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NUCLEAR REGULATORY COMMISSION

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27<sup>TH</sup> ANNUAL REGULATORY INFORMATION CONFERENCE

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REGIONAL SESSION

+ + + + +

WEDNESDAY

MARCH 11, 2015

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ROCKVILLE, MARYLAND

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The Regional Session of the Regulatory Information Conference met at the Bethesda Marriott Hotel & Conference Center, 5701 Marinelli Road, Rockville, Maryland at 10:30 a.m., Michael Johnson, Session Chair, presiding.

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## SESSION CHAIR:

MICHAEL JOHNSON, Deputy Executive Director for  
Reactor and Preparedness Programs

## PANELISTS:

DAN DORMAN, Regional Administrator, RI, NRC,  
VICTOR McCREE, Regional Administrator, RII, NRC  
CINDY PEDERSON, Regional Administrator RIII, NRC  
MARC DAPAS, Regional Administrator, RIV, NRC  
RANDALL K. EDINGTON, Executive Vice President, Chief  
Nuclear Officer, Arizona Public Service  
Company  
JOSEPH GRIMES, Executive Vice President, Chief  
Nuclear Officer, Tennessee Valley Authority

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

10:31 a.m.

1  
2  
3 MR. JOHNSON: Well, again, I do want to  
4 welcome you to the session and I want to welcome our  
5 panelists today in this regional session. We have, in  
6 fact, a very distinguished panel, set of panelists, and  
7 I will introduce them.

8 Dan Dorman who is the Regional  
9 Administrator for Region I, Vic McCree who is the  
10 Regional Administrator for Region II, Cindy Pederson  
11 who's the Regional Administrator for Region III and  
12 Marc Dapas who is the Regional Administrator for Region  
13 IV.

14 Now, on my other side we have Randy  
15 Edington who is the Executive Vice President, Chief  
16 Nuclear Officer for Arizona Public Service Company and  
17 Joe Grimes who is the Executive Vice President, Chief  
18 Nuclear Officer for Tennessee Valley Authority.

19 So, welcome panelists to the session also.

20 So, as I indicated, the format for this  
21 session is really question and answers. I'm prepared  
22 to start that session off with a number of questions  
23 for the panelists, but we really intend in this session  
24 to elicit your questions so the panelists can respond  
25 to things that are of interest to you.

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1           So, again, please don't hesitate to  
2 identify questions on a card or come to the microphone  
3 when you want to raise a question. So, let's get going  
4 without further ado.

5           The first question is, we've talked  
6 already in various sessions at the Regulatory  
7 Information Conference about the reactor oversight  
8 process. There have been several activities that have  
9 been conducted to identify potential changes to the  
10 reactor oversight process to continue to improve the  
11 sufficiency and its effectiveness.

12           Recently, there's been a lot of discussion  
13 on potential changes related to the reactor oversight  
14 process action matrix threshold for transition from  
15 Column 2 to Column 3 to the Substantive Cross Cutting  
16 Issues area of our process and to the size and scope  
17 or focus of the component design basis inspection of  
18 CDBI program.

19           So, I have a question for the NRC  
20 panelists. What actions are being taken on these  
21 programs? How do the regions view each of the proposed  
22 changes summarized above? I'm going to ask Marc and  
23 Dan if you'll take those questions first.

24           Then, following that, I'm going to, just  
25 to warn you guys, our industry colleagues, what safety

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1 benefit or deterrent do you see from the current  
2 processes in these areas and what changes would you  
3 think would be most beneficial to safety, again, as it  
4 relates to the reactor oversight process?

5 So, Marc, you want to start?

6 MR. DAPAS: Thanks, Mike. Hopefully  
7 folks can hear me okay here.

8 Let me start out with the one aspect there  
9 for which I'm sure there's relatively little interest,  
10 and that is the Substantive Cross Cutting Issue process  
11 here.

12 By way of background, I'll call it the ROP  
13 Founding Fathers back in the 1999/2000 time frame  
14 incorporated crosscutting areas into the original  
15 reactor oversight process or ROP framework because that  
16 group determined that these items generally manifest  
17 themselves as the root causes of performance problems.

18 We, the NRC, further developed the current  
19 Substantive Cross Cutting Issue process in response to  
20 Commission direction to the staff to enhance the  
21 reactor oversight process treatment of crosscutting  
22 issues to more fully address safety culture.

23 As many of you should be aware, the  
24 intended purpose of assigning a Substantive Cross  
25 Cutting Issue is to inform the licensee that the NRC

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1 has a concern with the licensee's performance in the  
2 crosscutting area and to encourage the licensee to take  
3 appropriate actions before more significant  
4 performance issues emerge.

5 We've had various public meetings over the  
6 last couple of years where the industry has expressed  
7 their concern. Their central concern regarding the  
8 current Substantive Cross Cutting Issue process is  
9 that, you know, challenging the premise that four  
10 findings with the same crosscutting aspect in a 12 month  
11 period is indicative of potential performance  
12 problems, especially considering that the findings are  
13 primarily of very low safety significance.

14 You know, we have green findings for which  
15 we would look at a crosscutting aspect typically.

16 Another concern that was expressed by the  
17 industry was the significant resources required to  
18 address and disposition the Substantive Cross Cutting  
19 Issues for the perceived very low safety benefit.

20 The industry has provided us with an  
21 alternative model for oversight of licensee safety  
22 culture in lieu of our Substantive Cross Cutting Issue  
23 process. That process, the industry process which  
24 would be voluntary is described in Nuclear Energy  
25 Institute, or NIE, Guidance Document NEI-09-07

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1 entitled Fostering a Healthy Nuclear Safety Culture.

2 Back in February of last year, Brian  
3 McDermott led an independent assessment and that study  
4 was provided -- it was dated February 18th. In that  
5 study, there was a recommendation that the staff  
6 perform a comprehensive analysis to determine whether  
7 the use of crosscutting issues and safety culture  
8 provides regulatory value in terms of licensee safety  
9 performance for the resources expended.

10 As a result of that recommendation, Office  
11 of Nuclear Reactor Regulation Division of Inspection  
12 and Regional Support led a working group that conducted  
13 an effectiveness review of our Substantive Cross  
14 Cutting Issue process and then developed a number of  
15 recommendations.

16 That working group had three overarching  
17 conclusions. The first conclusion was it is difficult  
18 to prove that licensee corrective actions resulting  
19 from identification of a Substantive Cross Cutting  
20 Issue prevented more significant performance issues,  
21 especially for those licensees whose performance was  
22 steady before and after an SCCI, or Substantive Cross  
23 Cutting Issue, was identified.

24 Consequently, the staff was unable to  
25 determine if the Substantive Cross Cutting Issue

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1 process was effective in preventing more significant  
2 safety issues.

3 The second overarching conclusion was that  
4 Substantive Cross Cutting Issues are not a leading  
5 indicator for declining licensee performance.  
6 Licensees moved right in the action matrix 86 times  
7 without identification of a Substantive Cross Cutting  
8 Issue.

9 Then the third conclusion from the working  
10 group was the resource cost for implementing the  
11 Substantive Cross Cutting Issue process is significant  
12 without an apparent commensurate increase in the safety  
13 benefit.

14 I should mention that that working group  
15 did consist of safety culture experts, staff from NRR,  
16 the Office of Enforcement and each of the regions were  
17 represented.

18 Again, the original problem statement was  
19 the level of effort to develop open and closed  
20 Substantive Cross Cutting Issues is not commensurate  
21 with the perceived value.

22 Stated differently, regulatory actions  
23 and outcomes from identifying and monitoring  
24 Substantive Cross Cutting Issues do not achieve gains  
25 in protecting public health and safety that are

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1 commensurate with the resources expended.

2 Based on those conclusions and that  
3 problem statement, the working group had a number of  
4 recommendations.

5 The first recommendation was to not  
6 endorse the proposed industry process that is captured  
7 in NEI 09-07. The various reasons for that were there  
8 were concerns with inconsistent implementation of the  
9 program, recent revision to NEI 09-07, Revision 1,  
10 which was issued recently further reduces  
11 standardization of the process in providing several  
12 different options for licensing implementation.

13 There were some concern that Revision 1  
14 removed the process requirement for an independent  
15 safety culture assessment.

16 The working group had some concerns with  
17 the lack of transparency for the public with the  
18 industry's process. The Substantive Cross Cutting  
19 Issue process provides a formal means of communicating  
20 an NRC concern with the licensee's performance in a  
21 cross cutting area to the public through a very  
22 transparent process in the semiannual assessment  
23 letters.

24 Then there was the recognized assertion  
25 that if a licensee is effectively implementing the NEI

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1 09-07 safety culture monitoring process, the  
2 likelihood the NRC would issue a Substantive Cross  
3 Cutting Issue is significantly reduced.

4 Another recommendation was to revise the  
5 terminology, eliminate Substantive due to negative  
6 connotations which may or may not be valid. It implies  
7 an issue with higher significance than may be justified  
8 by using substantive.

9 Increase the threshold for a cross-cutting  
10 theme from four to six findings with the same cross  
11 cutting aspect, that should reduce some of the resource  
12 burden and be more indicative of a trend. The thought  
13 was a higher threshold could result in Substantive  
14 Cross Cutting Issues being a better predictor of  
15 declining licensee performance.

16 Now, there were a couple additional  
17 recommendations regarding creating a backstop of 20 and  
18 12 findings in the cross cutting area of human  
19 performance and problem identification resolution,  
20 respectively.

21 When you look at the process that was being  
22 proposed with the change in the threshold from four to  
23 six, theoretically, you could have a theme of six  
24 findings with the same cross cutting aspect whereby you  
25 have as many as 70 findings with human performance cross

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1 cutting aspects and not meet the criteria for a cross  
2 cutting theme.

