Official Transcript of Proceedings

NUCLEAR REGULATORY COMMISSION

Title:Predecisional Enforcement ConferenceRE Dr. Bradley Bastow, NRC Licensee

Docket Number: EA-14-116

Location: Lisle, Illinois

Date: Friday, September 19, 2014

Work Order No.: NRC-1072

Pages 1-96

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1	UNITED STATES OF AMERICA
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3	BEFORE THE NUCLEAR REGULATORY COMMISSION
4	REGION III
5	+ + + +
6	PREDECISIONAL ENFORCEMENT CONFERENCE
7	+ + + +
8	BRADLEY BASTOW, D.O.
9	SOUTH HAVEN, MICHIGAN
10	License No. 21-32316-01
11	Docket No. EA-14-116
12	FRIDAY
13	SEPTEMBER 19, 2014
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15	2443 WARRENVILLE ROAD, SUITE 210
16	LISLE, ILLINOIS
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18	The above-entitled matter commenced
19	pursuant to notice at 1:00 p.m.
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1	PRESENT:
2	NRC STAFF: (Personal Appearance)
3	Patrick Louden - Director, Division of Nuclear
4	Materials Safety
5	Cynthia Pederson - Regional Administrator,
6	Region III
7	Steven Orth - Enforcement Officer, EICS
8	Andrew Bramnik - Materials Inspector, Materials
9	Inspection Branch, DNMS
10	Patricia Pelke - Chief, Materials Licensing Branch,
11	DNMS
12	Patricia Lougheed - Senior Enforcement Coordinator,
13	EICS
14	
15	NRC STAFF: (Telephone Participation)
16	Michelle Burgess - Regional Coordinator, Office of
17	Federal and State Materials and Environmental
18	Management Programs
19	Thomas Marenchin - Enforcement Specialist, Office of
20	Enforcement
21	Christopher Hair - Senior Attorney, Office of
22	General Counsel
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1	LICENSEE:	
2	Bradley D. Bastow - Licensee	
3	Phillip Troy - Attorney	
4		
5	MEMBERS OF THE PUBLIC:	
6	Rosemary Parker-Reporter, Kalamazoo Gazette	
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1	<u>PROCEEDINGS</u>
2	(1:00 p.m.)
3	MR. LOUDEN: It's 1:00 o'clock, 1:00 p.m.
4	Central Time, so let's get started. My name is Pat
5	Louden, I'm the Director for the Division of Nuclear
6	Materials Safety here in the Region III office. So,
7	we welcome you. We'll be back to our introductions
8	here at the table in a moment.
9	This is a predecisional enforcement
10	conference between the Nuclear Regulatory Commission
11	and Dr. Bradley Bastow, NRC Licensee, to discuss issues
12	associated with the items described in the confirmatory
13	order issued on September 3rd, 2013. This conference
14	is open for public observation. For members of the
15	public who are in attendance or on the phone, be aware
16	that this is a meeting between the NRC and Dr. Bastow.
17	And following the conference, NRC staff will be
18	available to answer questions and receive comments from
19	members of the public concerning matters discussed at
20	this conference.
21	Also, because it's a public meeting, we
22	have feedback forms available here. We look for
23	feedback on our process. We take that to heart and make
24	adjustments accordingly. If you'd like to provide
25	feedback online, you can go to the NRC public website,
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1	select public meetings, go to the meeting details
2	button and then that will take you straight to the form
3	if you wish to provide feedback electronically.
4	And I will also make one other note. As
5	we proceed today, we have microphones in use here. If
6	you do speak, make sure that you press the button on
7	the front here and you'll get a green light, that means
8	your microphone is active. And when you're finished
9	you click it again and it will be red, we won't be able
10	to hear you. Thank you.
11	Okay. So, before we get into the rest of
12	the agenda, I think that we'll start by doing some
13	introductions. We'll go for folks here at the table
14	on both sides, and then I'll coordinate an introduction
15	for those on the phone.
16	Again, my name is Pat Louden, Director of
17	the Division of Nuclear Materials Safety at Region III.
18	MS. PEDERSON: Good afternoon. I'm Cindy
19	Pederson, Regional Administrator, Region III.
20	MR. ORTH: Good afternoon. I'm Steve
21	Orth, I'm the Region III Enforcement Officer.
22	MS. LOUGHEED: I'm Patty Lougheed, the
23	Chief of the Nuclear Materials Licensing Branch here
24	at Region III.
25	MR. BRAMNIK: And I'm Andrew Bramnik,
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1	Inspector of the Nuclear Materials, Division of Nuclear
2	Materials Safety here.
3	MR. TROY: I'm Phillip Troy. I'm the
4	attorney for Mr. Bastow, or Dr. Bastow. And this is
5	Dr. Bastow.
6	DR. BASTOW: Yes, I'm Brad Bastow, the
7	Licensee.
8	MR. LOUDEN: Thank you. Okay. Now, I'd
9	like to turn to those on the phone. I'll do this
10	through groups. First off, there are other NRC staff
11	on the phone which would like to be identified. Go
12	ahead.
13	MR. MARENCHIN: This is Tom Marenchin,
14	Office of Enforcement.
15	MR. LOUDEN: Okay.
16	MR. HAIR: This is Christopher Hair,
17	Office of General Counsel, Attorney.
18	MR. LOUDEN: Okay.
19	MS. BURGESS: This is Michele Burgess, the
20	headquarters Program Office Enforcement Coordinator.
21	MR. LOUDEN: Anyone else from the NRC?
22	All right. What about local officials or other
23	government officials? Any members of the media on
24	line?
25	MS. PARKER: Rosemary Parker, Kalamazoo
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1	Gazette.
2	MR. LOUDEN: Okay, Rosemary, thank you.
3	Any other members of the public? All right. With
4	that, I would ask the folks on the phone, if you could,
5	if it's possible to place your phones on mute, we'll
6	try it that way. That way it would be easier to control
7	the dialogue. And then if we run into any problems,
8	we'll make adjustments accordingly.
9	Okay. For our agenda this afternoon, I'll
10	first start by going over the purpose of the
11	predecisional enforcement conference. And then Steve
12	Orth will discuss aspects of our enforcement policy and
13	also go over the specific matters that relate to the
14	purpose of the meeting today. And then Cindy Pederson
15	will provide some opening comments. And at that point,
16	we'll turn the meeting over to you for your
17	presentation.
18	And following the presentation, we will
19	take a break for a short caucus to discuss what we've
20	heard and formulate any follow-up questions we may
21	have. When we come back, if we have those questions,
22	we'll ask those questions. And then we'll adjourn this
23	portion of the meeting. Following the end of the
24	formal portion of this meeting, we will be then, we will
25	be available and provide, the meeting will be open for
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1	questions and we will take questions at that time.
2	Any questions or comments regarding our
3	plans?
4	MR. TROY: No, sir.
5	MR. LOUDEN: Okay. All right, so let's
6	get started.
7	The NRC requested this enforcement
8	conference prior to making an enforcement decision on
9	matters surrounding your failure to complete actions
10	as agreed to following an alternative dispute
11	resolution session conducted on July 1st, 2013. These
12	agreed-upon actions were documented in a confirmatory
13	order which was issued on September 3rd, 2013. These
14	issues are of concern to the NRC because these
15	agreed-upon actions, once we have obtained them would
16	have satisfied NRC concerns with your program.
17	As mentioned in our letter provided to you,
18	our preliminary evaluation of these issues, this
19	predecisional enforcement conference provides you with
20	an opportunity to assist the NRC in making an
21	enforcement decision by providing to us any additional
22	information that you may deem important for us to
23	consider. At this time, I'll turn it over to Steve
24	Orth.
25	MR. ORTH: Okay, thank you. The NRC
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Enforcement Program is governed by the Commission's enforcement policy. The purposes of policy are to encourage compliance with our requirements and encourage licensees to identify and to take prompt and comprehensive corrective actions. After wee identify a potentially safety significant issue, we determine whether or not it involves a violation of NRC requirements.

When an apparent violation is identified, the NRC evaluates its actual potential significance in accordance with our enforcement policy. The policy is available on the website. The apparent violation is assigned a preliminary severity level of 1 to 4, with 1 being the highest. Severity levels 1, 2 and 3 are considered escalated enforcement.

16 If we identify a violation that appears to 17 warrant escalated enforcement, we hold an internal 18 meeting called an enforcement panel. One of the 19 purposes of this meeting is to ensure that the NRC is 20 consistently applying our enforcement policy. At this 21 meeting, the NRC will make a preliminary determination 22 about the appropriate outcome for the issue and will 23 also discuss whether a civil penalty appears warranted. In cases where we determine that more 24 25 information is necessary, we request that a licensee

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participate in a predecisional enforcement conference. It is important to note that the decision to hold a conference does not mean that the Agency has made a final enforcement decision. The apparent violation we will discuss today is subject to further review and may change prior to any resulting enforcement action, based in part on the information we gather here today.

If we determine a violation did occur, 8 9 there are a number of sanctions available. Thev 10 include notices of violation, civil penalties, or 11 orders. Normal civil penalty amounts are contained in 12 our enforcement policy; however, we may escalate or 13 mitigate the amount of civil penalties based in part 14 on factors such as identification, corrective action, prior enforcement history, and whether the violation 15 16 was wilful. The nature and the extent of the 17 enforcement action is intended to reflect the 18 seriousness of the violations.

19 The NRC requested this enforcement 20 conference prior to making an enforcement decision on 21 the apparent violation identified in your facility. 22 As discussed in our inspector report, a predecisional 23 conference provides enforcement you with the 24 opportunity to assist us in making an enforcement 25 decision by providing your understanding of the facts

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and circumstances surrounding the violation, whether you agreed or disagreed with our understanding, as provided in the inspector report. We'd also like to get your perspective on the root causes or cause of the few, your view on the safety significance, and certainly a description of the correction actions, both immediate and long term, to resolve the issue.

8 Finally, the conference provides you the 9 opportunity to present any additional information that 10 you believe is important for us to consider before 11 making our enforcement decision. We would like this 12 meeting not to become a debate. The apparent violation 13 discussed at this conference is subject to further 14 review, it may change. It is important to understand 15 that the decision to conduct this conference means that 16 the NRC has not yet determined our final enforcement 17 So, the purposes of the conference and our action. 18 questions is to gain more information so that we can 19 make a high quality judgment of the enforcement action. 20 Before I go into the apparent violation,

do you have any questions about our enforcement process?

MR. TROY: No, sir.

24 MR. ORTH: Okay, thanks. As Mr. Louden 25 indicated, we performed an inspection to assess your

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compliance with the order and to evaluate your corrective actions for the violations. Based on that inspection, we identified 13 areas of apparent noncompliance with the confirmatory order which were documented as examples of the apparent violation. I'd like to go through those now in kind of a relatively low level of detail, but we can have a further discussion as we go through.

Item A-2 of the confirmatory order requires that you will either restore a well counter to service, calibrated and operable, or will provide a license amendment request for alternate instrumentation within 60 days of the issuance of the order. Based on our inspection, we found that you failed to do either within the time frame required by the order.

17 Item B-1, Bravo 1, of the confirmatory 18 order requires that within 90 days of the order, you 19 will complete a medical radiation safety officer 20 refresher training class, approximately eight hours. 21 Although you completed online training courses, you 22 failed to complete those training courses within the 23 time frame required by the order.

Item B-2, Bravo 2, of the confirmatory
order requires that within 60 days of the completion

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of the radiation safety officer training, you will meet with and shadow for at least eight hours another radiation safety officer who oversees a nuclear medical program. We found that you failed to meet with and shadow another radiation safety officer. Item Bravo-3 of the confirmatory order

requires that you provide a copy of the reports of your program reviews to the NRC within 60 days of completion of those reviews. We found that you failed to provide a copy of the November 2013 and January 2014 reports to the NRC within the time frame required by the order.

Item Bravo-3, B-3 of the confirmatory order requires that you provide written certification in the program reviews that you have reviewed the report and agreed with the results of the review, along with independent observations that you have made of the health of the radiation safety program. We found that you failed to provide an independent observation of the health of the radiation safety program in the November 2013 and January 2014 reports.

