

Memo to File: September 11, 2017

Attached is the transcript from the Annual Assessment Meeting for Oyster Creek Nuclear Generating Station on May 25, 2017.



Official Transcript of Proceedings

NUCLEAR REGULATORY COMMISSION

Title:	Oyster Creek Nuclear (2017 Annual Asse Public Meeting	Generating Station essment
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NEAL R. GROSS AND CO., INC. Court Reporters and Transcribers 1323 Rhode Island Avenue, N.W. Washington, D.C. 20005 (202) 234-4433 UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION + + + + + + OYSTER CREEK NUCLEAR GENERATING STATION + + + + + + 20:7 ANNUAL ASSESSMENT PUBLIC MEETING + + + + + THURSDAY, MAY 25, 2017 + + + + + The Public Meeting convened in the

Holiday Inn Manahawkin, 151 Route 72 West, Manahawkin, NJ 08050, at 6:00 p.m., Donna Janda, Facilitator, presiding.

PRESENT:

DONNA JANDA, Regional State Agreements Officer, Region

I, Facilitator KIM CONWAY, Project Manager, Reactor Decommissioning Branch, Office of Nuclear Material Safety and Safeguards

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ZAHIRA CRUZ-PEREZ, Project Manager/Geotechnical

Engineer, Reactor Decommissioning Branch, Office

of Nuclear Material Safety and Safeguards SILAS R. KENNEDY, Chief, Projects Branch 6, Division of Reactor Projects

AMAR PATEL, Senior Resident Inspector

DAVE PELTON, Deputy Director, Division of Reactor Projects

KEVIN ROCHE, Reactor Systems Engineer, Japan Lessons Learned Division, Office of Nuclear Reactor

Regulation

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

6:00 p.m.

MS. JANDA: Okay, good evening everyone. Welcome this evening to the 2017 Oyster Creek Nuclear Generating Station Annual Assessment Meeting.

My name is Donna Janda, and I will be facilitating this meeting tonight.

On the registration table there was a sign-up sheet for public speakers. If you'd like to speak this evening and have not already done so, please step outside and to add your name to the list, and it's right on the registration table.

Public speakers will be called, and basically from the first one to sign up, they'll be the first one to be called. And I'm going to just call one person at a time. There's a microphone right here in the middle, between -- the third row in between the rows here, and just ask you to come up to the microphone to speak.

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And if you need to have a microphone

brought to you, just let me know and we'll bring one to your chair. And I would ask that we basically keep the front row clear. If you have something that you would like to give to the NRC staff, please just hand it to me, or you can hand it to Brett, who's standing at the door.

So in an effort to give as many people as possible an opportunity to speak this evening, we will limit the speakers to three minutes. Know that I'm going to hold people to that. We'll hold up a yellow card if we need to when you have one minute left, and then a red card when the three-minute time is up, and at that point I'll just ask you to conclude.

So the NRC staff will remain after the meeting to have some individual discussions out in the hallway, if you'd like to speak to them at that time.

So tonight the meeting is being recorded, and a transcript will be generated after the meeting. Both the audio and the transcript will be posted to the NRC website.

So in light of that, I would ask that when it's your turn to speak, that you please identify

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yourself. I would also ask, for the sake of the audio recording, that people not speak over each other.

Now just for some basic ground rules. First, while recognizing that there may be some strongly held opinions concerning the matters that we'll likely be discussing tonight, I ask that you nonetheless please adhere to civil decorum, that you respect each other. So please do not disrupt each other.

Just wouldn't as you want to be minutes interrupted during your three at the microphone, please respect the speaking time of others. And I want to be very clear on this point Threatening gestures or statements will under also. no circumstances be tolerated, and would be cause for immediate ejection from the meeting.

If you feel that you've been threatened, please let me know, or tell one of the NRC personnel in the room.

A few minor housekeeping matters. The bathrooms are located outside the doors that you entered. You would take a right at the hallway, and then your next right, and they'll be down there,

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straight ahead.

