# Official Transcript of Proceedings

# **NUCLEAR REGULATORY COMMISSION**

Title: Three-Mile Island, Unit 2

Post-Shutdown Decommissioning Activities Report: Public Meeting

Docket Number: (n/a)

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1	UNITED STATES OF AMERICA
2	NUCLEAR REGULATORY COMMISSION
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4	THREE MILE ISLAND, UNIT 2
5	POST-SHUTDOWN DECOMMISSIONING ACTIVITIES REPORT
6	PUBLIC MEETING
7	+ + + +
8	Wednesday,
9	August 28th, 2013
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1	Hershey, Pennsylvania
L2	The Public Meeting was held at 7:00 p.m., at the
13	Hershey Lodge, Cocoa Terrace, 325 University Avenue,
4	Hershey, Pennsylvania, Bruce Watson, Facilitator,
_5	presiding.
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1	APPEARANCES:	
2	BRUCE WATSON - NRC	
3	JOHN BUCKLEY - NRC	
4	LAURIE KAUFFMAN - NRC	
5		
6	SCOTT PORTZLINE	
7	ERIC EPSTEIN	
8	MARY STAMOS	
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#### A-G-E-N-D-A

Decommissioning Power Reactor Oversight Program,

Decommissioning Activities Report,

Public Comments

Opening Remarks and Introductions Error! Bookmark not defined.4

John Buckley, TMI 2 Project ManagerError! Bookmark not defined.7

Laurie Kauffman, NRC Inspector for SAFSTORError! Bookmark not def:

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

F-K-O-C-E-E-D-I-N-G-

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7:03 p.m.

FACILITATOR WATSON: Welcome and thank you for coming this evening.

My name is Bruce Watson, I'm Chief of the Reactor Decommissioning Branch at the NRC in Headquarters. My Branch is responsible for the licensing activities associated with TMI 2 and a variety of other decommissioning projects around the country.

Tonight's meeting is a category 3 meeting, which means the public participation is actively sought by the NRC. That is why we have it locally, here in the area, where the licensee is.

A report of this meeting will be prepared by the NRC, and it will be made available, to the public, through our NRC's agency-wide document access and management system, commonly known as Adams.

We also have a court reporter here, so the meeting minutes will be captured.

Documents, submitted to the NRC, and comments made by the public, made during this meeting, will become part of the record of this meeting.

On the back table, when you signed in, we do have critique sheets. We would ask it, if you could, fill those forms out for us, and send them in. We would

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1 like your feedback on the meeting, the forum, and your participation. 2 The format for tonight's meeting will 3 include some short presentations by the NRC staff on 5 and inspection processes, licensing, and on 6 highlights of the post-shutdown decommissioning activities report, which is the real purpose of this 7 8 meeting, is to get your comments on the PSDAR, as we call 9 it. Following those presentations we would ask 10 for comments from the public on the PSDAR. And that is 11 12 the subject of our meeting tonight. 13 Can we go to the next slide? MR. PORTZLINE: I have a question. Can you 14 15 clarify a category 3 meeting, and also states that the 16 public can participate, throughout the meeting, as they see fit. 17 So if we have a question, or comment, during 18 19 a slide, we may choose to hold it to the end, or interrupt 20 FACILITATOR WATSON: I would actually like 21 you to hold it up to the end, so we think it would be more 22 23 efficient that way. MR. PORTZLINE: Well, I would like that, 24 25 too. But, sometimes, --

FACILITATOR WATSON: But if you have something you absolutely have to bring up, feel free, get our attention, okay? This slide depicts the decommissioning activities in facilities, that we have conducted, since we instituted the regulations, back in 1997, commonly known as the License Termination Rule. If you look at this slide you will see that we have terminated the licenses on seven power reactors. In all we have terminated the licenses on 11 power reactors, but seven of them were done since we put the new rules, into place, back in 1997. And if you look at the graph, also, we have terminated the licenses of about 50 material sites around the country, complex material sites, as a matter of fact, and 13 research reactors. Let's go on to the next slide, which is the agenda. Our agenda, tonight, is to discuss the NRC's decommissioning process. With me, tonight, is John Buckley, he will be covering that. He is the project manager for TMI 2. And he is also going to discuss the PSDAR for TMI 2, as it was submitted to us.

Region One Office. She is one of our inspectors who

Also, with me, is Laurie Kauffman, from our

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actually inspects the TMI 2. And she is going to discuss the NRC's inspection process.

And then, after we are completed, we gladly ask for your comments, and questions, and hopefully we will be able to respond to whatever your issue, okay?

Given that I'm going to turn it over to John Buckley. And, at the end, I would like to make a few concluding remarks before we close the meeting. We do have the meeting only until 9 o'clock, the room.

MR. BUCKLEY: Good evening. My name is John Buckley, and I appreciate you guys taking your time out of your schedule to come and join us at tonight's PSDAR meeting.

In discussing the NRC's decommissioning process is provided in the 10 Code of Federal Regulations 50.82. And there are specific steps that are spelled out, in the regulations, for how the decommissioning process works.

Decommissioning actually begins when the licensee permanently ceases operations. Within 30 days of deciding to cease operations, the licensee must notify the NRC, in writing, of that decision.

The licensee then removes fuel from the reactor. And, again, after the fuel is removed, the licensees are required to notify NRC that the fuel has

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been removed.

Before, or within two years, of cessation of operations, of that actual notification to NRC, licensees are required to submit what Bruce called the PSDAR, which is the post-shutdown decommissioning activities report. It is tough to say, so I will just use PSDAR for tonight.

So that has to be submitted within, before, or within two years of cessation of operations. Following that the licensees have a choice. They can go into SAFSTOR store mode, or they can start immediate decom.

Within two years of completing their decommissioning activities, the licensees are required to submit, to the NRC, a license termination plan. That document is, in fact, reviewed, and approved, by the NRC and it becomes part of the license record.

When decommissioning is complete the license is terminated. So the question, probably, comes to your mind. If licensees are required to submit a PSDAR prior to, or within two years of cessation of operations, what are we talking about tonight?

Next slide. The accident at TMI made the shutdown of the TMI 2 reactor different from all other reactor shutdowns. Because of the accident the normal

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1 decommissioning process was not followed. During the post-accident cleanup phase, GPU 2 3 defueled the reactor -- excuse me? MR. PORTZLINE: I guess what I'm trying to 5 understand is you said, because of the accident, normal decommissioning process has not been followed correctly? 6 7 MR. BUCKLEY: That is what I said, yes. 8 MR. PORTZLINE: All right. So what 9 process was -- was any process followed at all? 10 MR. BUCKLEY: Well, yes, a process was What was not followed was the licensee did not 11 followed. 12 make a conscious effort to cease operations, because of the accident, operations were ceased. 13 So we didn't get a cessation of operations 14 15 notification. That is why. All right, so the start of the decommissioning process was not followed. I think 16 that is recognized, okay? 17 MR. PORTZLINE: It is not okay, that is why 18 19 I'm trying to follow you. Was there, what you said earlier, and I'm just trying to get this. There are two 20 options, SAFSTOR or Decom. You are saying entombment is 21 not an option, correct? 22 MR. BUCKLEY: Entombment is an option but, 23 generally, it hasn't been chosen yet. And it is not 24 25 expected to be chosen here.