Item C-1, Charlie 1, of the confirmatory order requires that you conspicuously post the safety culture policy or a notice about the policy in your office and at least two locations. Our inspection found that you failed to post the policy or a notice

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1	about the policy in your office.
2	Item C-1, Charlie 1, of the confirmatory
3	order requires that the safety culture policy must
4	iterate that any concerned individual can contact the
5	NRC, provide a number and contact person in the NRC for
6	additional action on nuclear safety issues if
7	necessary. You failed to include that information in
8	your policy.
9	Item C-1 of the confirmatory order
10	requires that you provide a copy of the policy to all
11	persons, staff and contractors performing duties under
12	the NRC license in your facility. You failed to
13	provide a copy of that policy to the technologist, the
14	only person performing duties under the NRC license,
15	until approximately April 21, 2014 which exceeded the
16	time frame required by the order.
17	Item Charlie 2, C-2 of the confirmatory
18	order requires that documentation of the initial
19	training regarding the safety culture and raising
20	safety concerns would be maintained for future
21	inspections including the dates of the training, names
22	of the attendees, and the subjects covered. Based on
23	our inspection, we found that you failed to document
24	and maintain documentation of the training.
25	Item C-3 of the confirmatory order
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requires that once a quarter you meet with each person, staff and contractors, performing duties under the license to solicit concerns. Based on our inspection, we found that you failed to meet with each person performing duties under the NRC license to solicit concerns.

7 Item D-1, Delta-1, of the confirmatory 8 order requires that you verify that all required 9 records, including all the records and documents 10 created in support of such records, are onsite and 11 available for inspections. We found that you failed 12 to verify that provisions of the radiation safety 13 program, the maintenance of which is required by 10 CFR 14 Part 20, were onsite and available for inspection. For 15 example, you did not have onsite and available for our 16 inspection your procedures entitled Rules for the Safe 17 Use of Radiopharmaceuticals, or your emergency 18 procedures.

19 Item D-1 of the confirmatory order 20 requires that you ensure all documentation completed following the issuance of the order is complete, 21 22 accurate, clear and legible. We found that you failed 23 to ensure that the January 2014 audit report or inspection report of your facility was complete and 24 25 accurate.

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Finally, Item Echo of the confirmatory
order, Item E, requires that you submit written
notification to NRC's Region III Director of Division
of Nuclear Materials Safety upon completion of each
specific action at six months, one year, and annually
thereafter. We found that you failed to submit the
six-month written notification twice.

In many cases, our inspection found that you did not appear to complete the actions until questioned by our inspector.

the 11 Now, in addition to apparent violation, 12 inspection also identified our three 13 severity level 4 violations which concerned the failure to handle radioactive material in accordance with your 15 procedures, the failure to monitor occupational 16 exposure of your staff, and the failure to secure a 17 Cobalt 57 flood source stored in the imaging room as 18 required by 10 CFR Part 20.

19 MS. PEDERSON: Good afternoon. As you 20 recall, last July, we entered into an alternate dispute 21 resolution process. We came into that in a good faith 22 attempt to resolve our enforcement issues and to ensure 23 compliance on the part of the facility. When our 24 inspector came back and did our series of inspections, 25 we found gross noncompliance with our order, as well

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1	as some new violations that Steve also articulated.
2	This is extremely troubling to us, to find a program
3	with this level of noncompliance. This caused us to
4	lose confidence in your ability or your willingness to
5	abide by our requirements and our regulations.
6	So, today's meeting is very important. It
7	is an opportunity for you to inform us into what you
8	will be doing differently and how that will restore
9	compliance and how you will sustain compliance. At
10	this time, Dr. Bastow, we'd like to hear from you.
11	MR. TROY: As in the ADR, I'm going to be
12	speaking for Dr. Bastow. For the record, Cardiology,
13	P.C. is a small cardiology office in South Haven,
14	Michigan. The practice consists of one physician, Dr.
15	Bastow, who is also the radiation safety officer, and
16	one certified nuclear medicine technologist. The
17	office conducts nuclear stress tests generally two days
18	a week, though that can change depending on
19	cancellations and inclement weather. When not
20	conducting nuclear stress tests, our other non-nuclear
21	medical procedures are performed. The nearest office
22	conducting nuclear stress tests is approximately 25
23	miles away, besides Dr. Bastow's office.
24	It's also important to note, during the
25	exit conference call, the Region III inspector and
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supervisor were asked if any of the cited violations, 1 2 13 apparent violations or open items detailed in the inspection report were of safety significance. 3 The question was asked because, to be perfectly honest, 4 they went rather quickly through the list of items and 5 I was not able to copy them down and take notes on all 6 7 of them, and I was concerned that I might have missed 8 something. So, I asked if there were any safety 9 significant issues. The answer that was given by the 10 supervisor and the inspector was that none of these 11 items were of any safety significance. 12 We're going to go through -- do you want 13 us to address the notice of violation or just the 14 apparent violations or both? 15 MR. LOUDEN: Whatever you'd like to 16 propose, we're open to hear everything you'd like to 17 address relative to the non-compliances that were 18 So, I would say if you're prepared to detailed. 19 address both --20 Okay. We're fine, MR. TROY: we're 21 prepared to address both. 22 MR. LOUDEN: All right, thank you. 23 MR. TROY: There may be some, we may not 24 have facts that necessarily align directly with the 25 facts that you have in the inspection report. That

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doesn't mean that we don't take the matter seriously, 1 2 and it doesn't mean that we don't understand that there 3 are issues that need to be addressed at the practice and that will be addressed. 4 Dr. Bastow had an event with his camera a 5 6 few weeks ago and then it was out of service. It could 7 have been repaired relatively quickly. At that time, 8 we decided that it was clear that we needed to take a 9 radical step to address the NRC's concerns. What was 10 done at that point was we entered what in Part 50 11 licensing world we called a standout. And the office 12 has not conducted nuclear activities since that time. 13 We have used that time, because time is the

issue here, that we've used that time to address the deficiencies that were identified in the inspection report. And we've made some substantial progress in that area. There are still things that need to be done. And so, it's true, we haven't gotten everything addressed, but we are working on it. And we will address those before we return the office to service, so we think that's a commitment that should give you some assurance of his level of commitment.

23 MR. LOUDEN: Sir, if I may? What was the 24 time frame again when this occurred? When you --25 DR. BASTOW: Five weeks ago. Or six weeks

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1	ago.
2	MR. TROY: Yes.
3	MS. PEDERSON: When you're discussing
4	these things that you addressed, that they return to
5	compliance, can you please articulate for us what
6	you're going to do to ensure ongoing compliance?
7	MR. TROY: That's in here also.
8	MS. PEDERSON: Because when we went to ADR
9	last year
10	MR. TROY: Yes.
11	MS. PEDERSON: the needed expectation
12	was to return to compliance. And we added in things
13	into the order that should have assured ongoing
14	compliance, and those weren't effective. So, it's
15	important for us to hear what you're going to do
16	differently and that's going to comply and sustain.
17	MR. TROY: We plan on addressing that
18	issue. The way that we set it up in the presentation
19	was that we did the notices of violations first, the
20	three notices of violations. And I think I made it even
21	simpler than you did but summarizing, because I thought
22	we all knew what they were.
23	The first violation was that the certified
24	nuclear medicine technologist did not use a syringe
25	shield during dose preparation. We deny that
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We agree that he did not use a dose shield 1 violation. 2 syringe during, or а shield during the dose 3 preparation, but our understanding is that what he did was in fact a commonly used process in the medical 4 5 industry. And it was developed based upon the use of What he did was he put his 6 the ALARA concepts. 7 operating, or withdrawing the dose from the vial inside 8 the L-Block, he reaches inside and he takes it out or 9 withdraws the dose into the syringe. And I apologize, 10 I'm a lawyer, not a technologist, so I may not have the 11 terminology exactly correct, but the important parts 12 are that when he lifted the, or if he puts the syringe shield on the syringe, it's very difficult for him to 13 14 see the levels on the syringe, and it frequently results in additional operations inside the L-Block to adjust 15 16 the syringe to the right level. By not using the 17 syringe shield in that case, he is able to see the 18 syringe, get the dose right in one effort, and that 19 reduces the handling of the nuclear material and the 20 L-Block. 21 We have talked to two different radiation 22

safety officers and two technicians, all of which say that's a common procedure that they've used. It was developed because the idea was to trade off time of exposure versus the shielding. So, our understanding

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1	was, at the time, that we were doing something that
2	complied with ALARA. And so, we don't know, at this
3	point, we're unsure because the inspector suggested an
4	alternative procedure that
5	MR. ORTH: I think that procedure is bound
6	by your license which is the inspector's
7	recommendation.
8	MR. TROY: No, I'm talking about there was
9	another procedure that he suggested.
10	MR. ORTH: Oh, I'm sorry.
11	MR. TROY: I'm not, I don't know if that
12	was bound by the license.
13	MR. ORTH: Oh, okay. Okay.
14	MR. TROY: He was saying you were supposed
15	to use it during the handling of all aspects, and we're
16	saying if a licensee comes up with a process that lowers
17	dose, the licensee should be free to use that dose as
18	long as it doesn't increase the dose. And if it's a
19	valid attempt to lower dose, no one is intentionally
20	violating regulation, or even believes they're
21	violating a regulation.
22	MS. PEDERSON: But I think what Steve was
23	saying is the procedure you are required to follow per
24	your license requires the use of syringe shields.
25	DR. BASTOW: Even if there is greater
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1	exposure?
2	MS. PEDERSON: It seems to me like that
3	would be a reason why you would want to change your
4	procedure and use the appropriate licensing process to
5	do so.
6	DR. BASTOW: So, there is an ALARA for
7	MR. TROY: Well, then the issue is that we
8	didn't process a licensing memo for what we were doing,
9	not that we were violating NRC regulations?
10	MR. ORTH: You need to follow your license
11	until such time that you get an approval to have it
12	changed. So, that puts you in violation of the
13	license.
14	DR. BASTOW: Even if they get greater
15	exposure?
16	MR. ORTH: Which would be a valid reason
17	for sending in a license amendment in a timely manner
18	to update the procedure.
19	DR. BASTOW: Okay.
20	MR. TROY: Okay.
21	MS. PEDERSON: Patty, is there anything
22	you, Patty, is there anything you'd like to add?
23	MS. PELKE: Well, I would offer that you
24	seem to be relying on the cumbersomeness of the syringe
25	shield or the visibility of the technologist who is
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drawing up the dose to actually use the syringe in combination with the syringe shield. I would say, did you consider providing additional training to that individual so that they could appropriately use the syringe shield? And did you think about getting another vendor that may have syringe shields that may not have had that visibility challenge that it appears to me that you are saying this individual had?

9 MR. TROY: We did not consider another 10 vendor prior to this. We are looking at the issue, and 11 if, well, let me back up. The inspector suggested an 12 alternative procedure in which, I don't know that I can duplicate it because I don't, I'm not that familiar with 13 14 But essentially, in talking to the tech, the it. 15 alternative procedure required holding your hand a 16 different way and you effectively move the range of the 17 badge outside the stream from the pick or whatever you 18 called it, which to us isn't reducing exposure, it's 19 reducing measured exposure. And that would expose us 20 to another enforcement action for not accurately 21 measuring dose, right?

22 what point is, or So, our we were 23 committing to was that we will evaluate the right of 24 the various processes. We will train the technician 25 on the use of his hands during that process. And if

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it turns out that the process that we were supposed to be using or is suggested or whatever, then we will implement that process and we will do that by the end of the year. But we will complete the evaluation and then we will include that during the radiation safety audits, and the materials, I'm sorry, the radiation physicist will conduct the training with the technician on the appropriate procedure.

MS. PELKE: I will offer these syringe shields are widely used in the nuclear medicine field for precisely what we're discussing here to ALARA purposes to reduce extremity doses to technologists.

