

NUCLEAR REGULATORY COMMISSION

Title: Advisory Committee on Reactor Safeguards
 US-APWR Topical Reports Subcommittee
 Open Session

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1 UNITED STATES OF AMERICA

2 NUCLEAR REGULATORY COMMISSION

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4 ADVISORY COMMITTEE ON REACTOR SAFEGUARDS (ACRS)

5 SUBCOMMITTEE MEETING ON US-APWR TOPICAL REPORTS

6 + + + + +

7 OPEN SESSION

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9 FRIDAY, OCTOBER 24, 2008

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11 ROCKVILLE, MARYLAND

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13 The subcommittee came to order at 8:00 a.m. in
14 Room T2B3 of Two White Flint Two, Otto L. Maynard,
15 Chairman, presiding.

16 MEMBERS PRESENT:

| | | |
|----|-------------------|--------------------|
| 17 | OTTO L. MAYNARD | Chairman |
| 18 | SAID ABDEL-KHALIK | ACRS Member |
| 19 | J. SAM ARMIJO | ACRS Member |
| 20 | DENNIS C. BLEY | ACRS Member |
| 21 | WILLIAM J. SHACK | ACRS Member |
| 22 | JOHN D. SIEBER | ACRS Member |
| 23 | JOHN W. STETKAR | ACRS Member |
| 24 | NEIL COLEMAN | Designated Federal |
| 25 | | Official |

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P R O C E E D I N G S

(8:01 a.m.)

CHAIRMAN MAYNARD: Okay, I'd like to call the meeting to order this morning. We're in open session here for just the opening remarks, which there are very few. It would basically continue from yesterday.

Once we close the session here, we will pick up any items left over from yesterday that we have information on. And it will go into the accumulator discussion.

So with that, I'll ask if there is anybody from the public here who has any comments or any discussion.

(No response.)

CHAIRMAN MAYNARD: Okay, with that, I will announce that after the closed session this morning, we will be coming back into open session to end the meeting. That is scheduled for 11:15. So anybody -- any member of the public that is here, that's when we will resume the open session at 11:15.

With that, we'll go ahead and close the meeting. We'll close the transcript and we'll make sure that if there are any member of the public here,

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1 anybody --

2 MEMBER SIEBER: You have to tell us.

3 MR. PAULSON: I am looking. I don't see
4 anybody that I am aware of.

5 CHAIRMAN MAYNARD: Okay. That ought to
6 take care of that side of the room.

7 (Whereupon, the foregoing matter went off the record
8 at 8:02 a.m. and went back on the record
9 at 11:15 a.m.)

10 CHAIRMAN MAYNARD: He must be doing a very
11 thorough job. Nobody from the public?

12 MR. COLEMAN: Nope.

13 CHAIRMAN MAYNARD: I guess not.

14 CHAIRMAN MAYNARD: Well, it is 11:15. If
15 somebody does come in, I'll reiterate for them what
16 we're doing.

17 We are in open session right now. I'd
18 like to just go around the room. Again, we're not
19 here to make any final conclusions, decisions, or
20 anything. I think we provided most of our comments
21 but I'll just start with you Said. Do you have any
22 additional?

23 MEMBER ABDEL-KHALIK: I really have no
24 additional comments beyond what you captured at the
25 end of each presentation for each individual topical

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1 report.

2 CHAIRMAN MAYNARD: Okay. John?

3 MEMBER STETKAR: Nothing, thanks.

4 CHAIRMAN MAYNARD: Okay. Bill?

5 MEMBER SHACK: No.

6 CHAIRMAN MAYNARD: Sam?

7 MEMBER ARMIJO: I'd like to make a couple
8 points. First of all, I think it is a very ingenious
9 device and a lot of good testing has been done. The
10 thing I would like to see, and I'm sure you have done
11 it, is something like a failure modes and effects
12 analysis to try and see if there is any mechanism by
13 which this important safety system could be defeated.

14 And whether it is a blockage of one by gas
15 or material or some other way, but I think it is about
16 the only contribution that I think I could make is
17 spotting some problem that you haven't spotted. And I
18 certainly can't do that.

19 But I think it is a very novel and
20 workable device. I think scaling is very important.

21 CHAIRMAN MAYNARD: Okay. Dennis?

22 MEMBER BLEY: No more comments. It has
23 been a learning couple of days for me. And I
24 appreciate it.

25 CHAIRMAN MAYNARD: Jack?

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1 MEMBER SIEBER: For me I have no
2 additional specific comments. But I'm eager to see
3 the staff's SER. And when we see that and review
4 that, we will be in a position to provide our final
5 remarks to the topical reports.

6 I'd like to thank the presenters for the
7 excellent job.

8 MR. SHIRAIISHI: Thank you very much.

9 MEMBER SIEBER: It has been a pleasure.

10 CHAIRMAN MAYNARD: Okay. Well, I'd like
11 to add my thanks. I think it has been very
12 informative. And I'm really impressed with the amount
13 of information that you are willing to provide and
14 that you have provided.