3 Similarly, you could have as many as 30  
4 findings in the area of problem identification and  
5 resolution and without reaching a criteria for a theme.  
6 The staff felt that these numbers of findings would be  
7 indicative of a systemic problem in human performance  
8 or with the corrective action program.

9 There was a recommendation that the  
10 subjective questions prescribed by Inspection Manual  
11 Chapter 0305 which is our Operating Reactor Assessment  
12 Program should be eliminated and more objective  
13 criteria established for opening a Substantive Cross  
14 Cutting Issue.

15 The first occurrence of the theme that  
16 would be after a 12 month period, so that would be a  
17 minimum of six findings with the same cross cutting  
18 aspect. The recommendation was to document the theme  
19 in an assessment letter, consider reviewing licensee  
20 causal malice and corrective action though a focused  
21 problem identification resolution sample.

22 For the second consecutive occurrence, so  
23 we're now looking at over a period of 18 months, we would  
24 document the theme in an assessment letter, review  
25 licensee progress in addressing the theme and conduct

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1 a PI&R sample if not done earlier.

2 Then for the third consecutive occurrence,  
3 and I'd offer while you're looking at a 12 month rolling  
4 period in determining whether there are six findings,  
5 a minimum of six findings with the same cross cutting  
6 aspect, by the time you get to the third consecutive  
7 period, you've had issues there over a 24 month period.

8 At that point, we would assign a cross  
9 cutting issue and then we would develop a standard cross  
10 cutting issue closure criteria. We would recommend a  
11 follow-up inspection similar to the 95-001 to review  
12 licensee's causal analysis and corrective actions.

13 If at the time we issue a cross cutting  
14 issue and the following assessment period which would  
15 be six months later, we still had not closed the cross  
16 cutting issue, then we would look at potentially some  
17 additional regulatory actions like having the Regional  
18 Administrator and/or the Executive Director for  
19 Operations meet with the licensee's Board of Directors,  
20 discuss the licensee at the Agency Action Review  
21 meeting with the potential for recommending that that  
22 licensee meet with the Commission.

23 Then if you're a licensee in Column 4 of  
24 the action matrix, all cross cutting issues would be  
25 closed out as part of the confirmatory action letter

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1 closure process.

2 Those are the various recommendations that  
3 were put forward by the working group. My  
4 understanding is that the staff is proceeding to  
5 implement those changes and, Scott, you can tell me the  
6 time frame for that. I think we're looking in the next  
7 for mid-cycles? For the next mid-cycle assessment  
8 period.

9 But those are the recommendations and those  
10 are the actions going forward that we decided to  
11 implement to address the suggestion from the  
12 independent assessment that we look at the cross cutting  
13 issue process we currently have in place holistically  
14 and determine what changes are appropriate.

15 MR. JOHNSON: Thanks.

16 MR. DORMAN: So, I'm going to pick up the  
17 other two items on Mikes list, the action matrix  
18 threshold and the CDBIs. I'll start with the action  
19 matrix threshold.

20 The issue that was raised here from the  
21 independent assessment is looking at the entry criteria  
22 in to Column 3 of the action matrix which is called the  
23 degraded cornerstone.

24 The current criteria for entering Column 3  
25 is one yellow input or two white inputs in any

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1       cornerstone. The question is focused on the two white  
2       inputs piece.

3               Two white inputs are inputs that are in the  
4       ten to the minus six to ten to the minus fifth risk band  
5       as opposed to the yellow would be in the ten to the minus  
6       fifth to ten to the minus fourth. The fundamental  
7       question is, if you've got two white inputs that are low  
8       in that ten to the minus six band, they don't add up to  
9       be equivalent to a ten to the minus five. So is it  
10      appropriate to have that kind of regulatory response to  
11      two white inputs?

12              The regulatory response, just for  
13      perspective, on a Column 2, we respond with a 95-01  
14      inspection which is focused at the specific issue that  
15      is behind the white input and is in the neighborhood of  
16      40 hours of inspection effort.

17              If you get into Column 3 in the degraded  
18      cornerstone, we're going to do a much more intrusive  
19      inspection that's going to look at cross cutting aspects  
20      and get deeper into the licensee's root cause and  
21      corrective actions for the issues that got them into  
22      Column 3.

23              That inspection effort for the staff can be  
24      upwards of several hundred hours of inspection effort  
25      and there's a significant increase corresponding in the

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1 level of effort that a licensee puts into preparing for  
2 that.

3 So, the question was should we go to their  
4 white inputs in one cornerstone as a threshold for  
5 entering Column 3? That was discussed in a public  
6 meeting that NRR sponsored in January. The proposal  
7 that is being put forward would be to go from two white  
8 inputs in a cornerstone to three white inputs in a  
9 cornerstone.

10 There would be corresponding adjustments  
11 to the 95-01 inspection procedure because now you would  
12 have the potential for having two white inputs in the  
13 regulatory response column and so we would have  
14 adjustments to the sample sizes and the inspection hours  
15 under 95-01 to reflect a multiple white inputs in that  
16 performance area.

17 So, there was a basis that the staff put  
18 forward in the discussion for that, looked at -- in their  
19 history of the ROP, there have been 75 plants that have  
20 entered into Column 3. Thirty-one of those plants have  
21 entered into Column 3 based on two white inputs, so the  
22 staff focused in on those.

23 There are some of those entries into Column  
24 3 that were in cornerstones that don't have quantified  
25 significance determination process. They don't

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1 provide a lot of insight from the risk perspective.

2 So, the staff has developed the discussion  
3 on what is really the significance of two white inputs.  
4 They also looked back the original discussions in the  
5 establishment of the ROP. There was input from our  
6 senior risk analyst at that time that suggested that  
7 five white inputs may be correspond to a yellow.

8 The decision at the time was two white  
9 inputs is recognized to be a conservative decision.  
10 The staff revisited that decision and brought it to the  
11 Commission in 2003. At that time, the Commission  
12 agreed to keep it at two white inputs. We are looking  
13 at that again with a lot more history and data to look  
14 at.

15 The NRR plans to put together a Commission  
16 paper on this issue. It is threshold to the action  
17 matrix is fundamentally a policy issue in the structure  
18 of the reactor oversight process. So, the expectation  
19 is by the end of April, we'll see a Commission paper that  
20 will go to the Commission and let them decide on the  
21 issue.

22 There are a number of diverse views within  
23 the staff, within the working group that was put  
24 together on this issue. Those will be reflected, we  
25 expect, in the Commission paper by presenting different

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1 options to the Commission and discussion of the pros and  
2 cons for those options.

3 Moving on to the CDBI question, of the three  
4 topics, this is the one that is perhaps the least  
5 developed in terms of where the staff will go on this  
6 issue. But it has been an issue that's been under  
7 discussion for some time.

8 The component design basis inspections is  
9 a portion of the baseline inspection program under the  
10 reactor oversight process in which the inspectors will  
11 go into a licensee's design basis documents and drill  
12 down for a particular system to look at what the basis  
13 was for the design and maintenance of that system and  
14 how effectively the licensee is maintaining that design  
15 basis in their ongoing operations and maintenance of the  
16 system.

17 Over time, the results of those inspections  
18 have, I think early on, there were more greater than  
19 green findings. Recently there have been more green  
20 findings out of these inspections. So the question is  
21 being raised appropriately in the context of our ongoing  
22 assessment of the baseline inspection process of are we  
23 focusing our resources in the best areas for safety?

24 A white paper has been provided to the staff  
25 from the industry making some suggestions on ways to

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1 improve this inspection area. We did have a public  
2 meeting in January to discuss this area.

3 I think a couple of key points out of that  
4 meeting, from the NRC's perspective, this inspection is  
5 one of the most important inspections in the baseline  
6 inspection program.

7 Most of the operations and maintenance  
8 related inspection areas are focused on the current  
9 operability of systems and the effective operations of  
10 systems and maintenance of the systems. This is the one  
11 that really drills down to is the licensee maintaining  
12 the plant as it was licensed to be built and operated.

13  
14 Also, from our experience, this is not  
15 something that you do for one inspector for a week to  
16 do an effective job in this type of inspection. So, for  
17 us, the team structure is key to the success of these  
18 inspections.

19 We note that we also had some input from  
20 public stakeholders that they viewed this as one of the  
21 most important inspections that we do.

22 But we also have feedback from the industry  
23 that, based on their performance in this area that no  
24 longer warrants an inspection of this scope and the  
25 impact of the current inspection, they note that they

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1 do a significant amount of effort to prepare for these  
2 inspections and they wonder if there's a way that we can  
3 give credit for that self-assessment process being  
4 effectively conducted as part of the inspection  
5 activity and to enable us to kind of scale that back.

6 So, the bottom line is where we are, we're  
7 fairly early in the process in looking at the component  
8 design basis inspection. There is a diversity of views  
9 both within the staff and with outside stakeholders.  
10 So, there will be a continued dialogue on this one as  
11 we work forward to recommendations.

12 MR. JOHNSON: Very good. Thank you, Marc,  
13 thanks, Dan, for those answers.

14 Joe, let me just turn to you for an industry  
15 perspective. Again, what's the safety benefit or  
16 deterrent that you see in the current processes and what  
17 changes would you see as being most beneficial?

18 MR. GRIMES: Sure, thanks, Mike, and good  
19 morning.

20 Overall, we support the ROP as a very good  
21 tool to determine how to respond to licensee  
22 performance. I'll start in this area with the action  
23 matrix.

24 You know the potential move to raise the  
25 presentation or the transition threshold to Column 3 to

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1 three white inputs is a positive move in our opinion and  
2 should alleviate some of the pressure that occurs when  
3 we over respond early in the SDP phase. I think most  
4 importantly, it aligns us better to respond truly to the  
5 safety significance of each of the individual issues.

6 This should also be a positive effect on  
7 Column 4 potentially which is a very large concern to  
8 the industry, obviously, because of the cost for entry  
9 and the extremely significant activities to recover.

