms that I still cannot keep up with and I thought environmental regs had acronyms. I'm impressed with the staff at this plant. These staff are your neighbors. They work in this plant. They care about their own environment, just like I do. I live here. My kids go here. about where I live.

And some of the other stuff I do with them is on the side. My children come just like the other

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woman said with her child. My kids take tours of the plant. They learn about how fission works and they learn about how a nuclear power plant works and they can talk conversationally about how Limerick works.

They help with the Boy Scouts and the Girl Scouts with building the trails and planting the pollinator gardens and bird houses. I also support the station, actually multiple stations with a Wildlife Habitat Council certification and the work that they do for that certification. And recently we started working with the Audubon Society.

So I'm pretty impressed and I'm here to say
I support the Draft EIS renewal of the Limerick
operating license. Thank you.

(Applause.)

FACILITATOR BARKLEY: Les

MR. RINEHART: Thank you. I'm Les
Rinehart. I own Potty Queen. I'm a local business.
My business is located right in front of the power
plant. We have absolutely no problems with the power
plant. We're in favor of relicensing. I feel the same
commitment they do as far as environmental safeguards.
They do it every day. We see it. We see security
there. We see if anybody is out snooping around in
front there, they send security over right away. And

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they have a lot of systems in place that protect the people.

I have lived and worked in and around the power plant all my life. I've hauled trash out of there when I was in high school. When the facility opened up, I hauled trash out of there. Now many years later, I built my business right next door. I have 32 employees. None of them have any problems. Exelon is a great corporate neighbor. They're great for the neighbors there in the community. They do a lot for the community, donations and what have you.

We all use electric. We all turn the lights on at night. We all need it. If you look around, there was two local coal-fired plants that were closed down recently. So we need a source. And Exelon is a good source. The power plant does a great job.

Years ago, when I was in high school, nobody wanted to build a house around the power plant. Nobody -- they were scared. Now they're building right next to it. And the reason they're doing that is because they see the safety track record. They have a safety track record there. They don't have any problems. There's no incidence there that I know that would make me feel uncomfortable about going into work.

I drink the water every day. And I repeat,

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I'm in favor of repermitting and thank you for your time.

(Applause.)

FACILITATOR BARKLEY: Okay, thank you,

Les. The last person who asked to speak was Chris

Conroy and unless there's someone else who wants to -
Leroy Watters? I didn't see a card for you, but you're

next. How's that? Right after Mr. Conroy, all right?

We have plenty of time.

MR. CONROY: Hi, my name is Chris Conroy.

I live in West Chester and I work for Exelon at the

Limerick Station. I've worked for Limerick for about
the past four years. And I do believe, based on my own
experience that Limerick is operated in a way that's
safe and protective of the environment. In my opinion,

Exelon is a very good corporate citizen and operates
the plant in an environmentally-responsible manner.

Through my job at Limerick, I've had a lot of contact with staff from various regulatory agencies that issue Limerick operating permits and do inspections at Limerick on a regular basis. The comments and feedback that I've received from these agency staff have shown me that the agencies really appreciate a company like Exelon at Limerick that takes environmental responsibilities and environmental

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compliance seriously.

I support the approval of the Draft
Environmental Impact Statement for Limerick's license renewal application. Thanks.

(Applause.)

FACILITATOR BARKLEY: Come on up, Leroy.

I don't know where your card went, but we're going to hear from you.

MR. WATTERS: Where's my card? (Laughter.)

First of all, I like to speak anyhow so I get input on what everyone else thinks. And I like to make my stuff different. My name is Leroy James
Watters III and I live on Schuylkill River in historic Fort Indiantown.

Now my love for the Schuylkill River probably is because it's my favorite playground since I was about nine years old. But it's also the source of my drinking water. The water comes out from behind the Norristown Dam in Norristown which is the county seat where Pennsylvania's water comes from. And the first introduction that I had with Limerick had to do with a committee of the Norristown Boat Club, we were concerned about them boiling off all the water. And I was involved with the DRBC rules and regulations back

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to the original ones. And what the DRBC does is it controls consumptive use because Limerick can burn off a lot of our drinking water.

Now I've been looking forward to doing something since the early '90s when I videoed a dissolved oxygen violation that basically killed all the clams from Limerick down because of the dissolved oxygen violation because of the temperature violation and a flow violation of the DRBC rules.

Now in '91 and '92, as a member of the Telephone Pioneers of America, I was the chairman of the Environmental Committee and we won awards for stewardship and that's when it began, when I saw all the dead clams and smelled what the problem was.