1	FACILITATOR WATSON: Let me just respond to
2	that. Our guidance includes the option for entombment,
3	okay? So far we do not have regulations, nor have we had
4	any reactors, or for that matter, any licensee request
5	anything to be entombed, okay?
6	So we would have to develop rules and
7	regulations for that. But the guidance documents do
8	talk about that. Internationally they talk about that.
9	But, so far, we have not had any entombment
10	requests, nor do we expect any, okay?
11	MR. PORTZLINE: Well, that is where you
12	lost me, because you have three options, and we have no
13	scenario or criteria protocol, why would you have that
14	option?
15	FACILITATOR WATSON: In the guidance, it is
16	not a regulation.
17	MR. PORTZLINE: Just so that I'm clear
18	tonight. Because, again, I have been doing this for 35
19	years, I was told since day one that entombment was an
20	option, you are saying it isn't an option.
21	FACILITATOR WATSON: We haven't mentioned
22	entombment.
23	MR. PORTZLINE: Well, the industry has many
24	reports about entombment, and they are studying how to
25	entomb reactors.

1	FACILITATOR WATSON: Right.
2	MR. PORTZLINE: So for you to stand there
3	and say, to give the impression that entombment is
4	probably not going to happen is completely unfounded.
5	The industry is looking, very carefully, at how
6	entombment will benefit everybody.
7	FACILITATOR WATSON: Well, let me just
8	clarify. We have not had a request for entombment.
9	MR. PORTZLINE: We heard that.
10	FACILITATOR WATSON: The Department of
11	Energy has entombed some of their facilities, okay, after
12	they removed some of the highly reactive material.
13	And that is part of their process, to let
14	things decay, in place, with entombment. But in our
15	licensees we have not had any, nor do we expect any.
16	MR. PORTZLINE: We heard that.
17	FACILITATOR WATSON: But it is still an
18	option, okay?
19	MR. PORTZLINE: Right, and it is likely.
20	FACILITATOR WATSON: That is not the action
21	in progress, we will leave it at that.
22	MR. PORTZLINE: Well, it is part of the
23	agenda because we, as citizens of this area, are
24	concerned about the problems that this plant has given
25	us.

1 It gave us electricity for 90 days and 35 2 years later we still have headaches from it. That is not 3 going to go away. FACILITATOR WATSON: We understand. 5 MR. BUCKLEY: Can I go on? MR. PORTZLINE: Yes. 6 7 MR. BUCKLEY: Okay. during the So 8 post-accident cleanup phase GPU defueled the reactor, 9 and decontaminated the facility to the point where it was in a safe and stable shutdown condition. 10 That condition is 11 called PDMS, 12 post-defueling monitored storage. That transition from post-accident cleanup to PDMS, was reviewed and approved 13 by NRC. 14 15 NRC issued license amendment 45 on September 14th, 1993, which approved two different 16 17 One, it approved the PDMS safety analysis report and, second, it converted GPU's operating license 18 19 to a possession-only license. So although the regulations in part 50.82 20 were written to address routine plant shutdown, those 21 regulations do still apply to an accident reactor 22 situation, such as we have here. 23 GPU, last year, determined that the PDMS 24 SAR, which the NRC reviewed and approved, meets most of 25

1 the conditions that were required of a decommissioning plant at the time, and most of the conditions that it 3 required of a PSDAR today, but not all. So GPU decided to submit, to prepare and 5 submit, a PSDAR to come into compliance with the regulations in 50.82. 6 7 MR. EPSTEIN: So let me ask you this. The 8 company identified the fact that they were 18 years 9 behind in reporting the issue --10 MR. BUCKLEY: That is correct. 11 MR. EPSTEIN: And so you guys, at GPU, had 12 not reported, the way I understand this, we could still not be here tonight, in other words, they could still be 13 out of compliance, and we could be going indefinitely 14 15 until we got to this point? MR. BUCKLEY: Well, I think because of --16 17 and that is where I come back to my statement before, Eric, the fact that there was an accident made the 18 shutdown different. 19 20 The routine decommissioning process was not followed, period. I think that everybody thought that 21 the PDMS SAR was the same, or would be equivalent to, what 22 was required in the decommissioning plan at the time. 23 24 MR. EPSTEIN: No, I get that. But if everybody believes this, why did everybody miss it for 25

1 13 years, that it was reported missing and I'm a probation officer. Next slide, Sarah. 3 MR. BUCKLEY: 50.82(a)(4) provides the general requirements for what must be included in a PSDAR submittal. And 50.82 identifies four, I guess, topics or issues that must be 6 addressed. 8 The first is there must be a description of 9 the decommissioning activities to be undertaken. second, they must provide a decommissioning schedule. 10 Third, there must be an estimate of the 11 12 decommissioning costs and, finally, there must be a discussion about the environmental impacts associated 13 with the decommissioning activities. 14 15 In order to provide additional guidance, to the licensees, the NRC published a Regulatory Guide. 16 is Regulatory Guide 1.185, and the title of that is 17 Standard Format and Content for PSDARs. 18 And so it is that quidance document which 19 20 identifies how NRC will find the PSDAR acceptable to the So the regulations provide the requirements, the 21 guidance document provides how the NRC staff wants to see 22 that regulation implemented. 23 Next slide. 24

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Excuse me.

PARTICIPANT:

1	MR. BUCKLEY: Yes?
2	PARTICIPANT: I want to make a point about
3	the transcription. Will the questions or comments, from
4	the audience, so far, I'm concerned because I have read
5	many transcripts that comments off-mic are inaudible.
6	And it is important to us that it is being,
7	that it is put on the record.
8	MR. BUCKLEY: That is important for us,
9	too.
10	PARTICIPANT: Could we use a microphone
11	when we have comments?
12	MR. BUCKLEY: Certainly. Have you had a
13	problem with names yet, or
14	COURT REPORTER: Yes, no one has identified
15	themselves.
16	FACILITATOR WATSON: Okay, so we should
17	identify could we do that we will do it from this
18	point forward and could we go back to where we started,
19	for now, for comments?
20	PARTICIPANT: I have been identifying
21	myself, maybe he couldn't hear it. That is part of the
22	point.
23	FACILITATOR WATSON: Okay, so we need to
24	correct that. We will take care of it, when we get to
25	O&A we will use the mic

1 PARTICIPANT: No, we need a transcript of 2 what occurs at this meeting. It is a legal document, and 3 we can't have paragraphs say inaudible, when we could have corrected it right now. 5 FACILITATOR WATSON: That is fine. So we 6 will make sure that the names get associated with the 7 statements. 8 PARTICIPANT: I'm saying we want the No. 9 comments to be said into a microphone, and not from 50 10 feet away. 11 FACILITATOR WATSON: You can take mine, I 12 think you can all hear me perfectly well. So good point. When you want to make a comment, come up and you can have 13 the microphone. How is that? Fair enough, state your 14 15 name, make your comment. MR. BUCKLEY: The PSDAR review process is 16 17 also spelled out in the regulations. Upon receipt of a PSDAR the NRC notifies the public. And I did that in the 18 form of a Federal Register Notice. 19 The PSDAR is made available to the public 20 for review, and I did that by placing it in Adams. 21 folks all had public access to it. 22 After publishing the Federal Register 23 24 notice, the NRC is required to schedule a public meeting. That is where we are at tonight. So tonight is the public

meeting associated with this PSDAR submittal.

And the NRC will conduct its review, of the PSDAR, in accordance with the regulatory guide 1.185, that I just mentioned.

I have to let people know that the NRC does not officially approve the PSDAR. The PSDAR is reviewed by the staff, and we will determine whether or not it is acceptable, and the criteria we use for acceptance is provided in that regulatory guide.