10 So, overall, you know, a step in the right  
11 direction and would give both the NRC and the licensees  
12 room to focus more on fixing the actual problems and  
13 debate in the risk significance up front.

14 Let me talk a little bit about cross cutting  
15 issues. You know, we welcome the changes as a first  
16 step. Most of the utilities have established, you  
17 know, response thresholds and actions in this area that  
18 include performance analysis, it understands common  
19 linkage of the issues.

20 In addition, there is also many other  
21 sources of data, the corrective action process which is  
22 well used, well understood and well talked about.

23 The safety culture monitoring program and  
24 others that the utilities all rely on for plant  
25 performance which provides very clear insights into

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1 trends and the necessary response actions to both  
2 anticipate and/or arrest any declines that could occur  
3 in performance.

4 So given that, we would encourage the NRC  
5 to continue to assess the changes you're talking about  
6 in the cross cutting thresholds. Again, maybe in two  
7 years to come back and look at the impact of this first  
8 step revision that you're considering versus keep plant  
9 processes and how well they overlap.

10 Then lastly, CDBI. You know, we recognize  
11 very much the importance of this inspection, as Dan  
12 said. The industry recognizes that the safe operation  
13 depends on the maintenance of the integrity of the plant  
14 design and the fidelity to it.

15 The inspection in its current format has  
16 become a significant burden to the station operations,  
17 the site engineering resources and, over time, is  
18 yielding less in the area of significant and safety  
19 significance at all.

20 So, we believe this should be shifted in  
21 focus from design verification more so to a validation  
22 of the programs that maintain the health of the design  
23 basis, especially for those risk significant systems  
24 and components and in using the self-assessment  
25 processes that the industry has.

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1 Overall, we think this will allow for  
2 reducing the scope. We believe it will also impact the  
3 duration and especially the team size and just overall  
4 impact for the inspections.

5 MR. JOHNSON: Okay, very good. Thank you,  
6 Joe.

7 Randy, anything add? You don't have to,  
8 but you're welcome. It'll be hard to contain.

9 MR. EDINGTON: No, I'll let Joe handle  
10 that.

11 MR. JOHNSON: Okay. All right, very good.

12 This next question really relates to  
13 regional differences and I'm going to start off with --  
14 actually, I'm going to address the industry panel first.  
15 Here's the question.

16 In September of 2013, the Government  
17 Accountability Office issued a report that identified  
18 differences in the number of green findings and  
19 non-escalated violations in the regions since the  
20 inception of the reactor oversight process.

21 So, my question is, what's your perspective  
22 regarding the consistency with which the regions  
23 conduct the ROP activities? Is this a significant  
24 problem from your perspective?

25 Randy, do you want to take that one?

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1 MR. EDINGTON: Yes, I'll take that.

2 You know, having a strong and independent  
3 regulator is something that we feel is important to  
4 everyone. We have an industry that's matured  
5 dramatically and we're used to comparing information  
6 across the various venues, whether it's INPO or metrics,  
7 and from that, we get very strong views of our  
8 performance.

9 So, we do think it's important to have  
10 consistency. We're not looking for just carbon, but we  
11 think evaluating those differences adds a strength and  
12 credibility to the regulatory process.

13 You can find sometimes an area that maybe  
14 is being driven by one area and we don't think that is  
15 good for a good regulation overall.

16 So, we do believe that a regular comparison  
17 between the regions and seeking reasonable consistency  
18 would be very important to continuing the effort for  
19 credible regulations.

20 We also think, again, there's  
21 opportunities as we compare those areas to look for  
22 areas to strengthen, again, either an issue that's  
23 identified that needs to be broadened or, in other  
24 cases, where one is being unfairly pushed on in one  
25 region.

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1                   So, those are -- or we do think that's  
2 important. We think it's very capable right now.  
3 Again, we're looking for a strong independent and  
4 credible regulator just like you are.

5                   MR. JOHNSON: All right, very good. Thank  
6 you, Randy.

7                   So, now let me turn to the NRC. Your  
8 question related to this topic is, how do you view the  
9 GAO report and what have the regions done about it?

10                   I'm going to ask Vic to start, but before  
11 Vic does, I can't resist this. I've got to ask you, does  
12 Vic have on a white shirt with a gold tie? Or how many  
13 people see black and blue?

14                   MR. MCCREE: Should I give the answer?

15                   MR. JOHNSON: Go ahead, Vic, please.

16                   MR. MCCREE: It's actually brown and gold.  
17 No, it's blue and gold. This is an interesting question  
18 and it's one that we've addressed before. I think this  
19 is the seventh opportunity I've had to participate in  
20 this particular regional session. Invariably the  
21 question of regional differences arise. So, it's  
22 apparent that we've not addressed it in a sufficient  
23 manner.

24                   There's also some differences, optical  
25 differences. You'll note, if you're looking, that the

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1 regional administrators on one side of the dais and the  
2 industry's the other. That symbolizes our principle of  
3 good regulation of independence, so we're separated,  
4 but, independence doesn't mean isolation and definitely  
5 on this particular subject.

6 As background, about 18 months ago, the  
7 Government Accountability Office issued a report based  
8 on an audit it had done on our implementation of our  
9 reactor oversight process and how we identify issues,  
10 how we evaluate them for significance and how we resolve  
11 them.

12 That report included a number of  
13 observations, findings, one of which was noteworthy is  
14 that in comparison among the regions, we identify about  
15 the same number of Asafety significant findings and  
16 violations,@ but a lower significance findings, green  
17 non-cited violations, green findings and the lower  
18 risk, less severe violations, there was significant  
19 differences among the regions.

20 They noted that this was previously known  
21 long standing. In fact, the audit covered a 13 year  
22 period from 2010 to 2012, although, in fact, the  
23 differences actually preceded the reactor oversight  
24 process. Although there were several initiatives that  
25 we had taken over the years, it was concluded that those

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1 differences weren't that significant because, again, in  
2 most cases, licensees would enter those issues into  
3 their corrective action programs and be available for  
4 the regions to sample the effective implementation of  
5 corrective actions.

6 But the report concluded accurately that we  
7 had not conducted a comprehensive analysis of the  
8 differences and that our quote, oversight efforts to  
9 confirm that their objective and consistent and know  
10 whether the regional offices or inspectors are applying  
11 regulations and guidance consistently.

12 So, we took that to heart and NRR led an  
13 effort over the last year to conduct a tabletop review  
14 which included about 56 folks, about 53 from the  
15 regions, both inspectors and supervisors and others  
16 from NRR.

17 They conducted or participated in a survey  
18 where scenario-specific questions were asked and  
19 answered and non-scenario-specific questions to get  
20 folks views on how performance issues are identified,  
21 what the threshold should be in terms of minor and more  
22 than minor, how they would credit identification  
23 because in our process, we would grant credit for  
24 licensees if a licensee identifies the issue or if it's  
25 self-identified or, of course, if it's NRC identified,

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1 that has merit in our process in terms of whether and  
2 how an issue is documented.

3 The responses to those questions were  
4 evaluated and there were two noteworthy themes that came  
5 out of the review. One is that there's differences in  
6 how we implement the more than minor screening, using  
7 the more than minor screening questions in our guidance.  
8 Secondly, how we assign identification credit, again,  
9 as licensee identified or self-revealing. Those  
10 results generally aligned with the results of the GAO  
11 survey. So, we used that as input to base our follow  
12 on actions which are ongoing, but I'd like to ask Cindy  
13 if she would go into a little bit more detail on those.

14 MS. PEDERSON: Thanks, Vic. Good morning  
15 everyone.

16 The working group that looked at these  
17 various things did take a lot of input from various  
18 inspectors and branch chiefs throughout the agency.

19 So, the next step was to take that and try  
20 to align on where we wanted to move forward in these  
21 areas of noted difference. So, the regional senior  
22 leaderships got together and did this same evolution of  
23 going through these scenarios to come up with ways in  
24 which we could align so the agency would move forward.

25 Just to give you a couple of examples where

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1 the division directors working with NRR and the regions  
2 identified some differences, one was in the area of  
3 calculational errors and the noted difference was in how  
4 much of a change or how much of a revision was necessary  
5 for an inspector to call that more than minor. So that  
6 was an example where differences in the threshold are  
7 being used.

8 Another one that was noted was the  
9 self-identification or self-revealing particularly in  
10 the area of surveillances. There were noted  
11 differences in how the regions chose to implement that.

12 Another area was in the area of equipment  
13 deficiencies even though it may be able to provide its  
14 function, margin was lost. So, how much margin is too  
15 much margin to cross the threshold?

16 Another one of the noted differences was in  
17 answering the question of if left uncorrected, would the  
18 issue become a more significant issue?

19 So, those are some examples of areas we  
20 identified for a need for further work.

21 Now, all the regions have agreed that we do  
22 need to make changes to clarify our guidance such that  
23 we have more reliable outcomes for those types of areas.

24 So, what will happen is another working  
25 group will be put together to work out those particulars

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1 in the guidance documents, then those guidance  
2 documents will also be shared publically as part of our  
3 normal process for making changes to our inspection  
4 program. So, that's an opportunity for members of the  
5 public and for industry to provide feedback on that.

6 I'll just note that even though there'll be  
7 some changes, it's not to say one way was right or one  
8 way was wrong in the past. We identified some, if you  
9 will, ability to implement the guidance differently.  
10 So, the need here is just tighten up that guidance such  
11 that for a similar set of facts, a similar outcome comes  
12 forward.

13 In addition, Bill Dean and his staff at NRR  
14 have identified a desire to look a little bit more  
15 programmatically at our implementation of the  
16 inspection program. We do that in other areas already  
17 in operator licensing, for example, our materials  
18 programs and others.

19 But the ROP oversight process, we're going  
20 to look at in the regions and with working with Bill and  
21 his group to come up with a way that we can have a little  
22 more ongoing ROP oversight.