The exits are again right through those double doors, and you could go down the hall, take a left, right out back, and here there's another exit that you could exit out, and then head down towards the lobby area and out the front door.

While cameras are permitted, please try not to obstruct the view of other audience members. And if you would be so kind to please silence your cellphones at this time.

So first I'm going to introduce the NRC staff that's assembled here, and give you a short biography of each of the staff, and then we'll get into the NRC's presentation.

So the first person I want to introduce is Dave Pelton, and Dave is over there on my right -- far right. Dave is the Deputy Director of the Division of Reactor Projects at NRC, Region I.

He began his NRC career in 1997 as a resident inspector in Region III. His previous assignments included three branch chief positions in the Office of Nuclear Reactor Regulation, the Division of License Renewal, Division of Policy and Rulemaking, and the Division of Operator Reactor

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Renewal.

He was the recipient of the NRC's meritorious service award. Prior to joining the NRC, Dave spent ten years working as a nuclear engineer at the Portsmouth Navy Shipyard. He received a Bachelor of Science Degree in Mechanical Engineering from Pennsylvania State University.

And the next person to introduce is Silas Kennedy. Silas is the Chief of the Division of Reactor Projects, Project Branch 6, in Region I. Mr. Kennedy joined the NRC in 2001 as a reactor inspector. He has held several positions, including Project Engineer, Resident Inspector at Millstone, and Senior Resident Inspector at Calvert Cliffs.

Prior to joining the NRC, Mr. Kennedy worked briefly for Agere Systems as a process engineer, and served as a nuclear-trained officer in the US Navy. Mr. Kennedy earned a Bachelor's Degree in electrical engineering from the University of South Carolina, and a Master of Science in Administration from Central Michigan University.

And the next person that I'll introduce is Amar Patel. And Amar is the Senior Resident Inspector at Oyster Creek since February of 2015, and

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has been at Oyster Creek since 2012 as a resident inspector. He joined the NRC in 2002 as a reactor engineer in Region I.

Prior to his current position, he served as the Resident Inspector at Hope Creek, as a reactor inspector in DRS Engineering, Branch II, and as a project engineer in DRP Branch V. Amar earned a Bachelor's Degree in Electrical Engineering, as well as a Master's Degree in Engineering Management from Drexel University

And the next person I'll introduce is Kevin Roche. Kevin's here in the front row. Kevin joined the NRC in 2010, and is currently a reactor systems engineer in the Japan Lessons Learned Division in the Office of Nuclear Reactor Regulation.

He has been in the Division since August of 2014. Before moving to the Japan Lessons Learned Division, Mr. Roche was the Performance Assessment Program Lead in the Department of Inspection and Regional Support in NRR.

Mr. Roche also spent nine months as the Acting Resident Inspector at Surry Power Station in Virginia. Prior to his employment at the NRC, Mr. Roche was a nuclear shift test engineer at the

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Puget Sound Naval Shipyard for six years.

Mr. Roche holds a Bachelor's in General Engineering, with an electrical specialty from the Colorado School of Mines, and is a registered professional engineer in the State of Washington.

And next is Kim Conway. And Kim is a project manager in the Reactor Decommissioning Branch, in the Office of Nuclear Material Safety and Safeguards, where she is currently the lead for the decommissioning activities associated with Three-Mile Island 2, Fermi 1, Indian Point 1, NS Savannah, and the State University of New York at Buffalo, Research Reactor.

Ms. Conway joined the NRC in 2006, after receiving a B.S. in Mechanical Engineering from Rensselaer Polytech Institute, and she's been a project manager with the NRC's Decommissioning Program for nine years.

And our last speaker is Zahira Cruz-Perez, and she is a project manager and geotechnical engineer in the Reactor Decommissioning Branch of the Division of Decommissioning, Uranium Recovery, and Waste Programs in the Office of Nuclear Material Safety and Safequards.