MR. TROY: I understand. It apparently, I mean we didn't make this stuff on our own. This wasn't a thing that just happened. It is, apparently it's a fairly widely used process. So, I mean it wasn't that RSO instructed him to do it, it was that's why the tech was doing it. So, it's not that we did it alone.

So, we support ALARA, right, and obviously we support reducing dose. And so, we will take the appropriate actions to make sure that's done.

22 MR. LOUDEN: Well, before we move on, what 23 actions will you do in association with what you plan, 24 whatever actions you plan to do, as far as, I mean I 25 recognize the ALARA aspect, but what about reconciling

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1	the differences in your procedures with your license.
2	MR. TROY: Well, obviously if we are doing
3	something that's inconsistent with the license, we
4	would to fix the license.
5	MR. LOUDEN: I just wanted to make that
6	clear, follow it up.
7	MR. TROY: I mean if it turns out that the
8	procedure you all are recommending or suggesting we
9	should use is in fact the better procedure, we will do
10	that and we will comply with the license, because I
11	think you're saying your procedure complies with the
12	license. If it turns out that our procedure or the one
13	that we were using turns out that we have a lower dose,
14	then we would change the license.
15	MS. PEDERSON: I just want to comment on
16	this concept that the inspector suggested a particular
17	procedure, we are not in the role of making suggestions
18	how you should fix your problems and how you restore
19	compliance. You have choices. You need to evaluate
20	what works best for you, what conforms with the
21	requirements. If it requires a license change, it
22	would require a license change. But don't interpret
23	what the inspector said as this is the answer to your
24	problem, that's not his role or her role, and I just
25	want to make that clear. You need to decide what works
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1	for you.
2	MR. TROY: We completely agree.
3	DR. BASTOW: Yes, we're concerned.
4	MR. TROY: And that's, we're not being
5	disrespectful to the inspector, okay.
6	The second level 4 violation was the
7	licensee failed to monitor the nuclear medical
8	technologist's exposure. I believe the word monitor
9	is what our difficulty is here. And on that basis, we
10	deny the violation. Each month, the licensee provided
11	dosimetry, received dosimetry reports and reviewed
12	those reports. Those reports may not have been signed,
13	but that doesn't mean they weren't reviewed.
14	Recently, accurate dose estimates can be
15	prepared without written calculations. Specifically,
16	the number of studies per year is essentially constant.
17	From memory, I believe it was 410 in 2012, and 409 in
18	2013. The dose per study, if you calculate it, it's
19	not constant but it's basically relatively constant.
20	It's stable, right. And in reviewing the way to come
21	up with the best prediction, I believe the best
22	prediction of estimated dose is by the use of dose per
23	study because it's the dose per patient that varies,
24	or it's the patient load that varies from day to day
25	and month to month, not the number of days because he
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1	operates two days a week, you know. So, some days, you
2	know, it might be 25 patients, or some months it might
3	be 25 patients, some months it might be 48, okay.
4	The other issue is that because the dose
5	is about 650 millirem, 690 millirem per month on
6	average. You don't really know you're going to get to
7	the 10 percent limit if there are cancellations on the
8	audit until fairly late in the year. So, that's not
9	an excuse, it's just an observation. So
10	MR. ORTH: Can I just ask a question?
11	MR. TROY: Yes.
12	MR. ORTH: As you're saying for those
13	months, just for my clarification, for the months when
14	the fingerings failed or you we're getting a process
15	or dose, you were entering then an estimated dose for
16	those months?
17	MR. TROY: No. Not in the
18	MR. ORTH: You weren't?
19	MR. TROY: There was not a written record
20	and that is absolutely, we are correcting that. What
21	was done was you look at the form and you know about
22	how many studies they do, you know what the average dose
23	per month is and you can make a reasonable evaluation
24	based upon that experience that the nuclear medical
25	technologist was not going to exceed the annual limit,
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1	right, and that his dose was relatively predictable.
2	It averages, as our inspector said, in the 650 dose,
3	690 millirem per month range.
4	So, there was a safety evaluation. There
5	was not, the deficiency is that there was not a dose
6	estimate recorded and a dose estimate was not reported
7	to RDC, okay.
8	DR. BASTOW: Right, yes.
9	MR. TROY: Not that it wasn't monitored.
10	So, we're quibbling over the word or the violation
11	terminology, not that there was not something wrong.
12	DR. BASTOW: The dose is pretty easy by the
13	number of patients and it's very consistent.
14	MR. TROY: Do you understand?
15	MR. ORTH: No. But you're saying that you
16	basically limited his activities such that he wouldn't
17	exceed an NRC limit, but during the course of the year
18	you weren't really estimating the missing exposure nor
19	quantifying it nor recording it, but you had a high
20	level understanding that he wouldn't exceed the NRC
21	limits?
22	MR. TROY: It depends on
23	MR. ORTH: I guess I'm trying to
24	understand because I can't.
25	MR. TROY: Not to refer to a past political
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issue, but it depends on what the definition 1 of 2 And what we're saying is we monitoring is, okay. 3 monitored the dose, okay. We provided dosimetry, we 4 measured, or we sent the dosimetry off for process and 5 we got the reports. And we looked at the dose reports and could come to the conclusion that he was not going 6 7 to exceed a safety or the annual limit, right? We 8 considered that monitoring. 9 Where we failed was we did not record the 10 estimate on the dose form and we did not incorporate 11 that into his annual dose limit, or dose accumulation. 12 And that, did I say it right? 13 DR. BASTOW: Yes. 14 MR. TROY: And so, those two things we are 15 correcting. Our corrective actions are focused on 16 that. We are now reviewing the monthly doses. Well, 17 we've gone back and we've calculated all the missing 18 doses, right, estimated them. We have recorded them 19 on the dose sheets and we have informed the RDC to 20 into his incorporate those lifetime exposure 21 calculations. Okay, so we are addressing the concern 22 as we see it. 23 And we are also contracting with a new 24 dosimeter provider because we believe that the 25 dosimeters were failing abnormally. We are at

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1	abnormally high failure rate and we have identified a
2	new vendor and we're in the process of preparing a
3	contract with them.
4	We also have alerted the radiation
5	physicist to include this as a specific category that
6	he looks at to make sure that we are in compliance when
7	he does his audits.
8	MS. PEDERSON: Maybe this is a good time
9	to ask this question, or you can address it later. How
10	come it wasn't identified by your audits? Yours or
11	your external person.
12	MR. TROY: There is an issue here where we
13	had one medical physicist providing the service, and
14	in late 2013, we transitioned from that physicist and
15	that company providing audits to a different physicist
16	and a different company who does the audits. That was
17	not a smooth transition. It took a lot longer to make
18	happen than we thought it would. And it is true that
19	we did not do a particularly good job of communicating
20	to him the weaknesses that we knew about. We gave him
21	the order, we talked about it, but it didn't work.
22	And so, we now have spent a great deal of
23	time working with the physicist to make sure he
24	understands that he can't just come in and do the
25	standard, you know, whatever it is, audit he does. He
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1	needs to look at the order and the subsequent inspector
2	report and check those categories, not only in the
3	specifics of what were identified but in the general
4	nature of what was identified in his future audits.
5	MS. PEDERSON: This one wasn't really an
6	order issue, if you will. This was compliance with
7	Part 20. You know, dose monitoring and dose reporting
8	is a basic fundamental of any license program. So, I'm
9	trying to understand how that was missed.
10	MR. TROY: Can you give us one second?
11	MS. PEDERSON: I can.
12	(Mr. Troy and Dr. Bastow
13	confer.)
14	MR. TROY: I think I would call it an RSO
15	training issue in that he understood he was supposed
16	to be looking at the legal limit, but he had not, in
17	previous incarnations of techs working there, the techs
18	had taken care of recording the dose and reporting it.
19	And so, it was not something he was in the habit of doing
20	beyond looking at the total dose and were we safe
21	relative to annual limits. And so, he didn't pick up
22	on the fact that he should have been doing that when
23	we got the new tech, so it's a training bug.
24	MS. PEDERSON: And I, okay, I understand
25	you're saying that, but your medical physicist that was
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1	coming in to audit your program didn't identify this
2	either, correct?
3	MR. TROY: Well, no, I don't know that he
4	did or didn't personally.
5	DR. BASTOW: He didn't.
6	MS. PEDERSON: Well, if he did identify it
7	but didn't get it fixed before inspection.
8	DR. BASTOW: He didn't do it, that's
9	right.
10	MS. PEDERSON: So, I'll just, I was making
11	an assumption that he didn't identify it.
12	MR. TROY: I think that's reasonable.
13	DR. BASTOW: Yes.
14	MS. PEDERSON: Okay. Why not?
15	MR. TROY: I think that, well, I certainly
16	wouldn't pretend to try to tell or say how the NRC
17	conducts inspections. But most oversight
18	organizations do it on a kind of random sampling basis.
19	And he, you know, whether he looked at it or not, I do
20	know that he, if you look at the forms, they have
21	hold on for a second.
22	MS. PEDERSON: We don't need to belabor
23	this point. We've got a lot of other things to talk
24	about.
25	MR. TROY: Okay. If you look at the
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1	MS. PEDERSON: But I guess the question
2	I'm asking is about the quality of the audits that were
3	done
4	MR. TROY: The physicist understands that
5	he didn't look at it and that he was confused by the
6	form. It was not the form, at least I think he said
7	it was not the format that he was used to seeing, and
8	so he didn't recognize that the blank space was
9	significant, okay.
10	DR. BASTOW: Yes. In my understanding.
11	MR. TROY: He now knows. The tech, the
12	RSO and the medical physicist all understand how they
13	didn't see this and how it wasn't processed. So, we've
14	learned the lesson.
15	DR. BASTOW: That's true.
16	MR. TROY: The unsecured flood source.
17	This one is even trickier. We accept the violation but
18	we disagree with the severity level, and that is the
19	source, there was a source, a flood source that was on
20	the camera. The doors to the room were open and
21	essentially control of the source was theoretically
22	lost for a short period of time. We agree to that.
23	What we are trying to say is that the source
24	has a nominal date of I think 9 March, 9 April, something
25	like that, 9 May of 2009. It's gone through 6.7
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1	something half lives. It's, the current activity
2	level, instead of being 10 microcuries is less than 0.1
3	microcurie. So, instead of being able to put the
4	source on the camera and complete the test within, you
5	know, a nominal period of time of 15, 30 minutes or an
6	hour, the source has to remain on the camera overnight.
7	That really, if you can understand, is the
8	root cause of this because what happened was the process
9	that's followed at the site is they put the source on
10	the camera. To get the required counts, it takes about
11	12 hours, so it stays overnight. They lock the room,
12	they secure the facility and everybody goes home. The
13	next day, what happened we believe, and this is not
14	exactly clear and this is where we're not exactly sure
15	we understand the inspection report, the doctor
16	believes that he went in to the, or he was notified the
17	next morning that the inspector was there, that he went
18	into the room and unlocked the doors and turned on the
19	lights, not the staff, as the inspector said.
20	Now, we're not certain, okay, because to
21	be perfectly honest, other than Jeff and the RSO,
22	everybody else in this facility knows nothing about
23	nuclear medicine. They are totally office staff and
24	ultrasound techs. I mean they're smart people, but

