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U.S. NUCLEAR REGULATORY COMMISSION

BRIEFING ON FORT CALHOUN

FEBRUARY 22, 2012

9:00 A.M.

TRANSCRIPT OF PROCEEDINGS

Public Meeting

Before the U.S. Nuclear Regulatory Commission:

Gregory B. Jaczko, Chairman

Kristine L. Svinicki, Commissioner

George Apostolakis, Commissioner

William D. Magwood, IV, Commissioner

William C. Ostendorff, Commissioner

## APPEARANCES

## Omaha Public Power District (OPPD):

W. Gary Gates  
Chief Executive Officer and President

David Bannister  
Vice President, Chief Nuclear Officer  
Fort Calhoun Station

John Herman  
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## NRC Staff:

Bill Borchardt  
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Elmo Collins  
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Division of Inspection and Regional Support  
NRR

Troy Pruett  
Deputy Director, Division of Reactor Projects  
Region IV

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

1  
2 CHAIRMAN JACZKO: We'll now turn to the regular part of the  
3 meeting. Before we begin, though, I would just like to make a note. I believe,  
4 you can correct me if I'm wrong Steve, I think this is your last public meeting. So  
5 I just wanted to say, for those of you who don't know, this will be Steve's last  
6 public Commission meeting as General Counsel, so I just wanted to say a few  
7 words about Steve. He's been with the federal service for 34 years, and he's  
8 accepted, what will be I'm sure, a very interesting position as counsel at the  
9 OECD in Paris, working at the Nuclear Energy Agency. I've known Steve over  
10 seven years, and I have certainly appreciated his expertise, experience, and his  
11 steady professionalism. I think he has demonstrated tremendous leadership as  
12 the General Counsel in the long line of tremendous General Counsels that we've  
13 had at this agency. So I want to thank you for all your service to the agency and  
14 to the American people for your many, many decades of public service, and for  
15 the work you'll continue to do in between learning French and eating wonderful  
16 food.

17 STEPHEN BURNS: Learning French will be the challenge. No, I  
18 appreciate that Mr. Chairman, it's been, as I said, I started at the agency in 1978,  
19 a few months before the Three Mile Island accident, and I think -- my joke has  
20 always been I wanted to be a communications lawyer, but then when I found the  
21 Atomic Energy Act was based on the Communications Act in 1934, I became a  
22 communications lawyer for all these years, but it's been an interesting thing --  
23 one of the interesting things has been working with the Commissions over the  
24 years, for the last 25 years, and working with the staff as well as with the lawyers  
25 in my own office and others, so I think you for those nice words.

1 CHAIRMAN JACZKO: Sure, of course. Comments from --

2 COMMISSIONER SVINICKI: Yes, Mr. Chairman, I just -- Steve,  
3 you're moving on to something that I think is very fascinating, there's a lot  
4 happening in the international arena, and so I want to wish you well, and I'm sure  
5 that everyone will continue to benefit from your contributions in that capacity, so  
6 good luck.

7 COMMISSIONER MAGWOOD: Well, as a former chairman of the  
8 NEA's steering committee, I can tell you you're going to be working with a great  
9 organization, and the fringe benefits of excellent restaurants within walking  
10 distance of anywhere you go is not to be overlooked. So I look forward to  
11 coming to Paris and visiting you once you learn where all the good restaurants  
12 are.

13 [laughter]

14 COMMISSIONER APOSTOLAKIS: Good luck in your endeavors,  
15 Steve.

16 STEPHEN BURNS: Thank you.

17 COMMISSIONER APOSTOLAKIS: I think you will enjoy it there.

18 STEPHEN BURNS: Thank you.

19 COMMISSIONER OSTENDORFF: Steve, I've enjoyed working with  
20 you, and wish you all the best. Thanks for your service.

21 STEPHEN BURNS: Thank you.

22 CHAIRMAN JACZKO: Well, with that, we'll turn to the subject of  
23 today's meeting. The staff and I would note that this is the first -- this is another  
24 day of firsts or some lasts, and some firsts -- this is a first in a newly renovated  
25 Commission hearing room, so that explains the new carpet smell. So -- but it

1 looks very nice, I think it came out very nice, so thank you Annette for your work  
2 to get that done. Bill, do you want to get started then?

3 BILL BORCHARDT: Sure, thank you Chairman. Yeah, I'd also like  
4 to add my thanks to the Office of Administration that got this room completed  
5 yesterday, and it's in good shape for today's meeting, so I'd like to congratulate  
6 them for a lot of hard work on a very tight time schedule, and on behalf of the  
7 staff to add our thanks to Steve for his many years of service; we've had a very  
8 long and productive relationship with Steve, as have many of the senior  
9 managers, and in fact all of the staff within the agency, so wish him the very best  
10 of luck and we'll be seeing him in the next few years in a different capacity.

11 So today we're here to discuss the NRC's oversight of Fort  
12 Calhoun. A plant that enters Column IV of the reactor oversight process action  
13 matrix, which is the multiple repetitive degraded cornerstone column, receives a  
14 degree of increased oversight and attention from the staff, and from the  
15 Commission.

16 The annual agency action review meeting and the procedures that  
17 govern it was revised in 2009 to ensure that once a plant enters into Column IV,  
18 that within six months it receives -- it is the subject of a Commission briefing  
19 where the licensee comes in to describe their plans and activities related to  
20 improving facility performance. This was done, this timing, in order to make sure  
21 that the public and all stakeholders understood that we didn't wait for annual  
22 assessments or annual reviews to revise and adapt our inspection and oversight  
23 program to changing performance within the licensees, so we have continuously  
24 been modifying and adjusting the resources, and you'll hear from Elmo and the  
25 rest of the team here shortly about what we've done in that degree.

1                   Fort Calhoun is located near Omaha, Nebraska, and it entered  
2 Column IV of the action matrix on September 1st of 2011. The meeting was  
3 scheduled shortly thereafter in order to brief the Commission on the performance  
4 issues in accordance with our management directives. Since that time, however,  
5 performance challenges continue to emerge at Fort Calhoun, most notably the  
6 flooding situation in the Midwest, and the staff, on December 13th of 2011  
7 transitioned out of the normal reactor oversight assessment program to Manual  
8 Chapter 0350, which is oversight of reactor facilities in a shutdown condition, due  
9 to significant performance and operational concerns. This is the first plant to  
10 enter into an 0350 process in just short of 10 years, the last one was Davis-  
11 Besse. Can we go to slide three, shows the agenda for today's meeting, and  
12 with that I will turn the presentation over to Elmo.

13                   ELMO COLLINS: Slide four please. Mr. Chairman, Commissioners  
14 -- Mr. Chairman, Commissioners, good morning. Slide four. This morning I plan  
15 to provide a summary of the events and the regulatory actions that preceded us  
16 and leading up to this meeting. Slide five.

17                   In 2010 the NRC finalized a finding of significance; it was classified  
18 as yellow significance in the reactor oversight program. This dealt with an  
19 inadequate flood strategy that was identified by NRC inspectors. In 2011 Fort  
20 Calhoun station was in the process of preparing for the 95002 inspection which  
21 follows a plant that enters the degraded cornerstone of the reactor oversight  
22 process. Twice during 2011 the licensee performed self-assessments, and both  
23 times the self-assessments determined, and to the licensee's credit they  
24 reported, they were not yet ready for us to come on site and perform our  
25 supplemental inspection.

1           Ultimately, that inspection was scheduled for June of 2012,  
2 however, as we all know, in advance of that, in May, we received notification the  
3 licensee and the NRC, that the Corps of Engineers planned to increase the  
4 release rates from the dams of the Missouri River system to unprecedented  
5 levels, and the projected water level at the Fort Calhoun station that they were  
6 given by the Corps of Engineers indicated that they were going to have to deal  
7 with water on site at the station.

8           On June 6th, the licensee declared an unusual event. The waters  
9 were approaching 1,004 feet, which is the grade level at the site, which is also  
10 the emergency action level for an unusual event at Fort Calhoun station. On  
11 June 7th, the licensee experienced another event that was a fire and safety  
12 related 480 volt breakers, which -- for which the licensee declared an alert, and  
13 the agency entered the monitoring mode. We'll talk a little bit more about that  
14 later, but just to note it here, and later that day the licensee exited the alert.

15           I'll note that in advance of the rising waters at Fort Calhoun station,  
16 the licensee took a number of substantial actions to prepare the site to respond  
17 to the high water levels. Some of these were strengthened actions and added  
18 actions from NRC's finding, yellow finding that the licensee had developed, and  
19 they took actions even beyond that, I'll add.

20           The Nuclear Regulatory Commission responded to this. We  
21 instituted 24/7 site coverage with the rising water levels at Fort Calhoun. We  
22 verified the actions that the licensee put in place and the flood barriers as part of  
23 our inspection preparation, and we received, I'll just note, significant assistance  
24 from the other Regions, and the inspectors that enabled us to carry out this 24/7  
25 monitoring for an extended period of time.

1           So we were in the emergency response mode, the licensee was in  
2 the emergency response mode, the water had exceeded grade level at the site,  
3 and so NRC, at this time, deferred the conduct of the routine supplemental  
4 inspection for the yellow finding while the site was in emergency response.

5           The water peaked at about 1,006 feet, 11 inches in July of 2012,  
6 and we conducted a public meeting in Omaha with the licensee as the waters  
7 started going down to try to understand their plans, their actions post-flood for  
8 inspections, tests, verifications of equipment and the site to make sure that the  
9 facility was properly prepared for return to power, and this resulted in the  
10 substance of our Confirmatory Action Letter that we issued in August of 2012. It  
11 had some other actions in there for equipment problems, but it was primarily  
12 aimed at what was needed to be accomplished because of the flood.

13           So at the same time period, coincident with the flood and the  
14 Confirmatory Action Letter, Region IV was finalizing a finding of significance  
15 associated with the reactor protection system. It turned out to be a white  
16 significance, and this combined with the yellow flood finding and being in the fifth  
17 quarter of degraded cornerstone, NRC's assessment determined that Fort  
18 Calhoun Station performance warranted the highest level of oversight provided  
19 for by the reactor oversight process, and that's Column IV.

20           Region IV made an organizational change to ensure we provided  
21 the specific oversight for the conduct of the inspection programs, and to provide  
22 for the ongoing safety assessment that Bill alluded to. We established a  
23 separate branch. Fort Calhoun is the only branch in that part of the division of  
24 reactor projects.

25           The water levels subsided and licensee exited the emergency



1 conditions, so in September we were back on site. We needed to do some  
2 reactive inspections, primarily -- most significantly with the fire that had occurred  
3 on June 7th, so we conducted a special inspection to review that, to try to  
4 understand the significance, and there were several performance deficiencies  
5 which were identified in this inspection, but most importantly, I think at this time,  
6 we're still developing -- that inspection report is in final draft, and we're finalizing  
7 that for issuance, but the event, as we gathered the circumstances and did a risk  
8 assessment of that event, it became apparent to us that it's likely -- in all  
9 likelihood would be considered a significant operational event. We were coming  
10 up with conditional core damage probabilities in excess of 10 to the minus 4.

11           And so as part of our ongoing assessment process, the licensee  
12 had been shut down for over six months, the efficacy of the performance  
13 indicators starts to come into question when licensee's are shut down for  
14 extended periods of time. Our ability to meaningfully complete the baseline  
15 inspection program to give us meaningful performance information was called  
16 into question, and so we once again considered what is the appropriate level of  
17 NRC oversight, what's the proper level for NRC engagement at this facility, and  
18 now we know that the June 7th fire was a significant operational event, and  
19 Region IV, in conjunction -- in consultation with NRR and with the Executive  
20 Director for Operations, decided that Manual Chapter 0350 process was the most  
21 appropriate oversight guidance for us to use at Fort Calhoun Station. One of the  
22 benefits of this process is it will provide for us additional steps to verify that all the  
23 actions are taken for plant safety before the plant returns to power.

24           I believe the number of events and the significance of the events  
25 that we've seen at Fort Calhoun Station indicate that there are significant

1 performance issues that need to be addressed by the licensee, and while I think  
2 to date a comprehensive assessment of everything is not yet finally been  
3 completed, we do know some things that are challenges at Fort Calhoun Station  
4 performance. The first of which is maintenance and design, and I say this  
5 because of the insights we got from the special inspection after the June 7th fire.  
6 Licensee review and NRC inspection trace the roots of the causes of that fire  
7 back to a design modification which was accomplished almost two years ago.

8           There were installation difficulties; testing was not done to test the  
9 resistance of the contacts, and it actually resulted in a configuration where 12  
10 safety related 480 volt breakers either had or were susceptible to having a high  
11 resistance contacts, and so we -- those issues need to be understood.

12           The corrective action program has weaknesses, and there are  
13 organizational effectiveness weaknesses at the site that also need to be  
14 addressed, so the licensee has a number of plans in place, I believe you will hear  
15 from them, and we will use those plans to inform us for our restart checklist to  
16 make sure we address the right items for safety before the plant returns to  
17 power, so thank you. I'll turn it over to John; he's going to summarize 0350  
18 process.

