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UNITED STATES NUCLEAR REGULATORY COMMISSION  
BRIEFING ON THE RESULTS OF THE AGENCY ACTION REVIEW MEETING

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THURSDAY

May 14, 2009

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The Commission convened at 9:00 a.m., the Honorable Gregory B. Jaczko,  
Chairman presiding.

NUCLEAR REGULATORY COMMISSION

GREGORY B. JACZKO, CHAIRMAN

DALE E. KLEIN, COMMISSIONER

KRISTINE L. SVINICKI, COMMISSIONER

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PANEL 1: NRC STAFF

- BILL BORCHARDT, Executive Director for Operations
- ELMO COLLINS, Regional Administrator, Region IV
- FREDERICK BROWN, Director, Division of Inspection and Regional Support, NRR
- CHARLES MILLER, Director, Office of Federal and State Materials and Environmental Management Programs
- LUIS REYES, Regional Administrator, Region II

PANEL 2: PALO VERDE NUCLEAR GENERATING STATION

- DONALD BRANDT, Chairman and CEO, Pinnacle West Capital Corp. (PNW)
- RANDALL EDINGTON, Executive Vice President and Chief Nuclear Officer, Arizona Public Service
- MIKE GALLAGHER, Board Member, PNW
- SCOTT BAUER, Director, Regulatory Affairs, Palo Verde, Arizona Public Service
- MARIA LACAL, Executive Director, Projects and Plant Support, Palo Verde, Arizona Public Service

1     PANEL 3: NUCLEAR FUEL SERVICES

2                     DAVID KUDSIN, President, Nuclear Fuel Services

3                     TIMOTHY LINDSTROM, Vice President, Operations, Nuclear Fuel

4     Services

5                     JOHN NAGY, Chief Nuclear Safety Officer, Nuclear Fuel Services

6                     B. MARIE MOORE, Director, Safety and Regulatory, Nuclear Fuel

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1 P-R-O-C-E-E-D-I-N-G-S

2 CHAIRMAN JACZKO: Good morning, everyone. After good  
3 morning, I have everything else written out for me.

4 Well, I want to start just by acknowledging some firsts. This will be my first  
5 meeting as Chairman and it's the first time I think I've sat in this chair. I was  
6 reminiscing with Annette just a few minutes ago. I think I've sat in almost every  
7 other chair at one point in the last four and a half years except one on the far left.  
8 But right now I'll be in this chair for a while.

9 I just want to say that I'm honored, certainly, to have the opportunity to have  
10 this new responsibility and new position. I look forward to working again with the  
11 staff and the Commission as we continue to deal with our challenges and  
12 opportunities.

13 I would also note this is Steve Burns' first meeting as General Counsel. So,  
14 we welcome him and look forward to working with him in his new role.

15 While we have some firsts, we also have some things that stay the same.  
16 We're very fortunate that Dale will stay on as a Commissioner and we look forward  
17 to him continuing to contribute in substantial ways as he has in his previous role as  
18 Chairman at the Agency.

19 He and I have talked and we're very interested in ensuring a seamless  
20 transition as we go forward and make the change here at the Commission.

21 With that said, we move on and the work is in front of us. Today, we have a  
22 very important meeting which is our annual Agency Action Review Meeting. This

1 meeting provides the Commission with an opportunity to hear from senior  
2 managers regarding the overall effectiveness of the NRC's oversight programs  
3 and to assess the appropriateness and effectiveness of NRC actions that have  
4 been taken for those licensees who have had significance performance problems.

5 We will hear from three panels this morning. So, we'll have a long meeting  
6 and we will have an intermission. So, everyone will have an opportunity to take a  
7 little break.

8 First, the NRC staff will present and then they'll be followed by  
9 representatives from Palo Verde Nuclear Station. And then finally we'll hear from  
10 Nuclear Fuel Services.

11 So, I welcome all of you and thank you for being here. I look forward to  
12 hearing from you all today. Do any Commissioners have any remarks?