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She has worked in the NRC since 2003, and has held different positions, including Technical Reviewer in the areas of civil engineering and geotechnical engineering, Project Manager and Technical Assistant at the Office of Nuclear Reactor Regulation, and Office of New Reactors.

She is currently assigned as the Project Manager for the Dresden Unit 1, Peach Bottom Unit 1, and Rancho Seco. Ms. Cruz holds a Civil Engineering Bachelor's Degree from the University of Puerto Rico, Mayaquez Campus, and а Master's Degree in Geotechnical Engineering from the University of Maryland, College Park Campus.

And now let me turn it over to Dave Pelton.

MR. PELTON: Yes, thank you Donna. I just want to take a minute to say thank you to all of you for coming out tonight. Weather was a little rough this morning, but it turned out to be a nice day.

Along with our inspect- -- our important inspection role for ensuring public health and safety, we also take very seriously and enjoy engagement with the public.

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It's not only an opportunity for us to talk through our important independent regulator oversight role, but it's also a chance to know the folks who live in the vicinity of the plants, and to directly, face-to-face, address any questions, comments, or concerns you have about the operation of the facility, or our oversight of that facility.

So it's a privilege and an honor to be here tonight. So we really appreciate you coming out. Silas?

MR. KENNEDY: Okay, thanks. Pull slide 2 please.

Okay, in 2016 Exelon operated Oyster Creek in a safe -- safely, and in a manner that preserved a public health and safety, and protect the environment.

Oyster Creek is currently in the regulatory response column of the Action Matrix for having a white finding related to Exelon personnel not following electromatic relief valve -- or EMRV -- reassembly instructions.

This led to a failure of the valve to open during a test on September last year. And I would ask Amar later to talk a little more about the

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details of that issue.

And also just note that the regulatory column is the second lowest level of response in the action issues. Next slide.

So this slide shows the results of our expression activities in 2016. But first note that findings and performance indicators increased in significance from green, white, yellow and red. So the results were, there was all green performance indicators, there were three green findings, and two white findings.

On one of those white findings I just mentioned, was for the EMRV. The other white finding occurred on January 4th of last year, and it was for inadequate work instruction for flexible cup and hose preventative maintenance template, resulting in an inoperable diesel generator.

And you'll see on a later slide, that this finding has been closed out, the supplement inspection has completed, and there were no findings. Next.

So in 2016 we conducted approximately 7,166 hours of inspections -- of inspection and related activities. That also create -- this

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includes the efforts of two resident inspectors that are permanently assigned to the site, and live in the area.

You met Amar Patel. Also there's a Liz Andrews. And the resident inspectors have unfettered access to all areas of the site, 24 hours a day, seven days per week.

In addition to the resident inspector activities, there were 20 inspections at Oyster Creek conducted by regional -- region-based inspectors, including two major team inspections. One was a component design base inspection, and a (inaudible) identification and resolution inspection.

And as mentioned previously, we also conducted a follow-up inspection for a white finding associated with the diesel generator hose failure. Next slide.

And this just the information -- if you want to know a little more about the supplemental inspection for the diesel hose failure, you can put in the ML number -- it's up there -- just put it into Google, the report will pop right up. Okay? Amar? MS. PATEL: Okay. Upcoming inspection plans for 2017 include our routine resident

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inspections, which we will continue to provide dayto-day monitoring of plant operations. The fire protection inspection -- triannual fire protection inspection that was actually completed earlier this year.

And emergency preparedness we have exercise evaluation later this year. And the supplemental inspection, like Silas mentioned earlier, will be conducted to assess the completed Exelon's corrective actions for a white finding related to the electromatic relief valves that did not open during testing during the last refueling outage.

Now specifically, the EMRVs -- the reassembly instructions were not followed, and as a result washers that were required to be in there were not installed, and there's a lever plate that is used for functions, to allow valve opening. That did not function as necessary.