19           JOHN LUBINSKI: Good morning, I'm John Lubinski, I'm the vice-  
20 chair for the Fort Calhoun Station Manual Chapter 0350 oversight panel, and I'll  
21 discuss a general overview of the 0350 process. The purpose of Manual  
22 Chapter 0350 is to establish and provide enhanced oversight and assessment of  
23 licensee performance during the shutdown through restart, and until it is  
24 appropriate to return the plant to the routine reactor oversight process. Oversight  
25 includes an enhanced inspection plan that follows several aspects of the ROP;

1 specifically oversight utilizes the baseline inspection program to the maximum  
2 extent possible. In those cases where the baseline does not provide adequate  
3 assurance that performance issues are appropriately addressed, enhanced and  
4 supplemental inspections are used. Plants are not included in the reactor  
5 oversight progress action matrix when under 0350; however, performance  
6 deficiencies are evaluated using the appropriate aspects of the significance  
7 determination process.

8           For entry conditions, in general, into Manual Chapter 0350  
9 Oversight, there are four conditions that must be met. First, plant performance is  
10 in Column IV or V of the action matrix or a significant operational event had  
11 occurred. Secondly, the plant is in a shutdown -- is shut down, or the licensee is  
12 committed to shutdown to address the performance issues. The NRC has a  
13 regulatory hold in effect such as an order on the licensee or the licensee is  
14 committed to not restart such as under a Confirmatory Action Letter, and finally,  
15 once all these three conditions are met, NRC management makes a decision that  
16 Manual Chapter 0350 Oversight is appropriate based on the conditions of the  
17 plant and the licensee performance.

18           The process followed under Manual Chapter 0350 includes the  
19 establishment of an oversight panel to develop criteria for oversight, and to verify  
20 licensees corrective actions are adequate; development of a process plan that  
21 guides the oversight panel through its activities; development of a restart  
22 checklist which identifies all the items and issues that need to be addressed prior  
23 to plant restart; and ensures open and transparent communication to external  
24 stakeholders throughout the process. Regarding termination of Manual Chapter  
25 0350, oversight under Manual Chapter 0350 continues after plant restart for a

1 period of time recommended by the oversight panel, and approved by the  
2 Regional Administrator. When appropriate, the oversight panel will recommend  
3 termination of Manual Chapter 0350 and return to the routine reactor oversight  
4 process and inclusion back into the appropriate column of the action matrix.  
5 That's a general overview of the 0350 process, I'll now turn to Troy who will talk  
6 specifically about Fort Calhoun issues associated with 0350.

7 TROY PRUETT: Thank you John.

8 CHAIRMAN JACZKO: Take your time, whatever you need.

9 Technically, you run out of time, but don't worry --

10 TROY PRUETT: I thought I got to stop talking when it hit zero.

11 [laughter]

12 CHAIRMAN JACZKO: Keep talking until we tell you to stop talking.

13 [laughter]

14 TROY PRUETT: Well, good morning Mr. Chairman and  
15 Commissioners. Again, my name is Troy Pruett and I'm the chairman of the Fort  
16 Calhoun Station oversight panel, and what I wanted to talk about today was  
17 where we are in the process, actual process, at Fort Calhoun Station. As  
18 mentioned earlier, the first step was to identify the panel members, and we did  
19 that on December 29th, I was named as head chairman, John the vice-chairman,  
20 and then the other members are comprised of Region IV staff and staff from  
21 NRR, so we have a diverse team of headquarters and regional personnel.

22 Next step was to sign out a panel charter, we did that on January  
23 12th, and the panel charter, at a real high level, listed the activities that the  
24 panel's responsible for: communications with externals, developing an agency  
25 record, doing a comprehensive safety assessment and then reaching a

1 determination that the facility's safe to restart, making that recommendation for  
2 the Regional Administrator and then to be able to provide some level of  
3 assurance that the facility, once restarted, if warranted, can operate safely.

4           The next part of the process was to develop a process plan, and we  
5 recently completed that activity. It essentially follows all the elements that are in  
6 Manual Chapter 0350, highlights all the different activities that are in that Manual  
7 Chapter for us to accomplish. It provides a little bit more detail about the types of  
8 internal/external stakeholders we need to be communicating with, and how  
9 frequently we need to be able to do those things, and more importantly, it will  
10 ultimately establish a comprehensive agency record of all the activities that the  
11 panel took during this process.

12           The restart checklist, or the plant issues list, that's currently under  
13 development, we know with a high level of certainty that the current Confirmatory  
14 Action letter that was put in place following the flooding event, most of the items  
15 in that Confirmatory Action Letter will transfer over to what we term the restart  
16 checklist. In addition, as Fort Calhoun Station completes their comprehensive  
17 assessment to determine the depth and breadth of performance issues, there  
18 may be certain things that come out of that that will add to the restart checklist.  
19 The NRC may choose to add additional items to that checklist, for example, Fort  
20 Calhoun Station will embark upon an independent safety culture review that will  
21 need to be completed prior to restart of the facility, that's something that we  
22 would add to the restart checklist. All the items on the restart checklist will be  
23 incorporated into another Confirmatory Action Letter, and we're probably going to  
24 issue two more Confirmatory Action Letters through this process. One will  
25 specifically address those items that need to be completed prior to restart of the

1 facility to ensure safe operation. The second Confirmatory Action Letter would  
2 be similar to what we would issue for a plant that enters Column IV after  
3 completion of a 95003 inspection, and that'll be those activities that are  
4 necessary to sustain performance improvement for the long term, beyond restart  
5 of the facility, and that's needed to ensure continued performance improvement,  
6 and continued safe operation of the facility. And again, the restart checklist and  
7 the Confirmatory Action Letters, those are all under development right now as we  
8 learn more about the performance at Fort Calhoun Station.

9           The next thing we have to do is to develop an inspection plan.  
10 Again, this is a two phase approach. There's -- the first stage is those  
11 inspections that are required to be completed prior to restart. We'll also develop  
12 an inspection plan that'll go beyond restart for the transition from safe operation  
13 of facility back to the return to the reactor oversight program.

14           As John mentioned earlier, we have gone through and looked at  
15 each of the elements that are -- that were in the inspection program prior to  
16 entering 0350 and we selected those items that we felt are appropriate to  
17 continue in the near-term. That'd be an initial operator examinations, those are  
18 important to do, so we decided to keep those inspections. There's a tri-annual  
19 fire protection inspection schedule for March, we decided to keep it. Fort  
20 Calhoun's transitioning into NFPA 805 so that was an important inspection to  
21 maintain. We're looking at the resident inspector modules to see what's  
22 appropriate to be accomplished, and each of those baseline procedures will do  
23 the things that are appropriate to accomplish, and then the residence, if  
24 appropriate, will be used to follow-up on CAL specific items. There's a  
25 component design basis inspection that was scheduled for this summer. We've

1 opted not to complete that inspection, instead use those resources as part of our  
2 independent assessment of the licensee's performance review.

3           We recently completed a readiness for the 2012 flooding season  
4 inspection. You guys may have seen the event report that came out as a result  
5 of that inspection activity, and again, that inspection was to make sure we were  
6 ready to deal with the summer of 2012. We'll also have to do another inspection  
7 that looks at the 2011 flooding effects, and what were the impacts on the facility,  
8 what corrective actions has the facility put in place to deal with some of those  
9 issues, namely, soil compaction underneath the facility; that's still an ongoing  
10 review right now, and the licensee is completing some level of analysis. We still  
11 have a fair amount of analysis left to do to understand the soil compaction under  
12 the facility.

13           Once we've completed our inspections, we'll develop a plan to  
14 return Fort Calhoun Station back to the normal reactor oversight process. Upon  
15 facility restart, we'll stay in Manual Chapter 0350 process for some period of time,  
16 likely one to two quarters. That's to allow the performance indicators time to  
17 reset, so we have meaningful data, so we can make performance assessments  
18 under the reactor oversight process -- and then again this is all intended to make  
19 sure that when, if warranted, the facility can safely restart and then we'll be able  
20 to maintain safe operation beyond restart, and those are my comments.

21           BILL BORCHARDT: So in conclusion I'd just like to make four quick  
22 points. One is that the issues that got Fort Calhoun to Column IV and to the  
23 0350 process didn't manifest themselves overnight. It's unlikely they'll be fixed  
24 overnight. This is usually a long, deliberate process that is required to address  
25 all of the issues.

1           The second point is that we're early in on this process, you're still in  
2 the discovery phase, so it would not be surprising if there's a redefinition of some  
3 of the issues. Also, it wouldn't be all that surprising if some new issues are  
4 discovered and emerge that need to be addressed throughout the process. The  
5 third is that this requires a significant resource commitment on the part of the  
6 NRC, and of the licensee. The NRC is prepared to provide whatever resources  
7 we need to the Region IV team. We can draw on resources from the other  
8 regional offices, and from headquarters to support whatever inspection activities  
9 are required, whenever they're required.

10           And the fourth is what Troy alluded to, is that the objective is not  
11 just restart. It has to be much more than that, it has to be sustained, long-term  
12 safe operation of the facility, and that's the kind of acceptance criteria the staff  
13 will use when it makes regulatory recommendations. That completes the staff's  
14 presentation, thank you.

15           CHAIRMAN JACZKO: Great, well thank you. We'll start with  
16 Commissioner Svinicki.

17           COMMISSIONER SVINICKI: Well, good morning again, and thank  
18 you all for your presentations. My questions are pretty general so I will leave it to  
19 Bill and Elmo to decide if you want to respond yourselves or you want to ask the  
20 other members of this panel to take some of these questions.

21           I was not serving on the Commission at the time of Davis-Besse so  
22 I will confess that when the 0350 process was mentioned for Fort Calhoun I had  
23 to go and study up on the entry conditions, the process, and then how -- what's  
24 the structured process for exit from this particular process. At a very high level, I  
25 don't know Elmo, maybe you would want to take this, could you contrast --



1 because of course people, I think, are generally very familiar with the columns of  
2 the reactor oversight process, but Column V, if I'm defining this correctly, would  
3 be for plants that we consider unsafe and the 0350 process, I know we went over  
4 the entry conditions, but could you contrast Column V in our system versus the  
5 0350 process, from kind of the staff's regulatory toolbox?

6 ELMO COLLINS: Thank you. At least in a general sense, 0350  
7 serves two distinct purposes in my mind. One is it allows us to -- for facilities that  
8 are shut down, construct a unique oversight process to provide the meaningful  
9 performance information that we can use for our assessment. So set that aside,  
10 it also talks about being in Column IV and/or having a significant operational  
11 event, and we saw both of those at Fort Calhoun Station, so those are the types  
12 of things that ask us questions. Do we need to extra work before this facility  
13 returns to power? Without -- and that's where 0350 takes you. It provides for  
14 that construct, systematically to identify the issues to be addressed for the added  
15 verification of safety. We knew enough, in our continuing assessment process,  
16 to know we needed to ask those questions. We found that the facility did meet  
17 the entry criteria of 0350, and we made that determination. Contrast that to  
18 Column V, we didn't do the work, I would offer you, to take the results from the  
19 special inspection team and other findings, to finalize to a useable product to  
20 meet these multiple significant performance items which is one of the criterion to  
21 consider a facility for Column V. We didn't do it, and we haven't done it, so we  
22 never actually got to ask ourselves was the facility unsafe or not? Because we  
23 want to engage before that, at any rate -- [laughs] --

24 COMMISSIONER SVINICKI: John, did you --

25 ELMO COLLINS: -- and the guidance provided for that.

1                   COMMISSIONER SVINICKI: Thank you, it looks like John wanted  
2 to --

3                   JOHN LUBINSKI: If I could just add, as Elmo said, when the  
4 decisions were made with respect to the plant being transitioned to Column IV,  
5 the plant was in a shutdown condition at that time. The performance issues,  
6 somewhat related to the shutdown conditions, but others were related to  
7 operating conditions. From the standpoint of the Region's oversight, the plant  
8 was in a safe condition during shutdown, continues to be in a safe condition  
9 since it is shutdown today, so therefore looking to move to Column V, as Elmo  
10 said, was not something that we looked at all the details because we felt we were  
11 in the appropriate process. They were in Column IV, the 0350 process allows us  
12 to enhance our oversight and customize it to the situation at hand, which they  
13 were continued to be in a regulatory hold, having them in a shutdown condition  
14 and prior to restart, as Troy said, we will make sure all safety issues are  
15 addressed so that we will not authorize restart until they're in a safe condition.  
16 So the process itself led us from Column IV to 0350.

17                   COMMISSIONER SVINICKI: Can I ask -- maybe since you had  
18 your microphone on I'll ask you a follow-up. You had presented the entry  
19 conditions for entry into Manual Chapter 0350 and I'm not trying to be hyper  
20 technical about the process here, but I -- when there was a discussion, I think it's  
21 the -- well, they kind of flow from each other, so I won't jump to number two,  
22 number one briefly is plant performance is in Column IV/V. Elmo was just talking  
23 about that. But item two is the plant is shut down or the licensee has committed  
24 to shut down the plant to address performance issues. I had a sense here that  
25 maybe you are doing a bit of a stylized interpretation of these entry conditions

1 because I know this is a hypothetical, but for the flooding event, were the  
2 performance issues and status at Fort Calhoun would -- was that at a level that  
3 would have -- that you would have either shut that plant down or requested that  
4 the licensee commit to shut the plant down? Was the flooding event an aspect of  
5 kind of a stylized application of item two?

6           JOHN LUBINSKI: I wouldn't say it was a stylized application. I'll  
7 ask Elmo or Troy to add to this, but when we look at the process we're in the  
8 timeline, the plant was coming out of an outage already so they were in a  
9 refueling outage. They remained down at that point. Prior to going into the  
10 outage, there were not performance issues identified that would have caused us  
11 to even put them in a Column IV at that point.