23 MR. JOHNSON: Thanks, Vic. Go ahead, Vic,  
24 please.

25 MR. MCCREE: The one other area that Cindy

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1 I failed to mention is training. One of the important  
2 discoveries, if you would, from the review that was done  
3 is that of the two main factors driving the differences,  
4 one was the guidance and different interpretations of  
5 the guidance.

6 The second one was training and that one's  
7 a bit thorny, if you would, because the regions do  
8 implement training. Some of it's on the job training  
9 and how we train people to implement the guidance or use,  
10 again, use the guidance. What was noted was that there  
11 was a difference in the training that the different  
12 regions were giving.

13 So, one of the areas we're going to look at  
14 is providing better sharing of that training and perhaps  
15 using the NRR as a resource to make sure that we're  
16 training and developing our inspectors and our  
17 supervisors to implement the guidance, the improved  
18 guidance, more -- with fewer differences, more  
19 reliably.

20 MR. JOHNSON: All right, very good. Just  
21 staying with that topic, and I think, Cindy, maybe you  
22 were touching on this a little bit, a question from the  
23 floor.

24 Are initial license exams being reviewed as  
25 part of the comparison between the regions to verify

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1 consistency and exam difficulty?

2 MS. PEDERSON: There's actually another  
3 effort going on in the area of operator licensing.  
4 Operator licensing has a routine basis being overseen  
5 by NRR on an every four year basis, if I remember right,  
6 I think in our off years, we do our own self-assessments  
7 in the regions.

8 But there was a notable licensing reversal  
9 that came out through the Court system and after that,  
10 a working group on the agency's part was put together  
11 to examine the lessons learned from that.

12 So, that is an area. It's separate from  
13 this particular reliability effort looking the  
14 findings, but we do have a parallel path that is looking  
15 at a number of enhancements to be done in the operator  
16 licensing area. There are some that were taken very  
17 soon after the Court decision was made, but we have more  
18 that we're looking at. So, that's yet to come.

19 MR. JOHNSON: Okay, very good.

20 A question for the industry. Please  
21 describe any challenges associated with vendors  
22 supporting vintage I&C equipment. Please describe any  
23 challenges associated with vendors supporting vintage  
24 I&C equipment.

25 MR. GRIMES: I'll start, I'll start, Mike.

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1 I think that most of the vendors are very  
2 engaged in working on this issue. You know,  
3 obsolescence is a challenge for the industry as well as  
4 the vendors.

5 For the most part, I see a lot of engagement  
6 on that. I think there's some areas where some of the  
7 specific instrumentation is hard to get and, you know,  
8 you're really looking at doing an upgrade or a  
9 modification.

10 I think the industry's gotten better at  
11 doing those over the years. Certainly at times it leads  
12 into a challenge, can you move into digital space on some  
13 of these or not? How easy is that? What are the  
14 challenges that that that brings?

15 MR. EDINGTON: I would also say,  
16 obviously, with obsolescence, vendors have also had  
17 dramatic turnover just like all of the industries and  
18 NRC, and supporting our existing systems are extremely  
19 important.

20 It will be necessary to make control  
21 changes in a digital and, of course, this is an area that  
22 itself takes a lot of very specific.

23 I would just emphasize at this time that  
24 this is a challenging area as we work through the  
25 obsolescence that we'll need to continue to support

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1 each other as we work through those areas, working with  
2 the vendors and then eventually, the upgrades that will  
3 be necessary as we go forward.

4 MR. JOHNSON: Very good, thank you.

5 I'm going to stay with the topic of digital  
6 technology for a few minutes. I've got a question I'd  
7 like to pose to the panel, and it is, the industry's  
8 faced with opportunities and challenges associated  
9 with moving forward with equipment upgrades for digital  
10 components.

11 What's your perspective on ways the  
12 industry and the NRC can work together to improve our  
13 overall effectiveness and efficiency in our respective  
14 roles?

15 Sort of as a related question to that, a  
16 question from the floor. Given that all equipment  
17 degrades and wears with time, please describe any age  
18 related issues with instrumentation and control  
19 equipment.

20 The topic is instrumentation of control,  
21 how can we work in a way that is more conducive to  
22 progress, industry, NRC, and then any particular  
23 challenges associated with instrumentation and control  
24 digitally.

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1                   MR. MCCREE: I think there are -- can you  
2 hear me okay? Hello?

3                   MR. JOHNSON: Yes.

4                   MR. MCCREE: Good. I think there have  
5 been some pockets of success in the area of use of  
6 digital I&C technology. Even in some safety  
7 applications and guidance has been developed and we've  
8 endorsed some industry guidance, NEI 01-01  
9 specifically, that have supported some of the digital  
10 modifications and upgrades that have been made.

11                   I think there's still significant room to  
12 improve. In that regard, I think those improvements  
13 will be most successful and most timely if we keep the  
14 communications open. There continue to be good  
15 healthy communication among the industry counterparts,  
16 NEI, and I know EPRI has a role there as well as NRR.

17                   I do understand that NEI and EPRI have  
18 recently formed a working group to look at significant  
19 modification to NEI 01-01, if not a replacement to it  
20 to address some of the challenges that exist in that  
21 document.

22                   That document provides guidance, again,  
23 that we've endorsed to enable digital modifications  
24 under 10 CFR 50.59 and that EPRI has embarked on a

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1 technical review, if you would, to address the common  
2 cause failure concerns that exist in a number of  
3 potential upgrades.

4 Also there's opportunity to upgrade the  
5 guidance for 50.59 modifications to NEI 06-07, I  
6 believe, to support the licensing reviews.

7 Again, there's a lot of work ongoing. We,  
8 as an agency, need to remain engaged with the industry  
9 to make sure that anyone who chooses to take advantage  
10 of those digital upgrades do it very thoughtfully and  
11 with a shared understanding of what the requirements  
12 are.

13 In that regard, this is an area, and there  
14 are a number where pre-application meetings with the  
15 NRR staff are extraordinarily important so there's a  
16 shared understanding of processes and contents of the  
17 application and the expectations are shared  
18 expectations between the licensee and NRR.

19 I also understand from an NRC perspective  
20 that there is a pilot use of interim staff Guidance 6  
21 regarding licensing reviews that, again, that's being  
22 piloted. It should be completed sometime year and  
23 there will be an opportunity or will certainly create  
24 opportunities to engage the industry on that interim

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1 staff Guidance Number 6.

2 Let me just stop there.

3 MR. JOHNSON: Okay. Good, thank you,  
4 Vic. Joe, do you want to?

5 MR. GRIMES: Yes, if I could just comment.

6 I think we both face the same issues in this  
7 area. You know, digital evolves quickly and the  
8 knowledge base to keep up with it is a challenge I think  
9 for both the regulator and for us.

10 I really think that, as Vic said, I think  
11 continuing to keep the dialogue is very important. The  
12 working group I think will, you know, bring some new  
13 issues to light and try to readdress some of the  
14 approaches that were originally out there.

15 I think, you know, there's generic  
16 regulatory concerns with some of the specific digital  
17 technologies that we need to make sure we're dialoging  
18 on, getting clarity on the places that there may be gaps  
19 in some of the regulatory guidance.

20 Really, just making sure that we develop  
21 more generic information that, you know, is very  
22 supportive of growing regulatory confidence and giving  
23 us confidence on the industry side that we can keep  
24 moving forward.

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1 MR. JOHNSON: Very good.

2 This next question is really directed at  
3 the regional administrators, although, I'm going to  
4 open it, I'd like everybody to have a chance to answer  
5 this.

6 The question is, are there themes -- and  
7 it relates to an activity that we just completed in  
8 terms of looking at the performance of plants as a part  
9 of our annual roll up.

10 There any themes or low level issues that  
11 are concerning you for your respective regions? I  
12 would ask the industry folks, are there themes or low  
13 level issues from your perspective that we ought to be  
14 mindful of?

15 I guess I'll start with the NRC and then  
16 -- but I'll ask the industry to weigh in as well.

17 MS. PEDERSON: Mike, maybe I could start  
18 that discussion off.

19 One of the areas that we've been noting in  
20 our end of cycle and mid-cycle before that is weakness  
21 in operability determinations. We've seen quite a  
22 number of sites that have not done very well in that  
23 area, that we've had findings and a number of issues.

24 We are partnering with other regions as

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1 well as with industry to put on an operability workshop.  
2 I'm going to look for a call out, May 12th, thank you,  
3 at a location in the Chicago area and that's going to  
4 be an opportunity for the agency, the regions and NRR  
5 to engage with utilities and members of the public on  
6 operability determinations and evaluations.

7 That's an area that we've identified and  
8 we've seen as a trend and that's what we're doing in  
9 response to it.

10 MR. DAPAS: Similarly to what Cindy said,  
11 we've seen some challenges with the quality of  
12 operability determinations. But as a result of the  
13 most recently completed end of cycle assessment last  
14 month, one of the things that we noted was some real  
15 challenges with the quality of the operator licensing  
16 examinations.

17 There have a been a number of licensees in  
18 Region IV where there have been significant turnover  
19 of staff and you have some relatively inexperienced  
20 folks that are involved in preparing the exam and  
21 resulted in a fair amount of resource expenditure by  
22 the region in working with the licensees to develop the  
23 exam, to address the deficiencies and in some  
24 instances, rejecting the exam.

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1 I know there are a workshop coming up. I  
2 know there's going to be some discussion about exam  
3 questions and how to address the gap in terms of  
4 difficulty of exams. Hopefully that will be  
5 productive.

6 That's an area where I noted, and sitting  
7 in through each of the end of cycle discussions, that  
8 I thought was a trend that I didn't recall from some  
9 of the previous assessment discussions.

10 MR. MCCREE: I'll echo the low -- and the  
11 question was lower level issues or trends and I would  
12 echo that as well.

13 We've also seen a couple of examples of  
14 turbine building concrete degradation, just a couple  
15 of examples of that where there are water intrusion  
16 issues, clogged drains in turbine buildings. We're  
17 trying to better understand what that is and if there's  
18 any generic insights that could be drawn from that that  
19 may be of value.