There are five EMRVs at Oyster Creek. One of them did not work. The design is, that you need three out of the five. And this issue was documented in the fourth quarter of 2016, our report. There's a lot of numbers there, but if there's an ML

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number, you can Google that and the inspection report number.

So that completes our presentation, and I'll turn it over to Donna for the question and answer period.

MS. JANDA: Thanks Amar. So our first speaker is Jeff Brown. Mr. Brown?

MR. BROWN: My name is Jeff Brown, I live in Berk. I'm a member of a group called GRAMMES -- Grandmothers, Mothers and More for Energy Safety. I'm part of the More.

In preparation for tonight's meeting, I reread the Asbury Park press articles on Oyster Creek for the past 22 years. We're looking ahead now to 22 years of this thing closing, so I went back 22 years and reread and mostly very fine articles by Amanda Oglesby.

And my first reaction of reading about what had been going on for the past two years, was to think, well maybe I should go out and buy a Mickey Mouse hat and wear it here.

Because for the white findings, the green findings, back and forth what the company does, to the observer it looks like a classic enabler and a

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12-point program, or an overly permissive parent. They always get away with it. They can just -- then they keep on going, they keep on going, and new things happen.

But then it reminded me of a presentation that Dave Lochbaum of the Union of Concerned Scientists made about a dozen years ago, about Oyster Creek, where he described the bathtub curve of industrial projects -- large, complex projects.

So he said most of the problems happen when you start out. Then you get a period of operation where things have smoothed out. You've gone through the shakedown cruise. But then toward the end of the life of a major project, the problems start to escalate, and you wind up with this bathtub curve. And that's a standard, as you know, kind of concept that engineers have used to look at risk.

And when I read over the articles -- and what happened this past year included -- they're such mundane items, such as a lock washer, turbine control valves, support brackets, holes in bellows, electronic pressure regulator, water hose to backup generator, electromatic valves.

It reminds me that in the problems that

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WIPP had in New Mexico -- the Waste Isolation Pilot Program for military nuclear waste -- what blew that thing apart and messed up their plans for salt embedment, somebody changed the kind of kitty litter from inorganic to organic. Somebody at Los Alamos Labs.

And I mean not like somebody at Home Depot. Somebody in the labs made this major mistake of mixing in organic material with nuclear material, had an explosion, that radiation released to the environment.

So it is these little things that add up. So that -- as I was thinking about this, I take off my hat to the inspectors -- whether it's a Mickey Mouse hat or otherwise -- because I realize it's such an important role that you're playing for the public, to have these inspections continue in this kind of countdown to the shutdown.

This is one of the most dangerous periods of time in Oyster Creek's life. We know it's been extended ten years beyond its original design. Thank heavens it's not going to last to the 20-year mark.

But when we get to the countdown, then what? And I would just like to go on record for a

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GRAMMES, to say that we are calling for full decommissioning, not just safe store. Safe store is like a debate over prostate cancer. We get the diagnosis, and should you do anything? Or should you just let it wait out for 60 years and keep your fingers crossed.

So we're hoping that these dangerous materials will be removed from site as soon as possible, and that the materials come out of the pool and put in dry casks as soon as possible. But we do not think they should be sent to Yucca Mountain, as the Congress is trying to push at the end, because that's scientifically and geographically flawed.

And we do not think that it should be put to some interim storage site, because that's one temporary project that's going to be cut in the longterm solution for whoever gets that parking lot dump, whether it's New Mexico or Texas who are pushing for it, and some of the companies there.

So we think that we as a society need to find a final depository. Not some place where it can be recycled in some future time when we somehow figure out what to do with all this remaining energy. It's waste, and it needs to be isolated from the

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environment forever.

And in the meantime we propose HOS -- hardened onsite storage. This means that the dry cask shouldn't just be sitting out on pavement. They should be enclosed. Somebody should not be able to take some kind of a potshot from Route 9 right through those trees, or over those trees, into the waste storage.