12           COMMISSIONER SVINICKI: Okay.

13           JOHN LUBINSKI: So from a discussion standpoint we weren't  
14 doing anything stylized with respect to that. They did have an event occur in  
15 June prior to the flooding, so the flooding added to that, and then there were  
16 other performance issues that occurred along the line, so to be able to speculate  
17 would we have done something different if they were operating, it would be  
18 difficult because number one, that was not the situation, and number two, we  
19 don't know the performance or reaction of the -- what the licensee would have  
20 done if they were in an operating condition at that point, and had any of these  
21 issues occurred.

22           ELMO COLLINS: I would like to add to that, Commissioner. In  
23 August and September when we issued the Confirmatory Action Letter and  
24 moved the plant to Column IV, we consciously kept the flooding issues and  
25 actions for plant restart separate from the ROP performance assessment

1 process. They were not linked at that time, but once we became to understand  
2 the June 7th fire as a significant operational event, we had to -- we actually  
3 asked ourselves the same question you asked -- you just asked us, you know,  
4 does it meet this, and how does it meet it, and are we being true to criteria, and if  
5 the plant had been operating and that event had occurred, then we would have  
6 wound up in the same position.

7 COMMISSIONER SVINICKI: Okay.

8 ELMO COLLINS: It would have resulted in a plant shutdown, a  
9 significant operational event, and transient, and so it would -- we would -- it would  
10 have taken us to the same path, and so -- yes, I hope that helps give you some  
11 insight.

12 COMMISSIONER SVINICKI: That is helpful, I appreciate both of  
13 the commentary that -- the comments that you both made in response to that  
14 question, and Elmo, I think you did a good job in response to my first question of  
15 talking about how the 0350 process because we can design what we need there  
16 in terms of an inspection process, we need some aspect, again, of our oversight  
17 not to be so regimented that we -- you do need, in my view, something like an  
18 0350 because you're always going to find yourself in unique circumstance, plant-  
19 specific, that we need to have aspects of our program that allow us to do -- to  
20 design something that fits for the circumstances and that's some of how 0350 at  
21 the time was explained to me by Eric Leeds and others, and you're nodding your  
22 head to that, I think that was a point you emphasized earlier in response to that,  
23 so I think the other question that, you know, I -- again, I'm saying we have many  
24 performance indicators, and when I went to our website and looked at a lot of the  
25 different areas of performance, it did look like, you know, things were green, but

1 there were some areas where the trends were downward in some areas, and the  
2 findings that we had were of various levels of safety significance, so it sounds  
3 like in light of that, coupled with the extreme flooding event, 0350 just made a lot  
4 of sense to you.

5 ELMO COLLINS: Well, I think that's correct. Being in Column IV  
6 with a significant operational event speaks to significant performance issues that  
7 warranted the additional verification prior to plant restart, and 0350 gives us a  
8 process to accommodate that.

9 COMMISSIONER SVINICKI: And my last question is my other  
10 understanding is that an aspect of if plants are shut down for whatever reason for  
11 extended periods, we don't have the inputs to populate the ROP indicators. How  
12 do we go about regaining that? Is -- I don't so I know, as Bill Borchardt  
13 emphasized, we're in early stages of this process, but how do you go about at  
14 the point where we're convinced that restart is appropriate? How do they move  
15 out of this, and back into the ROP?

16 ELMO COLLINS: Good, that is one of the assignments of the 0350  
17 oversight panel, is develop that transition plan, I'll let Troy address some of the  
18 details.

19 TROY PRUETT: A lot of that hinges on what's in the plant issue list  
20 and the restart checklist. Through our review of the facilities comprehensive  
21 assessment, we'll come in with a fairly large team, do a validation of that  
22 assessment, from that we'll develop the additional items to fill out the restart  
23 checklist at our plant issues list, and we'll work through those and we'll go back  
24 and do additional validation inspections to make sure each of those items has  
25 been resolved to ensure safe restart of the facility, and then once we're confident

1 that we can do that, we've -- in that decision, we'll develop an inspection plan to  
2 go through restart, post-restart, and we'll go in and we'll brief Elmo, we'll make a  
3 recommendation that we believe the facility is safe for restart, and then Elmo, in  
4 consultation with NRR, will sign off on that.

5 COMMISSIONER SVINICKI: Okay, it looks like we'll be hearing  
6 more about that in the future. Yes, John?

7 JOHN LUBINSKI: One point is in 0350 is it allows us and is  
8 designed that way -- that we would continue under the 0350 process even after  
9 restart for some period of time so that we could address your specific issue there,  
10 so that we can understand that the performance is sustained performance  
11 moving forward. And we could look at a couple months and that would be  
12 determined by the restart panel, how long that would be, of performance indicator  
13 data to determine what would be the best place to put them back into the action  
14 matrix.

15 COMMISSIONER SVINICKI: Okay, thank you. Thank you, Mr.  
16 Chairman.

17 CHAIRMAN JACZKO: Sure. Commissioner Apostolakis.

18 COMMISSIONER APOSTOLAKIS: Thank you, Mr. Chairman.  
19 This Column V, is that a recent addition to the ROP? And I notice that some of  
20 you even skipped it. Is it -- from IV we went to 0350. So was it last Monday or a  
21 year ago? When was it added? It wasn't there in the beginning. Column V.

22 JOHN LUBINSKI: It wasn't recently added to the action matrix and  
23 that -- as we thought -- the exact timeframe of that? Fred Brown's going to give  
24 you the exact timeframe, but as he's coming up, as we talked about it, the entry  
25 condition even in 0350 specifically says if a plant is in Column IV or Column V we

1 can transition to 0350. So the process is designed such that it's an enhanced  
2 oversight process customized to the condition of the plant based on performance  
3 issues and the current plant issues. Current -- the timeframe, please.

4 FRED BROWN: Yeah, Fred Brown, NRR. Column V was an  
5 original part of the SECY-09-0007 formulation for the reactor oversight process.  
6 The change that was made to the ROP in the management directive about five  
7 years ago was to specifically add 0350 and how the 0350 process interrelated  
8 with Colum IV and Column V. But the original ROP did have five columns, and  
9 the unacceptable performance was I believe in --

10 COMMISSIONER APOSTOLAKIS: So a plant can be in Column V  
11 without going to 0350?

12 FRED BROWN: No, if a plant goes to Column V, we handle it in  
13 0350.

14 COMMISSIONER APOSTOLAKIS: Okay, okay. So it's automatic,  
15 then?

16 FRED BROWN: Yes.

17 COMMISSIONER APOSTOLAKIS: You have to go to 0350. You  
18 mentioned that there were multiple degraded -- repetitive degraded cornerstones.  
19 I wonder how the plant reached that state. I mean, I thought part of the agency's  
20 adopting the ROPs are there would be early warning that things are not going  
21 well. And yet we end up with a plant that has multiple repetitive degraded  
22 cornerstones, and then we move on to 0350. Does that mean that we don't have  
23 enough leading indicators in the ROP to warn us so that we'll never reach that  
24 level? Or what does it mean?

25 ELMO COLLINS: That's a question we're going to ask ourselves

1 and we're going to have to answer. We have the same question. I'll just -- and  
2 so that's going to be part of the process, is to take a look -- lessons learned on  
3 the regulatory aspects of this historically. Well, I'll give you my personal  
4 assessment. I mean, the site had a degraded cornerstone in 2007/2008 and we  
5 completed the supplemental inspection and gave it an up-check. Here we set  
6 2010 another degraded cornerstone, same cornerstone. And so for the same  
7 cornerstone to become degraded over course of three or four years, that's  
8 probably -- in the big picture that's telling you something about organizational  
9 performance. And the reactor oversight process doesn't carve that out  
10 separately for consideration, but looking back on it, historically that was an  
11 indicator to us. You know, that that cornerstone degraded again and doesn't  
12 register in the action matrix, but it's a historical fact that I think we'll have to give  
13 consideration. And this time we saw additional findings of significance on top of  
14 that, and the significant operational event, and that's what led us up to today.

15 BILL BORCHARDT: Yeah, you know, we -- every couple of years  
16 we start talking about leading indicators, and we just don't have one, never have  
17 had one. I hope someday we will, but it's not on the horizon. So it's a challenge,  
18 but this is a rare and unusual event. It hasn't happened in 10 years. It's far more  
19 often that a plant goes to Column II, maybe goes to Column III, addresses the  
20 issues and ends up ultimately back up in Column I. So that's by far the more  
21 normal path.

22 COMMISSIONER APOSTOLAKIS: But there will be some  
23 reevaluation of the ROP after the --

24 BILL BORCHARDT: Well, we do that annually. I mean, and this'll  
25 certainly be a major part of the annual assessment, to figure out the sequence of



1 events that led to this exact situation.

2 JOHN LUBINSKI: And as an input to that, as part of our process  
3 plan for the oversight panel we will be looking at the Lessons Learned of the way  
4 we've implemented this and looking back at the record to provide information on  
5 our annual reassessments of the reactor oversight process.

6 COMMISSIONER APOSTOLAKIS: Okay. Thank you. Mr. Pruet, you  
7 said that among other things the panel that you're chairing will have to  
8 decide that the safety culture is good, there would be a survey, and -- before you  
9 give the go-ahead. How did you decide that?

10 TROY PRUETT: That's part of the process. Fort Calhoun's  
11 required to complete an independent safety culture assessment. So they've let  
12 out a contract with an outfit to come in and perform that review for them. Our --  
13 the Human Factors Group in NRR will validate the process, the survey tools, and  
14 the types of questions that that group will use at the facility. And then our  
15 inspection follow-up team will go in and look at those results from that team.  
16 We'll compare those to our results that we obtain through the inspection. And to  
17 the extent that there's alignment between what they found and what we found --

18 COMMISSIONER APOSTOLAKIS: But presumably there are two  
19 cultures here. One is before they enter 0350, and the other would be afterwards.  
20 I mean, there would be some changes. So which culture are you looking at?  
21 The one after?

22 TROY PRUETT: We'll want to get a perspective on the historical  
23 safety culture to make sure that the corrective actions that they took were  
24 appropriate to get the behavioral changes that they wanted at the facility. And  
25 we'll also take a snapshot of the current-day safety culture, as well. A lot of times

1 in the focus group sessions, the people that sit there around the table, once you  
2 have a conversation with them, they talk about -- "Here's how things work, the  
3 facility. Here's the meaningful changes that we've seen as we've developed  
4 aspects of our integrated improvement plan." So --

5 COMMISSIONER APOSTOLAKIS: We still don't know what a  
6 good safety culture is, though, do we? I mean, that will be your judgment that,  
7 "Yeah, they're okay now."

8 TROY PRUETT: Right. Right.

9 COMMISSIONER APOSTOLAKIS: Right? Okay. And then you  
10 say, "They will return to the reactor oversight process." They will return to which  
11 Column? All green?

12 TROY PRUETT: Well, the oversight panel --

13 COMMISSIONER APOSTOLAKIS: Or they will return to the  
14 process itself.

15 TROY PRUETT: Yeah, yeah. The oversight panel --  
16 the oversight panel will make a recommendation as to which column to place  
17 Fort Calhoun Station back into. It'd be speculative right now, though. But I  
18 believe the recommendation that the panel would come forward with eventually  
19 would be -- we're going to have a Confirmation Action Letter that's open,  
20 traditionally with a 95003 plant that's in Column IV. That would remain in Column  
21 IV until completion of the Confirmatory Action Letter, and then they would  
22 transition back into Column I or II, or whatever the findings supported at that  
23 time.

24 COMMISSIONER APOSTOLAKIS: So they will return to Column  
25 IV?

1 TROY PRUETT: Possibly.

2 COMMISSIONER APOSTOLAKIS: Pretty serious.

3 TROY PRUETT: Right, right. Possibly. Right.

4 COMMISSIONER APOSTOLAKIS: Well thank you, Mr. Chairman.

5 CHAIRMAN JACZKO: Commissioner Magwood.

6 COMMISSIONER MAGWOOD: Thank you and good morning.

7 First let me say I appreciate, you know, Elmo and Troy and the Region IV staff  
8 and the work they've put into this, as well as the NRR staff. This is something  
9 that I've been following for a long time, and Elmo and I have talked about this on  
10 multiple occasions and I appreciate the amount of work that's gone into preparing  
11 for this stage and the amount of work that's going to go forward in seeing this  
12 through.

13 I wanted to ask a couple historic questions first, just to get some  
14 orientation. And hopefully -- and Elmo you look old enough to have been around  
15 long enough, so maybe you can answer some of these questions. But as I look  
16 back, I -- we really haven't had plants in 0350 very many times. It's been less  
17 than a dozen times in the history of the agency. As you look -- as you -- and  
18 maybe you've looked at this as you've gone into this process, but I'm curious as  
19 to whether 0350 is most often activated by a particularly large operational  
20 problem of a well-defined nature, or is it generally lots of operational problems in  
21 lots of different areas? When you look back, is there a pattern that you see with  
22 the plants that end up in 0350? And feel free to chime in.

23 ELMO COLLINS: Okay. I'll start, and then my boss will follow-up.  
24 My recollection -- you know, and I'm -- is usually there's some acute occurrence  
25 that was of such significance and spoke to the facility performance that really

1 became the seed or the catalyst to really prompt us to seriously consider 0350.  
2 And that's similar to what happened here. It was the fire on June 7th that  
3 affected both trains of safety related equipment that really had risk significance  
4 and safety significance.