Next slide, please, Sarah. Okay. So the reg guide that I just mentioned, 1.185, provides the review criteria. Here is the review criteria the staff will use.

First, can decommissioning be completed as described in the PSDAR? Second, can decommissioning be completed within the 60 years allowed by the regulations?

Third, can decommissioning be completed for the estimated costs that are presented in the PSDAR? And, fourth, the plant decommissioning activities, we have to ensure that they do not endanger the public health or the safety of the environment.

Next slide. Okay, the PSDAR is a rather thin document. It is about 25 pages. It was made available to the public. I hope most of you had a chance to read it.

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1 If you didn't I understand, we are all busy. 2 So what I will do is give you a couple of the highlights from the PSDAR. 3 First, GPU intends to decommission TMI 2 5 concurrently with TMI 1. What this means is that decommissioning of TMI 2 will start after the operating 6 7 license for TMI 1 expires. So the decommissioning 8 process will start after 2034. Second, TMI 2 will remain in the current 9 PDMS state, which it has been in, since 1993. 10 remain in that state until the start 11 of the 12 decommissioning. Third, initiating of decommissioning of TMI 13 2 in 2034 will provide sufficient time for GPU Nuclear 14 to finish decommissioning within that 60 year window 15 specified by the regulations. 16 MR. PORTZLINE: You said GPU. Do you mean 17 First Entergy? 18 19 MR. BUCKLEY: I'm sorry. MR. PORTZLINE: You said --20 MR. BUCKLEY: Yes, correct. And, fourth, 21 licensee estimates that the cost for decommissioning is 22 about 845 million. That is in 2008 dollars. 23 In 2012 dollars that number jumps to about 24 25 950 million.

1	MR. EPSTEIN: (Inaudible.) Is that
2	decommissioning, that includes non-radiological
3	decommission?
4	MR. BUCKLEY: That includes only the
5	decommission required to terminate the license.
6	MR. EPSTEIN: (Inaudible) All right. So
7	let me ask you this, because your numbers don't add up.
8	But you are saying that license termination
9	MR. BUCKLEY: Hold it. Can you use the
10	microphone, Eric, please?
11	MR. EPSTEIN: Thank you. Eric Epstein. I
12	think there is basically the license for TMI 1 was set
13	to expire in 2014. So point number 1 assumes that the
14	license extension, for the plant has
15	MR. BUCKLEY: been extended to 2034.
16	MR. EPSTEIN: And so we are assuming that
17	the plant will run to 2034.
18	MR. BUCKLEY: Correct.
19	MR. EPSTEIN: When you say the TMI 2 license
20	termination will occur before September 2053, 60 years
21	after cessation of operation, the TMI 2 license was
22	issued in '78.
23	MR. BUCKLEY: Right.
24	MR. EPSTEIN: So you are saying that the
25	cessation of operations occurred in '93?
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1	MR. BUCKLEY: Correct.
2	MR. EPSTEIN: All right. So although the
3	plant melted down in '79 you guys, as your frame of
4	reference, you are saying that cessation of operations
5	is actually in '93?
6	MR. BUCKLEY: Cessation of operations is
7	'93, corresponding to the time that they got their
8	decommissioning license, yes.
9	MR. EPSTEIN: So but between '79 and '93
10	the plant did not generate a kilowatt of energy. So what
11	I'm trying to figure out, what do you call that period
12	between melting the plant down, in '79, and '93 cessation
13	of operations? What is that term for those 14 years?
14	MR. BUCKLEY: There is no term for those 14
15	years, it is as simple as that. Cessation of operations
16	has been deemed to be September of 1993. That is when
17	they got their operating license was changed to
18	possession only license.
19	So those are the general highlights. In
20	conclusion, I guess I would just like to reiterate a
21	couple of points.
22	First, the NRC received the PSDAR for TMI
23	2 on June 28th, 2013. The NRC is not required to approve

the PSDAR by regulation, but the NRC will review the PSDAR

for acceptance.

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1	If it is not acceptable, the NRC will send
2	a request for additional information, to the licensee,
3	and the PSDAR will be updated and revised.
4	And, finally, the NRC will consider
5	comments we hear tonight, from you folks, on the PSDAR.
6	We will consider that in our review and acceptance of that
7	document.
8	Thank you very much, I appreciate that.
9	That concludes my presentation. I will turn the floor
10	over to Laurie.
11	MR. EPSTEIN: John, just one thing. What
12	is the difference between acceptance and approve?
13	MR. BUCKLEY: Approve is NRC's formal
14	approval via license amendment. And the acceptance is
15	a non-formal approval, it does not become part of that
16	license.
17	There is no license amendment associated
18	with this
19	MR. EPSTEIN: So you could accept without
20	approval?
21	MR. BUCKLEY: We could but we wouldn't
22	because our acceptance means that we actually find the
23	document
24	MR. EPSTEIN: I'm trying to understand it.
25	At the end of this exercise, today, will there be an

1 acceptance, or will there be approval, or will it be what? MR. BUCKLEY: It will be an acceptance, which is accompanied by a letter going back to the 3 licensee saying we find your PSDAR acceptable. There is 5 not a licensing action associated with that document. Anyway, I look forward to your comments. I 6 7 hope you folks have had the chance to read the PSDAR. 8 know where the criteria that we plan to use, in reviewing 9 that document, is located. If you think that the PSDAR is deficient, in some of those criteria, I look forward 10 11 to your comments. Thank you. 12 MS. KAUFFMAN: Good evening and welcome, ladies and gentlemen. Can you all hear me okay? Thank 13 14 you. 15 My name is Laurie Kauffman and, as was already mentioned, I am the lead inspector for all four 16 17 of the SAFSTOR plants in Region One. I've been conducting decommissioning and 18 19 SAFSTOR plants for about 13 years of my 23 years at the NRC. 20 Tonight I would like to take a few moments 21 to briefly discuss, with you, or cover with you, a high 22 level overview of the NRC's decommissioning power 23 24 reactor oversight program. And, if you don't mind, I'm just going to try to say the SAFSTOR inspection program. 25

The inspection program is a multi-tiered process. It begins with the regulations, of course. But then we have procedures to follow, as well as the licensee has procedures to follow.

And our high-tiered procedure is called the NRC Inspection Manual. And within that inspection

NRC Inspection Manual. And within that inspection manual contains the objectives, and the procedures, that we use to conduct SAFSTOR inspections.

And this particular inspection manual is Chapter 2561, and it is entitled, The Decommissioning Power Reactor Oversight Program.

Now, during the course of my presentation I will be utilizing the acronym SAFSTOR. And that is going to be short for safe storage of a permanently shutdown power plant, such as Three Mile Island Unit 2.

Overall the NRC does have a comprehensive program to conduct inspections. And we conduct routine inspections of site-specific SAFSTOR programs, on an annual basis.

The reason we do that is to verify controls for safe storage of radioactive materials at these permanently shutdown facilities.

Within the inspection manual there are approximately 9 different inspections procedures, that are utilized, if you will, we call them the core

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inspection procedures.

And there are additional inspection procedures that we may utilize at discretion, as we see fit, with regard to how a SAFSTOR program is being run.

Now, remember I'm conducting inspections at four different SAFSTOR plants, so I have to also tailor my inspections specifically to each different plant.

However, having said that, in general some of the inspection programs that we look at, for the licensee's radiation safety programs, their maintenance of systems and components, any safety reviews that they may have done over the past year, for example, since the last inspection was conducted.