13 COMMISSIONER KLEIN: Let me just say I think for the staff,  
14 certainly congratulate Greg on his new assignment. Having sat in that position, it  
15 is challenging. But I think for the staff I'd certainly like just to -- as Commissioners  
16 come and go it's really important for the staff to stay focused on our mission and  
17 that's protecting the public health and safety for the American people.

18 So, I think while Commissioners tend to change around, I think your mission  
19 stays the same. So, keep up the good work and I look forward to being an active  
20 Commissioner.

21 COMMISSIONER SVINICKI: I would certainly like to add my public  
22 warm wishes and congratulations to you as you begin a very exciting new phase

1 of your service here to this agency. I've enjoyed the collaboration and consultation  
2 we've had over the past year and I really look forward to continuing and growing  
3 that professional relationship. So, congratulations!

4 CHAIRMAN JACZKO: Thank you. Bill, do you want to begin?

5 MR. BORCHARDT: Thank you. Good morning. The staff is here  
6 today to brief the Commission on the results of the Agency Action Review  
7 Meeting. We're going to begin today's briefing with a review of the Reactor  
8 Program and then transition to the Nuclear Materials portion of the meeting. Go to  
9 slide 2, please.

10 The objectives of the Agency Action Review Meeting discussions are to  
11 review the appropriateness of Agency actions that have been taken for those  
12 plants with significant performance problems and those that have moved into the  
13 multiple repetitive degraded cornerstone. And also to review the appropriateness  
14 of Agency actions that have been taken for those nuclear materials licensees,  
15 including fuel facilities with significant safety or security issues.

16 In addition, we do a review of the ROP effectiveness and its results. And  
17 finally, we review the industry trends.

18 One plant in 2008 was in the multiple repetitive degraded cornerstone  
19 column of the Reactor Oversight Process Action Matrix and was discussed at the  
20 Agency Action Review Meeting. Elmo Collins, the Regional Administrator for  
21 Region IV will discuss the actions taken for the Palo Verde plant.

22 Fred Brown, the Director of the Division of Inspection and Regional Support

1 will review the industry trends and the ROP Self Assessment Programs. Next  
2 slide, please.

3 Charlie Miller, the Office Director of the Federal and State Materials and  
4 Environmental Management Programs will review the materials and waste  
5 program performance. And Luis Reyes, Regional Administrator for Region II will  
6 then discuss the current status of Nuclear Fuel Services.

7 During the Agency Action Review Meeting discussion the events at the  
8 United States Department of Veteran Affairs were discussed. Though the events  
9 met the Agency Action Review Meeting criteria for discussion and there are  
10 multiple activities related to these events that are still in process and have not yet  
11 been completed.

12 Based on these circumstances we felt that it was premature to discuss the  
13 VA at this time. Instead, the VA may be invited to a future Commission meeting or  
14 management meeting as warranted by the inspection findings and any eventual  
15 enforcement action that may or may not take place.

16 Elmo Collins will now start the discussion this morning with our first plant  
17 discussion.

18 MR. COLLINS: Chairman Jaczko, Commissioner Klein, and  
19 Commissioner Svinicki, good morning. As has been indicated this portion of our  
20 meeting is to discuss NRC actions relative to Palo Verde Nuclear Generating  
21 Station. They were in the multiple repetitive degraded cornerstone in 2008 and  
22 also the first quarter of 2009.

1           And so, I'd like to summarize those actions for you and the results and  
2       results of the Agency Action Review Meeting as we discussed those actions and  
3       considered their appropriateness.

4           I'm fortunate this morning to have Tony Vogel with me. He's sitting right  
5       behind me. He's the Deputy Director of DRP in Region IV. I wanted Tony to be  
6       here with me for this meeting. He was the manager who had the lead to plan and  
7       execute the Agency's increased oversight efforts associated with Palo Verde. And  
8       so, he was key to our success to date.

9           Last year at this meeting we discussed Palo Verde. I believe we described  
10      the Confirmatory Action Letter which had been formulated. That Confirmatory  
11      Action Letter addressed 12 key performance areas where we believed  
12      performance improvement was needed and the actions that the licensee planned  
13      to address the causes for those performance problems and to result in improved  
14      performance at the site.