5 BILL BORCHARDT: Yeah, and I'd say -- you know, the vast  
6 majority, almost 10 of the issues, preceded ROP. So this was back in the days  
7 of SALP and some of the words that have been banished from the regulatory  
8 dictionary. And it -- at least half of them I would say, just based on my general  
9 recollection, were just long-term, sustained, nagging issues that the Regional  
10 staff and they -- had developed numerous inspection findings. We didn't have  
11 the rigorous methodology that the ROP affords us, so it was kind of more of a  
12 lingering issue of problems not being fixed that at least on half of the occasions  
13 led to entry into 0350.

14 COMMISSIONER MAGWOOD: And that's what I guess I would  
15 have expected, because it's -- and I'm going to come back to that for a moment,  
16 but let me sort of ask Elmo to sort of emphasize -- to talk about something you  
17 just emphasized, which is you talked a lot about -- you talked about the fires  
18 being sort of the large operational issue that kicked it into this mode. In your  
19 discussion with Commissioner Svinicki you talked about that, as well. Let me ask  
20 the question a little bit differently from the way that Commissioner Svinicki asked  
21 it, and know this is again looking at the situation more theoretically as opposed to  
22 what actually happened, but are you saying that the plant is in 0350 because of  
23 the fire or is the plant in 0350 because of the fire and all the other things that  
24 were happening, as well? Understand your --

25 ELMO COLLINS: I think, if I understand your question, I would say

1 the latter. There were a number of factors. The fire, the significant operational  
2 event being one, which entered into the decision the process -- the criterion of  
3 0350 walked us through that.

4 I'll just add, we actually asked ourselves this question early on,  
5 what was the right oversight process? 0350? We have another Manual Chapter,  
6 0351, which deals strictly with extended shutdown periods. So we could have  
7 accommodated the performance indicators in the baseline programs through that  
8 program. And until we got on site in September and October and really got the  
9 facts laid out and got a good grasp of the significance, I had thought that's where  
10 we were headed. But then the significant operational event tipped the scale over  
11 and made us reconsider 0350.

12 COMMISSIONER MAGWOOD: So, let me -- that sort of brings me  
13 back to Bill's point that generally, historically, it wasn't just the one singular event,  
14 it was sort of a nagging, long-term list of problems that led to plants generally  
15 getting into 0350. And I guess my question really is, is that really more of what  
16 we're seeing with Fort Calhoun as opposed to the single operational event? Is  
17 this -- and to sort of use the word, is this a safety culture problem that we really  
18 have at Fort Calhoun, as opposed to an isolated set of circumstances?

19 ELMO COLLINS: I think -- my best guess is I think there's quite a  
20 bit of work to be done to really frame the answer to your question and with a  
21 systematic and defensible analysis. But yes, there are the cultural aspects at the  
22 facility, as well, that are coming into play. That -- a program -- if -- in Column IV,  
23 that's kind of the given. If you get to Column IV you have to do an independent  
24 safety culture assessment. It's almost assumed that if you reach that level of  
25 performance that somewhere in the organization, to some degree, likely of

1 significance, there are cultural issues at play.

2 COMMISSIONER MAGWOOD: And one would think that that's the  
3 hardest to assess and the hardest to fix really if you look long term. The last  
4 couple of plants that went through this process I think spent about three years in  
5 0350, something like that?

6 JOHN LUBINSKI: The timeframe for the last plant that went  
7 through was three years, from the time they entered until the time they  
8 terminated the 0350 process. On average, the plants before that -- and it's a little  
9 bit different, as Bill said, because the majority of those were before the ROP. But  
10 somewhere -- two, two-and-a-half years on average going through the process.

11 COMMISSIONER MAGWOOD: Largely because it wasn't just  
12 fixing one or two operational issues. It's really looking at the -- it really becomes  
13 the safety culture, organizational performance. It's a broad issue.

14 ELMO COLLINS: That's correct. I -- let me elaborate a little bit. In  
15 my analysis, if you have the significant events, they're almost always the causes.  
16 And when you really trace the roots back, they go pretty far and are going to go  
17 pretty deep into the organization. This fire in June 6th was -- I mean, it was a  
18 modification. It was actually well-intended, to improve the reliability of 480 volt  
19 breakers. But what resulted was a condition that was an unreliable configuration  
20 and actually induced conditions. And just that characterization gives me pause  
21 and so, I mean, what's going on in that organization when you set out to  
22 accomplish something, to make it better, and you actually get the opposite  
23 result? That's going to trace back into --

24 COMMISSIONER MAGWOOD: Yeah, I had the exact same  
25 reaction. I was also looking at the significant -- the yellow they got on failure to

1 maintain external flood procedures. And one of the sentences in the discussion  
2 of this says, "The finding was determined to have a crosscutting aspect in the  
3 area of problem identification and resolution, corrective action program, failure to  
4 take appropriate corrective actions to address safety issues and adverse trends  
5 in a timely manner." Sounds like safety culture issue to me. And so I guess --  
6 when I look at this, you know, I think it's -- you know, I think that you -- I think  
7 you've been saying this in different ways as this got started, but this really isn't --  
8 this isn't about the flood, it's not about the fire, it's about the organization, it's  
9 about the safety culture at Fort Calhoun. And so I think it's important as we go  
10 forward looking at this to not overly focus on those specific operational  
11 challenges, but to really focus on the overall performance of the organization. Is  
12 that a fair way to look at it?

13 ELMO COLLINS: I agree completely, Commissioner. We -- in our  
14 articulation, maybe we refer too much to the events and the incidents in the  
15 findings, but the reactor oversight process is very event incident-driven. We --  
16 it's not -- doesn't have leading indicators. We react, engage based on the  
17 significance of what we see and increase when the significance increases. And  
18 that's what we've seen at Fort Calhoun Station.

19 COMMISSIONER MAGWOOD: Well -- and I -- and that's not to --  
20 and I appreciate Commissioner Apostolakis' discussion about that aspect of it.  
21 And I recognize the ROP doesn't limit itself to those kinds of -- you know, I guess  
22 I say canaries in the mineshaft. But we do have the resident inspectors and I  
23 would think that one aspect of the resident inspectors' presence on site would be  
24 to give you, personally, some indication as to whether we are having  
25 organizational and safety culture issues. I -- did -- were you able -- has this --

1 before we got to this stage, did Region IV have indications of issues? Even if it  
2 hadn't reached this point, but were you -- were there issues that you were  
3 concerned about?

4 ELMO COLLINS: I have two answers to that question. Yes and  
5 no. You know, we are as true as we can be to implementing the guidance and  
6 procedures of the reactor oversight process. One of the values it brings is to put  
7 discipline in potentially numbers and guidance to any issue, what it means, and  
8 what it doesn't mean. And so resident inspectors follow that, and we're true to it.  
9 So if it's not there, you know, it's not going to surface as increasing engagement  
10 in the ROP action matrix. It's just not. And even substantive crosscutting issues  
11 don't change the action in the action matrix. I will say that it is a fact, and I rely  
12 heavily on the context and insights that resident inspectors develop at a facility.  
13 They understand what's going on there and they can put context around an issue  
14 and a problem that you'd never get from the regional office, and never get from  
15 black and white guidance. That does bring value and insight to us, and we try to  
16 use that. And that points us, then, to how we focus our inspection efforts. And  
17 we were seeing that at the Fort Calhoun Station.

18 COMMISSIONER MAGWOOD: That's a fair answer. Appreciate it.  
19 Thank you very much.

20 CHAIRMAN JACZKO: Commissioner ...

21 COMMISSIONER OSTENDORFF: Thank you, Mr. Chairman. I  
22 want to --

23 CHAIRMAN JACZKO: Moment of forgetfulness there.

24 COMMISSIONER OSTENDORFF: Thanks. I want to thank  
25 Region IV and NRR. Elmo, I want to go back to your comment you made in your



1 opening statement about kind of three major challenges, one maintenance and  
2 design, two corrective action program and three, dealt with organizational  
3 effectiveness. I want to ask a couple of questions in those areas. Can you talk a  
4 little bit about this breaker replacement and the testing? That got my attention  
5 and I wanted to maybe understand a bit more about what happened and what  
6 should have been done.

7 ELMO COLLINS: The 480 volt breakers at Fort Calhoun Station --  
8 I'm going to let Troy provide some details here. Or Jeff.

9 COMMISSIONER OSTENDORFF: I'm very interested in what test  
10 did not occur that should have occurred or any inspection --

11 ELMO COLLINS: Specifically, what I was referring to there was --  
12 well, and let me back up and describe the mod slightly. They were replacing the  
13 breakers, but they were of an older design. The newer breakers were not  
14 identical and they were actually smaller, physically smaller for 480 volt breakers.  
15 And so the licensee opted on a path to retain the cabinets and the bus bar  
16 arrangements, and fit the smaller breakers inside a larger cubical, which resulted  
17 in the need to design a -- I call it a -- it's called a cradle. I call it transition piece.  
18 But the breaker has stabs which go into the transition piece. The transition piece  
19 has another set of stabs which are inserted into the bus bar arrangements. And I  
20 believe that there are inspection and licensee review. In that installation they  
21 didn't measure the electrical resistance between the cradle and the bus bars. Is  
22 that -- and I'll let the -- Jeff Clark speak before I say more than I know here.

23 JEFF CLARK: Good morning. I'm the branch chief from the  
24 Division of Reactor Projects that has Fort Calhoun oversight. As Elmo specified,  
25 in that modification it was going from one breaker style to another. You had to

1 come up with this transition piece, as Elmo said, to have stabs. What we have  
2 determined through our inspection is there wasn't a rigorous process to  
3 determine that proper engagement of those multiple stab pieces. The actual  
4 location of those within the breaker cabinets was such that it couldn't be seen  
5 easily. You'd have to do some disassembly of the back portion of the cabinets.  
6 Some other things, such as resistance checks, thermography, or whatever, were  
7 not done to validate or verify that those connections were actually properly made.  
8 And that the modification then in turn would be effective going forward.

9 COMMISSIONER OSTENDORFF: I assume there's quality  
10 assurance paperwork or some kind of a work completion form that would have  
11 some testing or some post-installation checks on this?

12 JEFF CLARK: There was. And one of the complications we saw in  
13 there was that it was a misunderstanding with some of the craft and some of the  
14 QA, that they felt that some of those observations and readings should only be  
15 taken on the visible portion of the modification and were not done because of the  
16 complexity of getting to the back panel.

17 COMMISSIONER OSTENDORFF: This doesn't sound like it  
18 should be rocket science. I mean, I guess I'm -- I've replaced lots of breakers  
19 over many years in the Nuclear Propulsion Program. It's pretty straightforward  
20 just to do resistance -- and this is, you know, not complicated. So I'm trying to  
21 figure out, is this an unusual set of circumstances here because of the pieces are  
22 not visible? I'm just trying to fathom the absence of the testing of this. That's --  
23 and maybe there's no answer for that.

24 JEFF CLARK: Again, there's -- the specific answer to that is going  
25 to be, you know, part of our follow up --

1 COMMISSIONER OSTENDORFF: Yeah.

2 JEFF CLARK: -- inspection to that as to why you didn't actually get  
3 into that aspect.

4 COMMISSIONER OSTENDORFF: Okay.

5 JEFF CLARK: But, again, it fell in with the complexity of getting to  
6 the actual connections.

7 COMMISSIONER OSTENDORFF: Okay. Thank you.

8 ELMO COLLINS: I'll add two points. One, this is the first time  
9 these have been -- this actual process and mod have been done at Fort Calhoun  
10 Station, so -- now, there were -- evidently there were some translation  
11 weaknesses or misses with how those were put in and how they were tested. I'll  
12 also add, just to -- we got to issue our inspection report on this, so -- well, we're  
13 very close to issuing, and I would -- I'm a little hesitant here to --

14 COMMISSIONER OSTENDORFF: I understand.

15 ELMO COLLINS: -- discuss it.

16 COMMISSIONER OSTENDORFF: Well, I guess -- but I  
17 understand this is a potential significant contributing cause to the fire. Is that  
18 what I heard from you? Is that correct?

19 ELMO COLLINS: That's correct.

20 COMMISSIONER OSTENDORFF: Okay. Let me go on to the third  
21 challenge you mentioned, Elmo, in the area of organizational effectiveness. And  
22 I appreciate you or anybody else at the table commenting on the existing Fort  
23 Calhoun management's capacity to address the situation with 0350 and  
24 strengths, weaknesses, areas for improvement on the management ability to get  
25 their hands around these issues.

1 ELMO COLLINS: I'll start just by saying this is a significant  
2 challenge for the site, organizationally. Just being in Column IV by itself would  
3 be a challenge to any organization. This station is also challenged by the  
4 external event that they experienced with the flood. And so -- and we believe  
5 with the fire and the significant operational event, that that adds to the challenge  
6 a licensee has. So, by any measure, this is going to be very challenging for the  
7 organization. I think we need to see, you know, how they move through this with  
8 their cause analysis, the extent and condition for some of the equipment issues  
9 they've seen, and the extent of causes and that's something we'll have to take a  
10 look at. I'm not in a position to say how that's -- too much uncertainty around that  
11 right now. Too many unknowns.

12 COMMISSIONER OSTENDORFF: Is the licensee getting any  
13 external assistance from other industry sectors or any industry coalitions?

14 ELMO COLLINS: Yes, I believe they are. They have entered into  
15 a contract with an Exelon corporation and I believe they'll probably speak more to  
16 you about that, though, when they're at the table.

17 COMMISSIONER OSTENDORFF: Okay. Thank you.

18 ELMO COLLINS: They're getting external assistance.

19 COMMISSIONER OSTENDORFF: All right. Thank you, Mr.  
20 Chairman.

21 CHAIRMAN JACZKO: The -- as we go forward, there are, as I  
22 think -- Elmo, as you talked about, a couple of pending, potential, greater-than-  
23 green findings. To what extent do those factor in at this point, as they -- if they've  
24 moved into Manual Chapter 0350, do we then keep -- you know, if these come  
25 out as more whites than yellows, does that have an impact on the ROP or what

1 do those mean going forward?