when you go to the office manager and say there's a spill

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1	in the nuclear room, that means about like a code to
2	her. She has no concept of what that is, okay.
3	So, because the source had to be left
4	overnight, it was on the camera when he opened the room.
5	The inspector came in the room, and I'm not sure how
6	long a period of time transpired, but at that point he
7	called the doctor and said that there was, pointed out
8	the source. The RSO, the doctor saw the source,
9	immediately moved it from the camera to the storage in
10	the locker, the hot lab, locked hot lab where it
11	belongs.
12	MR. ORTH: So, when the source is normally
13	in place, aside from that, it's normally locked? It's
14	posted on the
15	DR. BASTOW: Yes.
16	MR. TROY: Yes.
17	DR. BASTOW: Right.
18	MR. ORTH: This seems to be an anomaly is
19	what I'm hearing?
20	DR. BASTOW: No, I went and opened the
21	doors for the inspector.
22	MR. ORTH: Right, that's what I thought.
23	DR. BASTOW: I normally wouldn't go
24	through there but they said the inspector was here, so
25	I went and opened the door and then the flood source
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1	was there.
2	MR. TROY: So, the other, we're quibbling
3	on maybe minor points because we basically accept the
4	violation but the severity level. The imaging room is,
5	just so you understand the layout, the imaging room is
6	where we had the ADR. The camera is right behind it.
7	MS. PEDERSON: I remember.
8	MR. TROY: The door that you were facing
9	that was behind us at that time is the door that leads
10	to the hallway.
11	MS. PEDERSON: Yes.
12	MR. TROY: And that hallway runs from the
13	back of the building to the patient waiting area, but
14	it's not a patient waiting area, right. And it used
15	to be used frequently when people would come from the
16	hospital in the backdoor and go to the pharmacy that
17	was in the front building. The pharmacy is no longer
18	there, so the traffic in that area is substantially
19	reduced. The primary use of that floor is when people
20	come from the patient waiting area in the front of the
21	building to the ladies room, right, and they generally
22	don't go by there.
23	So, we don't believe anybody went into the
24	imaging room. The inspector didn't report anybody
25	going into the imaging room. So, we don't believe that
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anybody would have been exposed to radiation or has been 1 2 exposed to radiation. And if they were, it's at a 3 meter, using the curie meter thumb rule, it would have been about 0.1 millirem per hour which, I'm not blowing 4 5 off 0.1 millirem per hour but it's not a big number, right, so it certainly didn't endanger anybody or put 6 7 anybody in reach in kind of legal limit dose. 8 So, and then the other thing was that there 9 is also no mention that the source was actually removed 10 from the room at any time. It just remained on the 11 So, what we're saying is that there was no camera. actual loss of control, although it was, there was 12 13 access --14 MR. LOUDEN: Access. 15 MR. TROY: Right. And that, you know, 16 there was no safety significance to the event. So, the 17 RSO immediately stored the source. We've talked to the 18 about reminding him to inform the RSO when CMT 19 conducting overnight tests. And we're looking at 20 buying a new source that can complete testing overnight 21 so that we don't have a situation where we set somebody 22 up to do this again. Those are our, we'll turn now to 23 the apparent violations. 24 MR. ORTH: Right. And we understand that 25 you've documented your response to the severity level

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1	4 violations so that we can have that entered as well?
2	MR. TROY: The copy, a copy today was put
3	in the mail today to the document control desk in
4	Washington. And I hand-delivered a copy which I
5	believe was forwarded to yo before the meeting.
6	MS. PEDERSON: I haven't looked in my
7	inbox in the last few hours so I'm not sure.
8	MR. TROY: If you don't have one, we can
9	give you another.
10	MS. PEDERSON: Has anybody seen it?
11	MS. LOUGHEED: Yes, it was given to your
12	inbox.
13	MS. PEDERSON: Thank you.
14	MR. ORTH: So, we have that?
15	MS. PEDERSON: We have it.
16	MR. TROY: Yes, so we complied with the
17	requirement being timely to do it today, okay.
18	MR. ORTH: No, I appreciate that. Just
19	wanted to make sure we have that full documentation so
20	that we can review it
21	MR. TROY: We're trying to turn over a new
22	leaf on timeliness here.
23	MR. ORTH: Okay.
24	MR. TROY: We understand that timeliness
25	is a big issue and it needs to be addressed, so that's
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1	an underlying issue to all of us.
2	Under the apparent violations, there was
3	one for restoring compliance, there was four for RSO
4	responsibilities and involvement, five for safety
5	culture, two for accuracy and completeness of records,
6	and one for notification of completion of activities.
7	The first one is restoring compliance and that is the
8	well counter. And we all understand that the well
9	counter was not through an employer for 60 days. We
10	admit that.
11	The issue is we, at the ADR, we accepted
12	a schedule that was probably overly ambitious for us.
13	And by that, that is not the NRC's fault and we're not
14	suggesting it is, it's entirely our fault. The problem
15	is that the facility works two days a week. 60 days
16	means that they work, that's basically seven and-a-half
17	weeks, so they work 14 days. And the rest of the time,
18	the doctor, the RSO is off doing other things, so it's
19	not like this is his only job, you know major hospital
20	facility.
21	He realized he was running late and
22	ultimately bought a well counter online, and was
23	provided assurances, oh, it will work for technician
24	99, and when the new radiation physicist came in, or
25	he came in and said I'm not sure that this will work,
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1	and so we then initiated investigation to try and find
2	the documentation supporting the fact that it would.
3	We can't even find the manufacturer. So, the company
4	still exists by name but it has many subdivisions and
5	nobody knows where this thing came from.
6	So, at this point, we've lost faith that
7	the well counter that we have is sufficient. And based
8	upon that, we're going to replace the well counter
9	before we start back up or start conducting we will
10	submit a license amendment as was originally required,
11	but until we can find one, you know, they're not
12	necessarily readily available, then we'll make it a
13	condition upon the startup, okay.
14	The other restoring compliance, I've
15	already summarized that page.
16	MS. PEDERSON: Maybe just a comment on the
17	schedule issue. Orders do allow for requests for
18	changes in schedules if you get somewhere near the end
19	of the order. Did it ever cross your mind that you
20	needed relief on the schedule before?
21	DR. BASTOW: It did, yes.
22	MS. PEDERSON: You should have come in
23	with a request to amend the order?
24	DR. BASTOW: Yes. And a lot of it is not
25	even to do with my practice. My fiancé had breast
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1	cancer and ended up going through the mastectomy and
2	the double chemo therapy and then radiation everyday,
3	just finished it. And you know, they gave her, you
4	know, not a very good prognosis. And it did require,
5	I didn't know at the time we met, and during that
6	process, I talked to Phil and he notified, I said I need
7	to tell somebody that I'm running behind on all these
8	things. I had signed up, I think I sent everybody the
9	conferences, I had signed up for two or three different
10	courses and conferences and just lost the money by not
11	going to them because of my commitment to her. And
12	that's really put my timetable behind.
13	But I found out, I did make a mistake, I
14	didn't send it in writing, it was only verbal and that
15	was a mistake.
16	MS. PEDERSON: I'm sorry you had to deal
17	with that, those difficulties. But I would have hoped
18	that, I mean you could have helped in this area, that
19	you follow the process, the regulatory process that's
20	still
21	DR. BASTOW: Right.
22	MR. TROY: The additional, the piece of
23	information you're asking about is did we notify
24	anybody at the NRC, and the answer is yes. I talked
25	to Ms. Lougheed and we discussed the matter. What the
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1	wrong decision was, was we didn't follow it up in
2	writing and we should have.
3	DR. BASTOW: Yes.
4	MR. TROY: And so, we were somewhat
5	surprised, but in retrospect should not have been, that
6	when the inspection report came out, that there were
7	so many issues with what was done because of schedule
8	in that area, right. There are other areas or schedule
9	areas that this doesn't affect, but in that area it was
10	surprising because we had talked to the NRC. But it
11	wasn't in writing, so I understand you're not taking
12	notice on it.
13	Under RSO responsibilities and
14	involvement, there were four violations. One, the RSO
15	did not complete training by 12/12, and that's related
16	to what we just talked about. The second one was that
17	the shadowed individual was an authorized user, not an
18	RSO. And we believe that that is incorrect, or let me
19	put it in another way. We were under the reasonable
20	belief that the person that was shadowed was an RSO,
21	and we believe so today. We believe, and we're not
22	certain about this, that what occurred was he was in
23	practice with another doctor and they had a split up,
24	and the license, we haven't tracked this down, okay,
25	completely, but we asked him if he was an RSO and he
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1	says, yes, I'm an RSO. So, and we asked him again
2	within the last three days, was he an RSO, and he said
3	yes, I'm an RSO.

We believe collectively, not proven, that what happened was when they split up before, the doctor that left was the RSO and he was an authorized user on 6 that license. We believe he subsequently, once again this has not been verified, that he subsequently got 9 a new license for his facility and he is the RSO and that the license that was cited in the inspection report is not the correct one. We certainly don't want this to be another missing meter number kind of fight, okay. And so, you know, if you would like us to investigate 13 that and report back to you, we certainly will. Or your 15 inspector can do it, we don't really care, but we would 16 like to get to the bottom of it.

17 MR. LOUDEN: The intent, the intent of the 18 requirement was to shadow a technically gualified and 19 active RSO and then have the documentation to support 20 that said activity was completed. So, I know that was 21 the basis for a number of the comments. So, what is 22 it exactly that you're proposing now with regard to the difference between the authorized user and the --23 24 Well, if he was an RSO, then he MR. TROY: 25 completed the shadow.