And don't forget, it was just last September we had a terrorist attack in Seaside Heights. Homegrown Jersey boy decided to come down and blow up a veteran's race.

So these people are around. This is not just a theoretical. It's just not 911 kind of a thing, but we're vulnerable.

And so to close, I would like to quote some of the Exelon officials who were -- or staff who were quoted in a March 2017 article. A plant staff said that oversight detailed training -- sorry -- and peer checks do not completely eliminate the potential for human error.

We certainly agree with that sentiment, and encourage you to keep up the good work. Thank you.

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MR. KENNEDY: Yes, thanks Jeffrey. Good to see you again here this year.

Firstly, I'd like to try to address your question about the -- or your concern about the bathtub effect.

So I understand you're saying that as the plant is getting older, that you're seeing more failures. But (inaudible) to do is just ensure the public that the plant is operating safely. The design of the nuclear power plant is very robust. There's a lot of safety margin.

There's redundant systems. A few failures here and there does not make the plant totally unsafe. It takes more than just one failure. The operators, they are well-trained, they have procedures, they are licensed by the NRC, it's a very robust training program.

It takes up to two years to get a license from the NRC. Also there's a very rigorous testing and maintenance program. Safety-related equipment required to be tested according to the technical specifications.

There's a maintenance program that is required by our regulations. And also this site has

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been through license renewal, and part of license renewal there's a Agent Management Program that the site is required to put in place for passive components like cables and pipes.

And as you had mentioned Jeff, we also have the resident inspect this year on a daily basis, and you saw that last year we did over 7,000 hours of inspection between the resident inspectors, and also our regional base inspectors.

So they have, again, unfettered access. They can talk from the everyday worker up to the site VP -- site Vice President. So they have a good feel of what's going on at the site. If there's any problems that are identified, we are required for them to put those issues into their corrective action program, and they're required to address those issues.

So I believe the plant is operating safely now, and will continue to operate safely until it shut down.

I also want to mention that we are looking for indicators of the pending shutdown possible impact on safe plant operations. And if we find any indicators, then we would adjust our baseline special

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program to address that particular area, and then we also would engage the senior leadership team on the site.

MR. PELTON: Just a couple extra thoughts I'll share. You know, ultimately something as complex as a nuclear reactor, it is the owner of that reactor who has the ultimate responsibility to make sure that it's run safely, and maintained.

And you know Silas walked you through a number of the programs that we have to provide public assurance that we're providing oversight, and that we're -- we have assurance that the folks who own the site are operating it safely.

So it starts with the folks who own the plant. We are there to just provide the oversight, and as Silas mentioned, the licensee, first and foremost, has a corrective action program that we put -- there's a lot of regulatory stock that we put in those programs

We inspect them frequently. The resident inspectors look at the ability of the licensee to identify their own problems, and to fix those problems. They look at those daily. We have teams that go out I think biannually. Very big teams. So

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we take that part of the process very seriously.

MR. KENNEDY: Got one this year.

MR. PELTON: Sometimes, as Silas said, oftentimes one failure may not lead to a more significant issue. But nonetheless, any failure that affects a safety-related component or a function at the plant, we do expect them to enter those into the corrective action program, and take action to fix it.

And then we follow up to make sure that happens. And when it doesn't, we have inspection follow-up that we can perform, and we have the -- by the Code of Federal Regulations, we have enforcement that we can take as well.

So that's, I think, as Silas said about confidence at the licensees operating Oyster Creek safely, those are some of the things that we do to make sure that that's happening.

Silas also mentioned that we are looking at the activities of the plant as they're approaching their planned shutdown. Part of our inspection process when we get within about three years of a plant's planned closure, we start reevaluating our inspection process to make sure that it's focused on the right things.

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Those things might be, are they planning to make changes to their preventive maintenance program that we think would -- has the possibility of degrading safety? And if they are, we would bring that to their attention, and work with the -- and suggest that those changes may not be appropriate.