2 ELMO COLLINS: I think moving forward -- technically, Fort  
3 Calhoun Station has been removed from the reactor oversight process, but we  
4 will develop those findings and make an assessment of the significance. And so  
5 what practically will happen is they will then, once they're finalized, be handed to  
6 the Restart Panel for consideration of inspection and evaluation for licensee  
7 corrective action. It's not going to change our level of engagement at this point in  
8 time.

9 CHAIRMAN JACZKO: Given -- or, I don't know, Troy, did you want  
10 to add anything?

11 TROY PRUETT: Just to say if those findings that we believe would  
12 result in a greater-than-green result, those would go to the panel. The panel  
13 would add those to the restart checklist for resolution prior to restart.

14 CHAIRMAN JACZKO: It's -- and I guess, as I understand, based  
15 on the different potential findings, that it's possible that we could see them then  
16 with degradation in possibly four cornerstones. Have we ever had a plant in a  
17 situation like that? Well I mean, again, not putting them into the ROP but --

18 TROY PRUETT: Yeah, there hasn't been, and again there are a  
19 number of findings that are working their way through the process right now. I  
20 don't believe we would hit four degraded cornerstones, based on where they are  
21 in the process right now.

22 CHAIRMAN JACZKO: Okay. John, did you want to --

23 JOHN LUBINSKI: If I can just add, just -- no we have not had a  
24 plant in that area, and as we move forward, as Elmo said, the -- when we  
25 characterize these, we would not be characterizing them as additional degraded

1 cornerstones. The more important part is when we have plants that have a  
2 degraded cornerstone is how do we react, how do we do our inspections? And  
3 that's the purpose of the oversight panel, is to take the information from those  
4 findings, the risk significance of those, also determine the connection to the other  
5 items that have been identified, to verify that, number one, the licensee's plans  
6 for addressing and identifying the extent of condition and corrective actions are  
7 appropriate. And then from our standpoint to make sure our inspection efforts  
8 that were -- our enhanced inspection efforts under 0350 are adequately  
9 addressing not only the issues themselves but any crosscutting nature to them.

10 CHAIRMAN JACZKO: Well, thank you. I appreciate that, and I --  
11 you know, I think to some extent the ROP is a very useful tool for communication,  
12 so -- and I appreciate -- because I think moving to 0350, we don't really follow it,  
13 but I think there is some value of, to some extent, tracking these things as to  
14 where they would have been in the ROP even if -- you know, because if we see  
15 another yellow, we see additional whites, that seems fairly significant from plants  
16 that I've experienced in the time that I've been on the Commission, to see that  
17 many findings with that level of significance.

18 ELMO COLLINS: I'll just add, I mean, communication is a very  
19 importance piece of Manual Chapter 0350, as well. And so we will have public  
20 communication about what we believe the significance is. What 0350 adds is --  
21 an ROP would change the level of significance by different columns of the action  
22 matrix. That's not going to change our level of engagement because we're  
23 already what we believe is maximum engagement with the 0350 oversight panel,  
24 and for communication purposes, there's a series of, you know, public meetings  
25 that we'll be conducting to talk about where we're at and how we're moving

1 forward through the process.

2 CHAIRMAN JACZKO: And Commissioner Svinicki asks a number  
3 of really good questions about the 0350 process, and I think for all of us, this is a  
4 little new. And, I think, when I was on the Commission, Davis-Besse was coming  
5 out of their 0350 maybe, or maybe they had already, but they were still wrapping  
6 up, I think, the CAL items, so they may have already been out of the 0350, but  
7 were wrapping up the CAL.

8 Is there an extent in which, I mean, is there a difference, let's say,  
9 at this point, with the additional issues that would be identified if they had some  
10 high degree of significance that would be equivalent to yellows or possibly even  
11 red findings if they were under the traditional ROP? Is there a difference? I  
12 mean, do we go back and reevaluate effectively Column V, or is there really no  
13 difference at this point between being in Column V, being in 0350, and being shut  
14 down?

15 ELMO COLLINS: Yeah, technically, Fort Calhoun's been removed  
16 from the reactor oversight process, so those algorithms that are constructed to  
17 determine NRC engagement with the action matrix are not applicable in Manual  
18 Chapter 0350. In lieu of that, we have the oversight panel, which looks at each  
19 issue and its significance to determine how it needs to be addressed.

20 So, what we rely on in 0350 is getting the right items and to restart  
21 for safety is getting the right items in the restart checklist and getting those items  
22 resolved and addressed appropriately, and to provide that additional verification  
23 of safety before the plant returns to power.

24 CHAIRMAN JACZKO: Would there be more tools if we were to  
25 terminate 0350, put them back in the ROP, and put them into Column V than

1 tools that we have available now under 0350?

2 TROY PRUETT: No, I don't believe so. Column -- if you hit  
3 Column V, you automatically transition into 0350, and you go into this process,  
4 so the process wouldn't be any different.

5 BILL BORCHARDT: And I think the bottom line is that the licensee  
6 needs NRC approval to restart, I mean, so, that's -- and we won't give  
7 authorization to restart until the startup checklist is done, we're satisfied that all  
8 the corrective actions have been taken for all the issues identified, and, so, it's -- I  
9 think there's a very strong regulatory footprint on the process from this point on.

10 CHAIRMAN JACZKO: Great. Well, thanks. One last question on  
11 that. Do we have any preliminary results on the -- have we run the fire event  
12 through the ASP at this point? Do we know? Is there plan to be an ASP  
13 analysis?

14 JOHN LUBINSKI: There will be analysis. We have not run that yet.

15 CHAIRMAN JACZKO: Yeah. Okay. Any expectations of what that  
16 -- is there a potential to be a --

17 JOHN LUBINSKI: Don't want to --

18 CHAIRMAN JACZKO: -- significant precursor, or --

19 JOHN LUBINSKI: Don't want to prejudge at this point. We'd have  
20 to run the information first.

21 CHAIRMAN JACZKO: Do we have a timeframe for when we would  
22 likely do that?

23 JOHN LUBINSKI: Do we have a time frame --

24 RANI FRANOVICH: Eighteen months.

25 JOHN LUBINSKI: Eighteen, I'm sorry.



1 RANI FRANOVICH: Eighteen months.

2 CHAIRMAN JACZKO: Have we started?

3 JOHN LUBINSKI: Rani, if you could just come to the microphone.

4 Rani Franovich is the branch chief in charge of our performance assessment and  
5 program.

6 RANI FRANOVICH: Yeah, Rani Franovich. Research does the  
7 ASP review, and they do a screen each year, but it can take 12 to 18 months to  
8 have the final outcome. I believe they probably are reviewing it, but we don't  
9 have any indication of where they are and what the results are indicating.

10 CHAIRMAN JACZKO: Okay. Thanks. Again, maybe we can just  
11 confirm or let us know if they are actually doing it or --

12 RANI FRANOVICH: We'll take that action, Chairman.

13 JOHN LUBINSKI: We'll do that, sure.

14 CHAIRMAN JACZKO: Great. Thanks. Okay. I think those are all  
15 the questions I had, so, again, thank you for your presentation for the work that  
16 you've done. I think this is a very appropriate action on the part of the agency,  
17 and I look forward to continued updates on progress. Thanks. We'll take a quick  
18 break.

19 [break]

20 CHAIRMAN JACZKO: Okay. We'll continue meeting and get a  
21 presentation from the Omaha Public Power District. Gary, I'll turn to you to begin  
22 and however you want to proceed.

23 W. GARY GATES: Thank you, Mr. Chairman. I'd like to introduce  
24 the people at the table with me. Dave Bannister is the chief nuclear officer and  
25 vice president of our company. I'm Gary Gates, president and CEO, and John

1 Herman's our division manager of engineering.

2 I'd like to open with a few opening comments, and then for the  
3 sequence, Dave Bannister's going to go over in some detail our recovery plan  
4 which will cover the points that we heard earlier in the meeting as we go through  
5 this as well.

6 First, I'd like to cover a couple of things, what we're here to do and  
7 what we're not here to do. First, I want to assure you that we understand the  
8 seriousness and the scope of these issues. We have a sense of urgency to  
9 return Fort Calhoun to sustained high levels of performance. I intentionally did  
10 not say a restart, I said sustained levels of performance. That'll be action-based,  
11 we don't have a time table. We want to share the elements of our recovery plan.

12 It's taken a long time to develop this plan. We will get it to the  
13 restart committee with Troy very soon, and the reason it's taken us a long time  
14 are two: As we surveyed the industry on similar situations, our advice was take  
15 your time up front, do the plan very well, do it very detailed, and have all the  
16 corrective actions in it that you need; a second is we want to kill this issue  
17 completely as we move forward.

18 We're clearly not satisfied with our performance. We'd like to  
19 assure you we have the support of our entire company. I can talk at any level of  
20 detail about that and our board for resources. Also, the majority of the workforce  
21 at Fort Calhoun are experienced, long-term employees. They have operated at a  
22 high level of performance. We lost our edge. The workforce at Fort Calhoun is  
23 very willing and anxious to make any changes needed and have already started  
24 that process.

25 I'd like to cover what we're not here to tell you, that we've

1 completed all our discovery. We have more to come in that, as was mentioned  
2 earlier. We do not want a short-term fix. We're a work in progress. We're  
3 challenging ourselves, questioning everything. We're doing deep dives to get  
4 root cause identified. As we find those deep dives, other issues will come up.  
5 We anticipate that, and we'll deal with them. Changes, we will make. You have  
6 my personal and the company's commitment on that.

7           We're not assuming that we have the capacity to do these efforts  
8 without outside help, to ensure our sustainable performance. Dave will cover  
9 that in his presentation on the additional resources that we've brought in to help  
10 us.

11           My last comments would be, as you listen to Dave's comments and  
12 to our presentations today and our answers, please do it in this context: We have  
13 a long-term goal of sustained performance. We understand we have let the  
14 industry down and we have let ourselves down with our performance. We have  
15 the drive, commitment, and heart to return this station to high performance.

16           Performance recovery is in progress. We've done a lot of individual  
17 root causes and have those results. We have interim actions in place to deal  
18 with, specifically as mentioned earlier, safety culture and those issues. But,  
19 additional items with improvement will be needed and are in our overall plan.

20           I'd also like to assure you that the industry has rallied to help us.  
21 We were very involved on a national level. I can say across the board -- and I  
22 think it's unique to the nuclear power industry -- the amount of help we've been  
23 offered and taken to return our station to high performance. We will be a high-  
24 performing unit. Dave, would you please go through our presentation?

25           DAVID BANNISTER: Okay. On slide one, first of all, I'd like to

1 thank the Commission for the opportunity to talk about our performance in a  
2 public setting. On side two, I'll talk about the key areas I'm going to discuss this  
3 morning and cover.

4 First of all, an acknowledgement of our performance issues and our  
5 accountability to them, the key objectives of our performance improvement plan  
6 and really our actions that dictate them going forward, and then finally some  
7 specific details about the plan itself. Okay. Slide three.

8 As Gary indicated, Omaha Public Power District understands the  
9 significance of the position that we're in, and we hold ourselves responsible for  
10 our unacceptable performance. We're committed to do what's necessary to  
11 identify, analyze, and resolve our performance issues.

12 Our performance issues were revealed by violations of color and  
13 other internal findings. Violations dealt with -- and you've already been briefed  
14 on those -- our flood preparation procedures, a failed electrical contact interactive  
15 protective system, some handling of some historical security-related information,  
16 and our corrective action program culture.

17 To date, we've done causal analysis on each of these issues and  
18 put forth detailed, corrective actions. We've rewritten our flooding procedures,  
19 fabricated, upgraded flooding gates and plates as a positive protective feature,  
20 and upgraded our flooding strategy.

21 We recognize we have more work to do. This was revealed at our  
22 specific flooding readiness inspection that we had in early February, and this  
23 resulted in some additional revisions to our flood procedures, and in the process  
24 of evaluating a safety class of a particular equipment in our intake structure.

25 We've replaced the failed contactor in our reactor protective system

1 and the three backup contactors in the other channels, and this was done last  
2 February. We've improved our handling and storage of security-related  
3 information and we've instituted stronger management oversight in our corrective  
4 action program.

5 Our event, which we've talked a bit about, is a breaker failure that  
6 occurred on June 2nd, or, excuse me, June 7th, and we anticipate that there is a  
7 finding of significance on this issue. To date, we've replaced that breaker in the  
8 load center and we have testing in progress.

9 We clearly understand that we must improve, and we've  
10 established a sense of urgency in our organization to improve not only our  
11 performance with safety but also from a regulatory perspective. We're taking  
12 strong management actions to continue to strengthen our leadership and  
13 management of the station, improving our oversight and rigor into our technical  
14 decision-making, and improving our human performance. Next slide.

15 Next, I'll discuss some key objectives of our integrated performance  
16 improvement plan, and they are as listed to improve and sustain station  
17 performance, equipment reliability, and risk reduction; to identify and correct  
18 human performance issues; to ensure ownership in the improving initiatives;  
19 reestablish regulatory confidence; and reinforce public confidence.