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1	DR. BASTOW: I picked him because he was
2	a solo cardiologist in a similar practice, would have
3	the similar issues and similar operations, and it made
4	the most amount of sense. And I knew his partner had
5	left and he had a new license since the beginning of
6	the year and fresh and new, I thought it would be the
7	best exposure.
8	MR. TROY: So, we know
9	DR. BASTOW: And I called him yesterday
10	and he said yes, I'm the RSO at my facility.
11	MR. LOUDEN: And what did you provide the
12	inspector at that time when he was looking to verify
13	this?
14	DR. BASTOW: We gave him his information
15	to call and talk to the doctor.
16	MR. TROY: We're working on correcting
17	this, but there is a documentation philosophical issue
18	here, and that is a doctor doesn't necessarily document
19	everything that is other than he completed the training
20	and he knew he completed the training. So, he wasn't
21	concerned about that. He did not have a form or a
22	letter or whatever that specified the dates. So, he
23	asked the doctor the dates, he didn't recall them, the
24	other doctor didn't recall them, but that doesn't mean
25	that it didn't happen. That just means that they don't
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1	recall the dates, okay.
2	Philosophically, as a nuclear person and
3	as a nuclear attorney, yes, I live with the
4	understanding of a piece of paper signed and whatever.
5	That's just not his world. So, that's the cultural
6	problem.
7	MR. ORTH: I think we just, we need some
8	documentation or some indication that the individual
9	was responsible as an RSO at a facility to, because as
10	Mr. Louden indicated, the purpose was that you could
11	share from his day-to-day RSO type responsibilities and
12	we want to ensure that it certainly wasn't just as an
13	authorized user because the roles are different.
14	MR. TROY: We understand, we absolutely
15	understand.
16	DR. BASTOW: So, a letter from him would
17	satisfy that?
18	MR. ORTH: To show us what license he was
19	
20	MR. TROY: Yes, to show what license and
21	to say he completed two days of training with Dr.
22	Bastow.
23	MR. ORTH: Yes.
24	MR. LOUDEN: Yes.
25	DR. BASTOW: Okedoke.
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1	MS. PELKE: I think it's the other way
2	around, that Dr. Bastow completed two days of training
3	with the individual that's designated as an RSO,
4	correct?
5	MR. TROY: Whichever way you look at it.
6	DR. BASTOW: Yes.
7	MS. PELKE: Well, also, I'm just trying to
8	better understand that this was an issue that came out
9	of your ADR discussion about a year ago. So, I would
10	have thought at that time that we were clearer in our
11	expectations on what you needed to do to go forward.
12	So, if you agreed to shadow an RSO from a similar sized
13	program, there are a number of ways that you could have
14	contacted us to follow up on confirming that an
15	individual that you were considering spending two days
16	of your time with to fulfill this training was listed
17	on a valid NRC license as an RSO. I mean you could have
18	called us to verify that.
19	MR. TROY: We could have.
20	DR. BASTOW: I guess it didn't cross my
21	mind that he would lie. Yes, I guess I should have
22	checked.
23	MR. TROY: That thought never entered our
24	mind.
25	DR. BASTOW: It honestly didn't.
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1	MR. TROY: I mean I understand your point.
2	DR. BASTOW: I would have checked. I
3	would have checked if I thought that was
4	MR. TROY: It just never entered our mind
5	that when he said he was an RSO, that he might not have
6	been. I mean it's the equivalent of somebody has a,
7	you know, says that they're a doctor and they have
8	forged their license. You know, that's the realm that
9	that would be in our minds. I'm not disagreeing with
10	you and I'm not saying that what you were saying is not
11	appropriate. It's just we didn't think of it.
12	MS. PEDERSON: I wanted to expand just
13	briefly what the documentation requirement is in the
14	order. The licensee will retain documentation showing
15	the name of the RSO to be shadowed, contact information,
16	approximate hours, and insights gained. So, that
17	needs to be included, not just it happened, but I think
18	the insights gained is an important piece of the
19	required documentation.
20	DR. BASTOW: Okay.
21	MR. LOUDEN: So, I think just to reiterate
22	what Cindy just said, and that is whatever you provided
23	to us, to go back to the order, verify all the various
24	facets that might have been stated in the order to do
25	that so that each of those items are addressed when you
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1	do provide them.
2	MR. TROY: We agree with that. The
3	quarterly audits were not submitted within the 60-day
4	period as required. Timeliness just runs all through
5	this. There was one audit, and I'm not sure, do you
6	remember which one that was late? We didn't get it in
7	time.
8	DR. BASTOW: I think it was the March one,
9	I think.
10	MR. TROY: But there's also multiple
11	examples so we're not quibbling with that, okay. This
12	is another one of those philosophical things at the
13	bottom. When the RSO reviewed the audits, he did not
14	provide independent observations to argue the health
15	of the radiation safety program. In other words, he
16	didn't write no comment or the plan is fine. He assumed
17	that if he didn't have any negative comments, he didn't
18	have to provide a comment. We will correct that.
19	DR. BASTOW: We're already doing that.
20	MR. TROY: He's already doing it.
21	MR. ORTH: And I understand the no comment
22	aspect. I think perhaps it doesn't come through the
23	words of the order, but we're looking for some, again,
24	insights other than, I understand there are certain
25	periods of time there may be no comment. But it makes
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1	us kind of wonder
2	MR. TROY: Well, especially in light of
3	what happened before in the history, what you're asking
4	for is not unreasonable, okay. The next one
5	MS. PEDERSON: Again, I'll just focus you
6	back on the words of the order. Not reading it all but
7	agrees with the results of the order along with
8	independent observations that he has made to the health
9	of the radiation safety program. The licensee will
10	also implement actions recommended in the report or
11	document justifications for not implementing the
12	recommended actions.
13	MR. TROY: I'm sorry, I didn't hear the
14	last sentence.
15	MS. PEDERSON: Also, the licensee will
16	also implement actions recommended in the report or
17	document justifications for not implementing the
18	recommended actions.
19	MR. TROY: Right.
20	MS. PEDERSON: So, it's more than just a
21	signature that the document has been read. There's
22	independent observations, there's actions to be taken
23	upon findings or issues in the report assuming there
24	are some. It sounds like based on the inspections,
25	there should have been at least some observed.
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1	MR. TROY: Yes. Restoring, the other
2	comment is the RSO, we did not appreciate the
3	administrative burden created by the schedule agreed
4	to in the order, and that's back to the two days a week,
5	right. You know, he's got other physician patient
6	safety, you know, other things going on. And even in
7	the days where he's doing different stress tests, that
8	afternoon he's off doing something else. So, it's not
9	intended as an excuse but just to describe the situation
10	as it is that, you know, it wasn't like he had enormous
11	amounts of time to focus on these issues. He should
12	asked for more time, and that's our problem not yours.
13	MS. PEDERSON: This just prompts me to
14	comment at this point. Our regulatory structure is to
15	ensure safe use of radioactive material. How an
16	individual chooses to organize their business and
17	chooses how to spend their time, totally up to people
18	other than us.
19	MR. TROY: Exactly.
20	MS. PEDERSON: Our only interest is that
21	you follow the rules which is our assurance that people
22	and the environment are going to be safe. Now, you need
23	to figure out how you're going to do that, how you're
24	going to spend your time. But it's imperative to us
25	that things get dealt with in a timely way. And working
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40 percent on nuclear issues versus 60 percent others, we're not going to give you an extra 60 percent time in order to resolve this stuff. You have material, you use it on an ongoing basis, it needs to be dealt with in a timely way.

We understand. MR. TROY: And that really is what prompted the stand-down was that once the, you know, the camera drove being shut down for a period of time. But then we realized, wait, this is an opportunity to buy time to fix these things, and that's what we're doing. So, okay, we don't get full credit because we didn't decide to do the stand-down first, right, but maybe we get the credit because we ultimately got there and realized that this was an opportunity to fix all the things that we hadn't had the time to address, and so we're doing that. And it's, I mean, and I know money isn't your thing but it's at significant cost.

Finding and scheduling shadowing was difficult. We talked about the family issues and that the individual appears to be an RSO. Finding an RSO who would agree to it was not the easiest thing. It took some protracted time.

And then there's the thing about the no comments which we now have your direction.

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	The corrective action, the RSO is
	evaluating hiring a medical physicist to assume RSO
5	responsibilities, that's one possibility. There are
:	other possibilities that are being considered. If he
	can't do this, then we'll figure out some way to do it.
5	And we're also focusing on timeliness.

7 MS. PEDERSON: Could you elaborate a 8 little bit on your first bullet there about looking 9 possibly for someone to assume RSO responsibilities? 10 MR. TROY: He has always been interested and felt that because it was his office he should retain 11 12 that responsibility and be responsible for what goes on there, right. It may be that he needs someone who 13 14 is more able to focus on nuclear activities --

15 It's a matter of time. DR. BASTOW: You 16 know, we used to put more time into it, I had to actually 17 do that, even though you feel you're losing control and 18 you don't want something to happen, you may not be aware It's a little uncomfortable but there's only 19 of it. so much time I have, so somebody may have to do some 20 21 of that stuff to make sure it gets done, whether I can 22 just do it right.

23 MR. TROY: So, because there are a number 24 of options under consideration, we don't want to make 25 a commitment to any specific option at the present time.

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But that is one of the kind of things that we're looking at to address your concerns because I believe that would give you a big boost in confidence that things are going to be handled correctly. So, in other words, we do take the issue seriously.

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Apparent violations that were for our safety culture, there were five, having to do with not posting the policy in time, not providing the language that he could contact the NRC for additional action and safety issues, not providing policy to the CMT, documentation of the initial training on the policy was not maintained, documentation of the RSO's quarterly meeting with thee CMT was not retained for inspection.

All those deficiencies have been 15 A new revised policy incorporated the corrected. 16 language that was identified in the inspection report has been posted in three locations in the office. The 18 RSO and the certified nuclear medical technologist 19 attended our safety culture training. I provided that 20 I have experience working with safety training. 21 conscious working environment with Part 50 licensees 22 and auditing those programs. We prepared a lesson 23 plan, the lesson plan has been annotated with the date that was given, the attendees, and that I gave the training.

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1	MS. PEDERSON: Was any of this identified
2	or done before the inspector's observations?
3	MR. TROY: No. Well, the procedure,
4	there was a revision in the procedure but I don't know,
5	I can't say that it incorporated precisely the language
6	the inspector raised.
7	MS. PEDERSON: How did it address safety
8	culture?
9	MR. TROY: The policy?
10	MS. PEDERSON: Yes.
11	MR. TROY: The original policy was an
12	excellent policy. It just didn't technically have
13	those
14	DR. BASTOW: I've seen
15	MR. TROY: It's more than I've used in many
16	places.
17	MS. PEDERSON: But was the tech trained?
18	MR. TROY: Yes. That was, I mean if
19	MS. PEDERSON: Is this an issue of trained
20	but not documented?
21	MR. TROY: Yes. The telephone call
22	that's mentioned in there is, the purpose of that call
23	was to ensure that the tech understood what a safety
24	conscious work environment was and what his rights and
25	responsibilities were under Section 2-11 were under the
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1	NRC Form 3 and all of that, right. That's why I called.
2	I didn't call to conduct training that day. So, when
3	the inspector asked me did I have records, the answer
4	was no. I didn't understand that, I mean it was not
5	my understanding that I was conducting initial training
6	at that point, and it wasn't conducted as initial
7	training. It was an interview to make sure that he
8	understood what a safety conscious work environment was
9	and that he needed to report safety concerns either
10	there or to you. He did.
11	And so, the frustrating part for me was the
12	inspector didn't ask that question, right. He focused
13	on the missing documentation which, you know, okay,
14	it's on the wall, it's there, but I don't think it
15	changed his understanding of it at all. So, and he has
16	been provided a copy with the new. But that's just me.
17	The one thing I will say is, and this is
18	probably something for all of us, is that we, people
19	that, you know, we don't look at bulletin boards and
20	we read bulletin boards and that's where we get things
21	like phone numbers and whatnot, right? Anybody, Jeff,
22	the tech is, I don't know, maybe what, 28? 30?
23	DR. BASTOW: Yes.
24	MR. TROY: If he isn't on iPad, he isn't
25	going to see it. So, just a wave of the future is coming
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1	and it's changing what people look at and read. We all
2	don't pay attention to it.
3	And also, the documentation of the RSO's
4	quarterly meeting has been, he conducted a quarterly
5	meeting and that documentation has been retained also.
6	MS. LOUGHEED: Mr. Troy, can I ask a
7	question? When was this
8	MS. PEDERSON: Can you use the microphone?
9	MS. LOUGHEED: When was the safety, this
10	is Patricia Lougheed, when was the safety policy first
11	put into effect?
12	MR. TROY: I don't recall specifically,
13	but it was put up, or it was sent to Dr. Bastow
14	DR. BASTOW: Late fall?
15	MR. TROY: Yes, like
16	DR. BASTOW: Late fall.
17	MR. TROY: Not very long after the order.
18	DR. BASTOW: Yes.
19	MR. TROY: And it was not posted
20	apparently, or if it was posted it fell off, I don't
21	know. I don't know when it went on the wall if that's
22	what you're asking.
23	MS. LOUGHEED: So, late fall you believe,
24	Dr. Bastow?
25	DR. BASTOW: Yes. We probably have
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1	documentation, you know, when you sent it.
2	MR. TROY: I mean I sent the e-mail, I just
3	can't tell you when it was on the wall.
4	MS. LOUGHEED: Was it just created at that
5	time?
6	DR. BASTOW: Yes, it was printed and put.
7	MR. TROY: Well, now, Jeff says he never
8	got a copy of it, so we'll stick with Jeff. We're not
9	going to get into a disagreement over that.
10	MS. LOUGHEED: Thank you.
11	MR. TROY: As far as the missing language,
12	we should have recognized that. It was in the order,
13	right.
14	MR. ORTH: And thank you for mentioning
15	that, because when I read just your picture of your
16	slide here, it reminded me of our discussion on the
17	syringe shield and it said the inspector suggested
18	items. And I hope we're on the same page
19	MR. TROY: No, this is
20	MR. ORTH: firmly documented on your
21	MR. TROY: Right.
22	DR. BASTOW: Right.
23	MR. TROY: There's no question.
24	MR. ORTH: Okay.
25	DR. BASTOW: Yes.
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1	MR. TROY: The next set of apparent
2	violations are two for accuracy and completeness of
3	records. The first one is the radiation safety
4	document procedures, such procedures were not onsite
5	and available for inspection. And the January 16th,
6	2014 order, I mean audit was not complete, accurate or
7	clear.
8	He cited two specific procedures, once was
9	Rules for the Safe Use of Radiopharmaceuticals, and
10	Emergency Procedures. And they were not posted, or
11	they were here is what we believe. We didn't check
12	them the day that the inspection occurred, and so we
13	can't say that they were on the wall. But they are on
14	the wall and they've been on the wall, and to our
15	knowledge they were on the wall, but they were in the
16	hot lab. They are not stored with the rest of the
17	procedures.
18	And our suspicion is he didn't go into the
19	hot lab and see them in the hot lab. And that's why
20	he thought those procedures weren't there. So, can we

prove that? No. But we think that. And we don't know, the doctor didn't post them subsequent to the inspection. The physicist didn't post them subsequent to the inspection. And we don't believe Jeff the tech posted them subsequent to it either.