15           Those key areas were formulated from a couple of major efforts. One was  
16      our 95003 inspection, which was, I believe, quite thorough in identifying the  
17      performance problems at the site and we combined with that the results of  
18      licensee's self assessments.

19           So, we believe we had a comprehensive set of performance areas which  
20      needed to be addressed and the actions we reviewed with the licensee were  
21      formalized in that Confirmatory Action Letter.

22           At the time we believe that the effective implementation of those corrective



1 actions would result in performance improvement at the site such that we could  
2 give consideration to reducing the regulatory oversight at Palo Verde Nuclear  
3 Generating Station.

4 Those key performance areas were findings of substance significance  
5 associated with the emergency core cooling system and emergency diesel  
6 generators; organizational performance problems with corrective actions and  
7 human performance; the quality of licensee evaluations. The licensee identified  
8 and we confirmed in our safety culture assessment that there were some safety  
9 culture issues.

10 There were problems with standards and expectations. Change  
11 management had not been effectively performed. Emergency preparedness,  
12 equipment problems and equipment reliability and there were numerous backlogs  
13 at the station that needed to be understood and resolved.

14 Since then in 2008 the NRC has performed continuous inspections to  
15 assess the licensee corrective actions and three team inspections in 2008 to  
16 assess licensee corrective actions.

17 Those inspection plans were aimed to confirm that the licensee  
18 implemented the actions they committed to and to understand the licensee's  
19 assessment of the effectiveness of those actions to result in performance  
20 improvement and to independently sample and confirm for ourselves the  
21 effectiveness of those corrective actions.

22 And so, at the end of the formal assessment period in 2008 for the Reactor

1 Oversight Process a substantial portion of those had been completed and we had  
2 seen some improvement at the site. Of note at the end of 2008 were a reduction  
3 in the challenges to the plant. The equipment failures resulting in unplanned  
4 power reductions were down substantially in 2008 from 2007. We had also seen  
5 improvement in their operational decision-making. Slide 5.

6 We continued our increased oversight activities in calendar year 2009 and  
7 they culminated with our last team inspection in February to review the remainder  
8 of the actions that we had not performed our inspection on associated with the  
9 Confirmatory Action Letter. It was a large team; ten inspectors. We had  
10 representatives from all four Regional offices on that team and we believe that was  
11 of great assistance to us to have that assistance.

12 After that team inspection we assessed the results in close concert with  
13 NRR, the program office, and we found Palo Verde had made notable  
14 improvement in all of 12 key performance areas. So, as a result of that we were  
15 able to close the Confirmatory Action Letter, which included the substantive  
16 crosscutting issues.

17 We designed that Confirmatory Action Letter to let us know and to signal us  
18 when licensee performance had improved to the point where we could consider  
19 relaxing our regulatory oversight. And so, at that time with closure of the  
20 Confirmatory Action Letter we discussed that and decided to relax the regulatory  
21 oversight at Palo Verde Nuclear Generating Station.

22 Where do we go from here? In 2009, the Reactor Oversight Process -- the

1 program provides for some additional inspection for facilities that have just exited  
2 the repetitive degraded cornerstone column of the action matrix.

3 So, we plan to utilize those resources to focus on the licensee's continuing  
4 actions to sustain the performance improvements that they have achieved. And  
5 also there are areas where additional performance improvement is needed. And  
6 so, we will be assessing that using that extra feature of the Reactor Oversight  
7 Process.

8 And has been a priority for our activities all along, we will continue to  
9 confirm safe operation of the facility. That was important for us as the licensee  
10 moves through the Confirmatory Action Letter that they not be distracted with  
11 these corrective actions from the day-to-day safe operation of the facility. And  
12 they were able to safely operate the facility through this performance improvement  
13 program that they've been implementing.

14 With that, Palo Verde has shown notable improvement in all key  
15 performance areas. Performance improvement needs to be sustained and some  
16 areas need additional performance improvement, which we will be checking as we  
17 move forward in 2009.

18 That concludes my remarks and I'll turn it over to Fred Brown.

19 MR. BROWN: Thank you, Elmo. Good morning. As you know the  
20 industry trends program aggregates the performance of individual licensees and  
21 allows us to assess the industry as a whole. The trending information provides  
22 early indications of areas where the Reactor Oversight Process changes may be

1     necessary.