And we also review any self-assessments, or their corrective action program. This is just to give you a general idea of some of the areas that we take a look at.

Again, don't forget, I have at least nine areas that I like to take a look at. And I do that on a sample basis. At the completion of each inspection the NRC will issue an inspection report to document the findings and observations.

And, in general, our recent SAFSTOR inspections have found that there have been no ongoing decommissioning activities, that the material condition

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25 1 of the components, and the structures, is satisfactory. And SAFSTOR programs are, in general, in compliance 3 with regulatory requirements. inspection reports are publicly available, and they are 5 located in Adams which, again, is the agency-wide documents access and management system. 6 7 And this particular system is the official recordkeeping system through which the NRC provides 8 9 access to libraries, or collections of the publicly available documents. 10 In addition to conducting inspections John 11 and I have a very close working relationship. 12 time I have any inspection items, or what have you, I 13 always make sure that he is aware of those items, and vice 14 15 versa. We keep in touch with each other with regard to any licensing issues. 16 17 The last slide, please. The last slide is our NRC names, our contact numbers, and our email. 18 if at any time you would like to contact us, please feel 19 free to do so. We are available to you. 20 And this concludes my presentation on the 21 22 inspection process. Thank you very much for your time

and attention. I really appreciate you.

At this time we would like to hear any comments that you may have on the PSDAR. Thank you.

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1	FACILITATOR WATSON: Name first.
2	MR. PORTZLINE: Scott Portzline, Three
3	Mile Island Alert.
4	I have two questions for you, Laurie,
5	please. I haven't seen any documents lately, I'm sure
6	they are there, on how much radiation is being released
7	from Unit 2. Can you tell me what that number is now?
8	MS. KAUFFMAN: There is no radiation coming
9	from the plant.
L O	MR. PORTZLINE: When did that change?
1	MS. KAUFFMAN: From when?
L2	MR. PORTZLINE: No, I'm asking you, when
13	did that change?
4	MS. KAUFFMAN: Yes, I know, but I don't know
L 5	what you mean by that.
L 6	MR. PORTZLINE: When did it change from no
L 7	release to a small amount?
8 .	MS. KAUFFMAN: I can't answer that
_9	question. It has been that way for a very long time. I
20	really do encourage you to take a look at the inspection
21	reports.
22	And if you have any difficulty finding them,
23	I would be more than happy to help you find those.
24	MR. PORTZLINE: The second question is, in
25	the past they reported small releases from Unit 2. You

MS. KAUFFMAN: I'm not really sure where you are coming from, from that.  MR. PORTZLINE: I'm coming from the audience, but it seems you can't understand a simple question. I asked a simple question. Are you aware that TMI Unit 2 released radiation in years gone by?  The answer is either yes, you are aware, or no. Now, do you understand where I'm coming from? No, I asked Laurie.
MR. PORTZLINE: I'm coming from the audience, but it seems you can't understand a simple question. I asked a simple question. Are you aware that TMI Unit 2 released radiation in years gone by?  The answer is either yes, you are aware, or no. Now, do you understand where I'm coming from? No,
audience, but it seems you can't understand a simple question. I asked a simple question. Are you aware that TMI Unit 2 released radiation in years gone by?  The answer is either yes, you are aware, or no. Now, do you understand where I'm coming from? No,
question. I asked a simple question. Are you aware that TMI Unit 2 released radiation in years gone by?  The answer is either yes, you are aware, or no. Now, do you understand where I'm coming from? No,
that TMI Unit 2 released radiation in years gone by?  The answer is either yes, you are aware, or no. Now, do you understand where I'm coming from? No,
The answer is either yes, you are aware, or no. Now, do you understand where I'm coming from? No,
no. Now, do you understand where I'm coming from? No,
T asked Laurie
i ablica laarro.
FACILITATOR WATSON: I know you did. This
is a public meeting, and I'm running it, and I would like
to answer the question, sir.
MR. PORTZLINE: Well, I asked Laurie, you
are not Laurie.
FACILITATOR WATSON: I know, but we are
getting ready to go to common questions from the
audience, okay?
MR. PORTZLINE: No, no, no.
FACILITATOR WATSON: No, let me
MR. PORTZLINE: Are you going to have her
answer the question?
FACILITATOR WATSON: I'm trying to
FACILITATOR WATSON: I'm trying to understand your question because, obviously, she didn't

1	MR. PORTZLINE: Is there anyone here who
2	doesn't understand the question?
3	FACILITATOR WATSON: I think the question
4	really is
5	MR. PORTZLINE: Would someone interpret
6	the question for this man here?
7	FACILITATOR WATSON: I'm going to
8	MR. PORTZLINE: Evidently you don't need an
9	interpretation, they all get it. Laurie, could you
10	answer the question, please?
11	FACILITATOR WATSON: I think your question
12	is, are there
13	MR. PORTZLINE: I said Laurie could you
14	answer the question please?
15	FACILITATOR WATSON: Excuse me, I'm
16	speaking.
17	MR. PORTZLINE: She said, earlier at this
18	meeting, that they would be happy to answer and entertain
19	any comment and question. You are not even listening at
20	this moment.
21	MS. KAUFFMAN: Sir, my understanding of
22	your question is, are there any effluents that are coming
23	from the plant, is that correct? I'm asking this
24	gentleman.
25	MR. PORTZLINE: I wasn't listening. Go
1	1

1 ahead, now, please repeat it. The same to you, very This is how you treat the public. 2 FACILITATOR WATSON: 3 Sir, I think the question you were asking, and you can clarify this, was 5 are there effluents, containing radioactive materials, from the site? 6 7 PORTZLINE: That was a different MR. 8 question. I didn't ask that. The question I asked is, 9 was Laurie aware that it used to release radiation. 10 didn't answer yes or no yet. Don't change the question. 11 FACILITATOR WATSON: We are trying to make 12 sure we understand the question. MR. PORTZLINE: All right, I will put it in 13 writing, you can get back to me in 35 years. 14 15 FACILITATOR WATSON: Okay, you are welcome to do that. We would like your comments. You can put 16 them on the critique sheets, if you would like, or you 17 can send them to John, or myself, or whatever. 18 I think the question you were asking was, 19 are there effluents from the plant? Yes, there are. 20 They are monitored, and they are well within the 21 regulatory limits of 10CFR20. 22 fraction 23 are small of the 24 requirements, or the limits, and so therefore yes, there are releases from the plant, very small, very minuscule, 25

1 and there are no health problems with that, no safety issues. Can we open it up for any other questions? 3 MR. EPSTEIN: I'm Eric Epstein, Chairman of 5 Three Mile Island Alert. I think one of the problems is, when the accident occurred I was 18, I'm now 53. 6 7 So there is a lot of people here where this 8 was a determining factor in how their life was lived, and 9 how their life was impacted. And although there are different people 10 here, tonight, wearing different suits, they are kind of 11 12 giving us the same response. What I would like to do is walk you through 13 what I went through, the last 35 years, listening to your 14 15 predictions. Everything I am going to say tonight came 16 17 from the NRC. The reassurances that nobody was hurt, the reassurances that everything was under control, the 18 reassurances that we know how to decommission a plant. 19 20 The reassurances, back in '79, that by 2013 there would be a radioactive waste disposal site to take 21 By the way, Neal, thanks for sending me the 22 the waste. information, I appreciate it. 23 Let me just walk you through, and this is 24 just my personal experience, so I'm speaking for TMI 25

Alert.