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1	DR. BASTOW: The physicist is the one that
2	told us they're in there.
3	MR. TROY: He told us they were in there.
4	DR. BASTOW: He's the one that says what's
5	this issue about? They're in the hot lab. He was
6	aware of it.
7	MR. TROY: So, that may explain what
8	happened and why he didn't find them, I don't know.
9	MS. PEDERSON: But he wasn't, presumably
10	during the exit this wasn't discussed?
11	MR. TROY: We didn't know. During the
12	exit, well, it wasn't discussed in detail. He kind of,
13	I'm not complaining and I'm not trying to
14	mischaracterize anything, they went through it rather,
15	it's a lot, it was a lot to go through.
16	MS. PEDERSON: Right.
17	MR. TROY: So, they were going through it
18	rather quickly. And I don't know that we asked and I
19	don't know that we even knew it was or wasn't there at
20	that moment during the exit interview at all, okay.
21	So, we weren't able to tell them during the exit where
22	it was, right. So, we're not, I mean we understand
23	we're partially responsible for that.
24	MS. PEDERSON: I'm just trying to
25	understand the sequence there, so okay.
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1	MR. TROY: Yes. So, it's not, and there
2	were a couple of days or at least one day that he was
3	in the office conducting his inspection and Jeff wasn't
4	there, so he was in there by himself. And that may be
5	the day that he looked, I mean we can see this making
6	sense of why he didn't see it, right. And if he didn't
7	go back and look again, then, if it didn't come up again,
8	then we wouldn't have commented on it or Jeff would have
9	known it was there.
10	MR. LOUDEN: So, you're maintaining that
11	these two procedures were in your facility at that time?
12	MR. TROY: We're not quite going that far
13	because we're not comfortable saying that we know they
14	were there the day he did the inspection because we
15	didn't see them that day, do you understand? Okay. I
16	would never make an assertion that something was there
17	if I didn't see it or he didn't see it. So, what we're
18	saying is it's our belief they were there. They were
19	there since then and we don't recall anybody putting
20	them up or posting them in there, so we're making the
21	leap of faith that they were there. But you know, don't
22	hold me to a, you know, perjury statement that they were
23	there, I'm not saying that, okay.
24	Okay. And finally, all of the
25	documentation deficiencies identified in the
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inspection report, or the audit report of 1/16/2014 have been corrected and the documentation is clear and legible. So, that long list of documents on the page in the addendum portion by Mr. Louden's left hand is there and corrected.

Finally, the final apparent violation is 6 7 the identification of completion of activities. The 8 six-month notification of activity completion was not 9 provided by March 12th as required. We agree. The 10 licensee has implemented a stand-down to correct administrative deficiencies 11 that we discussed. 12 Timeliness was a major focus of that. And this will be the kind of thing that we're trying to fix so it 13 14 doesn't happen again.

today's presentation And basically provides the current status of all actions under the order and the inspection report.

18 I think I understand the MR. ORTH: 19 actions that were taken or discussed to fix the things 20 that we identified or to correct. I'm not sure I got a good understanding of what's going to prevent 22 recurrence.

23 MR. TROY: Hopefully the next page will 24 help you.

> Okay, I'm sorry. MR. ORTH:

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1	MR. TROY: No, that's okay.
2	MR. ORTH: Jumped ahead of you.
3	MR. TROY: In conclusion, we believe the
4	RSO shadowing was completed and we will provide you with
5	documentation that you asked for to demonstrate that.
6	With the documentation and safety conscious work
7	environment deficiencies that were, I think, you know,
8	Section A was the completion of the well counter, B was,
9	was it B? A? B? Whichever it was, the one on safety
10	conscious work environment, all of that has been
11	corrected. And the one on the documentation of
12	completeness and accuracy of information, those have
13	all been corrected.
14	The transition to the new medical
15	physicist and focusing on correcting the deficiencies,
16	excuse me, identified in the inspection report have
17	served as a tool to address the issues of concern to
18	everybody. And so, the medical physicist just
19	completed an audit. Hopefully, when you review that
20	audit, once we get the copy back and mail it to you,
21	you will see a better focus on activities and less
22	deficiencies on the audit, okay.
23	MR. ORTH: So, this new medical physicist,
24	this it the audit-orientated issue?
25	DR. BASTOW: Yes.
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1	MR. TROY: Yes. We were relying perhaps
2	too much on the audit in the early stages, and we still
3	do rely on the audit because that's the independent
4	check to make sure. You know, the old thing about,
5	there's going to be human error so it will be, you know,
6	a person is going to make an error one percent of the
7	time. If you have two people, you know, two-person
8	check, then you have an error one-tenth of one percent
9	of the time, or a hundredth of one percent, whatever
10	the number is. I'm a lawyer, not a mathematician.
11	So, we were depending on the audit process
12	and I probably over-depended on it because we weren't
13	getting the performance from it that we needed or
14	wanted. And I think we've worked with the physicist,
15	I did, I spent a lot of time on the phone with him about
16	what we need and what we want. Hopefully, we're going
17	to get better performance out of the physicist in this
18	area and help us identify problems and obviously to be
19	more comprehensive than fill in the blanks of, you know,
20	that he shows up, he's there for a couple of hours, fills
21	in the blanks or whatever.
22	Speaking of which, one of the deficiencies
23	was that we did some sort of test on January the 16th
24	by a cal check method, and the actual dates that it was

performed was like January 20th through February

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1	something, that's one of the deficiencies. What
2	happened was he wrote the date in on his book, it's not
3	a falsification, so I'm trying to tell you he wrote the
4	date into the book, or his audit, and then he found out
5	that the office had not ordered a, what do you call it?
6	A dose?
7	DR. BASTOW: Dose.
8	MR. TROY: Right, for him to do the test
9	with. So, they changed and decided, no, we want to do
10	the cal check method, bail me out if I say this
11	incorrectly, they didn't use the cal check method, they
12	used the decay method, right. And so, it was done over
13	a period of time. And what he did was he had written
14	in the audit January 16th, but then he had taken the
15	documentation on the test and attached it to the back
16	of the audit and clearly it was done at a later date.
17	DR. BASTOW: The physicist.
18	MR. TROY: The physicist, right. So,
19	even though the audit was the 16th that was appended
20	to, even though it had happened a few days later, it
21	was appended to the back. So, that's how that
22	occurred.
23	MS. PEDERSON: Can I just ask the
24	question? This bullet, you talk about transitioning
25	to a new medical physicist. Is that the medical
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1	physicist that you hired at the beginning of this
2	calendar year?
3	MR. TROY: Yes.
4	MS. PEDERSON: So, it's the physicist that
5	started after whomever you had last year in 2013?
6	MR. TROY: Right.
7	DR. BASTOW: Yes.
8	MS. PEDERSON: Failed you somehow?
9	MR. TROY: I wouldn't say he failed us
10	somehow. We were in the unique position that we
11	required more attention in the audit than just the
12	standard audit, I believe, more detail. And he was
13	doing audits that met the standard requirement but not
14	to the level of detail that we needed. For instance,
15	checking did we complete the requirements of the order,
16	not the inspection report, and he wasn't really looking
17	at that, okay. And we kind of thought he was, he
18	wasn't. You know, whether it was us that didn't tell
19	him or he didn't understand, it really doesn't matter.
20	We as a team didn't do what needed to be done.
21	So, no, I would not put that on the
22	physicist and say he failed us. We failed as a group.
23	MS. PEDERSON: I just want to understand.
24	This is the physicist you've had in place since January
25	of 2014, correct?
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1	MR. TROY: November of 2013.
2	MS. PEDERSON: This is your new medical
3	physicist?
4	MR. TROY: Yes, this is the new medical
5	physicist.
6	MS. PEDERSON: Okay.
7	DR. BASTOW: Yes, that's right.
8	MR. TROY: But what we're saying, what I'm
9	
10	MS. PEDERSON: That's all I needed, thank
11	you. You answered my question.
12	MR. TROY: But what that bullet means is
13	that the transition is becoming more effective as we
14	work together more.
15	And then we're trying to strengthen the
16	administrative programs to ensure future timeliness as
17	part of, you know, corrective actions. And frankly,
18	we don't have all the answers yes, all right. We don't,
19	obviously we need some sort of tickler system, some sort
20	of better record keeping system. And we're working on
21	it.
22	You know, I don't know what will make you
23	or convince you that we're making a good faith effort
24	to do that, but we're looking at it. We're trying to
25	come up with a better system to make sure this doesn't
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happen, including QA audits with the medical physicist, 1 2 you know, the quarterly audits, right. So, I know I'm 3 not giving you the warm fuzzy you wanted here, okay, but it is a focus, we recognize the problem, and we're 4 trying to come up with something. We just don't have 5 the magic bullet yet, right. 6 7 So, can I say we will resolve that and 8 report back to you prior to restarting the facility? 9 I'd be willing to do that if that would make you more 10 comfortable. We just don't have all the answers is all 11 I can say. 12 The final issue -- I lost the page. 13 MS. PEDERSON: I think it's before your 14 conclusion page. 15 I'm sorry, I skipped by It is. MR. TROY: 16 If we can backtrack for a moment. that page. The 17 notification -- no, that's not it. 18 MS. PEDERSON: Open items? 19 MR. TROY: Oh, the open items, that's what 20 I'm looking for. There were two open items. One was 21 that survey records from the April 23rd, 2014 were not 22 complete and accurate in material respects. The second is the certified medical nuclear technician did 23 24 not appear to report the spill to the RSO, and as a 25 result, the RSO did not supervise the cleanup of the