2             Perhaps most importantly the trend data allow us to assess the current  
3     accuracy of one of the founding premises of the Reactor Oversight Process; that  
4     the industry is mature and is operating at historically high levels of safety. Next  
5     slide, please.

6             On an industry-wide basis, the trends data show continuing safety  
7     improvements for the 10 year period ending with fiscal year 2008. In general, I  
8     would characterize the most recent three years of data as being essentially  
9     uniform with performance at a level of safety not previously seen for such an  
10    extended period of time.

11            An area of specific note involved the accident sequence precursor values.  
12    The accident sequence precursor program is implemented by the Office of  
13    Research and the results are one of the indicators in the industry trends program.

14            For the period 2001 through 2007 the accident sequence precursor values  
15    reflect a statistically significant decreasing trend for all precursors and also for the  
16    precursors with the highest increased or conditional core damage probabilities.

17    Next slide, please.

18            Moving to the annual Reactor Oversight Process Self Assessment, staff  
19    concluded that all the program goals and assessment metrics were met. As  
20    important to me as the formal metrics are the empirical examples where oversight  
21    activities have arrested declining performance at individual licensees in a timely  
22    manner.

1           Specifically, we have seen licensees implement voluntary changes for their  
2   corrective action and procedures programs, make system operating changes, and  
3   make major plant modifications to improve plant safety all as a result of inspection  
4   findings and performance indicators. Next slide, please.

5           The staff implemented several program improvements to address your Staff  
6   Requirements Memo from last year's briefing of the Agency Action Review  
7   Meeting. We added text to the external website to explain the meaning of green  
8   performance indicators. We also reviewed the green/white threshold for each  
9   performance indicator and concluded that the basis for each remains valid and  
10   consistent with the original intent of the Reactor Oversight Process.

11          Several improvements were made to performance indicators in 2008 and  
12   we expect to make further improvements to the program in 2009.

13          An NRC senior level management working group developed strategies and  
14   initiated actions to address resident inspector attraction and retention challenges.  
15   These enhancements were the subject of a separate paper to the Commission.

16          The Commission's continued support of this important initiative is greatly  
17   appreciated by the staff. Next slide.

18          There were no new issues requiring deviations in 2008, but one deviation  
19   was renewed and a second remained open. Both are expected to close this year.  
20   No additional permanent changes to the Reactor Oversight Process are planned  
21   as a result of these deviations.

22          In addition to the improvements made to performance indicators in 2008,

1 staff also made enhancements to the substantive crosscutting issue process, we  
2 established ways to better integrate performance deficiencies subject to traditional  
3 enforcement -- these are typically willful violations -- into the assessment process,  
4 and we implemented lessons learned from the supplemental inspection performed  
5 at Palo Verde that Elmo referred to.

6       Once again the Regions successfully completed the baseline inspection  
7 program at all sites. Total reactor oversight inspection related resources have  
8 been fairly constant for the last four years. Next slide, please.

9       Staff plans to further improve the efficiency and effectiveness of the Reactor  
10 Oversight Process in 2009. The Regions are leading an effort to utilize cross  
11 Regional experience and involvement to further improve the reliability of the  
12 Reactor Oversight Process implementation and to develop individual members of  
13 the staff.

14       Staff will revise program guidance as necessary to support the proposed  
15 safety culture policy statement once it has been finalized. We will also continue to  
16 make changes to and look for opportunities to refine existing performance  
17 indicators and to explore options for introducing new performance indicators to  
18 ensure that the program continues to provide useful insights and contributes to the  
19 identification of declining performance.

20       At this time, I'd like to turn the presentation over to Charlie Miller who will  
21 begin the materials portion of the briefing.

22       MR. MILLER: Thank you, Fred. Before I get into the actual

1 performance of the materials program I want to set it into perspective. First of all,  
2 we're dealing with a very large number of licensees nationwide. In 2008 there  
3 were approximately 22,300 licensees; 3,800 of which were NRC licensees and  
4 18,500 of which were Agreement State licensees.