We also look at their staffing, and make they re keeping the plant sure that staffed appropriately, with the right operators and the right folks that are walking around the plant everyday to things maintained make sure are and operated appropriately.

And we also look at the safety culture at the site, and we make sure that safety remains paramount. And that's a very important aspect. As a matter of fact, Silas and I and the resident staff met with the plant site Vice President today, and he walked us through the activities that they're doing to continuously monitor how their staff is -- make sure they're qualed, make sure they're prepared.

But to make sure they're also engaged in safety, and understand the importance of safety and their ability to raise safety concerns if they see them. So it's those things that help to provide us

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the kind of confidence that Silas mentioned, that the plant's running safely.

MR. KENNEDY: That answer your question Jeff? Did that answer your question.

MR. BROWN: Let me just say that the thing that, where I find your credibility getting strained, is that there's no punitive impact on the plant for their violations. They get more inspections. Maybe they like Amar. Maybe they'd like to see him more.

So if, for example, I mean you had the fatigue cracking of the bellows, and they've wrapped it many -- five times I believe, according to the 2015 article. But a joint failure happened in 1986 and they failed to consider this experience.

They were -- where the problems of -- what was it, the hoses, 22 years old. They were supposed to be replac- -- they had to be replaced in 12 years. They didn't get replaced for 22 years. No financial consequences to the company, that I've ever seen about.

They've got the valves. The valve is -- if it's -- must be inoperable for more than three days, it's required to shut down the reactor.

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Didn't shut down the reactor. You need three out of five, maybe that's the rationale.

But there never seems to be any punitive impact on the company when they don't live up to their rules. They just get to see more of you. So that just undermines credibility.

MR. PATEL: You know, the additional inspections we do, while they might like to see Amar -- I know I do -- but those inspections are a burden on the licensee, and do reinforce, number one, the expectation that they should have had a behavior or a plant procedure or a process that was different or better.

For example, in the electromatic valves, something as simple as a failure to install a washer caused what was characterized as a white finding, or of low to moderate safety.

So we do reinforce those while we're onsite. We do make sure that the actions that the licensee takes are appropriate, and depending on the significance of the issue, that we -- either the licensee can fix the -- talk about how they fixed or changed a procedure, or fixed a problem, by one of our regulations.

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If it's a significant condition that's adverse to their quality, they would be required to have specific steps to perform a root cause, as well as determine how are they can prevent that same issue from happening again.

So we change and we increase that amount of oversight based on the significance. And to be fair, the process we use by using colors, the colors are informed by the risk of the issue.

So as the risk of the issues increase in significance from green to white to yellow to red, that changes our perspective on the amount of additional inspection the licensee gets, but it also gives us an opportunity to evaluate from an enforcement perspective, with an action such as a civil penalty, is appropriate.

So where you may not see a civil penalty leveraged on the examples that were shown here earlier, it's largely based on the overall significance of the issue, which was, in these cases, the green issues were low significance, and the whites issues were low to moderate.

And the licensee took action to fix those problems. If they had not taken action to fix those

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problems, we might very well have considered enforcement that could lead to a civil penalty.

So there are ways a licensee, or actions or inactions on the part of the licensee, that could result in civil penalties. And they know that going into our inspection program. And by virtue of that, we -- part of the process is meant to encourage the licensee to take the appropriate actions to avoid a civil penalty, or a more significant finding.

May not be completely satisfying, but you know, it's -- our process does -- is graded in that way based on, or at least partially informed by risk, and also based strongly on safety. So we evaluate that every time.

So lest you think these findings come and go and we don't look at them, we also have an annual process where we look at the cumulative impacts of all these findings on plant performance, and we make assessments all the way up through our Executive Director, regarding did we do enough with Oyster Creek? Have we taken the right actions? Are we satisfied that this licensee knows how to operate this plant safely.

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And in this case, as we determined

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earlier this year, we believe that that is the case with Oyster Creek.