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1	spill and a radioactive spill report and a radioactive
2	spill contamination survey were not completed.
3	My general reaction is to say that there
4	is currently an OI investigation ongoing, OI
5	investigation about that issue, and therefore, we don't
6	want to make any comments about it.
7	MS. PEDERSON: Yes, we're not asking that
8	you respond to those today.
9	MR. TROY: Okay. Other than that, we can
10	answer any other questions for you.
11	MR. LOUDEN: Okay. I think we don't have
12	anything at this point. So, at this point of our
13	agenda, as I mentioned earlier, thank you for your
14	presentation, we will now take a short break for a
15	caucus where we'll meet separately. And then we'll get
16	back to you for any follow-up questions or
17	clarifications we may have.
18	MR. TROY: Do we have the opportunity to
19	talk to you outside the
20	MS. PEDERSON: Not on the subject matter
21	as it pertains to this meeting. This needs to be an
22	open discussion. Unless there is some reason that
23	there is proprietary or security information or some
24	other kind of protected information.
25	MR. TROY: No.
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1	MR. LOUDEN: So, at this time, we'll take
2	a break for our caucus.
3	(Off the record.)
4	MR. LOUDEN: We're back. We have a few
5	follow up things we'd like to comment on, ask some
6	questions, do some follow up, so I'll turn it over to
7	Steve first to kick that up.
8	MR. ORTH: Okay, thanks. As we got
9	together, we developed a few more questions, just
10	making sure we're understanding the position on a few
11	of the items. One of the conditions in the order was
12	to have quarterly meetings with the technologists or
13	the staff. And I'm not sure that we heard what you were
14	doing with respect to that or what your position was
15	on that issue.
16	DR. BASTOW: Actually, well, because we
17	meet so infrequently, on Monday morning, usually I ask
18	Jeff about, you know, any concerns or safety issues kind
19	of stuff. And then I say make sure you report to me
20	before you leave on Tuesday because that's usually the
21	two days we worked. And that's every week.
22	MR. ORTH: So, what I'm gaining from that
23	is that throughout this, that's been your
24	communications with them as, you know, as part of this
25	quarterly but perhaps it's
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1	DR. BASTOW: And then the only thing I
2	think I added
3	MR. ORTH: issue that we're talking
4	about
5	DR. BASTOW: Yes, and the only thing we
6	added was, because there's only the two of us, part of
7	the recommendation was that the NRC is the other person
8	you can call at any time for any kind of issue if you
9	don't want to deal with me about this stuff. And that
10	was the only other thing we added to that.
11	MR. TROY: Now, Jeff, if you read the
12	inspection order, supposedly Jeff said that there was
13	no formal meeting.
14	MR. ORTH: Right.
15	MR. TROY: And that's true, there was no
16	formal meeting where we sat down and
17	DR. BASTOW: When two of us did sit down
18	for half an hour and discuss anything, it was just
19	checking on Monday and checking on Tuesday.
20	MR. TROY: It's kind of a small office, and
21	so things are unfortunately, well, relatively informal
22	compared to what you're saying. But yes, there is now
23	between them on that subject on a periodic
24	DR. BASTOW: Every week.
25	MR. TROY: Every week.
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1	MR.ORTH: And I guess what I'm taking from
2	that is there has been
3	MR. TROY: Ongoing.
4	MR. ORTH: Ongoing. We talked about
5	earlier the shadowing of the RSO of your organization.
6	MR. TROY: Yes, sir.
7	MR. ORTH: Can we get documentation to
8	help us resolve that issue from you folks within, say
9	a week?
10	DR. BASTOW: I asked him last night to text
11	me, the license number to me, you know. And I texted
12	him this morning, he was just in the cath lab and that
13	was last notice, I haven't gotten anything back from
14	him yet, so I expect him to.
15	MR. TROY: Let me answer it this way. We
16	will try and do it in a week. If we can't do it in a
17	week, we will notify you.
18	MR. ORTH: Fair enough. We talked about
19	the well counter, certainly that's an area that I know
20	we've been dealing with for quite some time now.
21	DR. BASTOW: Yes.
22	MR. ORTH: Going back to the original
23	inspection, well before we got into the ADR. Can you
24	give us a better idea of where you're going with that
25	in terms of the time line, what you're doing, when will
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1	we get this resolved?
2	MR. TROY: I think what we said was that
3	we were trying to procure a new well counter. It's
4	difficult to necessarily find one today, that we will
5	get a new well counter prior to restarting operations
6	at the facility, or we will submit a license amendment
7	to do that. So, the facility will not operate without
8	a well counter, an adequate well counter. Is that
9	acceptable?
10	MR. ORTH: I think we wanted to follow up
11	a little bit more on your, you know, your stand-down,
12	and it sounds very voluntary, very, it lacks some
13	formality. Is that something that you might provide
14	to us as a letter indicating that your standing down,
15	you're going to put your license into a standby mode
16	until you satisfy
17	MR. TROY: Does that change the status of
18	the license such that we have to report back to you?
19	Or is that just a letter notifying you of what we're
20	doing? I'm interested in the license implications of
21	what you're asking.
22	MR. LOUDEN: It would, if you submitted a
23	request to place your license in standby, you would then
24	be required to notify us of or actually you would have
25	to submit a request to put your license back to an active
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1	status.
2	MR. TROY: Would there be a review program
3	involved in that? Or would it be just a question of
4	a letter and another letter?
5	MR. LOUDEN: I'll turn to Patty for that
6	question.
7	MS. PELKE: No, there would be a review
8	based on the circumstances on why you're putting your
9	license in the standby, and then commitments on what
10	you've put in place and your preparedness to stand your
11	program back up and not only chief compliance but also
12	a sustained compliance going forward.
13	DR. BASTOW: If formality matters, then we
14	could do that because that's essentially what we're
15	doing.
16	MR. ORTH: And I raised it because a lot
17	of things that we're discussing, they really hinge on
18	that.
19	DR. BASTOW: Yes, certainly.
20	MR. TROY: I understand that. The
21	hesitance isn't to do that, right, because
22	DR. BASTOW: Because we are doing that,
23	yes.
24	MR. TROY: We're basically doing it and we
25	will do it. We have no problem with that part. The
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issue for us is that, I know once again we all aren't 1 2 concerned about money, but if we got into a long protracted, you know, if you all got busy with some 3 4 other plan, whatever it was, and we got to the back of the line and we went off for weeks, that would mean that 5 he couldn't operate, it's that part of the commitment 6 7 that we're kind of balking at a little bit. It's not 8 the fact that we don't want to tell you or have you 9 involved, in fact we welcome your involvement and we 10 welcome telling you. So, that's our only reservation 11 with that. 12 MR. LOUDEN: Okay --13 MR. TROY: We are more than willing to come 14 back and talk to you periodically. We're willing to talk to you before we start up. We'll do anything like 15 16 that. 17 MS. PEDERSON: I think part of our concern 18 here is the lack of effectiveness of the actions that 19 have been taken before. MR. TROY: I understand. 20 21 MS. PEDERSON: And we decided to ensure 22 that this time corrective actions are in place and that 23 they're going to be effective. And we're looking for 24 a process that gives us that added assurance that it's 25 going to be effective this time. And the license, and

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because you talked about a number of things that you 1 2 were going to do prior to resumption of operation, and 3 so we are trying to think about within our regulatory toolbox what would be a mechanism that we could work 4 5 with that. But I recognize what your concern is because you don't have control of that final step. 6 7 MR. TROY: Right. 8 MS. PEDERSON: If a licensing action is taken to put your license in standby, you would then 9 10 request the resumption and then the action is back in 11 our court to approve that and to issue your follow-on 12 amendment that would reauthorize. So, what I would like to do is I'd like to take a few minutes with my 13 14 team on that aspect before we give you an answer. 15 being MR. Okay. TROY: We're not 16 resistant. 17 MS. PEDERSON: Т understand. Т 18 understand your concern. 19 DR. BASTOW: It seems more is getting done 20 just by the fact we've had the time to be able, you know, 21 not doing any studies and we've been putting all that 22 towards getting this accomplished and at great expense. We could, you know, we could 23 MR. TROY: 24 conceivably, I don't, I'm not saying this is going to 25 happen, we've gotten so much done in a very short period

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1	of time that if we get a well counter, for instance,
2	and we can figure out how to solve this administrative
3	issue problem effectively, that in essence, the whole
4	of, not that we can't find a way to solve it, we're
5	trying to find something that we know is going to be
6	effective. We could do that in a fairly short period
7	of time. So, then we don't want to get into another
8	couple of months of, you know, you all have time to do
9	that and so, whatever.
10	MS. PEDERSON: Yes, I understand.
11	MR. TROY: Right.
12	MS. PEDERSON: Just a quick question. Is
13	your camera currently fixed?
14	DR. BASTOW: Yes.
15	MS. PEDERSON: Okay. So, these
16	compliance
17	DR. BASTOW: It was just one-day fix thing
18	but, you know, it just looked like a good opportunity
19	at that point.
20	MS. PEDERSON: Let's ask the rest of our
21	questions and then we're going to take another, a second
22	short caucus on that issue.
23	MR. TROY: We would prefer to do it in a
24	voluntary way, right, to agree to whatever it is you
25	want than necessarily to get an order about it if we
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1	had that option. Okay, we will do whatever you want,
2	we just
3	MS. PEDERSON: I understand. We'll take
4	that back and have a short caucus, but let's finish with
5	the other questions and then we'll
6	MR. TROY: Okay.
7	MR. ORTH: I know one of the aspects for,
8	you know, continued compliance or long-term compliance
9	is the proposition for perhaps a new RSO. But if that's
10	not your position that you go down, I'm not sure I heard
11	what would be your alternative pathway. Is that
12	something you can discuss with us today?
13	(Mr. Troy confers with Dr.
14	Bastow.)
15	MR. TROY: I guess there are other
16	alternatives that are commercially oriented and
17	discussing those in public might affect the outcome of
18	the commercial negotiations. So, I'm hesitant to talk
19	about that. But for instance, you know, getting
20	another RSO isn't necessarily going to happen. There
21	may not be anybody available who'll do it, but we're
22	looking for somebody.
23	Another option that we considered was
24	bringing in like an outside vendor to perform the, like,
25	you know, like CT, or something like that. But there's
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1	nobody who does that. So, we're looking at a wide range
2	of possibilities of what might happen that isn't just
3	limited to getting an RSO. And if we can't get an RSO,
4	then you have to look at what are the other alternatives
5	available to us. I mean the least favorable but
6	possibly effective would be, okay, we'll have the
7	physicist here on a much more regular basis, right,
8	rather than quarterly, let's say monthly or bimonthly
9	or whatever is reasonable, right?
10	We're entertaining those kinds of things
11	but, I'd be more than happy to talk to you outside the
12	room about commercial things, but I'm not necessarily,
13	I don't want to do that inside the room.
14	MS. PEDERSON: Right. And we understand
15	for financial and proprietary type information, that
16	is a reason to close a public meeting. And so, if
17	that's necessary in order to have a complete
18	conversation, at the end of the public meeting, we can
19	have a closed session to talk about that.
20	MR. TROY: We'd be more than welcome to do
21	that.
22	MS. PEDERSON: I think the thing that
23	you're hearing from us in this regard is, and you've
24	brought it up multiple times, is the ability of Dr.
25	Bastow to devote adequate time to oversee the program.
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1	And I'm not trying to put words in your mouth but that's
2	what I've taken from this conversation. And if you
3	don't get an RSO to provide that oversight function,
4	what is going to be different such that Dr. Bastow can
5	provide that oversight function?
6	DR. BASTOW: Well, I had provided, it had
7	been done well for 20 years. It's some personal issues
8	that made that a little different than usual. I
9	suspect if we had this the way, when we get these things
10	fixed and operating the way it is, the time that was
11	there before and in time we'll be there again.
12	Shortcomings of something, that's very unusual and
13	rare and a family crisis like that, that occurs, that's
14	the time that I think you jump in and say, you know,
15	hey, I need somebody else, to hire somebody to do these
16	duties until time does become available. But I think
17	that was more the exception than the rule.
18	MS. PEDERSON: But when we met at ADR, I
19	don't believe, at least it was communicated that you
20	were having issues during that previous time.
21	DR. BASTOW: No, that was really, that was
22	a transition from the new contractor that was doing
23	those services that should have, the way we had been
24	running before very smoothly and very well, and the
25	bumps in the road came with the new contractor which
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1	where the problem I think came about which ultimately
2	was my responsibility. But that's where the thing
3	needed to be fixed.
4	MR. TROY: By before, he's talking about
5	2002 and earlier, okay.
6	MR. ORTH: I don't have any other
7	questions on my list.
8	MS. PEDERSON: Okay. Pat, do you have
9	some more things before we caucus?
10	MR. LOUDEN: I think we'll caucus first
11	because I would like to hear what where we are with that.
12	MS. PEDERSON: Yes.
13	MR. LOUDEN: So that we can follow up on
14	that directly right now.
15	MS. PEDERSON: Yes.
16	MR. LOUDEN: This will be shorter.
17	MS. PEDERSON: This will be shorter, yes.
18	MR. TROY: Okay.
19	(Off the record.)
20	MR. LOUDEN: We have a couple of items to
21	follow up, mainly with respect to the discussion about,
22	in association with the various corrective measures
23	that we talked about, you know, the possibility of
24	submitting a request to place your license in standby.
25	And I wanted to clear it up, your response. You made
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reference to not being -- you're willing to do whatever. What I wanted to, you know, you can clarify that or provide us a little more that piece, but our interest would be if you submit a request to place it in standby, what we took from it was you had a concern about, hey, if I'm ready to turn into operational status, there could be some delay on that.

And while we're, we've discussed our process and with a three-week notice ahead of time of your desire to restart, if you were in that state, we could take the licensing action on that piece of it and certainly we would want to conduct an inspection at that time. So, that's our position right now relative to that. So, I'll let you comment on that.

15 MR. TROY: The issue is that I'm not sure, 16 the discomfort from our side is that the process, we 17 understand the process, it's the same process you use 18 all the time. But that three weeks is a significant 19 amount of revenue lost. So, you know, let's say we 20 could conceivably be ready in a week or two weeks, it 21 doesn't really matter, right? Well, we could 22 conceivably be ready in three weeks but I can't tell 23 you today that we are going to be ready in a week. That 24 makes it a month, if you understand.