20 And we talked -- as Gary Gates had talked before our focus is  
21 really a long-term approach to performance improvement and not taking a short-  
22 term view of this. We do that by being rigorous in our analysis, digging deep in  
23 the discovery of our issues, and then recognize that the plan has taken time to  
24 evolve. However, we want to ensure that we do this right the first time, that the  
25 analysis has the right breadth and depth, and that ensures that we clearly

1 understand the issues and put forth a correct -- smart, corrective actions.

2           Slide five talks about some of the improvement plan attributes, and  
3 these are really the attributes that will make the plan successful. First of all, site  
4 engagement. This is at all levels of the organization, whether people are  
5 participating on the performance improvement team; identifying and  
6 implementing the corrective actions; or being part of the analysis and part of the  
7 discovery.

8           Next, a strong, external support. Gary Gates indicated that we  
9 have reached out to the industry and have gotten a tremendous amount of  
10 support. One of those are from Exelon nuclear partners -- and I'll talk more about  
11 them in terms of leading our performance improvement efforts -- the Institute of  
12 Nuclear Power Operations, and other industry experts.

13           We've also employed internal and external oversight, both from our  
14 internal quality organization, our nuclear safety reviews, our independent offsite  
15 review committees, and line organization assessments. We've also increased  
16 our internal and external communications really with a focus on being transparent  
17 and open in our communication and our messaging.

18           And, finally, our projects scope, which is much, much broader and  
19 much more focused on sustained improvements rather than just meeting the  
20 minimum requirements associated with startup.

21           The next slide, I'll talk a little bit about the organization, and this is  
22 our performance-improvement team, and these are really the keys to the  
23 organization. First of all, a dedicated, blended team of OPPD, Exelon, and  
24 external experts. The organizational accountability as you see in the chart  
25 directly to the chief executive officer of the improvement team.

1           The team is largely self-contained. It has the right expertise  
2 embedded on the team to analyze and resolve technical issues and assist with  
3 the implementation of corrective actions in a number of areas, being it with safety  
4 culture, identifying and correcting deficiencies, reactor system reviews, the  
5 corrective action program, or analysis of engineering and maintenance issues.  
6 There's a representation on the team from every line organization at the station.

7           The next slide shows some of the major elements of the integrated  
8 plan, and I'll talk briefly about each one of those. These elements were selected  
9 to ensure that we have a complete understanding of our performance issues and  
10 that we develop the right actions in place to address them. The elements are,  
11 first and foremost, are our flood recovery plan, and that really recovers the  
12 physical plant and really ensures we harden our flooding strategy and take care  
13 of any issues of any impact the flood may have on the plant.

14           A detailed reactor safety system review, detailed assessment of the  
15 processes and behaviors used to identify and correct our deficiencies at the  
16 station, an independent assessment of our nuclear safety culture, detailed  
17 assessment of our corrective action program, and then, of course, review of  
18 selected engineering and maintenance processes. And these were processes  
19 that were identified doing some of our internal assessments and some inspection  
20 activities.

21           Next, I'll go on to provide some more detail on each section of the  
22 plan, which I've just laid out here. On slide eight, first of all, the flood recovery  
23 plan, and really, the plan analyzed and addressed the physical impacts that the  
24 flood had on the station in six broad areas. The actions from the flood recovery  
25 plan have been put into our integrated plan. We felt that was necessary.

1 First of all, the site restoration, that deals with the physical cleanup  
2 and recovery of the site in and around the station. It also deals with the recovery  
3 of the load center and the fire that occurred on June 7.

4 Plant systems and equipment assesses any flood-related impact  
5 that the plant systems and equipment had due to having water on site for nearly  
6 100 days. The equipment reliability looked at any long-term effect the flood may  
7 have on station equipment and the site itself. This is where you would see the  
8 geotechnical or soil evaluation. The design and licensing basis assessment  
9 really looks at the configuration and licensing basis changes that we may need to  
10 look at as a result of the flood.

11 The emergency plan basically assessed and corrected any  
12 equipment deficiencies or responses that were impacted by the flood and any  
13 necessary changes we would make -- need to make long-term. And then, finally,  
14 the security aspect is to ensure that we've restored the physical security system  
15 and then looked at if there's any enhancements we need to make going forward.

16 On slide nine, it talks about the reactor safety review, and this is an  
17 intrusive assessment into selected safety-related functions, subsystems, and  
18 processes really to verify that we can fulfill their safety-related functions. We also  
19 look cross-functionally to evaluate if any safety organizational performance  
20 issues exist with the maintenance design or the operation of the system that  
21 we're looking at.

22 As part of that review, there's a couple of key attributes that I'll  
23 touch on. In the design equipment performance and configuration control  
24 attribute will verify that the system can fulfill its intended safety-related function  
25 and we'll do that by doing a detailed review of the design basis, the operation,



1 and any past modifications that we made. We'll also, as a part of this review, do  
2 a latent issue review. We'll also assess the effectiveness of any corrective  
3 actions that we've done and look at any performance deficiencies that have  
4 evolved with the system and any testing methodologies we'd use to prove  
5 operability of the system.

6 We'll also verify proper configuration control of system by doing  
7 plant walk downs, design document reviews. We'll also look at our work control  
8 process to make sure that we properly evaluate risk when we're doing  
9 maintenance or upgrades on any portion of the system.

10 Next, in the human performance attribute, we'll assess our  
11 effectiveness of identifying and correcting issues dealing with human  
12 performance. We'll give specific attention to any attribute identified in a cross-  
13 cutting aspect really to evaluate its impact on work control, decision-making,  
14 work processes and practices, resources, and ALARA planning.

15 In the procedure review attribute, we'll assess how effective we are  
16 in identifying and correcting deficiencies dealing with plant procedures, and we  
17 won't limit these just to operational procedures, but we'll take a broader look,  
18 including things like emergency preparedness procedures. And, finally, we'll look  
19 at the effectiveness of the emergency response organization readiness.

20 On slide 10, I'll discuss the processes that we'll use to evaluate the  
21 things that we do to identify and correct performance deficiencies at the site;  
22 sometimes this is called an IACPD review. Purpose of this review is to determine  
23 whether our systems were identifying and correcting performance deficiencies  
24 are really adequate. To do this, we'll evaluate a number of processes and  
25 programs.

1           We'll look at our performance improvement programs. This  
2 includes a corrective action program, our causal analysis program,  
3 benchmarking, trending, self-assessment, and the use of operating experience.  
4 We'll also evaluate our performance goals and metrics to ensure they're  
5 appropriately set and how well known they are throughout the organization. We'll  
6 evaluate any greater than green finding to validate that we've done a good depth  
7 of analysis and we've got the right corrective actions in place.

8           We'll also review our employee concerns program. Part of this is to  
9 ensure that employees are free to raise concerns without any fear and also that  
10 each of those -- if there was a concern brought forward, that it was appropriately  
11 inspected, evaluated, and actions put in place.

12           And, finally, we'll conduct what we call a historical data review, and  
13 this is -- we do this by doing document reviews and what I would call this, a  
14 binning process, really, to take a look to ensure that actions that we have taken  
15 and issues we have had in the past were properly characterized and acted upon.  
16 And, of course, any deficiency we find in there will be corrected.

17           On slide 11, is the third-party safety culture assessment. That will  
18 be performed by Conger & Elsea; they're a nationally recognized firm that  
19 provides root cause analysis and safety culture assessments. The assessment  
20 is a very important part. We recognize that and really consists of three key  
21 elements: behaviors and practices, safety culture, and employee concerns. And  
22 the idea of this, the assessment really allows -- we want employees to open up  
23 and encourage them to raise concerns and offer opinions about how we do our  
24 business at Fort Calhoun.

25           We really recognize the importance of culture and the role that

1 safety culture plays in our day to day operation. That's why we've implemented a  
2 lot of interim actions, you know, regarding culture and how we get this  
3 information. We have daily discussions on a safety culture attribute. We utilize a  
4 safety culture advocate, a person that sits in some of our higher-level  
5 management-level meetings to just focus on safety culture, where we may have  
6 missed an opportunity to utilize and discuss safety culture in a decision-making  
7 process.

8           We also do abbreviated safety culture surveys to try to get insights,  
9 and a lot of this deals with our messaging and communication to a site to make  
10 sure that we're keeping on top of that and seeing what impact safety culture may  
11 have on our decision-making interactions. And, with all that knowledge and  
12 information, we still recognize that this is an opportunity for us in an area that we  
13 have to do better in.

14           Regarding our third-party safety culture assessment, just to give  
15 you some perspective, this will be done with survey, individual interviews, and  
16 focus groups. And the target population will be all Fort Calhoun Station  
17 employees and any consultants or contractors have been on site for greater than  
18 six months. The surveys start on the 27th of this month, and we expect the final  
19 report in early May.

20           The performance improvement team provides line ownership of the  
21 safety culture process and survey, and the key element of our involvement is to  
22 make sure that it's an independent assessment. That's got to be key. And then  
23 the final report we issue will be rolled up to and factored into our integrated plan  
24 and our action moving forward.

25           On slide 12, our corrective action program improvements are vital

1 for us because we -- based on our analysis, our corrective action program hasn't  
2 served us in the mean that it should. It hasn't been doing the things that we  
3 needed it to do. Key elements of our corrective action program culture  
4 improvements include a causal analysis that we've done, and really to pinpoint  
5 where our corrective action program deficiencies lie. Some key interim actions  
6 that we have taken to date primarily deal with more oversight and focus of senior-  
7 level management, management of the station on corrective action.

8 I've personally given my expectations to all station leadership  
9 regarding CAP, the importance of the program, the fact that it is core business. It  
10 demands our attention each day, and there's no tolerance for shortcuts.

11 We're demanding higher standards in our analysis and our  
12 corrective action oversight, and we're coaching lower thresholds and writing  
13 corrective action documents for the entire site. We also are conducting training  
14 as part of our causal analysis. We have done an upgrade of our corrective action  
15 program. We're actually conducting training on that revised program and the  
16 culture aspects of that today. You know, part of that training includes the fact --  
17 and what does it mean when we say that corrective action program is core  
18 business and how we expect it to be the corrective action program to be used at  
19 the site, the fact that we're instituting higher standards for causal evaluation,  
20 action item closure, and the level of documentation that's required for closure, the  
21 amount of senior management oversight we put in the corrective action process,  
22 and our expanded use of training to identify issues early before they become  
23 larger issues.

24 On slide 13, I'll discuss some of our plans for assessing selected  
25 engineering and maintenance processes and issues. We identified a number of

1 engineering and maintenance programs and processes that, in all cases, weren't  
2 meeting our needs and expectations. Each area is being thoroughly analyzed  
3 and evaluated to identify any past discrepancies and actions that we need to be  
4 taken to correct and strengthen the processes and behaviors going forward. The  
5 findings in these reviews will be evaluated in the aggregate, and then actions will  
6 become part of our integrated plan.

7           Some weaknesses that we are investigating and will continue to  
8 investigate really include our degraded non-conforming condition process, our  
9 operability evaluations, use of vendor manuals, and the upgrade of those  
10 manuals, our configuration control of safety-related equipment, our equipment  
11 service lives, safety evaluations and 5059 screenings, and our oversight of  
12 vendors.

13           Now, on slide 14, we recognize that our integrated plan will identify  
14 our issues, and yet the overarching objective of the entire plan is to improve our  
15 performance long-term, and we really ensure this by doing an collective  
16 evaluation of each of the individual elements of the plan and then rolling those  
17 analysis up and then doing an overall analysis of all the issues. We also do this  
18 by developing smart, corrective actions with the appropriate management  
19 oversight of the review and implementation and closure of each of those actions  
20 by implementing management changes to strengthen and challenge our  
21 oversight of the station and our recovery efforts. We also do this by employing  
22 external sources. We talked about some of the folks and the help that we've  
23 gotten from the industry, and that actually, to lead an oversight our improvement  
24 activities and also provide us counsel and direction. Also, by providing long-term  
25 oversight, and these are both by internal and external sources of oversight, and

1 then we provide check and adjust points within our action plans and interim  
2 actions to make sure that we're staying on the path and we're making the  
3 improvements at the rate that we expect.

4           Now, what's different today? Well, we're utilizing the systematic  
5 approach to evaluate where we are. We recognize that our performance issues  
6 are broad, and we have to dig deep to be able to get those on the surface so we  
7 can get forth the right actions to correct them. And, really, it's looking at the  
8 cultural level and getting it in at the cultural level to ensure these are sustained  
9 long-term.

10           Before I turn this back over to Mr. Gates, there's a couple of points I  
11 want to reinforce to you. I clearly understand the significance of the position that  
12 we're in, and I hold myself responsible for our unacceptable performance. I've  
13 never been in this situation before, but you have my word, I will fix it.

14           We're taking a long-term approach, and really, that's looking at this  
15 from a performance-improvement perspective, and it really starts with digging  
16 deep to get these issues uncovered and then put forth the right action to correct  
17 it. I commit to you that we'll focus on nuclear safety each and every day; that's  
18 our primary value, our primary focus, and we won't deviate from that. I'll turn this  
19 back over to Mr. Gates.

20           W. GARY GATES: Thanks, Dave, and, to you, Mr. Chairman, and  
21 the Commission for giving us this opportunity to speak to you today on our plan.  
22 As Dave said, and the whole OPPD team, we're serious about safety. We  
23 understand that. We understand our obligations to the industry and our  
24 responsibilities.

25           I have the privilege of working in this nuclear industry for almost 40

1 years now, and I know what Fort Calhoun Station is capable of. I know what the  
2 people are capable of there, and with personal interaction, I know their  
3 willingness to do the right thing.