What I have witnessed, in 35 years of going through meetings -- now, for some of you who don't know me, or may know me and don't like me, that means there are a lot of people in this audience, and I know a lot of you who have had to give up Girl Scout meetings, that have had to give up doing Little League.

That have given up a lot to be here to make sure that we can document the grotesquery that is happening tonight, because it is grotesque.

If you look at what happened, within two years after submitting the certification of permit to close, to NRC, which is what they did for PDMS, and I was very involved in that, I litigated that case.

Nuclear power plants, all nuclear power plants, as you discussed, are required to file a post-shutdown decommissioning activities report.

GPU's plant owners neglected to do that.

You can call it whatever you want, an oversight, that was in '95, that was 18 years ago, all right?

On February 13th, 2013, and I tracked the records, over 17 years after the report was due, and 30 years after the meltdown, the NRC decided to give TMI 2 the benefit of the doubt, based on an issue that they

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didn't catch, but was brought to them by the company that melted the core.

The NRC stated, quote, and these are your quotes: After reviewing the circumstances for the company's failure to submit a PSDAR, the NRC downgraded the severity level 3 violation, to an NCV, which is a non-cited violation.

In my mind that is like being awarded a PhD for flunking out of first grade. If, according to what you said, that a PSDAR provides a description of the plant's decommissioning activities, a schedule for accompanying them, and the estimate of expected costs, okay, I can accept that.

That is a good idea, let's have a plan, let's have a strategy, let's decide how we are going to do this. The new revised plan, and this is what I have heard for the last 35 years, there is always a new revised plan, scheduling for decommissioning TMI 2 has been developed in order to achieve the termination of the license, by September 14th, 2053, all right?

Eighty-four years after the first piece of dirt was removed, after construction -- 84 years later we are thinking about maybe we will start decommissioning.

Seventy-four years after the plant was

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melted down, and 60 years after TMI, in their own nomenclature said the cleanup has been completed, and future decommissioning will be limited to 200 million dollars.

This is what I heard from you guys, year, after year, after year. Now, I footnoted everything.

I'm a former professor, everything is there for you to look at.

Let me give you a history of what it was like to grow up here at TMI. In '69 Med Ed broke ground, and most of us were supportive of the nuclear power plant thinking, wow, this is a pretty cool thing, we are going to build an atomic energy plant here, it is better than coal.

Not bad. The station came on-line on December of '78, it was grossly over budget, and behind schedule. But nobody really wants to talk about that any more, it was behind -- and it operated for one 120th of its operating life span.

Thank God you guys don't have to operate in a free market, or you would be out of business. In fact, groups like ours, TMI Alert, helped to rescue you.

In '82 we supported the Thornbird Plant, despite the fact that you were two and a half times over budget, despite the fact that you melted the core,

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despite the fact that we ate a lot of crow for doing this, we made sure that you were still around to clean the plant up, even though you are still not around, all right?

The costs that we spent to defuel the plant was one billion. Which was more than it cost to build the plant, more than it cost to build the plant. You didn't pay for it, ratepayers paid for it, taxpayers paid for it, insurers paid for it.

In fact you blamed Babcock and Wilcock for the problem. Maybe some of you weren't even born back then, I remember that.

At the time of the accident the plant was owned by four companies, none of which are in this area, Jersey Central Power and Light, Penn Elec, and Med Ed. Med Ed owned 50 percent of the plant. Allentown, JCP&L was Jersey, 25 was Pen Elec.

The irony, the insult of the accidents is that very few people around here ever derived any electrical benefit from the accident, but we are still dealing with it 35 years later.

What was really interesting, in 1980, you guys renamed yourself. You were no longer Med Ed, you became GPU. January 18th, 1994, you guys may not remember this, but some of us in the room tonight attended over 80 TMI advisory panel meetings.

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35 Over 80 TMI advisory panel meetings to discuss how we, as a community, you as a regulatory entity, and as a company, we would figure this out. At that time, in 1994, January 18th, this is a direct quote from Robert E. Long, when he was asked, how much will it cost to decommission the plant? million. Here is a quote, GPU spokesperson, Mary Wells said, we have a detailed plan, in place, to make sure that the money is going to be there. The money is never going to be there, the plant is never going to be built. In 1995 we were one of the groups that sued, at the PUC, to make sure that the taxpayer, the ratepayer, actually the ratepayer didn't have to clean up, but we lost. So, basically, the ratepayer is still on the hook for a plant that operated for 120 days, that really produced no energy for the local community. But it gets better. In February 1998, and for years I became a GPU shareholder. The new revised estimates, the new

revised estimates, this is coming from the company, was 399 million to decommission the plant, 34 million for non-radiological decommissioning.

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So in 1993 we were at 433, 433 million. Ιt is interesting because the next year, GPU Nuclear reduced their insurance, if you forget this, from one billion to 50 million. August 9th, 2000, TMI sold, so this is our

third set of ownership since '79. In November of 2001 the license was formally changed. In 2006, again, according to the annual plan, the NRC radiological decommissioning plan, if you add it all up, they have 779 decommissioning, for radiological 27 for non-radiological decommissioning.

Add the numbers up and then you look at what the company has, and they are 246 million dollars under the minimum level needed, under the minimum level needed to decommission, 246 million.

Where I come from that is a lot of money. Maybe not in the nuclear world. So you go to the NRC's -- I went to the NRC's website in 2007 and it said, the current radiological decommissioning cost is 805 million radiological, 27 non-radiological.

The current amount in the decommissioning fund is 601. Do the math, it is consistently 200 million dollars under the minimum level, under the minimum level.

All right. So now we get to 2008, when the market takes a wild turn downward. The cost of

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decommissioning the plant is 831 million, the company has 485 million.

So I think you get where I'm going. You can change names, you can change ownership, you can do all this stuff. The one constant is the inability to accurately predict when the plant will be cleaned up, how much it will cost, and who will be left paying for the bailout.

I'm not going to get into it but the wild card, here, that is very, very negative, is the fact that since deregulation, the people that own the plant no longer have the opportunity to go to the ratepayer to recover decommissioning.

The money is what the money is. In other words, where we are at, right now, is unless the shareholders belly up, there is not enough money.

Deregulation, and I cited the number of court cases which I litigated, demonstrate that there is no more rate relief left from the ratepayers. So the money you have is the money you have. It is still inadequate.

What is interesting, to me, and if you look at, and I don't know if the NRC actually reads GPU's annual reports. The conundrum has always been this, is that the GPU has to operate, if I understand this, John,

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1 under a funding target that the NRC sets, right? So the NRC says, here is your minimum 2 funding target. Does the NRC have the ability to compel 3 the utility to raise the money? That is the problem. 5 You can set whatever target you want, you don't have the ability to raise the money. It is a fool's 6 7 errand. 8 So I said, look, why don't we do this? 9 don't we move forward, let's see where we are at today. 10 Let's take your reports. I looked at your reports, let's see where we are at. 11 12 I have to tell you, it was pretty weird to be 18 years behind the curve, and then give somebody the 13 benefit of the doubt. 14 15 If, and this is going to go back a while. If you look to what we were told by a guy by the name of 16 Ralph probably remembers 17 Frank Standard, him. Unfortunately he has passed away. 18 19 This is what we were told at the TMI advisory 20 panel, quote, unquote, and I got it from his transcript. 21 And this is how we sold the community to delay decommissioning. 22 If we wait to decommission TMI 2, there will 23 be less risk to our workers, and it will be more cost 24 25 effective. He also told the TMI advisory panel, and I

quote, GPU will not have a problem finding funds to shut both reactors in the next century.