5 More importantly when we deal with these licensees there's a variety of  
6 applications and activities that take place ranging from industrial, medical,  
7 academic and fuel cycle applications.

8 In some of these applications radiation is given to a patient intentionally,  
9 such as a therapeutic or diagnostic dose of medicine for medical purposes. And  
10 these activities require that people practicing these activities are very careful in  
11 what they do with well-controlled handling of radioactive material.

12 When we discuss the number and trends of reportable events it's important  
13 to keep in mind that these activities conducted are large in number as I mentioned.

14 For example, the Society of Nuclear Medicine's annual report for 2006,  
15 which was the latest statistics we had, said that there are more than 17 million  
16 medicine procedures conducted every year in the nuclear area. And over the past  
17 10 years we've had an average of about 37 reportable events in the medical area  
18 based on our NMED reporting. This represents a very small percentage of the  
19 number of procedures that are conducted every year.

20 This has implications when we discuss trending when were dealing with  
21 very small numbers in terms of statistics. Furthermore, the denominator is large,  
22 but we're uncertain of the total number of procedures or activities conducted each

1 year because some of these activities don't require written procedures.

2 It's important to keep this in mind when we look at our plots of data as we  
3 analyze the results. Next slide, please.

4 Industry data is collected, monitored and evaluated on an ongoing and  
5 periodic basis. The process is intended to identify significant licensee  
6 performance issues or NRC program issues or gaps warranting management  
7 attention and awareness at the AARM.

8 The AARM review is a part of a broader oversight process which includes  
9 licensing, inspection and licensee performance reviews and routine enforcement.  
10 The defined process and criteria are used to identify those items and licensees  
11 that rise to the level of needing discussion at the AARM.

12 These criteria target the most critical issues involving very serious events;  
13 those triggering strategic level measures, significant licensee performance issues  
14 or program issues and NRC program gaps or failures identified. Next slide,  
15 please.

16 These are the goals and criteria that we monitor against. They emphasize  
17 the graded approach from a higher level, higher consequence, which includes  
18 strategic outcomes and performance measures and abnormal occurrences to a  
19 lower level, which is precursor monitoring that's reported only within the NRC.

20 This graded approach allows us and provides us the ability to focus  
21 management attention on higher level items while providing an early indication of  
22 any programmatic issues and allowing for early action on our part with lower level



1 items. Slide 15, please.

2 In 2008, all strategic outcomes were realized and our performance  
3 measures were within established goals. In particular there were no unrecovered  
4 lost or stolen risk significant sources during the year of 2008. Slide 16, please.

5 However, there were 10 abnormal occurrences in 2008, all of which were  
6 medical related events. Five of these occurred in NRC jurisdiction and five of  
7 these occurred in Agreement States. Two of the events included dose-to-embryo  
8 fetus, one of which is with NRC and one with an Agreement State.

9 For the past 10 years medical related events have generally dominated the  
10 total number of AOs every year. Some possible reasons why medical related  
11 events dominate the number of AOs are there's a large number of medical  
12 procedures conducted every year and the intentional use of radioactive materials  
13 on individuals. This is the only area that we regulate where that's the case.

14 Human error continues to be the primary contributor to the root cause;  
15 however, the number of AOs is small compared to the number of uses with  
16 radioactive material; for example, medical radiography research fuel cycle. And  
17 there were no discernible trends in the total number of AOs from year to year.  
18 Slide 17, please.

19 During this period there were 118 escalated enforcement actions: 94  
20 severity Level II and III actions, 23 orders and one demand for information. There  
21 were two cases involving severity Level II violations: Alaska Industrial X-ray, Inc.,  
22 which was a radiography event involving willful severity Level II problems and

1 Source Production and Equipment Company, Inc., which had a transportation  
2 event which involved noncompliance with an NRC certificate of compliance? No  
3 significant performance trends were identified. Slide 18, please.

4 This part of our process identifies significant licensee performance issues or  
5 NRC issues or gaps warranting the attention and awareness of the senior  
6 management. For 2008, there were two materials licensees, Nuclear Fuel  
7 Services and the United States Department of Veterans Affairs that met the  
8 significant performance issues criteria.