Now since that time with the help of my wife, Lynn, we've been able to acquire USGS documents of algae blooms. Now an algae bloom occurs when the flow of the river is less than 730 cubic foot a second, I think that is, and the temperature is above 79 degrees. Now those are the two rules that were in the original DRBC regulations.

Now the high impact problem of these algae blooms not only is the clam kills which are the canary in the coal mines that tell you when the next living thing dies, it has the impact on clogging the filters

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in the water main, requiring around the clock
monitoring.

Now almost four decades I had
with Bell Telephone, well, now it's called Verizon, I
had an opportunity to be outside and witness a lot of
environmental issues from sewer plants to well, we
won't go there. But the fact is is that the last spill,
excuse me, wrong meeting, this has to do with the algae
blooms.

The last algae bloom which we have USGS documentation, I called the DRBC and complained about the condition. They referred me to the Delaware Estuary who referred me to the Corps of Engineers who are the ones that are responsible -- oh, excuse me, after explaining the problem with the Green River and the dying clams five times, I managed to get to George S., we'll call him George S. And what we accomplished is changing the flow from Beltzville to Blue Marsh to stop the blooming and also deal with the salt line in the Delaware River which is what the Army Corps of Engineers and the DRBC is responsible for.

Now the thing is is that I have a moral responsibility to share what I know and I intend, well, let me say this about that. I have put some stuff on YouTube that has fixed things. Now I have a very embarrassing video from July 7, 1991 showing this

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condition on the Schuylkill River. I just may put this on YouTube.

Now in order to resolve these problems, we have to look at the environmental impact of the tornadoes and you want to get this one? I remember the tornado that came down and tore the roof of the NRC building in King of Prussia. Now I thought that was a real ha-ha. But I didn't think it was a real ha-ha from the baseball size hail that hit. Does anybody remember that?

Well, here's the thing. Fishing is down because it's affected the river. Something happened to all the aquatic plants that's in there. We have aerial photographs that document this. The Valley Forge Watershed Association which I'm part of, I'm on the Community Education and Outreach, that's why I'm outreaching out here to all you folks.

This came too fast for having official comments from the watershed, from the community afforded in the end, from the Norristown Boat Club and everybody else that's affected by the environmental quality of this river. I have that documentation.

I am not here talking idly. My career for almost four decades in the telephone company had to do with the truth and we will get to the bottom of this.

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And everybody is going to have an opportunity see this video. God bless. (Applause.) FACILITATOR BARKLEY: Thank you, Leroy. 5 And we did find your card. Sorry. MR. WATTERS: Like I said when things get lost, it's sometimes for a benefit. 8 FACILITATOR BARKLEY: All right. Very 9 We have about five minutes left, if there's 10 anyone who would like to make one last remark. 11 At this point I'd like to let Leslie come 12 up and make a remark at the end? 13 DR. DIETRICH: Could I just say something 14 real quick? 15 FACILITATOR BARKLEY: From here, please. 16 DR. DIETRICH: Sorry. FACILITATOR BARKLEY: He has to 17 transcribe you. 18 19 DR. DIETRICH: Just one small thing. 20 wanted to say about when I was talking about risk 21 takers, this was a comment that I think the last comment 22 that really makes some sense that could bring some --23 a little bit more clarity about risk takers. 24 The person most willing to take on risk is 25 the one unaware he is doing so. He charges no risk

premium. The resulting market of equilibrium is that the guy who is unaware of the risk ends up loaded with it. Then the music stops.

FACILITATOR BARKLEY: Thank you.

(Applause.)

You are welcome to speak for one more minute, please. Why don't you stay there.

MS. CUTHBERT: I just had a question for all of you who have testified on behalf of Limerick relicensing. I'd like to know if any of you have ever analyzed the air permits, water permits, the radiological monitoring report or the Safety Evaluation Report that's being done with this relicensing? That's my only question.

FACILITATOR BARKLEY: I won't put anybody on the spot to answer that.

Are we ready to wrap up, Leslie? Okay. With that, I really appreciate the cooperation of the audience. We got through every speaker. I gave flexibility to everyone as we went through who are finishing up right at the marker. So again, thank you for being a very positive audience. I know you feel very strongly about it. We heard your comments and remarks and we'll address them.

I would advise you again, up until June

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27th you can submit additional written comments to the NRC so please don't let that deadline pass if there's something you want to submit to us. With that, I'll close the meeting. Thank you.

(Whereupon, at 3:58 p.m., the public meeting was concluded.)

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