

OFFICIAL TRANSCRIPT OF PROCEEDINGS  
UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

Title:

REACTOR DECOMMISSIONING  
RISK WORKSHOP

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PAGES: 241 - 474

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1 MR. MEISNER: What I'm saying is 0612 allows you  
2 two paths. One is use of a non-single failure-proof crane,  
3 but only if you do a consequence analysis. And given the  
4 consequence analysis, then this whole issue goes away. It  
5 won't result in breaching the pool. That's a plant-specific  
6 licensee initiated evaluation.

7 If you don't do that, now we're into the space  
8 you're talking about, and that's single failure-proof crane  
9 and implementing all the concomitant things that go along  
10 with 0612.

11 MR. RICHARDS: One or the other then, right?  
12 That's your commitment.

13 MR. MEISNER: Yes. That's what we're required to  
14 do.

15 MR. CAMERON: Let me make sure that we all agree  
16 on that. You keep referring to it as a commitment, Stu, as  
17 opposed --

18 MR. RICHARDS: Let me explain why. When you go  
19 and look at a 106 licenses, it's not unusual where you won't  
20 find that there are outliers out there who somehow, through  
21 the regulatory process, don't fall into that category.

22 To make it simple, let's just make that an  
23 assumption. Keep it simple. That's an assumption.  
24 Somebody falls outside that category, for rulemaking or for  
25 processing purposes, then they're dealt with on an

1 that kind of plant, you get that answer.

2 Then I think -- and then whether you're conforming  
3 with 0612 or not is simply a question of facts. Otherwise,  
4 we have the possibility of getting -- mixing the apple and  
5 the orange. You're not a plant like this, but you're  
6 applying analysis that doesn't apply, and it seems to me  
7 it's a little more work to do the analysis both ways, but  
8 ultimately I think it simplifies the understanding where the  
9 plant stands.

10 MR. MEISNER: We're making this awful, awful  
11 complicated. Rich, ~~as far as 0612, let me be explicit.~~  
12 ~~It's either a single failure-proof crane or it's a~~  
13 ~~consequence analysis that makes your issue go away anyway.~~  
14 ~~And in addition, it's phase one of 0612 that includes the~~  
15 ~~things like safe load paths, the crane operator training~~  
16 ~~program, and the criteria, there are like five or six items~~  
17 ~~in there.~~

18 So is that real clear? I'm not talking about  
19 pulling in new NRC requirements that you'd like to get in  
20 here. ~~It's a single failure-proof crane or the consequence~~  
21 ~~analysis, this phase one, which includes those five to seven~~  
22 ~~items, such as safe load paths.~~

23 MR. BARRETT: That's my understanding.

24 MR. MEISNER: Okay. As far as having multiple  
25 analyses, that's fine, Gary, as long as you give us credit

1 sequences with very high numbers in it. And we probed a lot  
2 in that meeting, trying to understand what was behind it,  
3 what drove those high numbers.

4 And I think it was the next day, then, we're in  
5 talking to senior NRR management and tried to come up with a  
6 success path forward, based on what the staff had done to  
7 date. And what we had agreed to, I believe, was this  
8 workshop. And the -- what we brought up at the meeting  
9 developing that workshop was the willingness on the part of  
10 the industry to come up with commitments that would address  
11 those things that seem to drive the high numbers in the  
12 staff's preliminary results. And, of course, to do that, we  
13 needed to have some information about how that model worked  
14 and how it was put together and what the assumptions were.

15 So, we came prepared to do that at this workshop.  
16 We have talked about a number of commitment areas, and I'm  
17 going to go over those again, just to be clear of what we're  
18 talking about. And, you know, in return, we're looking for  
19 some explicit reduction in risk that resided in the models  
20 and that were tied to these areas of commitment.

21 So, first of all, and we may have lost some of it  
22 in passing quickly through it yesterday, when Ed Burns  
23 talked on the risk insights. We were looking at four areas  
24 of commitment -- hardware commitment, one that has to do  
25 with seals, to the extent they're included in the design,

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1 and committing to the notion of either redundant or soft  
2 loading seals; the second had to do with anti-siphoning  
3 devices associated with the spent fuel pool, both in the --  
4 I'll call it the permanent design, as well as when you use  
5 temporary pumps and the like for one reason or another, that  
6 you would incorporate the same kind of safeguards, and then,  
7 finally, the idea of pre-staging or providing a connection  
8 for the diesel fire pump to the spent fuel pool floor, so  
9 that that can be aligned outside of the refueling in the  
10 middle of an event. I didn't want those things to get lost  
11 in the shuffle. And I want to be able to understand that,  
12 to the extent those provide a risk reduction, those are  
13 areas the industry is willing to commit to.