So let's fast forward to today. The total minimum level cost, to decommission the plant, is 918 million dollars, which is more than it cost to build the plant. Which doesn't factor the cost of one billion that we put in to defuel the plant.

So we are now at 1.9 billion dollars, to defuel a plant that operated for 120 days, and I don't mean -- or 90 days, I'm trying to be generous here.

So what I'm saying to you is, after 35 years of doing this, let's be honest, you don't have the money. You don't have the technology. You have nowhere to take the waste.

The plant is not going to be cleaned up. You can call it whatever you want, you can call it SAFSTOR, because that is what we are calling it now, we are not doing Decom.

And we can wait, let's wait until TMI 1 gets taken off-line, which is bizarre, since they are owned by another company. But at the end of the day we are looking at a decommissioning date that has been postponed, consistently, year after year, decade after decade.

The accident occurred in '79. We were

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told, in '93, that the cleanup had been completed. Then we were told, when the plant came off-line in 2014, decommissioning would occur.

Then we were told, only two years ago, that decommissioning would occur in 2036. We are in the year 2053. The reality is the plant will never be decommissioned.

Let's stop talking about decom, or SAFSTOR, it is going to be entombment. There is nowhere to take the waste, there is nowhere for it to go. I mean, I can't believe, 35 years later I'm here, I have to be honest with you, wasting my time on an evening, talking to people, and half of you are going, God please shut up, Eric.

And the other half are going, don't shut up,

I get that. But the reality is let's be adults. The

plant is not going to be cleaned up. It is never going

to be cleaned up.

There is no money there, there is no resource, there is no -- there is nowhere to take the waste.

So I want to thank you for coming up tonight and I appreciate your wooden responses, they are the same responses that I have heard, year after year, with different people in different suits.

1	I know you are coming up. Is it Bruce?
2	That is good. But at the end of the day, what is going
3	to happen here is this. As you will ignore the comments,
4	you will approve this, and we will move forward.
5	And by moving forward I mean moving
6	backward. Thank you for your time.
7	FACILITATOR WATSON: This is Bruce Watson.
8	Eric, I want to thank you for your comments. I think we
9	understand them.
10	One of the basis for the 60 year requirement
11	is that in a normal reactor plant, the radiation doses
12	in the plant will be reduced to about one percent to two
13	percent, of what they originally were when the plant was
14	shut down.
15	Also it was estimated that about the volume
16	of radioactive waste will be reduced to about ten percent
17	of what it really was in the beginning.
18	And so since this plant has been defueled,
19	and that is where that billion dollars I believe went to
20	
21	
22	MR. PORTZLINE: You just said, a couple of
23	minutes ago, aren't we there at that percent? There is
24	no reason why the plant can't
25	FACILITATOR WATSON: After 60 years.

1	MR. PORTZLINE: No, no, no. But you just
2	said there was nothing being released. So if there is
3	nothing being released, you have achieved the standard.
4	The issue was this, we have achieved the
5	standard
6	FACILITATOR WATSON: No, we haven't
7	reached the standard for unrestricted release of the
8	site.
9	MR. PORTZLINE: So how much is being
10	released, if you have all your figures?
11	FACILITATOR WATSON: Like I said, before,
12	the radioactive material in the plant is monitored, and
13	any releases are monitored, and they are a small fraction
14	of the requirements in 10CFR20.
15	MR. PORTZLINE: Yes. How many First
16	Entergy employees work at TMI 2?
17	FACILITATOR WATSON: I think it is very
18	few.
19	MR. PORTZLINE: It is zero. It is a
20	skeletal crew, nobody is there. But look, good luck
21	monitoring the stuff with nobody there. I mean, I feel
22	better about that. I'm going to move on.
23	FACILITATOR WATSON: Thank you.
24	MR. PORTZLINE: There is a contract with
25	Exelon. Exelon does the monitoring for First Entergy.

1	This is silliness.
2	FACILITATOR WATSON: So there is a reason
3	for the 60 years. And they can, they can this can
4	result in significant savings from the decommissioning
5	fund, if the volumes of radioactive waste are lower. It
6	is the way the rules are written.
7	I invite anybody else to have an opportunity
8	to speak.
9	(Pause for setting up slide show.)
10	FACILITATOR WATSON: All set?
11	MR. PORTZLINE: As soon as it comes up on
12	the screen.
13	FACILITATOR WATSON: Okay.
14	(Pause.)
15	FACILITATOR WATSON: While we are waiting
16	for the computer to boot up, does anybody else have any
17	other questions, or comments for us, on the PSDAR?
18	(No response.)
19	FACILITATOR WATSON: Hearing none, we will
20	wait for the computer to boot up.
21	(Pause.)
22	FACILITATOR WATSON: All set? State your
23	name, please.
24	MR. PORTZLINE: Scott Portzline, Security
25	Consultant to Three Mile Island Alert.

1 want to make sure that everybody 2 understands the importance of Three Mile Island. 3 the same importance that Gettysburg is to the United States history. 5 And, therefore, the record preservation is of utmost importance, not only for safety and knowledge, 6 7 but accurate history. 8 And before TMI is decommissioned, 9 public wants to participate in some of the ground rules. And we think there are some special considerations 10 because of the 1979 accident. 11 12 I want to go over five or six, I guess it is six issues, very quickly, and then expand on them. 13 This is a presentation that will only be about eight 14 15 minutes long. The record is incomplete, and that 16 because high levels of radiation prevented proper 17 investigations of certain equipment malfunctions. 18 19 The reason is that the man hour exposures 20 was not worth it, at the time of the accident, '79, '80, 21 '81, during those first few years the radiation was too 22 high. And not enough men, with enough hours of 23 exposure left on their sheets. 24

Okay, issue number two, there remained many

1	unanswered questions about what went wrong with the
2	components and systems. The NRC's investigators, along
3	with other investigators, including the President's
4	Commission, could not explain numerous malfunctions.
5	Issue number three, examining these
6	components would provide further opportunity to increase
7	technical knowledge in the data bases, and historical
8	accuracy is always important.
9	Issue number four, examine for additional
10	evidence of tampering or sabotage.
11	Issue number five, there needs to be a
12	complete inventory of what remains behind at unit 2, and
13	the inventory should be made publicly available.
14	We don't know, for sure, what is there. And
15	it is possible that the companies, and the NRC, is not
16	even aware of the inventories.
17	And then issue number six, certain things
18	should be preserved, and sent to museums, such as the
19	Smithsonian Institution, and the Pennsylvania State
20	Museum.
21	And I will just start with this point to
22	expand on. We don't want to see souvenirs carried out
23	of Three Mile Island by workers. This was a serious
24	accident.

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It was also a crime scene in the sense that

the company falsified records of reactor leak rates.

And so for a criminal to benefit by the sale of a book, or a souvenir from Three Mile Island, would be wrong, morally.

That any profit from such souvenirs should go to the rate payons, the taxpayons, the businesses, the

go to the ratepayers, the taxpayers, the businesses, the people who were burdened from the accident.

So I can just foresee, some day, people taking a piece of Three Mile Island, a phone, a control panel, a meter, a gauge, and putting it for sale on ebay.

And I don't think that would be proper. So there needs to be that sort of control over what leaves that island.

So in order to meet all of these objectives the public must be fully engaged. We anticipate additional meetings. I know Eric is very cynical, and I am too, about whether the NRC hears our requests, when they can't answer a simple question of yes or no.

