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1 very beginning?

2 A. Yes, sir.

3 Q. Did you ultimately receive a degree from
4 Purdue?

5 A. I did.

6 Q. What degree was that?

7 A. BSME, Bachelor's of Science in mechanical
8 engineering.

9 Q. Was there any area of specialization, or was
10 that a general degree?

11 A. It was a general mechanical degree.

12 Q. Okay. As part of your coursework at Purdue,
13 did you take any courses in thermodynamics?

14 A. I did.

15 Q. Okay. And what courses did you take?

16 A. Thermody- -- basic thermodynamics, one
17 semester series.

18 Q. So just one semester worth?

19 A. Yes.

20 Q. Did you take any courses on nuclear
21 engineering?

22 A. No.

23 Q. Did you take any courses on heat transfer for
24 power plants?

25 A. Yes.

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1 Q. In that degree, did you take any courses in
2 thermodynamics?

3 A. I don't believe I did.

4 Q. Okay. Any courses in nuclear engineering in
5 that degree?

6 A. No.

7 Q. Any courses in heat transfer?

8 A. I don't think so.

9 Q. What was your focus or what was the focus of
10 your coursework for your professional degree?

11 A. It was to round out my -- my education. I
12 knew that I was never going to become a professor, I
13 was going to be a working engineer. So I tried to
14 structure it to take the courses that I would like to
15 have taken when I was getting my bachelor's and didn't
16 have time. So refractories was one course, welding,
17 you know, some of the more -- some of the other courses
18 just to round out my knowledge base.

19 And then as part of that, instead of writing
20 a thesis, we had to do a project write-up for a project
21 we were doing at work, so I did -- that was kind of
22 a -- what they would consider the equivalent of a
23 thesis, we were doing a project and then writing it up.

24 Q. And what was your project?

25 A. I put in -- we put in a coal-fired boiler

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1 the money.

2 Q. Okay. So there was no further education or
3 training or testing that you had to undergo through --
4 to get your P.E. from Illinois?

5 A. No, sir.

6 Q. What about Texas?

7 A. Texas did have an ethics -- they do have an
8 ethics exam.

9 Q. An ethics exam?

10 A. Yes, sir.

11 Q. Anything relating to the actual engineering
12 work?

13 A. No. It was about engineering ethics,
14 conflict of interest, things like that.

15 Q. Okay. The Ohio 3rd class stationary exam --

16 A. Yeah, correct.

17 Q. -- what is that?

18 A. That means I can legally operate any
19 nonnuclear boiler in the State of Ohio.

20 Q. Nonnuclear boiler?

21 A. Yep.

22 Q. Is there such thing as a nuclear boiler?

23 A. I think there's a few units in Ohio, yes.

24 Q. And that's not the same as a power plant,
25 correct?

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1 that you applied in this case that are also applicable
2 to the instant case?

3 You know what, I'm sorry, let me rephrase
4 that for the record.

5 Were there any methodology or considerations
6 that you took into effect in examining this elementary
7 school boiler malfunctioning that you believe also to
8 be applicable in the instant case?

9 A. It may or it may not be. Based on the
10 documentation I've seen so far, there may be some
11 safety issues involved. As we both know, I have yet to
12 do a site inspection at the Doral facility, so, you
13 know, I do reserve the right to modify my answer based
14 on what I may or may not see later in the week.

15 Q. Have you made any safety determinations as to
16 the E-Cat or the Doral plant in this case?

17 A. Based upon -- again, based on not having
18 physically seen it, but based on what I understand
19 about the construction, I -- I have made a bit of a
20 determination, yes.

21 Q. Okay. We're going to get to that in just a
22 minute.

23 But just back to your publications real
24 quick, so neither one of your publications have been
25 peer reviewed?

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1 asking you to tell me.

2 A. Oh, sure, certainly. The first -- the first
3 law of thermodynamics is generally that energy can
4 neither be created nor destroyed, it only changes form.
5 And -- and also -- well, yeah, that's it.

6 Q. And there are many forms of energy, correct?

7 A. There are, yes, sir.

8 Q. Would you state that there are chemical,
9 electrical, mechanical, nuclear, thermal,
10 electromagnetic and so on?

11 A. And so on, correct.

12 Q. Now, on page 3 of your report, you go on to
13 discuss and state that the energy forms are all
14 interchangeable?

15 A. Theoretically, but go ahead.

16 Q. Okay. And you can convert one form of energy
17 into another?

18 A. Theoretically.

19 Q. Okay. But then you state that nuclear energy
20 is generally a one-way street?

21 A. Yes, it is.

22 Q. Why is that?

23 A. It's because -- again, I'm not a nuclear
24 engineer, understand that. But to go from, say,
25 mechanical energy to nuclear energy is typically not

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1 possible. And I cited a nuclear weapon and a nuclear
2 power plant. And usually with -- with nuclear energy,
3 it's a one-way street outbound.