9 After review and analysis of the data, we did not identify any significant  
10 trending issue with the materials and waste programs. Also, there were no NRC  
11 program gaps or failures identified. Slide 19, please.

12 Based on the data for 2008 from the NMED annual report, over the last 10  
13 years there have been 5,227 materials events. No significant performance trends  
14 were identified and there was no significant change from the previous 10 year  
15 period. When I say the previous 10 year period we analyze this over a 10 year  
16 period every year. So, the previous 10 year period was from 1997 to 2007.

17 Per my earlier comment I believe the proper perspective here is that the  
18 number of reportable events has remained very small relative to the number of  
19 activities and our review did not identify any common causes.

20 For some of these event types, however, lost or abandoned stolen material  
21 and release of licensed material or contamination, the data indicated a statistically  
22 significant trend. These trends may be cause for several different reasons, such

1 as a change in the number of NRC and Agreement State licensees or change in  
2 regulations, but the staff did not identify any performance issues that were  
3 associated with these trends. Slide 20, please.

4 Every year we take a special focus on an area within the Materials  
5 Program. This year we looked at events involving general licensed devices. The  
6 data was reviewed to determine the type of general licensed events that have  
7 been reported and determined if there are any trends.

8 We decided to review this data because a general licensee, Wal-Mart, was  
9 found to have a large number of lost or unaccounted for tritium exit signs for many  
10 different locations across the United States. Slide 21, please.

11 For this event study, data was taken from NMED for the period covering  
12 January 1st, 1998 to December 31st, 2008. The data used for the study was  
13 downloaded from the NMED database on February 3rd, 2009. The data indicated  
14 that there were 546 events that involved general licensed devices during this time  
15 period. There were 7,776 general licensed devices actually involved in these 546  
16 events.

17 Tritium exit signs accounted for 93% of the total number of general licensed  
18 devices involved in these events, which is in line with the fact that approximately  
19 90% of these devices in the general licensed tracking system are tritium exit signs.

20 Just for information, the next category was static eliminators, which were  
21 the next largest type of device involved in general licensed events. Static  
22 eliminators accounted for only 3% of the total number of general licensed devices

1 involved in these events. Slide 22, please.

2 After analyzing the general licensed data the staff found that for three most  
3 numerous devices, tritium exit signs, static eliminators and gauges, portable and  
4 fixed, that were involved in general license events for this time period the tritium  
5 exit sign events involved the least number of general licensees.

6 We're currently evaluating the cause for the large number of tritium exit  
7 signs involved in these events. No other trends were found during this study.

8 I'd now like to turn over the presentation to Luis Reyes who will discuss the  
9 current status of Nuclear Fuel Services.

10 MR. REYES: Thank you, Charlie. Good morning, Chairman and  
11 Commissioners. I'll be briefing you today on Nuclear Fuel Services and I'm going  
12 to refer to Nuclear Fuel Services as NFS just for the sake of brevity.

13 The senior managers discussed NFS in the Agency Action Review Meeting.  
14 The reason for it, it met the criteria in SECY-08-0135, specifically the performance  
15 issues, program issues, extended for more than one inspection period.

16 And two, the NRC had to take unusual oversight activities in order to  
17 monitor the facility. That triggered a threshold where we discussed NFS in the  
18 Agency Action Review Meeting. We also in the discussion felt that it was  
19 necessary to brief the Commission on NFS performance.

20 In 2007 the NRC issued an order to NFS based on enforcement and  
21 performance issues. As a result of that they conducted a third party safety culture  
22 self assessment, which resulted in an improvement plan.

1           In order to monitor all that the NRC implemented an oversight panel  
2     consisting of senior managers from the Region and the program offices. And all  
3     that is what triggered the discussions in the AARM.

4           In addition to the panel, the NRC has implemented a very rigorous  
5     oversight inspection program at NFS. It's the only fuel facility that has two full-time  
6     resident inspectors and we have also designed a set of inspections to clearly  
7     review activities at this site. Specifically in 2009 we're implementing five different  
8     significant inspections to monitor the activities at the site.