20 Several examples of inadequate  
21 maintenance rule implementation, again, not a  
22 significant trend, but lower level issues where we've  
23 given feedback on. In fact, some of them may have even  
24 been minor violations, but it wouldn't have gotten in

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1 the report, but at least in Region II.

2 Fortunately, it was an opportunity to give  
3 feedback to the licensee who was very receptive to it.  
4 I do appreciate the question, lower level issues and  
5 the fact that the question is asked means that you value  
6 that feedback and will take action to address those  
7 issues before they become a regulatory concern.

8 MR. JOHNSON: Dan?

9 MR. DORMAN: Yes, thanks.

10 Just I would second the comment on the  
11 rigor of operability determinations and expand it to  
12 include corrective action program issues and rigor in  
13 the root cause evaluations and development of  
14 corrective action plans.

15 The other thing I would put out there is  
16 broadly equipment reliability. I think licensees are  
17 doing a good job in maintaining the equipment that is  
18 the greatest risk contributors. The other equipment  
19 that is supporting that equipment and supporting the  
20 operators in response to events, sometimes we don't see  
21 the same rigor in that equipment and we see that coming  
22 up as challenges to operators when something happens  
23 to the plant. One or two other things happen and  
24 complicate the operator's response to the events.

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1           Again, it's not the diesels and the HPSIs  
2           and the RCSIs, it's more the supporting equipment. But  
3           it just complicates life for the operators  
4           unnecessarily.

5           MR. JOHNSON: Okay. Randy? Joe?

6           MR. GRIMES: I'd just comment in the  
7           equipment area. I really think, you know, ensuring  
8           that corrective actions really stick. I mean most  
9           issues, we all know previously occurred somewhere in  
10          the industry. In many cases, we've solved them  
11          ourselves and then they come back, you know, at  
12          different times.

13          I just think we need to continue to make  
14          sure that those issues, as they reoccur, that are really  
15          getting the appropriate attention in the corrective  
16          action process.

17          MR. EDINGTON: I might go a slightly  
18          different -- we're talking about themes in areas. We  
19          have lots and lots of new people in all our industry,  
20          yet we have an industry that has everywhere from  
21          pre-general design criteria plants to general design  
22          criteria to new plants.

23          The kind of the redefining of regulations,  
24          you know, as we're going along, we think we have this.

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1 We have new people and the next thing we know, well,  
2 that's not what it meant.

3 That's a theme that I'm concerned about.  
4 I know a lot of people out here are that, you know, what  
5 -- the rules continue to be challenged which, again,  
6 I kind of go back to the question you had where we should  
7 be comparing notes across regions because it may start  
8 here and there's a chance for us to look at those and  
9 say, wait a second, let's do a reset.

10 You know, the reality is, we do have our  
11 licenses from pre-GDC to GDC early and late to new.  
12 That challenge, especially as we break in new people  
13 of ensuring that we maintain our classes of basis and  
14 do upgrades where necessary, but be careful that we're  
15 not redefining things without going through a due  
16 process.

17 MR. JOHNSON: Thank you. Good answers,  
18 everyone. Randy, you started me on a topic I was going  
19 to go to maybe a little bit later, but you took me there,  
20 so we'll go there now.

21 It relates to the workforce in the industry  
22 and the fact that that workforce, as you talk about  
23 industry broadly, is aging and retirements are  
24 increasing. The question is, what actions are being

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1 taken by licensees and the NRC to retain knowledge in  
2 important areas like the one that you just described,  
3 Randy, to retain knowledge of experienced workers of  
4 NRC staff, so on and so forth?

5 Let me, Randy, ask you if you want to  
6 continue with an answer on that topic, and then I'll  
7 shift over and get an NRC perspective.

8 MR. EDINGTON: Well, I can open it up.  
9 It's an area that I'm quite interested in.

10 You know, first, I've always said that the  
11 young people that we're bringing in, the capabilities  
12 is just fantastic. In my particular case, if I hire  
13 150 people this year, I can still go down 30 people  
14 because of the turnover that we're dealing with.

15 It is extremely important to do knowledge  
16 transfer. We frequently think of the knowledge  
17 transfer from operators and all, but I'll go back to  
18 kind of the theme I started.

19 The regulatory knowledge, the regulatory  
20 transfer, in many cases, we're not as formal on ensuring  
21 that that history is fully understood and the rules and  
22 the licenses. I do think that's an area that could use  
23 not only at the -- well, certainly at the utilities,  
24 but, again, I would ask what the regulator is doing to

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1 ensure that the plants that are pre-GDC, which there  
2 are many of them, or early GDC plants are getting a fair  
3 shake as they go through that type of area.

4 MR. JOHNSON: Okay. Cindy, do you want to  
5 take that one?

6 MS. PEDERSON: Sure. We, too, have the  
7 similar problem and actually, I asked for a couple of  
8 statistics thinking this topic might come up.

9 Today, in the NRC, 19 percent of our  
10 workforce is currently eligible to retire and in five  
11 years, that number climbs to 62 percent.

12 Now, not everybody retires on their  
13 eligibility but, you know, those numbers are rather  
14 shocking. It's certainly something that is on our  
15 minds, and we're doing a number of things.

16 Certainly, one of them is hiring the right  
17 people and getting experienced people and people that  
18 we need to develop into our pipeline. We're doing that  
19 in a mindful way.

20 You heard a lot during this about Aim 2020  
21 and how we're anticipating the agency may get smaller.  
22 But that's not going to have us stop hiring the right  
23 kind of people because we are going to continue to have  
24 the need.

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1           We are looking to do things like what we  
2           call double encumbering. If we know people are going  
3           to leave, we need to want to bring them in such that  
4           we can have that turnover in a meaningful way with those  
5           experienced people that are leaving.

6           We're also doing what we call over-hiring.  
7           If we don't know a specific person that may be going,  
8           we know an area that we're going to need. We're  
9           bringing people in while we have the talent still,  
10          before they retire, to start sharing that knowledge.

11          We're doing a number of other things.  
12          There are a number of things that, for example, the  
13          Office of Research is doing is putting on seminars and  
14          those that are being recorded, some of them are being  
15          developed into NUREGs for more broad distribution as  
16          an example.

17          I know all the regions and offices are also  
18          having, I'll call them knowledge management test  
19          sessions or knowledge transfer sessions where we're  
20          bringing various topics and spreading that knowledge  
21          throughout our organization, again, trying to capture  
22          those things when we can.

23          Though, honestly, we're struggling a  
24          little bit about how you capture some of that knowledge

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1 such that it's retrievable from people. You know, if  
2 people have good ideas to share about how to capture  
3 that in a retrievable way for years to come, that's  
4 something that we certainly could learn from.

5 Those are just a couple of things that  
6 we're doing so far.

7 MR. JOHNSON: Anyone else want to weigh in  
8 on that topic? Again, you're not constrained to or  
9 compelled to. All right, very good.

10 I have a couple of questions, really that  
11 are follow-ups to other questions or answers given.

12 One relates with respect to component  
13 design basis inspections. This, I think, Dan directed  
14 at you, and Joe, but anyone can weigh in as well.

15 What are your views about what activities  
16 or areas should be focused on to get the most bang for  
17 the buck as it relates to CDBI inspections?

18 Dan, do you want to start?

19 MR. DORMAN: Sure, thanks, Mike.

20 Joe suggested earlier an industry  
21 suggestion of looking at some programmatic areas that  
22 support the design basis.

23 I think there's kind of an underlying  
24 principle when we went to the ROP that we were moving

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1 away from programmatic type inspections and looking for  
2 more performance based inspections.

3 We'll explore that option and but I think  
4 the going in point from some of the folks who've been  
5 around the ROP and remember before ROP is reluctant to  
6 go in that direction.

7 I think there are other elements of the  
8 reactor oversight process that relate to the  
9 implementation of changes to the plant, design  
10 modifications that are areas where you can look at how  
11 effectively the licensee is examining the existing  
12 licensing basis and design basis in evaluating the  
13 change to the plant.

14 50.59 evaluations, the implementation of  
15 design modifications, those can look at how effectively  
16 the licensee is maintaining their design and licensing  
17 basis as they're looking at changes to the plant.

18 I think what the CDBI give us, though, that  
19 I wouldn't want to lose is sort of the insidious changes  
20 to the plant, the unintentional -- the evolution, if  
21 you will, of the design basis. That may be a shift in  
22 how we address the balance between those two  
23 components.

24 MR. JOHNSON: Okay. Joe?

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1 MR. GRIMES: Yes, just a couple comments.

2 You know, I think insidious is a good  
3 focus, Dan. I mean, a latent designer is the place you  
4 really I think you can provide a lot of benefit as you're  
5 looking at that.

6 I also think that, you know, just  
7 considering some sort of performance base approach, you  
8 know that's really based on the know assessment or  
9 utility performance over time in this area will give  
10 you a pretty good feel for it.

11 I think you have a good understanding of  
12 where many of the utilities are now. I think you could  
13 focus the teams much more effectively if you took that  
14 into account.

15 MR. DAPAS: Mike?

16 MR. JOHNSON: Yes, go ahead, Marc, please.

17 MR. DAPAS: Just one comment to add.

18 Having looked at the NEI white paper, one  
19 of the things I noted in particular was the suggestion  
20 that we modify the CDBI scope to focus more on  
21 validation of the health of various station programs  
22 that, if not effectively implemented, could adversely  
23 affect design margins, an example being modification  
24 process versus the current focus of the CDBIs which is

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1 more in the area of design verification.

2 I think we need to maintain the appropriate  
3 balance there. I would not be a proponent of shifting  
4 strictly to assessing the health of licensee programs  
5 that could have an impact on the design basis.