So let's expand on issue number one.

Radiation preventive and proper investigation. One example of that would be the very point of the loss of coolant, called the PORV, has been unexplained.

They took some guesses as to why that stuck open. But it has never been examined, that I'm aware of because the radiation levels were too high.

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So that is just one example. And to think we have a loss of coolant accident, and no one knows, with certainty, what caused that. That is kind of surprising, it is 35 years later.

Issue number 2, there are many investigative failures, and I could easily give you a list of 40 or 50. No one knows the exact triggering event.

I know that sounds hard to believe, we know that the accident started in the condensate polisher system, but we don't know why. We don't know exactly how.

They had some guesses, but they don't know. In fact, when investigators for NASA were working for the President's Commission, went and looked at the condensate polishers, they found out wires had been pulled off of five of the eight terminals. No one at the plant could explain why or how that had occurred.

Issue number two for investigative failures. The integrated control system failure, there should not have been a SCRAM that day. The control system, the integrated control system, should have caused a reactor run back three seconds into the event.

It didn't happen, there was no explanation as to why that happened. Now, if you tear down Three Mile

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Island without having a second chance to look at this stuff, it would be a huge mistake, I think.

An important switch was rewired. This is just another small example. There is no explanation for why a jumper wire was added to a switch. Somebody put that there, nobody knew why. Investigators were suspicious of that event too.

A make-up pump failed to start. The one critical pump to start injecting water into the cooling system, before the high pressure injection turns on, did not start. They could only guess as to why, radiation levels were very high at that area, because radioactive coolant went backwards through that pipe.

So we need to know where the radioactivity is all throughout this plant. It would help explain the accident, which is still not completely understood.

Before destroying the record, investigate these events, and other evidence, which was not covered or understood by previous investigations, that was just five examples.

There is criminal evidence. The President's Commission, and the U.S. Senate investigations both suspected, and requested, sabotage investigations, because of the suspicious evidence and events.

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Further evidence may yet be discovered. There has been more than 120 acts of sabotage and tampering at U.S. nuclear plants. So much so that the FBI issued a warning about that increase in 1983.

This is the letter that was sent, I retrieved it from the National Archives. I have done 40,000 pages of research at the National Archives, and other public document rooms at the Nuclear Regulatory Commission.

I probably know more about the first ten minutes of that accident than just about everybody in the United States. So this letter I got from the National Archives saying that there were suspicious events, and that the FBI should investigate. The FBI did not investigate.

On the component inventory, this is just an example of a few of the components. It would be necessary to accommodate the public input engagement. We want to understand more about the release paths, and equipment malfunctions and, possibly, tampering evidence.

Issue number six, again, is the record preservation. So that is the importance of why we need to have additional meetings. That is the conclusion of

1	mine.
2	When Mary gets a chance to speak she would
3	like to use the presentation.
4	MR. BUCKLEY: Is there a chance that we can
5	get sorry, John Buckley. Can we get a copy of this
6	for the record?
7	MR. PORTZLINE: Yes, I can email it, yes.
8	MR. BUCKLEY: Okay, thank you.
9	FACILITATOR WATSON: So we will put your
10	presentation along with the meeting minutes, in Adams,
11	for public
12	MR. PORTZLINE: I want to say one other
13	thing. Ralph, when that fire truck comes back, could you
14	tell them it is okay, they don't have to fire hose me,
15	I will behave. Inside joke with Ralph. I think the
16	punch line is obvious.
17	FACILITATOR WATSON: Well, you are a man of
18	your word, you were eight minutes.
19	MR. PORTZLINE: Was I?
20	FACILITATOR WATSON: Yes. Your name and
21	spell it for us so that he
22	FACILITATOR WATSON: Yes, Mary Stamos,
23	S-T-A-M-O-S, it used to be Osborne, and my husband Ray
24	worked at Three Mile Island before the accident, his
25	stepfather worked there, at Unit 1 and Unit 2. And his

brother worked there after the accident.

Before the -- during the accident I would not let my husband work there again. So the year before the accident, 1978 in May, one of his coworkers stopped by my house and told me that they were taking so many shortcuts, at Three Mile Island Unit 2, that it was never going to make it.

So that is a thing that kind of put me to the alert. And on this thing, on what we are doing here, the radioactivity inventory and mapping, we want to know what to expect.

We want to know how you plan to contain any radiation during decommissioning. And we want to be able to monitor your progress and see how it matches with your planning.

This is a new event in history, and we would like you to get it right for a change. The radioactivity inventory and mapping will help to understand the transport of radioactive materials from the core, and the release pathways during the accident.

The debate still remains. Here is another example of the release pathways. The reactor building, fuel handling building, auxiliary building.

Here is another example of release pathways. An issue raised by David Lochabum, of the

52 Union of Concerned Scientists, he said a pathway that I would have loved to examine, when I was an expert witness in the TMI 2 case, involved the unit 2 condenser. There was compelling evidence of a primary to secondary tube leak in at least one of the two steam generators. And this one, chemical inventory and mapping. What is also necessary is the pipes, tanks, and the ponds. Underground components, also, and mapping the pipes, tanks, drilled wells, for sampling. And there was confusion, at Vermont Yankee, about underground piping. They didn't even know about it. And this is kind of interesting. When my husband worked there for holidays, and stuff you know, I would cook a ham, or a turkey, or something for Christmas.

And I had heard people were drinking and smoking illegal drugs during these party things, on-site. And one time, months after the accident, a waitress from one of the bars and restaurants, down near TMI had called me.

I don't know how she even knew who I was.

And told me a lot of people were going there, getting drunk, and then going to work doing cleanup at TMI.

So the issues are -- and even security stuff, when people would go on-site, some of those guys

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had drugs on them, when they were going to work. So who knows what was going on with that.

Now, the other thing, what I want you to know, because many of you weren't here, or involved with this during the accident, we had numerous public meetings with the NRC, GPU, Med Ed, all over the area.

And when the Amish would attend the meeting they repeatedly said that you build a house without an outhouse. Now, Yucca Mountain is built on an earthquake fault, which is why it hasn't been going on, or why it is not a waste site.

Three Mile Island is also on an earthquake fault. We had one, I think, in '83 or '84, starting in Lancaster County, going under Three Mile Island, under my house, to the Harrisburg East Mall.

And the earthquake thing really is a scary thing, and I can't believe that, you know, unit 1 is still being allowed to operate, especially since the Fukoshima earthquake and tsunami thing that happened.

But I'm really concerned about that. I'm concerned about spent fuel pools, and the cracking of pipes underground, and other places, how are you going to fix it, how soon does it take for you guys to find out that there is a problem.

And basically that is it. But I do want to

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tell you, also, I have some of my stuff on the Adams thing. I think the name was Mary Stamos Osborne, I'm not sure. But I have photos of mutated flowers, double headed cow, all kinds of horrible things that have happened to those of us living near Three Mile Island for the last 34 and a half years.

And my flowers continue to mutate. I go to grocery stores, or farmers markets locally, and find mutated vegetables. I did organic gardening ever since I lived there in 1970.

And I'm still having trouble, lately, growing vegetables in my yard, even though I had a truckload of soil brought in just to cover it up.

So the Nuclear Regulatory Commission, not necessarily you guys, but the ones that I have dealt with, for all of these years, either don't know what the truth is, or they are lying to each other, and they are starting to believe their own lies.