9           In 2007, through the assessment of the licensee and in the fuel facilities our  
10    program for assessment is called "Licensee Performance Review" or LPR. In the  
11    LPR we conducted in 2007 we decided that the performance of the facility required  
12    reduction on the frequency of our assessments. Those assessments are nominal  
13    every 12 months and we decided that we were going to reduce that frequency to  
14    six months.

15          So, the licensee performance review in 2008 was from January to middle of  
16    summer. Now, that assessment concluded that there were significant  
17    improvements from the previous assessment in 2007 and we decided to relax the  
18    frequency from six months to nine months. Still not to the full 12 month cycle, but  
19    recognition of performance improvements at the facility.

20          NFS continues to comply with the order that was imposed. They have  
21    several activities yet that remain to be completed, such as third-party assessment  
22    of the implementation of their safety culture improvement and we continue to

1     monitor those activities.

2             In terms of the future, we are going to take or import some of the practices  
3     from the reactor site in order to be able to implement some of the safety culture  
4     reviews that would be forthcoming.

5             At some point in time we will have to determine whether the order activities  
6     have been effective and whether we could return back to normal oversight. And  
7     for that we're going to import procedures such as 95003 that everybody  
8     recognizes from the reactor side and try to import some of those techniques in  
9     order to be able to assess the performance at NFS.

10            That's a quick summary of where we are with NFS and I'll turn it over to Bill  
11     for closure.

12            MR. BORCHARDT: Can I get the last slide, please? We believe  
13     that the Reactor and Material Oversight Programs have been successful over the  
14     past year. As a result of our review there have been no change required to our  
15     oversight plans for those facilities warranting discussion and that there were no  
16     adverse trends identified in either the reactor or the materials areas of our  
17     responsibility.

18            We're going to continue to look for ways to refine and improve our  
19     performance indicators and explore options for introducing new PIs to ensure that  
20     the program provides useful insights and contributes to the identification of  
21     declining performance.

22            In summary, the reactor materials and environmental programs continue to

1 be a vital and critical element to the Agency to help ensure the protection of public  
2 health and safety and the environment. This concludes our presentation.

3 CHAIRMAN JACZKO: Well, thank you. Appreciate the  
4 presentations and we will start our questioning with Commissioner Klein.

5 COMMISSIONER KLEIN: Thanks. Well, thanks for a good  
6 presentation. Obviously, it's good to see that there's always enhancements to the  
7 ROP. Even though I think it's well documented it's always good to look for  
8 activities. I know that Charlie always says it's a challenge with all the users you  
9 have out there in the world. They seem to be a little bit more dispersed than those  
10 that Elmo looks at. You know exactly where those reactors are all the time.

11 On the activities, Elmo, and Region IV, obviously going through looking at a  
12 plant that had a Column 4 issue is sometimes challenging on your staff. Could  
13 you talk about what kind of activities you had and challenges for Region IV?

14 MR. COLLINS: That's with respect to the increased oversight of  
15 Palo Verde? Yes, Commissioner. That was a challenge for us. We did set out for  
16 ourselves the goal, the objective. We know it was important as we implemented  
17 our increased oversight at Palo Verde to be aware and not let our oversight  
18 degrade on other facilities within the Region.

19 We believe we did accomplish that. I think a key to us being able to  
20 implement this and not degrade our oversight at other facilities was the planning.

21 A couple of keys. The first key is planning. We were able with that  
22 Confirmatory Action Letter with good input from our 95003 inspection and the

1 licensee's self assessments to understand what -- within reason -- what the scope  
2 of work was needed at Palo Verde.

3 And so, once that Confirmatory Action Letter was finalized we knew what  
4 we needed to do. So, we were able to plan that and prioritize it and use flexibility  
5 that exists within the Reactor Oversight Program. And it was a cooperative effort  
6 with other Regions and the Program Office as well to allow us to be able to  
7 execute that increased oversight.

8 So, that was our challenge, but it was planning and execution of that plan in  
9 cooperation with other offices. I believe that it allowed us to do that in an effective  
10 manner.