4 Q. What were you told of the E-Cat process?

5 A. That it is a -- not a nuclear reaction.

6 Q. Who told you that?

7 A. I read Mr. Stokes' report in which Mr. Rossi
8 said that there's not a nuclear reaction involved.

9 Q. I'm sorry, Mr. Stokes' report?

10 A. The Florida radiological guy.

11 Q. That wasn't listed on the documents that
12 you -- that are included in your report.

13 A. I believe it's in the -- I believe portions
14 are in that 277-page response, and I'm not -- I can't
15 look, I don't have all 277 pages of the third amended
16 answer.

17 Q. Do you know what the nature of the reaction
18 underlying the E-Cat is?

19 A. I do not.

20 Q. So as far as you know, it may be nuclear?

21 MR. LOMAX: Objection to the form of the
22 question.

23 A. Again, based on Mr. Stokes' report, it does
24 not appear to be nuclear.

25 Q. Okay. But, again, you're saying based on

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1 Mr. Stokes' report.

2 What in Mr. Stokes' report indicates to you
3 that it is not nuclear?

4 A. Okay. This is the 15 February '16 report of
5 his, on the last line of item 20, Description of
6 Investigation, he uses no process that generates
7 ionizing radiation and uses no radioactive materials in
8 the construction.

9 Q. Have you ever heard the term LENR, L-E-N-R,
10 before?

11 A. I have.

12 Q. Okay. What does that stand for?

13 A. It purportedly stands for low energy nuclear
14 reaction.

15 Q. Have you done any research on that subject
16 matter?

17 A. Prior to this case, not much. I was -- I was
18 vaguely familiar with Pons and Fleischmann when it
19 happened, but I, you know, quit following it after the
20 controversy.

21 Q. What about as part of this case?

22 A. Well, it -- Mr. -- what I do understand is
23 that what Mr. Rossi is claiming kind of falls under the
24 general rubric of LENR. But I believe that LENR is now
25 a generic term as opposed to a specific term describing

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1 a specific phenomenon.

2 Q. Okay. And so other than Mr. Stokes' report
3 which states that it does not use -- or does not emit
4 ionizing radiation or use radioactive materials, do you
5 have anything other than that to base your statement
6 that it is not a nuclear reaction?

7 A. I believe that Mr. Rossi has stated that
8 maybe in one of his depositions.

9 Q. Okay. Do you, sir, have any independent
10 knowledge other than what you believe other people have
11 said?

12 A. Well, when you say "independent knowledge,"
13 help me out here because this is an official report
14 from the State of Florida, it's an official document.

15 Q. And it's somebody's interpretation. In our
16 profession, we call it hearsay. Okay.

17 So what I'm asking you is, is there anything
18 that you know that does not rely upon what somebody
19 else says?

20 A. Well, I've not -- I've not been allowed to
21 look at anything inside the facility. All right. I've
22 not had a description of what is purported to happen,
23 so I have not been allowed to get that far to make an
24 independent determination yet.

25 Q. Would that be within your field of expertise

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1 instead of being technically rigorous and -- and picky.

2 Q. Have you talked to him about that?

3 A. Never talked to him.

4 Q. Have you called him?

5 A. Never met the man.

6 Q. Don't you think it would be prudent to give
7 him a call before making an assumption as to what his
8 statements mean or don't mean?

9 MR. LOMAX: Objection to the form of the
10 question.

11 A. I hadn't really considered that, but that's
12 probably going to be on my to-do list now.

13 Q. Okay. So looking at page 14, third
14 paragraph, now, again, this section is entitled Test
15 Instrumentation, although it discusses the boiler and I
16 don't know that it necessarily addresses the
17 instruments used other than in the broad sense.

18 Is it your opinion that any of the
19 instrumentation used by Engineer Penon was somehow
20 defective or flawed?

21 A. Maybe not defective or flawed, but what I --
22 again, I've not delved into this deeply, but I believe
23 the pressure transmitter was only good to 40, 50, 60
24 degrees C, and --

25 Q. And who told you that?

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1 A. I believe it was Joe Murray.

2 Q. But you have no knowledge. You didn't look
3 that up yourself, did you?

4 A. I did not independently confirm that, no.

5 Q. Okay.

6 A. And then the whole -- all the issues with the
7 water meter itself, you know, the sizing of it, the
8 slope and inclination and all those other issues
9 related to the water meter, I have not delved into
10 those in any depth yet.

11 Q. Okay. So you are not formulating at this
12 time any opinion as to those matters?

13 A. Correct, at this time, but I do reserve the
14 right to do so later on if need be.

15 Q. So am I correct in saying that your -- your
16 report states that you would have done things
17 differently, you would have had a steam flow meter?

18 A. Yes.

19 Q. You would have had temperature gauges?

20 A. Well, we do have temperature gauges, so I'll
21 agree with that.

22 Q. Okay. We do have those.

23 You would have had a manometer, is that --

24 A. Well, but a manometer is just another term
25 for a pressure gauge. A manometer measures low