MS. JANDA: Okay, thanks Dave. At this point we have no other speakers signed up, so I'm going to offer out to anyone who would like to come up and speak, please go head up to the podium -- I mean up to the microphone, sorry. There's one right there.

> MR. WHITE: You pointing to me? MS. JANDA: Yes, sure. MR. WHITE: Thank you. MS. JANDA: Yes.

MR. WHITE: My name is William White. Bill White. I just, because of what I've heard, I'm impressed what I heard. I first visited Oyster Creek some in 1970. I was the Chief Technical Engineer at а sister plant, which was coming online in Massachusetts -- Plymouth, the pilgrim station. And I just have one question really. I retired to this area 12 years agp, live very close to the plant. Frankly, I did not know the plant was going to continue operation.

I'm very pro nuclear power, not -- but I have to say, I work with the people who hastened or

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contributed to hastening the closing of Oyster Creek, because I feel that the agent plant is not good for the industry as a whole, or for the country, and I'm glad that it is being closed in a couple of years.

I just in the meantime, what I'd like to ask is, being that Oyster Creek has no height pressure-cooled injection system -- which I gather is unique to that plant -- are there some precautions that the operators really understand that, and that you people at the plant understand that, and recognize there are some things you'd better be prepared to do if you have an event -- small (inaudible) -- that does cause what a high-pressure injection coolant system would give you protection for.

And I'll sleep better tonight if you just answer yes. I dom't need detail.

MR. PATEL: Yes. (Laughter.) But if you want me to be more specific, yes. The highpressure system's there. They have CRD -- control raw drive system. They have the feedwater that can also inject into the core. Safety-related sources, you know what their method is. They have those electromatic relief valves that would open on a small break LOCA, for example, for a hypothetical small

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break LOCA.

And they would then depressurize. Well then you have your coarse brace system would then inject into the reactor. So that's the strategy at Oyster Creek, as the design has been approved, and it is a robust design. And they also have the isolation condensers that could be used at a high pressure to remove the DK heat, if necessary. So --

MR. PELTON: And I'll tell you, that's what -- one of the white findings had to do with those electromatic relief valves. And as Amar described, when the plant's operating at relatively high pressure, and they have low pressure systems that will -- that are available to inject water in case there's a loss of coolant accident -- or LOCA -- then it's important that they reduce the pressure in the reactor such that those low-pressure systems can get water where it needs to be.

So those valves -- the electromatic valves -- are what reduce -- or what the operators open to reduce that pressure. And if -- as it was in the case of the one EMRV, just a problem with one valve, it raised the significance from low safety significance -- or green -- to low to moderate -- or

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white.

And it's just -- it's an indication that those values are very important, and the operators at the site, part of their training as licensed operators involves hypothetical scenarios on a -- they have a simulator that's a computer-simulated model of the plant, and they run through those kinds of simulations as part of their continuous training.

And that includes doing manual depressurizations when needed, and making sure that they know how to respond to events that would require the low-pressure injection systems to operate.

But as Amar said, along with those lowpressure systems, they do have installed and normally operated systems, such as the control rod drive system, and others that they can use to inject water even at high pressure.

So it's a fairly robust design. And it's not completely unique. There are a couple of other sites in the country that have a similar design versus a dedicated safety-related high-pressure injection system.

MS. JANDA: Are there any other questions from anyone in the audience? Okay, well at this

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point we are going to conclude the meeting. I do want to point out that there are some brochures out on the table in the back of the room if anyone's interested to take a look.

And also feedback forms that were on the table out front. If you didn't get a chance to pick one up, please do so on your way out. Looking forward to next year, we welcome any of your comments and ideas on what we can do to improve the conduct of this meeting.

And at this point, thank you for attending tonight.

MR. PELTON: And we're all going to be available for a while here to answer any additional questions or comments you might have. So seek us out, and ask away

MS. JANDA: Yes. Thank you.

(Whereupon, the above-entitled matter went off the record at 6:32 p.m.)