So, it's that three-week delay that we're

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1	balking at, not the idea that we have to talk to you.
2	But the regulatory process by its very nature is not
3	prompt, right. We understand that, at the same time
4	that, you know, put ourselves in this box and,
5	therefore, we got to kind of live with it, right?
6	So, just understand, that's what our
7	problem is. It's not what you want, or it's not that
8	you want approval, it's just we're trying to figure out
9	a way to do it without incurring such as a significant
10	delay. Three weeks to a Part 50 licensee is not that
11	big a deal. Three weeks to us is a huge problem.
12	So, is there any flexibility there? Or if
13	you telling us there's no flexibility, we'll do what
14	you're asking.
15	MR. LOUDEN: I think that would be our
16	preferred course right now, three weeks on that.
17	MR. TROY: We'll live with it.
18	MS. PEDERSON: Now, you know, this
19	three-week period
20	MR. TROY: It's from the day you get the
21	letter.
22	MS. PEDERSON: No. The letter would be to
23	put it into the standby mode.
24	MR. TROY: No, that's the first letter.
25	MS. PEDERSON: Right. And then, if you
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1	can project out when you're going to be ready, we need
2	three weeks notice in order to get our inspector out.
3	And so, it's not you're done, then there's three more
4	weeks.
5	DR. BASTOW: That is when the clock
6	starts, I got you. Well, that's good.
7	MS. PEDERSON: We need to, in order to use
8	our person power, we need to be able to plan for it.
9	DR. BASTOW: That makes sense.
10	MS. PEDERSON: And so, if you can say I
11	know by October, you know, 31st, everything is going
12	to be ready, that and notify us three weeks in advance
13	of that date, we then can get our people, a person or
14	persons organized such that we can get them out during
15	that time frame.
16	MR. TROY: We can do that. That's
17	reasonable.
18	DR. BASTOW: Yes, that's reasonable.
19	MS. PEDERSON: But it's got to be
20	developed enough such that our inspector can actually
21	inspect.
22	DR. BASTOW: Yes. Right.
23	MR. TROY: Right.
24	MS. PEDERSON: That the actions are
25	effective.
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85 DR. BASTOW: The well counter is there, 1 2 everything is there, yes. 3 MS. PEDERSON: Yes. Does that --4 MR. LOUDEN: Everything is in place. MS. PEDERSON: Is that --5 That's fair. 6 DR. BASTOW: 7 MR. LOUDEN: That's exactly, thank you for 8 the clarification. 9 MS. PEDERSON: Is that healthy а 10 understanding of the --11 MR. TROY: Yes. It made it a lot I 12 understandable that way. 13 MS. PEDERSON: Okay, okay. 14 MR. TROY: That's fine, we can do that. 15 So, the letter putting the license in standby. And 16 then a letter, three weeks notice that we're ready to 17 come out of this. 18 MR. LOUDEN: Note --19 DR. BASTOW: Does the standby start when 20 I started it or --21 MS. PEDERSON: The duration of the standby 22 doesn't really make a difference. DR. BASTOW: Doesn't matter what date it 23 24 is? Okay. 25 So, we would like you to MS. PEDERSON:

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1	come in timely though such that we can take the
2	licensing action and put it in standby.
3	DR. BASTOW: No, I meant I started standby
4	four weeks ago. Is that
5	MS. PEDERSON: Correct. That's okay,
6	that's not a problem.
7	DR. BASTOW: Okay.
8	MS. PEDERSON: The letter just is now a
9	request to have an action with your license.
10	DR. BASTOW: A formal, got you.
11	MS. PEDERSON: A formal action that will
12	change the condition on your license.
13	DR. BASTOW: Okay.
14	MR. TROY: Does it, I already know the
15	answer to this question and I don't. Does standby mean
16	that he cannot, for instance, continue to calibrate
17	equipment and receive nuclear material on site?
18	MS. PEDERSON: We better let Patty
19	MS. PELKE: It means that you can't use
20	radioactive material.
21	MR. TROY: Period?
22	MS. PELKE: Yes.
23	MR. TROY: Not for patients but period?
24	MS. PELKE: Now, if you want to put a
25	contingency into the standby that you would not use
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1	material with the exception of material you need to
2	calibrate instruments such as the well counter that
3	you're going to purchase.
4	DR. BASTOW: The well counter, we're going
5	to need that then, okay. Yes, we're going to need that.
6	MS. PEDERSON: So, that would need to be
7	articulated in the letter, correct?
8	DR. BASTOW: Got you.
9	MS. PEDERSON: So, anything you think you
10	need to use in order to be compliant or regain
11	compliance such as on the well counter would need to
12	be specified in the letter.
13	DR. BASTOW: Or by the flood source,
14	right.
15	MS. PEDERSON: Correct.
16	MR. ORTH: Any use.
17	MS. PEDERSON: Any use of radioactive
18	material you think you must do must be articulated in
19	the letter. Is that right?
20	MS. PELKE: Yes.
21	MR. ORTH: It sounds like you could have
22	kind of a generic statement of use of material for the
23	purpose of instrument calibration and quality
24	assurance.
25	DR. BASTOW: Okay.
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88 MR. TROY: Okay. That's acceptable to 1 2 us. 3 MS. PEDERSON: Okay. MR. LOUDEN: All right. We don't have any 4 other questions that have to be answered. Did I miss 5 I think that was it? 6 anything? 7 MR. ORTH: I think that was it. 8 DR. BASTOW: Thank you. 9 MR. LOUDEN: All right. Steve? 10 MR. ORTH: I think for the enforcement 11 wrap 12 up --13 MR. TROY: Do you want to talk about the 14 commercial issues? 15 MS. PEDERSON: We can still do that after 16 we finish this part. Yes. if we're 17 MR. TROY: Okay. I mean 18 interested, we'll tell you. 19 MS. PEDERSON: Yes, I think that would be 20 helpful to understand. 21 MR. TROY: Okay. 22 MR. LOUDEN: Go ahead, Steve. 23 MR. ORTH: Okay. For the enforcement 24 aspect, just to, you know, again we'll talk about a 25 number of items today. In terms of the beginning of

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our discussion, we talked about the severity level 4 notice of violation. We plan to handle that separately than the escalated case we're discussing as our primary purpose today. You've provided us your response, your issues, your position regarding those. And we'll evaluate those and determine the outcome of that.

7 Now, in terms of the apparent violation, 8 my understanding is through our discussion of a number of examples, there are probably three examples that you 9 10 may take issue with. And that is the shadowing another 11 RSO, in terms of that individual being an RSO, you're 12 going to provide us some clarifying information so that 13 we can come to a conclusion on that. I certainly 14 understand that the documentation of that hasn't 15 existed to date but you are going to put some additional 16 information together.

Soliciting concerns from the technologist, I understand that you're indicating you meet with him every week and that should constitute at least a quarterly if not more on meeting with the individual.

And then, finally, with the availability of records, in terms of those procedures, they exist now and it's your position that very likely they existed at the time that our inspector was out there.

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1	MR. TROY: We think so.		
2	MR. ORTH: All right. No, I captured		
3	that. Otherwise, I think you agree with the other		
4	issues that we discussed?		
5	MR. TROY: We agreed with them, although		
6	what we were looking for was they weren't licensee		
7	identified, right? So, that, we can't chew more there,		
8	right, and obviously the corrective action came after		
9	it was identified by the NRC inspector, but on the other		
10	hand the corrective action we've taken is substantial.		
11	And if we've, you know, shut down the practice, not the		
12	entire practice, the nuclear portion of the practice,		
13	right?		
14	MR. ORTH: The nuclear portion.		
15	MR. TROY: Which is, you know, a fairly		
16	significant commitment for a small medical practice,		
17	so we were looking for maybe some acknowledgment or		
18	notation of that.		
19	MR. ORTH: I think we got a good discussion		
20	of the corrective actions, both the shutdown and some		
21	other, a number of other activities.		
22	Okay. So, as we stated earlier, the		
23	nature of this conference, we have not made a decision.		
24	Statements or opinions made by the NRC staff during the		
25	conference, or silence, should not be taken as our		
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position or acceptance of your views. We'll take into consideration all the information you've provided us today, the additional information that you're going to provide us within the next week, and the information we gained through the inspection. Following the conference, the staff in region will get together with our counterparts in headquarters, they're the people that were on the phone today, and we will review that information and reach a final enforcement decision.

We expect this process should be somewhere in the neighborhood of four to six weeks, maybe a little bit longer, depending upon the information. And then we will notify you prior to issuing our final action. As I mentioned before, we have four basic options: no enforcement action, notice of violation, notice of violation with a civil penalty, or an order.

17 If a civil penalty is proposed, there will 18 be a subsequent press release. If there is a civil 19 penalty, you may pay the civil penalty or you may 20 protest the civil penalty all or in part. Ιf you 21 protest it, we will review the case and determine if 22 we agree with your response. If we disagree, we may 23 issue an order imposing the civil penalty. At that 24 point, you may pay the civil penalty or request a 25 hearing if the civil penalty comes into play here.

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1	So, we'll get together, determine our			
2	final action, notify you, and then issue that action			
3	roughly in that four to six-week period. Do you have			
4	any questions?			
5	MR. TROY: No. Standard rules on that?			
6	MR. ORTH: Standard rules, yes, thank you.			
7	MR. LOUDEN: Okay, thank you, Steve.			
8	With that, we've reached now to the close so I'll turn			
9	it over to Cindy.			
10	MS. PEDERSON: Thank you. Just a few			
11	comments here as we close. I find it very			
12	disappointing that we had to find ourselves here. As			
13	I mentioned in the opening, a year or so we entered into			
14	an ADR session to try to resolve issues and ensure			
15	improved performance. And that didn't happen.			
16	This is not an ADR session, so it is a			
17	different process. And as Steve explained, we will			
18	make an enforcement decision, taking into effect all			
19	of the information that we've talked about. But I just			
20	want to reiterate that corrective actions were			
21	required. These corrective actions were mandatory			
22	that you had to fix your problems and you had to restore			
23	compliance.			
24	Coming into compliance should not be			
25	viewed as, oh, we've met the threshold. The			
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enforcement process will hold you accountable for your past performance. And so, I don't want you to confuse past performance with current compliance and ongoing compliance, because that, too, is required. You are required to continue to be compliant, whether it's requirements in our 10 CFR or in your license or in the order, none of those are optional. They all have to be complied with.

9 And it's your responsibility as the 10 licensee to ensure that compliance. Whatever time it 11 takes, whatever resources it takes, that is your 12 obligation as a licensee. And those obligations are 13 there to protect people.

We had a conversation early on, I believe it was stated in your opening that these issues were not safety significant. You need to think about how you're defining safety significance. Was somebody in immediate danger? No. If that was the case, we would have promptly shut you down.

20 Safety significance here underlies 21 everything that we're doing though. And the role of 22 the radiation safety officer is exceedingly important. 23 We don't allow people to operate without a radiation 24 safety officer. And if you don't have the ability to 25 have an adequate and a fully functioning radiation

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1	safety officer, we need to think about whether or not			
2	the basis for the license is there.			
3	So, it's imperative that the radiation			
4	safety function is adequate. We only require			
5	adequacy. We like all licensees to go beyond that, but			
6	we do require adequacy.			
7	So, you've given us things that we need to			
8	assess, so we're not making an enforcement decision			
9	today. We will be timely in our decision and we do			
10	appreciate your willingness to take a licensing action			
11	to help bolster your corrective actions. And at this			
12	point, I think that's a very appropriate item, I think			
13	it's very appropriate that until you get your program			
14	in order you're not using radioactive material. And			
15	so, I think that was a good thing that came out of the			
16	conversation today.			
17	So, at this point, I would like to close			
18	this portion of the meeting. We will make ourselves			
19	available if there is anybody on the phone, is there			
20	anyone on the phone, a member of the public or media,			
21	that would like to have a question or answer session			
22	with the NRC?			
23	(No response.)			
24	MS. PEDERSON: Okay. Hearing none, we			
25	will close the predecisional enforcement conference			
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1	and we will go into a closed session to talk about some				
2	protected informat	zion. Thank you very muc	:h.		
3		(Whereupon the me	eting was		
4		adjourned at 3:36 p.	m.)		
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