15 It is sometimes hard for us to digest all
16 of that. And obviously there are times when we
17 struggle with understanding a little bit of it. You
18 struggle with understanding some of the things we're
19 really asking. And I think we're all just going to
20 have to be patient and work through that.

21 I think on the plus side, it just -- the
22 willingness of Mitsubishi to provide data to us and to
23 try and get answers to our questions very quickly, I
24 think, you know, the testing and the various things
25 that you have done is going to go a long way in our

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1 review of the DCD and other aspects of this.

2 What we will be doing is we meet again in
3 November, in a couple of weeks, on a couple of the
4 other reports. And then when we have our full ACRS
5 meeting, we will talk internally a little bit about,
6 you know, where do we go from here and what do we need
7 to do.

8 But I think these meetings have been very
9 informative to me in just helping us outline what we
10 are going to be in for in our review of the DCD and in
11 the overall US-APWR design.

12 So with that, I would like to --

13 MEMBER SHACK: Let me just ask one -- I'm
14 trying to keep track of all the reports. And there
15 was some implication that we've gotten the one-seventh
16 scale report. But it doesn't ring any bells with me.
17 And is that because I've missed it? Or has anybody
18 else seen it?

19 Neil, do you know whether that was on one
20 of the CDs?

21 MR. COLEMAN: It may have been. I don't
22 know for certain but it may have been one of the
23 technical reports because along with the topical
24 reports, the CDs have numerous technical reports.

25 MEMBER SHACK: Okay. I didn't see it.

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1 CHAIRMAN MAYNARD: I think we probably
2 need to put together a new consolidated list because
3 we've gotten a couple of other new CDs.

4 PARTICIPANT: The staff may know. The
5 staff may know for sure.

6 MR. CIOCCO: This is Jeff Ciocco of the
7 NRC staff. If there was a one-seventh scale test
8 report as a technical report then you have it. I'm
9 not certain that there was a separate technical
10 report. Mitsubishi would have to answer this outside
11 of the actual topical report or an appendix to it.

12 But if there was a separate report, you do
13 have it. I'm not sure -- I looked in my list. I
14 didn't see a separate report.

15 MEMBER SHACK: Oh, so it is Appendix A of
16 the LOCA Report that we're talking about then?

17 MR. CIOCCO: I'm not sure. What exactly
18 is the name of the report you are asking about? It's
19 the --

20 MEMBER SHACK: It's the one-seventh scale
21 test where they were looking at the flow variability,
22 you know.

23 MEMBER BLEY: They mentioned it in the
24 last hour.

25 MEMBER SHACK: Yes.

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1 MEMBER BLEY: The other one that was
2 mentioned that we haven't seen, and maybe you've got
3 it as the topical on the gas turbine they mentioned.

4 MR. CIOCCO: Yes, you have that one. That
5 was dated December 5th of 2007. And that is on the CD
6 that we gave -- Mitsubishi provided all the technical
7 reports and topicals as of about a month or two ago.
8 So you do have that one.

9 I showed Neil where he can get it. They
10 provided the CD. And the --

11 MEMBER SHACK: Maybe no one --

12 MR. CIOCCO: Okay, is this -- the reactor
13 vessel lower plan in one-seventh scale flow model
14 test? Yes, dated June 30th. You should have that on
15 your CD as well. I'll double check with Neil.

16 MEMBER SHACK: Okay. Maybe no one looks
17 at topical reports because -- and I didn't look at
18 technical reports.

19 MR. CIOCCO: Correct. They are in the
20 technical support and supplement, the design control
21 documents separately.

22 CHAIRMAN MAYNARD: I think we can make a
23 current list of what we have. And then we'll have
24 that to go by.

25 MR. PAULSON: Would it be all right if

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1 Kumakisan made a closing statement?

2 CHAIRMAN MAYNARD: Yes, yes, go ahead.

3 MR. KUMAKI: Sorry, sorry for my later
4 introducing by myself. My name is Yoshinari Kumaki
5 from Mitsubishi Heavy Industries. And I am a DCD
6 manager on the MHI. And so today and yesterday I am
7 as a representative of our general manager, Mr. Ogata.
8 He will come up the next November meeting.

9 So we have already submitted and they
10 already presented our topical report and technical
11 report with the core and the fuel and also today the
12 accumulator and the safety features.

13 So we may present enough information for
14 our topical report but yesterday and today many
15 discussions have occurred. And some parts we could
16 answer your question but some portion the result
17 provide the addition RAI from NRC. Maybe it is
18 presented by ACRS members.

19 And at the end of the topical report,
20 safety evaluation report will be prepared by NRC and
21 at that time, we'd like you to review again our
22 topical report as a safety evaluation report review.

23 So next November, we will present about
24 the INC area. And maybe I heard in the next year,
25 early spring, we will present about the safety

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1 analysis code. So please review our topical report
2 and also including our DCD of US-APWR in future.
3 Thank you very much.

4 CHAIRMAN MAYNARD: Okay. Very good.
5 Thank you.

6 With that, we will bring the meeting to a
7 close. And we will adjourn the meeting. Thank you.

8 (Whereupon, the above-entitled open
9 session of the ACRS meeting was concluded at 11:23
10 a.m.)

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