6 I think there is value in going back and  
7 looking at the design verification aspect. I know  
8 there's an issue that we're looking at with a current  
9 CDBI where we have a question on the acceptance  
10 criteria, and it goes back to the original design  
11 assumptions.

12 I think there is value in continuing to  
13 keep that aspect of the CDBI, and I would offer there  
14 probably is room for some scope reduction in that area  
15 but I certainly wouldn't want to lose that element and  
16 focus more just strictly on verification of the health  
17 of a licensee program that could impact the design  
18 basis.

19 MR. MCCREE: Just really quickly, Mike.

20 I agree with Marc. I also am open to the  
21 comments that Joe has made. This is an area of our  
22 oversight where over the years we've grown, it's  
23 matured. In fact, when I first started with the NRC  
24 a long, long time ago and Mike and I were in the same

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1 division, and my first supervisor was Jim Dyer.

2 The first inspection I was on was an  
3 engineering inspection. We called them back then  
4 safety system functional inspections. When we  
5 transitioned to the reactor oversight process some 15  
6 odd years ago, we changed the name to safety system  
7 design and performance capability inspection with a  
8 slightly different focus.

9 Not long after, I think four or five years,  
10 we actually piloted the component design basis  
11 inspection approach in Region II and it was expanded  
12 nationwide.

13 I think that that story tells me that we're  
14 open and interested to feedback and we want to improve  
15 this important area of our oversight process. It is  
16 truly fundamental, in my opinion, to safety.

17 I hope we're mature enough in our  
18 understanding of our process and significance to know  
19 that simply because every inspection does not identify  
20 a white finding or a yellow finding. It does not mean  
21 it is not adding value and green is not necessarily  
22 good. Minor perhaps should green, but there are  
23 opportunities to learn and grow and we need to take  
24 advantage of the performance improvement but still

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1 modify our program as appropriate to still derive the  
2 value from it.

3 We're committed to do that. It's  
4 consistent with our principles, efficiency and that's  
5 what we'll do. We'll certainly provide opportunity to  
6 engage the industry.

7 MR. JOHNSON: Randy, please?

8 MR. EDINGTON: In this area, there's been  
9 a lot of good discussion on it. I think a few things  
10 that came, though, is what is the appropriate scope  
11 adjustment to get better use of our resources? How do  
12 we take some credit for what the licensees work is going  
13 on? Which there's quite a bit of that and that's an  
14 effective use.

15 Then I'd throw in the last piece of trying  
16 to be real careful not to redefine our design as we're  
17 going through these and that we have accepted the design  
18 and license basis. Again, that creep, it gets to be  
19 something we should watch for.

20 MR. JOHNSON: Very good.

21 Switching gears a little bit now, we're  
22 going to talk about new plant construction. Joe and  
23 Vic, you guys should listen to the question.

24 Are there any lessons learned from new

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1 plant construction or licensing and execution that have  
2 informed or benefitted the operating fleet either in  
3 technical issue, closure or in safety insights?  
4 Things that you've learned, gleaned from new reactor  
5 construction, execution that could inform us,  
6 technical issues or otherwise.

7 Do you want to start Vic or Joe?

8 MR. MCCREE: We're still learning, and I'm  
9 sure once the Watts Bar Unit 2 is completed and when  
10 the AP1000s are completed, we'll update the guidance  
11 documents on lessons learned from the next wave of  
12 nuclear construction in the U.S.

13 I think among the lessons that'll be spoke  
14 to, I don't know if Glenn Tracy is in the audience, one  
15 of the challenges that we're seeing is the quality of  
16 components in the nuclear supply chain, supplier  
17 quality.

18 That's an issue that I think has relevance  
19 with the operating fleet as well and efforts to assure  
20 the right quality, the right pedigree of equipment that  
21 even operating facilities need.

22 Also, I think another area is oversight of  
23 contractors or oversight of work. That's been  
24 manifest, not only at some of Joe's sites, but other

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1 sites. I know in Region II have had lessons learned  
2 in terms of the amount of effort and ownership and  
3 oversight that you have to give to assure that quality  
4 work is conducted on site.

5 Those are just two thoughts.

6 MR. JOHNSON: Joe?

7 MR. GRIMES: Yes, just a couple comments,  
8 Mike.

9 I think we've taken very good advantage of  
10 past industry experience, even though in some cases,  
11 it's been a while. Certainly, a lot of work that's gone  
12 on in the modification process and others have really  
13 enabled us to update a lot of the parts of the plant  
14 in a fairly efficient way and probably better  
15 documented than we did in previous times building  
16 plants.

17 You know, interesting enough, I think  
18 we've also had a chance to deal head on with some long  
19 standing industry issues. We're facing a new license  
20 in front of us. In some cases, been able to engage a  
21 different technical approaches and I think a deeper  
22 dialogue that's enabled both sides to see issues from  
23 a different perspective. I think there's some  
24 advantage in that that'll flow back to the operating

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1 fleet.

2 MR. MCCREE: If I could have also  
3 introduced a design finality and constructability  
4 without going into a whole of detail, I think those are  
5 important areas as well.

6 MR. JOHNSON: Go ahead, Dan, yes, please.

7 MR. DORMAN: I think part of the question  
8 was benefits to the operating fleet. I'd just pick the  
9 theme that Vic touched on in terms of oversight and  
10 contractors.

11 I think there have been other issues in the  
12 operating fleet that go to not just oversight of  
13 contractors on site for the operating fleet, that's  
14 especially during the outages. Also oversight of  
15 contractor services and safety analysis and the  
16 procurement chain of quality of equipment.

17 I think there's a broader issue there that  
18 is something that the operating fleet needs to stay on  
19 top of as well.

20 MR. JOHNSON: Thank you very much.

21 I've got a couple questions related to  
22 cross cutting issues, and you saw me, I'm trying to get  
23 this card back from Randy. I don't know whether he was  
24 holding on to it because he didn't want me to ask it.

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1 Just kidding, Randy. But, Joe, you've got one also,  
2 cross-cutting issue.

3 The question for you, Randy, and really,  
4 they're similar questions. What's the most  
5 significant cross cutting issue identified in the open  
6 of Palo Verde? I think the really the theme or the  
7 thrust of the questions are, as you think about cross  
8 cutting issues at the sites, and you talk about one of  
9 those and then, you know, how they've really affected  
10 you, what you've been able to do with those cross  
11 cutting issues as you move forward in terms of  
12 corrective actions?

13 MR. EDINGTON: So, as I read that and it  
14 was talking about the most significant cross-cutting  
15 issue and interesting enough, I'm sitting there trying  
16 to work through my head of what is the most significant  
17 one.

18 You know, we do the monthly reviews like  
19 many sites where we're looking at all the cross cutting  
20 issues. We do the reviews constantly. Then every  
21 area gets tackled.

22 I would probably say the biggest theme  
23 we've been dealing with a little bit is some of our human  
24 performance errors, you know, you're looking at them

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1 at the surface level and then you start looking deeper,  
2 it was really a lot of, again, so much turnover and the  
3 real depth of understanding of the whys.

4 The training, it was showing up as a human  
5 performance error but it was really more of a training  
6 issue and that we were teaching a lot of the how's and  
7 what's and not as in depth of the whys. It doesn't hit  
8 you until you have enough new people at that aggregate  
9 amount.

10 If I put two new people on crew that's with  
11 a lot of experience but currently we have lots of new  
12 people on crew and that experience factor is down. The  
13 training is great, the procedures are great and the  
14 assimilators are great, but the really depth of  
15 understanding can manifest itself as a human  
16 performance error.

17 You know, if you're not careful, you can  
18 fix the system as the root cause, and the root cause  
19 is not easy because you've got to really go back and  
20 teach a real strong depth of understanding because  
21 you're now trying to make up for the years of experience  
22 on a crew.

23 Again, the people that we deal with it's  
24 just fantastic that, you know, if you ever get down in

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1 your energy, just go visit one of your classes that you  
2 have now. Of course, most of them weren't born when  
3 TMI happened, so it makes for an interesting discussion  
4 on the whys and the depth of understanding.

5 MR. JOHNSON: Great, thank you. Joe?

6 MR. GRIMES: Well, I'll just add on that  
7 Randy's a little bit, you know, human performance is  
8 one of those things that just takes constant steady  
9 pressure to stay in front of it and it's always out there  
10 for all of us.

11 You know, the one that really gets your  
12 attention is if you get something in the safety culture  
13 area, and we all know we're always trying to prevent  
14 that.

15 I think you get tremendous amount of  
16 learning about your organization and, you know, what  
17 you haven't been paying attention to and where the  
18 leadership really needs to focus.

19 Probably most importantly, you know, why  
20 wasn't the leadership focused in the right places. Out  
21 of that, I think you can not only address a specific  
22 issue, but you can really get after a number of other  
23 issues that are impacting your performance across the  
24 board.

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1 I encourage folks to not go there to find  
2 out that answer, but it definitely gets you from a  
3 perspective of a significant issue.

4 MR. JOHNSON: Very good. I'm going to  
5 switch gears now. I want to talk about a little bit,  
6 I want us to talk about significance determination  
7 processes.

8 I'm going to start with the NRC. The  
9 question is, on occasion, the SRAs in some regions will  
10 default to higher significance determinations using  
11 very conservative assumptions when there's an absence  
12 of technical input and certainty from the inspection  
13 team. That's the context for the question.

14 What efforts do the regions undertake to  
15 ensure consistent use of technical inputs and PRA  
16 processes to ensure predictability and consistency of  
17 outcomes between the regions?

18 Then, for our industry counterparts,  
19 similarly, interactions with sites during the  
20 significance determinations produce assumptions with  
21 a wide range of quality. What level of quality and data  
22 and assumptions for risk analyses is appropriate for  
23 the input and decisions regarding regulatory response  
24 to licensees performance?

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1                   Again, a focused question on STPs. Marc,  
2 do you want to take that?