14 Then, we had a longer discussion about -- I'll  
15 call it the software, the procedural aspects of things. And  
16 we're looking at things like -- things that really are  
17 already required to be in place for, say, internal fires,  
18 work controls, combustible controls and the like. I think  
19 you can probably verify through our license and design bases  
20 that those things are already part of our FSAR. And then to  
21 the extent that it's not included in the SSAR, for detection  
22 purposes, operator and security rounds, as an example, and  
23 various detection devices. And, of course, central to all  
24 of this is if you should ever get into a situation where  
25 you've lost cooling or you're in a draindown situation, then

1 the idea of clear procedures in place that will identify the  
2 various water sources, means of getting water into the pool,  
3 and power sources that are available to the operation staff,  
4 to mitigate that event.

5 Now, we don't think there's any benefit in going  
6 into detail, like we heard, for instance, when level goes  
7 down two inches, you do this; when it's down one foot, you  
8 do that, whatever. I think what we're talking about is  
9 insuring, as they already are, that operators are aware of  
10 all the potential paths for recovery, that they have a  
11 procedure that directs them to not focus on a single path,  
12 and that they have some training and ability to respond to  
13 these very long-lived, long-term events.

14 There was also some discussion about training.  
15 But, I think in that area, clearly, there's no need for  
16 additional commitments, at least that I'm aware of, because  
17 that's part of Appendix B and our license basis in what  
18 we're required to do, given the NRC approved certified fuel  
19 handler training program. I think there shouldn't be any  
20 concern about lower quality training, for instance, than we  
21 had when we were operating. The quality remains the same  
22 and it has to remain the same. And there are a number of  
23 regulatory hooks, I'll call them, that you have to come in  
24 and if you're not comfortable with the quality of training,  
25 make sure it gets back up to snuff. But, the regulatory

1 framework, we believe, is already there.

2 And if I've missed some, somebody can correct me  
3 later, but that was kind of a general discussion of those  
4 areas that ~~we're willing to provide additional commitment~~.  
5 And the appropriate place, seems to me, to be incorporate  
6 that into our license basis through the FSAR. That insures  
7 that you've got all the controls associated with 50.59 and  
8 50.90, should there be, for instance, an unreviewed safety  
9 question and us wanting to change some of that.

10 We kind of throughout the workshop, asked staff  
11 for feedback on which ones of these commitments would make a  
12 difference. And I guess I thought that was going to be the  
13 major portion of the two-day discussion, and I believe we've  
14 gotten back very little feedback in that area. So, I don't  
15 know the degree to which any of these things could be  
16 credited or the level of possible risk reduction that could  
17 be achieved. What we did get from the staff was, you know,  
18 that you'll look at it; you'll take it back and look at it.

19 Heavy loads was a bit of a concern. We thought  
20 that would be the seminal issue that would be real easy to  
21 identify; that, in fact, licensees have commitments and  
22 requirements in place and have always had them there, and  
23 there should have been -- we've had a pretty direct  
24 reduction in risk, as a result. I'll mention two that --  
25 although it wasn't emphasized too much by Bill Henries, our

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1 workshop was going to be, because once the plan is approved,  
2 it goes completely out of the staff's draft report and this  
3 workshop. I think the jury is still out, so we're looking  
4 for some positive feedback and getting a face-to-face  
5 meeting on HRA, say, in the next two to three weeks. And  
6 working our way through these issues to some level of  
7 resolution would give us that kind of certainty that we need  
8 to respond to the Commission before that 30-day period is  
9 up.

10 On heavy loads, again, we're looking for something  
11 in hand, some actual final decision. We still believe that  
12 that's an easy issue to deal with and we would ask the  
13 staff, you know, to maybe even as a show of good faith, to  
14 get back to us in a couple of weeks and give us the details  
15 of the credit that they intend to give for not only 0612  
16 implementation, but those areas of upper bound concerns that  
17 Bill Henries talked about, as well.

18 On seismic, I am optimistic there. The industry  
19 has an action to propose a screening checklist, like Goutam  
20 suggested, and Bill Henries has talked to Goutam and will  
21 work with him. We hope to have a first cut of that to you  
22 in a couple, three weeks tops.

23 I've heard, maybe more inside discussions than  
24 anything else, that perhaps there are some resource  
25 restraints, as far as, you know, having to risk inform