4 We will not return Fort Calhoun to operation until we're satisfied and  
5 recommended along, I know, with the CAL process from the NRC's point of view.  
6 You have my commitment, personal commitment, CEO and Gary that we'll get  
7 this fixed. We'll do it right. We'll do it in a very thorough, very professional, and  
8 very transparent manner. Thank you and we would appreciate your questions at  
9 this time.

10 CHAIRMAN JACZKO: Thank you for that presentation. We'll start  
11 with Commissioner Svinicki.

12 COMMISSIONER SVINICKI: Well, my thanks to each of you for  
13 the messages that you've delivered here today and for the update you've given  
14 on the status of actions at Fort Calhoun Station. I had a chance to visit there. I  
15 can't recall specifically when it was. It was probably over a year and a half ago,  
16 and it was well before the flooding event and some of the recent events that the  
17 NRC staff panel talked about, and I appreciated the opportunity, though, to visit  
18 the station and talk to the women and men who worked there.

19 I'm going to touch on a few items, and I want to acknowledge that I  
20 know that we're, as the NRC staff panel indicated early in the process, so I  
21 acknowledge that up front, but I'm still going to ask some questions, and please  
22 respond to the extent that you have the information or details, and you can give  
23 some indication of where things stand.

24 I'll start with a very general question. Mr. Gates, you had  
25 mentioned that your board and others are fully supportive of making the

1 resources available that the station needs to take the actions that will be  
2 necessary, and I appreciated your commitment to that. That will obviously be  
3 key if things aren't resourced, they can't be accomplished. However, I know as  
4 we look forward on some post-Fukushima actions, Fort Calhoun as other stations  
5 may be receiving requests for information and other compulsory actions, are  
6 there areas where you feel that your response to what NRC might require on  
7 those items, which, again, to some level of detail about those actions has already  
8 been communicated from the NRC staff to the industry, so you must have some  
9 general awareness of what you're looking at in terms of a post-Fukushima  
10 response to the NRC. Do any resources, in terms of key niche expertise  
11 compete with things that you have, commitments you will have to make under  
12 this 0350 process, and, if so, how will you balance that?

13           W. GARY GATES: Let me start that, Commissioner, if I could. The  
14 way we're going to handle those capacity requirements to handle both  
15 Fukushima -- we're also in the process of transitioning to NFPA 805. We have  
16 the emergency preparedness rule that's out that we're working through. We  
17 have the cyber and all those issues. We're specifically bringing those separately  
18 out of the organization to be managed -- and in concert with the line organization  
19 but in a separate function so we get the right focus on it, we devote the right  
20 resources to it. As a matter of fact, we have set ourselves an internal goal that  
21 we want to lead the country in one of the Fukushima items, which is increasing  
22 our station blackout time. As we recover from this effort, we think that's a  
23 proactive message and also one that our plant can get its arms around and  
24 execute. It being a smaller PWR, we've got a lot of options in that area. So we  
25 plan on leading those efforts and not just reacting to them as a unit. I'd let Dave



1 input some more color around that, but we do understand the additional capacity  
2 and we provided that structurally in the organization as well as resource-wise.

3           DAVID BANNISTER: As Mr. Gates just pointed out, it's exactly  
4 what we have done. We've -- I don't want to say compartmentized, but we have  
5 designated people in the organization focusing on just the Fukushima pieces,  
6 going to the various working groups and committee meetings, looking broadly  
7 across the industry on the input on what are other sites doing? In some cases,  
8 doing the analysis or what's the best practice to be able to implement the right  
9 structure or right process. We're doing the same thing with all the other  
10 initiatives. One I'll also point to is the security order. And, you know, that is  
11 going down the path and has been. Even -- if you can believe this, even during  
12 the flood we had activities that were still going in terms of planning processes, et  
13 cetera, to get ready for our actions as soon as the flood waters receded to get in  
14 there and do the work for the security order. So that's all ongoing.

15           COMMISSIONER SVINICKI: Okay, thank you. And to continue a  
16 bit on this theme, but turning now to external support, which you've indicated  
17 that, where appropriate, you will supplement your efforts, you have a partnership  
18 with Exelon. I'd like to turn to the concept, though, of sustainability in recovery  
19 versus external support. And I'm not saying that external support should be  
20 spurned. There's a lot of really valuable external support, both Exelon and other  
21 industry-wide sharing of lessons that you can tap into. As a matter of fact, one of  
22 the things I recall from my visit to Fort Calhoun Station, which is in walking from  
23 one part of the facility to another I spoke to one of the station executives about  
24 the fact that he had an opportunity through INPO to be at another station and  
25 how valuable he and others at Fort Calhoun found those opportunities. Again,

1 it's a comparing of, as he put it, "How we do business versus how other people  
2 do business." And so obviously reaching out and not becoming insular is very  
3 important, but you do need all of your measures to be sustainable for Fort  
4 Calhoun Station over the long term. It's this peril of having, you know, fixers  
5 come in but then they haven't really, once they depart, had you -- really have you  
6 invested in something that will be very enduring for the station. How are you  
7 approaching that?

8           W. GARY GATES: The -- and I'll let some more comments be  
9 made, but the way we're approaching that -- that's an excellent point. As Dave  
10 said, we integrated the recovery crew. Right now it's about two-thirds OPPD  
11 people and one-third outside resources. So we want our folks to learn the  
12 lessons and then come back into the line organization. Our plant manager, Tim  
13 Nellenbach, is going on loan to INPO. And he'll be spending his time in a very  
14 detailed program in our cooperation with INPO to raise standards and  
15 understand what's going on around the country. Because as a single unit, single  
16 operated unit, being insular is something you really have to guard against. And  
17 we have put those into our plan, as well. So we have integrated crews with the  
18 folks.

19           And the other piece is we are going to stay with an outside support  
20 as long as necessary until we're satisfied that we have the unit sustainable. And  
21 it may be a prolonged period of time. We're not sure what that'll be. We are  
22 starting those discussions. But we recognize that, particularly in a single unit of  
23 our size, it is always going to be a challenge for insularity -- if that's a word. I  
24 may have just invented one. I hope not. Or the fact that we will always be  
25 capacity-challenged in the degree of -- the way we looked at this, you know, you

1 have a station staff that's running and typically every unit has excess capacity  
2 that they use for special projects and everything. So we put in new steam  
3 generators and head in 2006, and we grew capacity with a single vendor, it was  
4 Bechtel at the time. And then we reduced down to our normal staff and we were  
5 putting in projects. But if you -- the ones you just mentioned, Fukushima and the  
6 other ones we alluded to, take additional capacity, and then layering on top of  
7 that. So we're going to always be, I believe, in a position to need additional  
8 capacity beyond what we have. We had a lot of additional capacity due to our  
9 extended power uprate, which we were pursuing, and we have now suspended  
10 to focus those resources on this recovery. As a matter of fact, that extended  
11 power uprate has provided us some great information because we were doing  
12 system reviews to do that, to raise the power level. So we have a lot of  
13 information from deep dives, from the extended power uprate that will serve us  
14 well as we go through this recovery effort. Dave, I -- but we're internalizing those  
15 lessons.

16 COMMISSIONER SVINICKI: Okay. Thank you.

17 DAVID BANNISTER: Yeah, we had actually a lot of discussion  
18 upfront because we were concerned with the same thing. That, you know, once  
19 the cavalry leaves, you know, what does that leave the rest of us? And so my  
20 analogy is that the ramp-up is very quick to bring on the additional resource, but  
21 there's a slow decay curve of getting those resources out. And the intent of that  
22 is that there's a -- that learning has to take place, that there's oversight and  
23 challenge as we continue -- once the plant is up and performing at the level that  
24 we expect, we want to continue that. So there's a slow removal of this external  
25 resource. As we're building, you know, our knowledge, improving our

1 performance, and really culturally sustaining that new type of culture we want in  
2 our organization.

3 COMMISSIONER SVINICKI: That sounds like a very appropriate  
4 way. You don't want an abrupt removal of external support, because its gradual  
5 removal I think will allow the station to adjust back over time. In military sense  
6 we call that surge capacity. But -- the additional capacity that you're talking  
7 about. The challenge, of course, will be that with the actions that NRC has under  
8 contemplation for Fukushima, all of the industry will be surging at the same time.  
9 So there's going to be limited, as I call them, smart nuclear people across the  
10 country to put on some of these questions. You have a very near-term need in  
11 terms of your recovery process from the 0350. So it sounds like you've done a  
12 lot of thinking about that upfront and I appreciate that.

13 In my brief remaining time I'm going to ask you -- although it's not  
14 really central to today's meeting, I can't help but have a curiosity about the  
15 extreme flooding event that you experienced. As you think about that at a high  
16 level, do you feel that there are generic lessons for the industry that you're going  
17 to be able to draw from that extreme natural event, and is there anything that you  
18 could share in terms of kind of inter-organizational or inter-agency cooperation,  
19 state, FEMA, and others? Will you be looking on any Lessons Learned there that  
20 you could feed back into other people's Lessons Learned system?

21 W. GARY GATES: We have a detailed Lesson Learned document  
22 that's still under development but has quite a bit of legs under it to address those  
23 issues, and we certainly will. We do have -- we think we can offer to the industry  
24 some insights. And I would just give one, in the interest of time, and Dave may  
25 have others. I think it's the length of time that you may be in an external event.

1 Most plant events, pretty quick, typically. But external events can end up being  
2 very, very protracted. And that brings on a whole new set of challenges, as when  
3 the Chairman was out seeing us, I mean, to the point where you're carrying copy  
4 paper in by hand just to run procedures for operators to use and those kind of  
5 things. So I think the looking at the length of time is just an example of one of the  
6 insights.

7 COMMISSIONER SVINICKI: Did -- Mr. Bannister, just quickly, did  
8 you want to add anything?

9 DAVID BANNISTER: And I know the Chairman was out and saw,  
10 we actually met at the Corps of Engineers Head Office, which is only four or five  
11 blocks away from our corporate office. And that was the one thing that I saw, is  
12 very early on when we started -- you know, because every day -- we live on the  
13 river, so every day we're looking at their websites, we're looking at the river,  
14 looking at the National Weather Service, and we were seeing this. And then it's  
15 that dialogue upfront and early. That's what gave us the early indication that, you  
16 know, this wasn't something that was, one, going to go by quickly. And that's  
17 why, in our dialogue with them -- even though they weren't necessarily projecting  
18 the river levels that we saw eventually, with that early insight we took early  
19 action. And so that gave us time and really allowed us -- the safety part of the  
20 plan is easy to protect, because that's what the procedure's designed to do. But  
21 we protected all the, you know, millions of dollars of asset around the site. And it  
22 was that early dialogue and early conversations that we had with the Corps of  
23 Engineers, the National Weather Service, and other state agencies and federal  
24 agencies that helped us make those decisions.

25 COMMISSIONER SVINICKI: Okay. Thank you. Thank you, Mr.

1 Chairman.

2 CHAIRMAN JACZKO: Commissioner Apostolakis?

3 COMMISSIONER APOSTOLAKIS: Thank you. Mr. Bannister, you  
4 had a series of slides where you described your integrated performance  
5 improvement plan, flood and recovery, reactor safety, correcting performance  
6 deficiencies, and so on. Actually, what I would be more interested in is to know,  
7 in your opinion, what were the top two or three areas where you feel you went  
8 wrong and you ended up in this unhappy situation?

9 DAVID BANNISTER: Well, I would call it more than an unhappy  
10 situation.

11 COMMISSIONER APOSTOLAKIS: Unfortunate?

12 DAVID BANNISTER: Yeah. What I really point down to, the one  
13 issue is our corrective action program culture, our -- and it's a culture that  
14 evolved over time. We looked at it more of a work driver, more of a -- you know,  
15 it's a way to manage the system rather than being "this is the work that we do, it's  
16 finding and correcting our performance deficiency." That is the work that we do  
17 in our business, and so if I can point to one thing, that is the one area, where  
18 over time, that we didn't hold a high standard there. The other is, really, it falls  
19 upon the shoulders of leadership. We weren't holding our people accountable,  
20 particularly with the corrective action program, to identify issues at a low level  
21 and kill them dead. And we'd continue to have these issues reappear or we'd  
22 have an -- whether it be an equipment deficiency or, you know, our procedural  
23 item or a behavior. That we did not jump on that. You know, and that's a  
24 leadership issue, and that also requires some cultural change within the  
25 organization. And, quite frankly, it involves some management change at our

1 site. One of the things that we've also done is by bringing on Exelon Nuclear  
2 Partners, they recognize they have a significantly different culture than we do,  
3 and that's not by accident that we reached out to them to give us that type of  
4 insight.

5 COMMISSIONER APOSTOLAKIS: You are part of the USA --  
6 what is it?

7 DAVID BANNISTER: Utility Service Alliance?

8 COMMISSIONER APOSTOLAKIS: Yeah.

9 DAVID BANNISTER: Yes.

10 COMMISSIONER APOSTOLAKIS: You are part of it.

11 DAVID BANNISTER: Correct. Correct.

12 COMMISSIONER APOSTOLAKIS: So did you have outside input  
13 or support from your fellow members?

14 DAVID BANNISTER: We do. And it's -- some of it is prescribed  
15 that we have, and it's -- you know, it's -- you know, that we get monthly,  
16 quarterly, et cetera. Much of it, though, is on demand. When we ask for it, you  
17 know, they come in and provide it. And, you know, what I will tell you is that in all  
18 cases that didn't get to the right level. You know, now I see that. It's very clear  
19 to me that, you know, with management and leadership and in some cases  
20 sharing of those leaders, having them go to another site, see what they do with  
21 related -- whether it be engineering or corrective action, and then bring that  
22 information back. We need to do a better job of that.