3                   MR. DAPAS: Yes, thanks, Mike.

4                   I'd offer, since I arrived in Region IV  
5 about 18 months ago, I've had the opportunity to be  
6 involved in some rather challenging significance  
7 determination processes, you know, dealing with  
8 flooding deficiencies and some other challenging  
9 events.

10                  I would offer that our preliminary risk  
11 significance determinations, they're based on the best  
12 available information at the time the determination is  
13 performed. In the absence of specific technical  
14 information, we look at conservative assumptions and  
15 those may need to be applied.

16                  But to ensure at least some consistent  
17 application, when we conduct a Phase III assessment  
18 that is peer reviewed, a senior analyst, say, in Region  
19 IV is conducting a preliminary risk determination, that  
20 result is peer reviewed.

21                  Then, for any preliminarily greater than  
22 green findings, we receive a second analysis performed  
23 by the program office of, I think it's the Division of  
24 Risk Analysis DRA and the Office of Nuclear Reactor

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1 Regulation.

2 Then the results of that are discussed at  
3 Significant Enforcement Review Panel, or a SERP, and  
4 we ensure that we reach consensus on what should be the  
5 appropriate agency conclusion prior to issuing that  
6 preliminary finding.

7 Then, as part of our process, there is the  
8 opportunity for a licensee to communicate their  
9 perspective regarding the risk assessment. Many times  
10 in developing our preliminary risk assessment, our  
11 senior reactor analyst, the inspectors are fully aware  
12 of the views and assumptions that are being used by the  
13 licensees PRA specialist.

14 The other thing is that the senior reactor  
15 analysts are in frequent communication with each other  
16 and their counterparts and the program office to ensure  
17 they share any specific learnings and monthly  
18 teleconference and their semiannual counterpart  
19 meetings and that's all in the vein of ensuring  
20 sufficient knowledge transfer.

21 When you're dealing with uncertainty, you  
22 may have to resort to use of qualitative factors when  
23 you can't determine or make a specific point estimate  
24 on say initiating event frequency and the Manual

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1 Chapter 0305 allows you to use qualitative factors.  
2 And when you do enter into use of qualitative factors,  
3 clearly, there is subjectivity that enters into that.

4 We try and apply the guidance to the best  
5 of our ability and ensure we're sharing the approach  
6 that we're exercising with risk analysts and peers to  
7 ensure to the best of our ability that there is a  
8 consistent application.

9 MR. JOHNSON: Okay. Joe, do you want to  
10 take that one also?

11 MR. GRIMES: Clearly consistent  
12 application is the challenge for all of us. You know,  
13 the real challenge when you get into some of these SDPs  
14 is how do you get the high quality data combined with  
15 the timeliness of pulling that data together so that  
16 you have the right discussions going on at the right  
17 time?

18 We come from the perspective in the  
19 industry, I think, as the regulator does, that the  
20 quality of the data, the assumptions and what we know  
21 about those assumptions when we're doing the SDP is the  
22 key to our success.

23 I think it's very important in those  
24 conversations to know, you know, how close and how much

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1 you believe in each of the assumptions and what's really  
2 behind them.

3 The high quality data is very important and  
4 I think the open interaction between what the utilities  
5 find in SDP space and those assumptions and what the  
6 SRAs are doing is very important to consistently get  
7 to the right answer.

8 MR. DAPAS: Hey, Mike?

9 MR. JOHNSON: Yes, Randy? I'm sorry,  
10 thank you, Joe. Yes, Marc?

11 MR. DAPAS: Just one quick additional  
12 perspective to offer. I think we face challenges with  
13 the timeliness of SDP determinations, particularly  
14 when you're dealing with an issue where you're looking  
15 at what's the appropriate credit for recovery actions.

16 I know we're working with the program  
17 office to improve our guidance there and look at  
18 delivering an SDP result in as timely a manner as we  
19 can, because I think it can be challenging to  
20 communicate to members of the public if you have an  
21 event and then you look at the length of time it takes  
22 before the agency delivers their final risk  
23 significance to determination, you end up being  
24 challenged and having to explain, well, here is the

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1 reactive inspection we conducted to ensure the public  
2 health and safety was not at risk during that period  
3 of time, while we're finalizing the risk significance.

4 I don't think we do ourselves a service  
5 there when it is a year after the initiating event that  
6 we're trying to determine the significance of the  
7 performance deficiency when we deliver that final  
8 result.

9 There are a number of factors that can  
10 contribute to those unique situations, but I think, you  
11 know, working with the industry to make sure we fully  
12 understand the assumptions that they would offer should  
13 be used, and communicating the assumptions that we use  
14 in our risk assessment in reaching closure on that risk  
15 determination in as timely a manner as we can, I think  
16 serves the public well in ensuring that we're  
17 communicating a consistent safety message.

18 MR. JOHNSON: Anyone else want to weigh  
19 in?

20 MR. EDINGTON: Yes, Mike, I do have.

21 There's been a lot of growth in this area  
22 for quite a while. The subjective areas of how you  
23 apply human performance factors and all is always been  
24 an area that seems to be one of the toughest. We're

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1 going to add to that now that we have added a lot more  
2 equipment or by the end of this year, we'll have the  
3 FLEX equipment available for trained operators and  
4 others use.

5 This area of subjective use in the human  
6 performance factors and all is certainly an area -- now,  
7 I have equipment, I expect my people to use it. How  
8 are we going to credit those and all? I know Marc and  
9 I have had some discussion in this area.

10 So we've got a lot of beyond design basis  
11 equipment that if people are going to be functionally  
12 trained on and how to appropriately credit that is going  
13 to be an interesting area and it's in an area that we've  
14 had many discussions in the past and disagreements.

15 MR. JOHNSON: Thank you, Randy. I'm not  
16 going to let Marc talk on that issue.

17 Yes, please do, Scott.

18 MR. MORRIS: I'm Scott Morris and I  
19 represent the Division of Inspection and Regional  
20 Support at NRR. Many of the topics that the panel has  
21 addressed today fall into our wheelhouse, clearly.  
22 SDP is the significance determination process.

23 I just wanted to just to let the folks know  
24 in the room, I know the panel probably knows this, but

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1 the Commission has actually directed the staff to tell  
2 them or for us to tell them what we're doing to enhance  
3 the SDP and the words they used in their directions to  
4 streamline the SDP, which to me means efficiency among  
5 other things.

6 We're doing that. We completed a business  
7 process improvement initiative about a year ago looking  
8 at the existing process to try to find ways to tune up  
9 the existing process, to, you know, mitigate some of  
10 the challenges that marc mentioned and others.

11 In addition, we'll be given opportunities  
12 to interact with the industry and the public on the  
13 direction we think we need to go with respect to  
14 streamlining the SDP. That's a near term activity.

15 To Randy's point, I would just mention that  
16 we're also fully engaged in an effort to assess the how  
17 to incorporate things that are captured, mitigation  
18 equipment for beyond design basis events, but also  
19 things that are already required to be incorporated as  
20 a consequence of what was formally known as B.5.b  
21 equipment but now 50.54(hh)(2) equipment.

22 All those things are under consideration  
23 of the myriad of activities that we're working on to  
24 enhance the program. This is one that's very important

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1 to us and central and I think key to the process moving  
2 forward.

3 So, thanks.

4 MR. JOHNSON: Thank you, Scott. I  
5 thought you were going to ask a question.

6 This next question, we're going to switch  
7 gears a little bit. The question is, can each of you  
8 comment on the usefulness of regional utility group  
9 meetings and including whether you personally attend?

10 RUG meetings, how useful are they and do  
11 you attend?

12 Marc, do you want to start?

13 MR. DAPAS: Yes, I've had the opportunity  
14 to attend two RUG meetings since I assumed my  
15 responsibilities as regional administrator. I view  
16 those as a highly valuable form for communication  
17 exchange to understand issues of concern on the part  
18 of the industry as represented by the regulatory  
19 assurance managers that attend.

20 I personally attend and if I'm not able to  
21 attend, the deputy regional administrator attends. In  
22 fact, we have a RUG meeting coming up on April 1st and  
23 I'll be accompanying one of the Commissioners to a  
24 couple plants that week, and my deputy regional

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1 administrator, Kriss Kennedy is supporting that RUG  
2 meeting.

3 We actively reach out and make sure we  
4 understand what topics the representatives would like  
5 us to address. I think they're a very valuable and  
6 important communication exchange, so I fully support  
7 that initiative.

8 MS. PEDERSON: We too have RUG meetings in  
9 Region III. I would say we're going through a bit of  
10 an evolution to try to make them even more valuable.

11 We've had kind of, I'd say, a bit of a mix  
12 in our history in how those have gone. There's a  
13 concerted effort on both the industry part and the  
14 region's part to make those more valuable experiences.

15 It's typically supported by our division  
16 directors; myself or my deputy may go periodically.  
17 But we've added another type of meeting to our mix that  
18 I think has proven to be quite valuable and that's a  
19 meeting at my level with the site vice presidents.  
20 We've kind of a bit of a mix and I know other regions  
21 do some of this as well.

22 That combination, I do think provides  
23 valuable opportunity for interchange and feedback.

24 MR. MCCREE: I think similar to Regions IV

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1 and III, Region II supports regulatory users group  
2 meetings at least twice a year. Similarly, we meet  
3 with the plant managers, Region II plant managers. At  
4 one point, we were doing a Region I, II plant managers  
5 meeting a couple times a year either in Region II or  
6 Region I.

7 I meet with the site vice presidents and  
8 that gets to the question of the level of participation  
9 and if I can't attend, one of my deputies participates  
10 in that valuable opportunity for sharing the moose is  
11 proverbially always on the table, so any issues that  
12 are relevant are brought up and the feedback is always  
13 -- is usually positive.