We had radiation systems, classic bomb tests fallout from Utah, Nevada, the soldiers out in the Pacific Ocean. We had metallic taste, which is the most bizarre thing that I ever experienced.

I will never forget it, that is why I'm still here, believing and knowing what the heck is going on. We had hair loss. We evacuated for over a week, came

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home, gave my son a bath, and the hair was in the tub, and you could see a bald spot on his head.

I brushed my daughter's hair, when she was going back to school, and so much of it came out in the hairbrush, it freaked me out.

And then other people had, and we had reddening skin, the burning, and stuff like that, the eyes. And people all over the area, not just five miles, but 10, 20, 30, 40 miles away had metallic taste on certain occasions.

And it was almost all during the accident. Some of it was a week or so before. And the soldiers out west, Utah, Nevada, and citizens who lived there, during the bomb fallout finally had a settlement.

The Government finally paid them a few years ago over one billion dollars for health damages related to their experience. And here, at Three Mile Island, 3.9 million was awarded to 80 people, and another 15 million was awarded to another class of citizens that had filed for lawsuits.

The 15 million wasn't totally public, but I found it in one of the documents that I just read recently. And the people living within five miles of Three Mile Island, 50 percent or more of them, moved following the accident. And how would the health

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department ever follow them up?

If nothing happened to you would you have moved away from Three Mile Island? So I just want to put that in there, because people have lied repeatedly.

And the rems, and rads, and all of that stuff that they are talking about, it doesn't take 500 rads just to kill a person, I mean, it will kill them.

You can have three rems, or even less, or five rems, which is what the metallic taste range is supposed to be, and you can get sick, and you can die, but you won't die right away, you won't die within a week, unless you are already sick of something.

But it could take 30, 40, 50 years. So people who are doing this, and I don't even know if the Nuclear Regulatory Commission has any health physicists, or anything like that.

But they had better start learning, because radioactivity is mass random, premeditated murder according to Dr. John Gothman. And that is it.

FACILITATOR WATSON: This is Bruce Watson, again. I just wanted to make a couple of comments from your presentation. It was very nice.

We do require a radiological characterization of the entire plant site to be put into the license termination plan. Now, that is a ways off.

1 But the entire radiological characterization of the plant has to be done in order for us to approve the license 2 3 termination plan. MS. STAMOS: Is that an aerial sort of a 5 thing? Because I remember when the airplanes came by and 6 7 FACILITATOR WATSON: No, I'm talking about 8 all the structures. 9 MS. STAMOS: Okay. FACILITATOR WATSON: The soils around the 10 plant, all the interior buildings, do that type of 11 12 radiological characterization as part of the license termination plan, okay? 13 Secondly, with respect to drug use, and 14 other things, the NRC did put rules out in, I believe, 15 the late 1980s, early 1990's, called 16 17 fitness-for-duties rules. And it required licensees, as well as ourselves, to participate in random 18 19 drug testing, and alcohol testing. 20 And it is a very random event, and it is a requirement that they implement those types of programs, 21 and those are reviewed by the NRC, okay? 22 The FBI just broke up a 23 MR. EPSTEIN: methamphetamine ring 24 at Peach Bottom, that was 25 investigated by the FBI. So I appreciate now having something in place.

FACILITATOR WATSON: Well, thank you. Are there any other questions, or comments? Well, I will just make a few concluding remarks.

I just wanted to point out that there are 17 power reactors in decommissioning right now, in the U.S. Four of those are in active decommissioning. One is in Lacrosse, in Wisconsin; Humboldt Bay in California, and Zion 1 and 2, in Illinois.

There are, if you take that four active decommissioning and 13 that are in SAFSTOR. Most of those are at multi-unit facilities, just like TMI 2.

I think TMI 2 does represent a special case, and I respect the fact that there is still a lot of public interest in it, and I expect that to continue.

MR. EPSTEIN: Bruce, can you clarify something? When you say Zion 1 and 2, can you compare it to TMI? Zion 1 and 2, which is owned by Exelon, had its license transferred to environmental solutions.

Let's just be factually correct tonight.

This is not a multi-unit site, this is one unit, owned by First Entergy, one unit owned by Exelon, responsibility for decommissioning is segregated and apart.

1 FACILITATOR WATSON: Well, I appreciate 2 your comment. But my point is that there are four plants that are actively decontaminating right now, or in 3 decommissioning. That is all my statement was. 5 MR. EPSTEIN: No, but you said Zion is a multi-unit plant. 6 7 8 FACILITATOR WATSON: It is a two unit 9 plant, correct. MR. EPSTEIN: But it is different, you have 10 different ownership of -- there are different segregated 11 12 decommissioning --FACILITATOR WATSON: I wasn't going into 13 the ownership issue, I'm just saying there are four 14 plants in active decommissioning, there are 13 in SAFSTOR 15 at this point. 16 We have had four plants join that group this 17 year, and I just heard another announcement that Vermont 18 19 Yankee will be joining at the end of 2014. So my point is that we have a lot of 20 experience in decommissioning. We expect that we will 21 continue to be active in the decommissioning world, 22 regulating the decommissioning. 23 We have extensive experience with it, 24 25 having terminated eleven sites, and we only terminate

those licenses when they demonstrate to us that the unrestricted release criteria, which is what all the plants have gone for.

We also do an independent verification to confirm that they are meeting those requirements, and that we only terminate the license when those license requirements are demonstrated to us.

And, finally, that our inspection program will continue, and it does continue, until the license of these facilities is terminated. And to make sure that things are safe and secure at these facilities.

I would like to remind you that there --

MR. EPSTEIN: Can you edit -- let me just say this, because we are getting into silliness here. More and more plants are being closed down, whether it is Vermont Yankee, whether it is San Onofree, whether it is Crystal River.

My name is Eric Epstein from Three Mile Island Alert. You say that you have a lot of experience in this. Where is the waste going? TMI 2 was unique, it went to INEL. Where does the waste go?

FACILITATOR WATSON: The low level waste, right now, is going to a site in Utah, Energy Solutions Site in Utah. And, recently, a site opened up, Waste Consultant Services, I believe it is called, in Texas,

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1 which accepts the type B and C waste. And so, yes, there is a facility for those 3 Unfortunately there is no high level waste repository, and I respectfully would ask that you talk 5 to your federal government about that, because it is up to Congress to decide what goes on with that. 6 7 MR. EPSTEIN: You sold us a plant in 69, and 8 you said this issue would be solved. It is 2013, dude, 9 There is no site, there is never going to be a 2013. 10 site. There is nuclear waste fairy. Well, I would just 11 FACILITATOR WATSON: 12 encourage you to talk to your elected public officials about that. 13 MR. EPSTEIN: Well, why do you generate a 14 product that has no place to go? Would you buy a home 15 if your toilet had no sewer? It is asinine, 35 years of 16 17 this, and it is the same answer, dude. FACILITATOR WATSON: I understand your 18 19 question, or your comment. We do have the critique 20 sheets, back on the back table, if anybody is interested in providing those, and mailing those in to us. 21 Sarah will have the address for you. 22 more question, or comment? 23 MR. PORTZLINE: Scott Portzline. 24 There

was an electrician found dead at Millstone last week.

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1	Does anybody know why she died?
2	FACILITATOR WATSON: That is something
3	that I wouldn't be involved in. Any other questions?
4	Well, hearing none, then we will close the meeting down.
5	Thank you very much for attending, we
6	appreciate the use of your time in attending.
7	(Whereupon, at 8:20 p.m., the
8	above-entitled matter was concluded.)
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