23 COMMISSIONER APOSTOLAKIS: Yeah. I'm curious, because,  
24 Mr. Gates, you mentioned the potential for insularity. And being a member of  
25 USA probably that's a way of fighting against it. But evidently it didn't work very

1 well.

2           DAVID BANNISTER: Well, certainly we didn't apply it in the right  
3 areas. We do a very good job in the areas of training and qualification. Maybe  
4 with particular operator performance issues and how we evaluate them, and the  
5 standards with crews. We needed more work on just -- you know, I would call  
6 the blocking and tackling, of finding and fixing our issues and killing them dead.  
7 There was an opportunity of course that we missed.

8           COMMISSIONER APOSTOLAKIS: Yeah, yeah. Well, it's  
9 interesting that you identified the corrective action program is the number one. I  
10 mean, we've always believed that this was the cornerstone of a good culture, a  
11 good performing plant, and so on. So you confirmed it once again. Well, thank  
12 you very much, Mr. Chairman. Back to you.

13           CHAIRMAN JACZKO: Commissioner Magwood.

14           COMMISSIONER MAGWOOD: Thank you. And, welcome. This  
15 is a -- you know, first, I appreciate Commissioner Svinicki mentioning the flood.  
16 Let's just go into -- you know, indicated -- as that situation unfolded, you know,  
17 we like many other people in the country were watching you deal with that. So I  
18 just wanted to say I appreciate that, you know, the unusual circumstances, you  
19 know, beyond the performance issues we talked about today, of just dealing with  
20 that natural disaster and -- not just for the plant, but obviously for the people that  
21 work at the plant, who live in the region. And I have no doubt that there were  
22 people who were personally affected by the flood, so I just wanted to pass on  
23 that --

24           DAVID BANNISTER: Thank you.

25           COMMISSIONER MAGWOOD: -- you know, certainly that was



1 something we were -- in our thoughts during that time. The -- one thing I wanted  
2 to -- and Commissioner Apostolakis, he often steals my questions because he  
3 gets to go before me. So he's done that again. But one thing -- as he was  
4 having the dialogue about what were the issues you thought got you to this  
5 place, one thing that Mr. Gates in his remarks was, you know, "That we lost our  
6 edge." And I'm just curious, because, you know, while we have a very  
7 systematic way of thinking about nuclear safety performance, nuclear culture,  
8 there's always, as leadership, you have a sense as to where things -- or when  
9 things are going right and when things are going wrong. And I'm just curious, do  
10 you -- and you don't even have to give me the answer if you know what it is, but  
11 do you have more or less a gut feeling as to where things started to go wrong,  
12 where things started to go off the tracks? Were there personnel changes,  
13 organizational changes that you can think back and identify that led you down the  
14 path to where we are today?

15           W. GARY GATES: Let me start with that. I think it was so subtle  
16 and so slow in many cases, that I think -- and something made sense very  
17 recently to me, I believe from a presentation given to you by Ed Halpin on faint  
18 signals of human performance. How do you pick those up? And it's best picked  
19 up by being present and talking to people and that sixth sense. I think our  
20 performance, if you look back at our indicators, and Commissioner Svinicki  
21 indicated -- I mean, we -- if I just looked at data, we had a lot of good operations  
22 up until perhaps even the flood time. But if I look back in the context of those  
23 most recent comments -- which I'm reflecting a lot on my role in this and how we  
24 got here and what we need to do for the future. I think it was those faint human  
25 performance signals that we missed. I can't point to a specific personnel change

1 or a specific watershed kind of an event. As I've reviewed it, going forward, I  
2 think, you know, the flood is not the reason. It was a factor, but it was there. But  
3 we -- when I said, "Lost the edge," it's to what Dave referred to as our  
4 accountability to our systems. It's all about people and it's all about leadership at  
5 the end of the day. And so that's where the issue is, is we missed some signals  
6 along the way, that we are -- and what have already corrected and what we will  
7 correct in the future -- paying attention to those faint human performance signals.  
8 That really resonated with me when Ed talked about that.

9 COMMISSIONER MAGWOOD: I don't know, Mr. Bannister,  
10 anything to add?

11 DAVID BANNISTER: You know, I -- and I've read the same  
12 document about the faint signals, and as a matter of fact I've read that document  
13 on the plane ride here. And -- you know, and I thought back about the same  
14 types of things and, you know, is there a particular point in time where, you know,  
15 "Hey, things aren't going quite right"? I couldn't necessarily pinpoint that. But I  
16 can go back and think about, you know, there were things, you know, with the  
17 contactor issue, with the M2 contactor protective system. That, you know, our --  
18 we tend to look at our process and providing and supporting us, but in some  
19 cases those are leadership and management decisions that, you know, even  
20 though we had worked through our process and said, you know, it was  
21 acceptable to go repair it, you know, as a leadership team we should have said,  
22 "Well, wait a minute. This isn't right." And those are the types of things, the faint  
23 signals that we got to keep asking ourselves. And, you know, that's -- what I  
24 impress upon the staff is to look -- I don't necessarily call them faint signals, but  
25 look for the signs. If you're asking yourself -- you know, constantly asking

1 yourself this question, "Well, boy, that doesn't seem right," that's telling you  
2 something. Go act on that. Go pursue that. And then get the staff together and  
3 sit down, because chances are they're saying the same things, "Boy, this doesn't  
4 seem right." And that's that whole cultural learning for the entire organization.  
5 John, do you got anything to add there?

6           JOHN HERMAN: I would say the early signs for me, the condition  
7 reporting system backlog was too big, and we knew that and we didn't address it.  
8 The number of root causes and apparent causes that we were required to do  
9 was higher than normal, and we didn't address that. When we looked at our  
10 corrective actions that came out of those root causes and apparent causes,  
11 frequently we found we were shooting maybe 85, 90 percent, but we missed one  
12 or two things. And then the timeliness issue. Things were scheduled, the right  
13 things were there; eight or nine of them got done, but not all 10. Those were the  
14 early signs for me looking back on it saying, "What did we miss? We allowed  
15 that." So what you had was a number of very low-probability events that were  
16 unlikely to escalate, but when you had enough of them on the table, something's  
17 going to occur. So the need to drive those numbers down, keep the backlogs  
18 low, and resolve things in a timely fashion so that you take them off the table.  
19 There isn't that one item out of 10 that's still hanging out there.

20           COMMISSIONER MAGWOOD: I appreciate that. Really quite --  
21 very interesting. You mentioned earlier that -- you talked about the external  
22 resources you're bringing in to help right the ship, so to speak. And I thought you  
23 had a good dialogue with Commissioner Svinicki about that. But one aspect of  
24 that I wonder about is you look at where these external resources are coming in  
25 to supplement your staff, are there areas where your staff was actually lacking in

1 experience or expertise that concern you now that you have those resources in  
2 place, now that you can see what others are bringing to the table? Are there  
3 areas where you now know that you need to build staff?

4 W. GARY GATES: I would say -- and I'll start this. I can -- John  
5 will probably add to this, but our engineering group -- we've got about half of the  
6 engineers that are new there. And if I looked broadly at the utility, there's some  
7 interesting statistics. And I'm not trying to change the subject, but just the  
8 numbers for us for utility, for when I started this would be an unusual number, but  
9 in the next five years over half of our folks will have less than 10 years  
10 experience in the whole utility; and that is also mirrored at Fort Calhoun Station.  
11 So what we have found is we've gotten some external resources in that have  
12 more layers of experience, particularly in John's area where he is taking on a  
13 very aggressive task of qualifying our new engineers. And they're well-trained  
14 and qualified. What's the experience factor and how much does that add in, and  
15 how do we transfer that? That's going to be the key issue. But that's one of the  
16 key points for me. And that kind of change that I think we're not unusual in going  
17 through, having a very high percentage of new people. And how do you transfer  
18 that experience factor?

19 COMMISSIONER MAGWOOD: And I -- actually, I don't think that  
20 changes the subject. I think that's probably a large part of it, because there's a  
21 big demographic shift that's taking place in the industry. It's a big demographic  
22 shift that's happening here at NRC. And there is a transition, and managing  
23 those transitions -- you know, we have a big knowledge management program at  
24 NRC, trying to transfer the knowledge and experience as best you can from  
25 people who've been around for -- you know, for decades to people who just

1 graduated perhaps five years ago. And that's not an easy matter. So I know  
2 that's something the whole industry's dealing with, and perhaps as you go  
3 through this that's an important lesson learned for others. Because it's probably  
4 one of those subtle things that doesn't leap out in your ROP, but there certainly is  
5 an ongoing trend that can affect performance. But, again, we'll be watching very  
6 closely. I do appreciate the personal commitment that you've talked about today.  
7 I think that's where recovery begins with the leadership and I think that that's  
8 exactly the right kind of message to be sending. So appreciate your comments.  
9 Thank you.

10 CHAIRMAN JACZKO: Commissioner Ostendorff?

11 COMMISSIONER OSTENDORFF: Thank you, Mr. Chairman. I  
12 want to thank you all for your candor today. I didn't expect anybody to come in  
13 here and make any excuses. I've had some dealings with you all in the past. I  
14 know you're all pretty straightforward people, accept responsibility and  
15 accountability. So I just wanted to echo the importance of that, but I appreciate  
16 how you presented yourselves. My colleagues raised some great questions and  
17 points, I think. Commissioner Apostolakis on corrective action program piece,  
18 which was the question I was going to ask, and I think that was really my  
19 experience in the Naval Reactors Program goes to the heart. If you don't have a  
20 way of going about methodically fixing problems, then any list of actions to take is  
21 just -- it's not worth the paper it's printed on. And then Commissioner Svinicki  
22 and Commissioner Magwood talking about sustainability piece. I know it's of  
23 critical importance to you as a single unit operation, and I think we all appreciate  
24 the challenges that you have when you have just that one unit that's part of your  
25 organization.

1           And I know that others have addressed this issue, as to how you're  
2 using Exelon, INPO, and so forth. Let me just provide a data point, because  
3 we're all creatures of our experience, that really framed my experience as a  
4 submarine officer. It wasn't until after I had finished being a commanding officer  
5 of a submarine, so I had 19 years of Commission service. In the four years after  
6 that, I went to sea on 30 different submarines: Atlantic fleet, Pacific fleet. And I  
7 was observing the ship's cleanliness formality of operations, torpedo shooting,  
8 missile launch abilities, et cetera. I was shocked at the wide spectrum of levels  
9 of performance in those 30 submarines. But it wasn't until after I'd been captain  
10 of my own ship that I had the chance to go do that.

11           And so as a single unit operation you probably don't have a whole  
12 lot of flexibility to send people elsewhere, but to the extent you have an  
13 opportunity to send some midlevel managers for periods of time. And, Dave, you  
14 already talked about that a little bit in your presentation that caught my attention.  
15 I'd just say, I think that's very valuable to see how are others doing it well? It's  
16 easy to say, "Well, this is screwed up over here. This is not the way of doing it."  
17 But seeing a positive example as to how these operations, whatever aspect of  
18 your operations you're talking about, how are they being done well? That, to me,  
19 is -- pays huge dividends. I'm not trying to lecture you, but providing an  
20 analogous experience I've seen work in a different setting.

21           Gary, let me ask you a question. Given all that's been said today  
22 and I've heard a lot of comments that seem to me to reflect significant self-  
23 assessment reflection by you and your team, how do you assess your  
24 workforce's receptivity to making the changes that you think, as the CEO, are  
25 necessary in order to get to where you want to go?

1           W. GARY GATES: I appreciate that question, because that's one  
2 that's near and dear to me. And I'll tell you exactly how I do it. I go out and ask.  
3 There's nothing more than personal contact that'll allow you to assess that. So  
4 I'm out in spaces, I'm understanding -- asking people about it. We've had direct  
5 meetings with all our unions and all their E-boards, and even though they may  
6 not be working at Fort Calhoun, they're working in other parts of the company.  
7 The entire company is willing to help Fort Calhoun get better. And it's by  
8 personal interaction that I make that assessment. There are other more formal  
9 areas. I've started a practice called Sunrise Meetings. I think it gets its name  
10 because they start at 6:30, and they're very structured in the sense that all  
11 groups are there to go over information and specific questions. They vary from  
12 meeting to meeting.

13           The second thing I do is I walk down a system with a system  
14 engineer and take operators and find out what they're thinking about it, as well as  
15 a system engineer. I found that that allows the system engineer to have a  
16 candidness when the operator's standing there talking about the system and its  
17 operation, as well.

18           And then the third, I go to training and I assess by interaction with  
19 the training staff and with operators there what their willingness to change is. So  
20 it's by personal interaction, Commissioner. And they are willing to change.

21           COMMISSIONER OSTENDORFF: Okay. I don't have any other  
22 questions. I'm not going to say good luck, because that -- you know, you don't  
23 get out of bad situations by luck. It's just by hard work and persistence. So I  
24 wish you well in your endeavors.

25           W. GARY GATES: Thank you.

1                   CHAIRMAN JACZKO: Well thank you, and I don't have any other  
2 questions, either. I think many of the issues have been covered already and the  
3 staff I think has a good process and I encourage you to continue to interact with  
4 them, and they'll interact with you, and heed their areas of focus and we'll, I'm  
5 sure, have an opportunity to interact in the future as you continue to make  
6 progress on your recovery. Thank you.

7                   W. GARY GATES: Thank you, sir. Thank you.

8                   [Whereupon, the proceedings were concluded]