14 We really look forward to and value those  
15 sessions.

16 MR. DORMAN: I guess I didn't realize they  
17 even had proverbial moose in Georgia.

18 MR. MCCREE: Yes, there are.

19 MR. DORMAN: Having been in the job for  
20 three months, I have a 100 percent record of going to  
21 one out of one RUG meeting since I've been there. I  
22 found it to be a very valuable conversation and I expect  
23 that I will continue, either myself or my deputy, and  
24 participating in those meetings. I think it's a good

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1 dialogue at the reg assurance level.

2 I also agree with the comments that were  
3 made about, you know, routinely meeting with the site  
4 vice presidents. I also at the RUG meeting that I did  
5 participate in, in encouraging open communications.  
6 Also support fleet meetings because, at this point, we  
7 have a number of fleets that touch several of us.

8 MR. MCCREE: Mike, the only thing I'd ad  
9 is that at those same meetings, we always invite an NRR  
10 representative or an NRC representative and they  
11 typically show up and often times, they do more sharing  
12 than the regions do because of the importance of the  
13 initiatives ongoing now in the agency.

14 Again, a valuable opportunity to share.

15 MR. EDINGTON: Yes, I believe anytime we  
16 can have open professional communications talking  
17 about our industry and its challenges, I've had  
18 participated in the past. I get briefed on some of them  
19 now whenever issues occur.

20 I think they're a great opportunity and if  
21 anything, I would just encourage us to be aware of our  
22 young and up and coming and add a few more to these  
23 meetings because they get exposure at this time now  
24 while we're still around.

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1 MR. JOHNSON: Very good.

2 MR. GRIMES: Yes, and I would agree with  
3 Randy. You know, I think they're vital exchanges of  
4 information. I would encourage it. There's probably  
5 opportunities to keep some of the more challenging  
6 issues in front of those groups and talk about  
7 resolution paths. You know, especially on some of  
8 those long standing issues that we all have in front  
9 of us. It's just another forum for that kind of  
10 dialogue.

11 MR. JOHNSON: Thank you, Joe.

12 As Vic reminds me, we have also another  
13 valuable opportunity to meet in terms of the meeting  
14 that we have with the industry chief nuclear officers  
15 with us in SIAC, those meetings where we have an  
16 opportunity to share information, raise issues that  
17 need to be focused on.

18 That's just another example of a really  
19 good opportunity for us to get together and make sure  
20 that we're making progress on issues that are  
21 important.

22 I've got a number of questions.  
23 Incidentally, I've just got to tell you, the audience  
24 is raising great questions. Usually, you get two or

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1 three throwaways that you don't dare ask. I haven't  
2 gotten any throwaways. My problem is getting Marc to  
3 finish quickly enough so I can get on to the next  
4 question.

5 MR. DAPAS: I think we're noting a  
6 substantive cross cutting issue trend here.

7 MR. JOHNSON: Actually, Marc, I do have a  
8 question that I'd like you and Dan to field and it  
9 relates to the SONGS lessons learned activity that  
10 we've been engaged in and it's not yet, I think, been  
11 publically available, but it certainly is wrapped up.  
12 There are a couple aspects to that I'd like you guys  
13 to talk to.

14 One is, and these are questions, one  
15 relates to the 50.59 reviews and the weaknesses in those  
16 50.59 reviews.

17 Dan, I know you did a lot with that before  
18 you left NRR Deputy to go to Region I. If you could  
19 just talk about that a little bit, and then, Marc, if  
20 you could talk about the inspection program changes or  
21 inspection program changes that would be conceivable  
22 based on that activity.

23 MR. DORMAN: Yes, so there's a number of  
24 issues 50.59 related to SONGS and some not related to

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1 SONGS.

2 The underlying issue SONGS replaced steam  
3 generators, they did it under 50.59. One of the  
4 generators in Unit 3, it failed halfway through the  
5 first cycle. It raised questions about the adequacy  
6 of the 50.59 review that was done as well as questions  
7 about, you know, did Region IV miss something in looking  
8 at the 50.59s?

9 I think, ultimately, the staff's  
10 conclusion was that there was a green finding cited  
11 against the 50.59 evaluation but that the root cause  
12 of the problems with the generator were design control  
13 issues, not a 50.59 issue fundamentally.

14 IG looked into that. They had some  
15 broader perspective in their report on some issues that  
16 they put on the table that I would characterize as open  
17 questions about other aspects of the 50.59 that the  
18 staff had not dug into in their inspection activity  
19 which also feeds into the question of are we giving the  
20 inspectors the right guidance in the 50.59 inspection  
21 procedures in looking at licensees screenings and  
22 evaluations.

23 There was also a question of is there  
24 something unique about a large component like a steam

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1 generator versus other components?

2 All of this was folded into our SONGS  
3 lessons learned project that Mike alluded to. The EDO  
4 provided direction to NRR, NRO who has the vendor  
5 oversight component of it in Region IV to look at a range  
6 of issues related to the SONGS experience in the 50.59  
7 and inspection of 50.59 was an important component of  
8 that.

9 During that lessons learned review, the IG  
10 report came out and so evaluation of the IG report got  
11 folded into that effort.

12 I think the bottom line, as Mike alluded  
13 there, there is a draft report. I think it's close to  
14 being finalized. I think there are some things that  
15 we can improve in the oversight of 50.59. But  
16 fundamentally, the staff concluded that 50.59 itself  
17 is sound. It is appropriate for large component  
18 replacement. 50.59 is agnostic on how big the  
19 component is. It's really how does the component  
20 affect the safety margins in the licensing basis of the  
21 plant?

22 It's also important to point out that 50.59  
23 is not a safety determination, 50.59 is a decision  
24 making tool relative to whether a licensee needs prior

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1 NRC approval before implementing a change. There are  
2 specific criteria laid out in the 50.59 rule and  
3 expounded upon in guidance that was developed by NEI  
4 and endorsed by the staff many years ago and it has been  
5 a very effective tool in ensuring that both industry  
6 and the staff are focusing our attention on the most  
7 safety significant issues.

8 I don't think you'll see fundamental  
9 shifts coming out of the SONGS lessons learned activity  
10 in the area of 50.59. I think you will see areas for  
11 improvement in our staff training on 50.59 and in how  
12 we look at 50.59s. It's both in the inspection piece  
13 and also for the things that a licensee evaluates under  
14 50.59 and concludes that they can go ahead and make that  
15 change without prior NRC approval.

16 They are required to provide an annual  
17 report of those changes and how review that report when  
18 it comes in as well the associated changes to their  
19 FSARs that are required to be updated.

20 I think there are improvements coming as  
21 a result of the SONGS effort. I think there are  
22 improvements on the margins and in the implementation  
23 of it.

24 MR. JOHNSON: Okay, Marc, you'll have the

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1 last answer.

2 MR. DAPAS: All right, thanks. I will  
3 attempt to be succinct here. I only have three quick  
4 points here.

5 Obviously, as Dan indicated, there were  
6 some learnings regarding our review of the licensees  
7 50.59 evaluations and learnings communicated from the  
8 Office of the Inspector General's perspective and the  
9 views that were delivered by those that were responding  
10 to the SONGS lessons learned tasking memo.

11 Clearly, there will be a change to or  
12 enhancement of a guidance, inspection guidance,  
13 regarding our review of the 50.59 product. I think we  
14 would be looking at ensuring we had experienced  
15 inspectors that have had, you know, have had the  
16 opportunity to review 50.59s fairly extensively.

17 There also will be a change to the, I'll  
18 call it entry criteria for when you might conduct a  
19 vendor inspection. I think, historically, those  
20 vendor inspections have been reactive in nature when  
21 There's been an issue identified.

22 There will be some enhancement regarding  
23 a guidance for when you could initiate a vendor  
24 inspection. Also some guidance regarding when it may

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1 be appropriate to conduct a more detailed evaluation  
2 for a large component replacement like the reactor  
3 vessel or steam generator and leveraging the various  
4 procedures that we have.

5 If the region, in coordination with the  
6 program office, things that there's some unique aspects  
7 that would warrant a more comprehensive review than  
8 just looking at the 50.59 evaluation.

9 MR. JOHNSON: Thank you. Thanks, great.

10 This set of questions, great set of  
11 answers. I've to tell you, I have some I didn't get  
12 to. There's one that asked about time lines for some  
13 of the things that we talked about in terms of the ROP  
14 enhancements and when those things would roll out.  
15 We'll get that answered.

16 There's a question about Substantive Cross  
17 Cutting Issues and that meeting and what came out of  
18 that meeting, what was committed to. We'll get an  
19 answer to that question up on the webpage.

20 There are a couple of questions, actually  
21 in different handwriting. I was actually wondering  
22 whether someone was getting a little frustrated that  
23 I hadn't asked this question and so wrote a second  
24 question, but I'm pretty sure that's not the case.

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1           This question really deals with pre-GDC  
2 plants and issues around our knowledge related to  
3 pre-GDC plants and our approach to resolution of those  
4 issues. Another set of questions that we'll get  
5 answers to up on the webpage.

6           And then, finally, there's a question  
7 about the reactor oversight process and the initial set  
8 up of that process which really allow 30 days to  
9 complete a root cause and but a part of that root cause  
10 is maybe benefitted by having an indication of the NRC  
11 violation. It talks about the timeliness of those  
12 issues as they roll out and as we originally intended  
13 it in the original ROP as we set it up.

14           You'll see the full question and you'll see  
15 that question answered on the web page. I apologize  
16 for not getting to those. I think we had a full set  
17 of questions again and a great set of answers to those  
18 questions.

19           I do want to, in closing, thank, of course,  
20 the panel coordinator. He's very disappointed that I  
21 mentioned his name.

22           I want to thank the panel, the very  
23 distinguished panel, good answers again. I think you  
24 for your time and your answers.

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1                   I want to thank the audience, of course,  
2                   for being attentive and asking great questions.  
3                   You're free to go, please enjoy the rest of your day.

4                   (Whereupon, the above-entitled matter  
5                   went off the record at 12:03 p.m.)

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