11 COMMISSIONER KLEIN: I know when Perry came out of Column  
12 4 several months ago that there seemed to be a little bit of slipping on  
13 performance. Could you just talk about your confidence and how you're watching?  
14 You talked about an enhanced process.

15 MR. COLLINS: First of all, we do have resources dedicated to keep  
16 an eye on that as we move forward from here. There have been performance  
17 improvements noted. We need to confirm that they're sustained and improvement  
18 is still needed in a number of areas at Palo Verde. So, that also needs to be  
19 achieved. And we understand what the licensee's plans are with that respect and  
20 so we will be watching those with our inspection resources.

21 We also believe that a key bellwether for us in that area will be the  
22 licensee's self assessments that they had planned moving through in the near



1 future. Their third-party independent assessments. We think that will give us  
2 some keys as we look at those results as well as to how the licensee is doing.

3 But that performance needs to be sustained and actually in some areas  
4 continue to be improved. Considerable momentum was established, I believe, on  
5 the part of the licensee headed through the Confirmatory Action Letter.

6 What we've heard are their commitment and their understanding that they  
7 need to keep that momentum going; that this is not the time to let up. So, we  
8 haven't seen any sign of letup yet.

9 Certainly, we understand the licensee's commitments. Over the last 18  
10 months I think Palo Verde has done a reasonably good job at doing what they said  
11 they were going to do and doing it well. We have some level of confidence that's  
12 established there, but we will watch from here forward to see how they do.

13 COMMISSIONER KLEIN: Thanks. Well, Fred, it's interesting on  
14 your precursor value trends that they looked pretty good. So, the obvious question  
15 is do you know why? Are there any lessons learned and implemented that we can  
16 look at -- good characteristics of those precursor events going down? So, the  
17 question is do you know why?

18 MR. BROWN: I wish I could say with absolute certainty that we  
19 know exactly why. I think that there's a combination of things. The maintenance  
20 rule has been in place now since the late 90's and I think that the improvement in  
21 plant equipment status certainly ties to the improvement in precursor information.

22 I think that the advent of the Mitigating System Performance Indicator as an

1 MSPI indicator has helped focus licensees on single train or more risk significant  
2 systems and the maintenance of those systems availability and reliability. I  
3 believe that's been a contributor to the improvements, but I don't believe that  
4 there's been any one thing that I can point at specifically. I don't know if Elmo or  
5 Luis have any --

6 MR. REYES: Yes, I think the third one is -- and you mentioned it  
7 earlier -- is the actual hardware modifications that have been implemented at the  
8 stations to reduce risk. And also what that basically turns out to be is that a small  
9 error in an oversight doesn't have the risk consequences that it would have had  
10 otherwise. These are actually additions of pumps, diesel generators, valve  
11 operational line ups that Fred alluded to earlier. So, even though you may have a  
12 small oversight the risk consequences are much, much less.

13 COMMISSIONER KLEIN: Well, you mentioned in your slide about  
14 the resident inspectors about attracting and retention. I guess I've probably got a  
15 general question for Bill. If you look at most of the senior managers throughout  
16 the agency most of them at some point in time have been resident inspectors,  
17 which I think is certainly a good training experience.

18 You look at the number of new hires that we've had and the number of  
19 resident inspector positions, there's a mismatch. There's just not going to be an  
20 opportunity. So, if you sort of look 10 years down the road at the NRC do you  
21 have any thoughts about how do you get the plant experience into our cadre of  
22 people that may not have RI opportunities?

1                   MR. BORCHARDT: Well, I think historically people with resident  
2   inspector experience have always done very well in this agency. It's a very valued  
3   experience. We will continue to see people being promoted out of resident  
4   inspector and senior resident inspector jobs into first-line supervision and on  
5   through the rest of the agency or even into NRR and the major program offices  
6   because that field experience can only be acquired one way at the NRC and it's  
7   through the resident program.

8                   I think we will continue to see turnover. It's getting the right balance, so it's  
9   not so high that we're lacking experience on site because we certainly want that,  
10   but we also want to continue to have a healthy flow through those positions.

11                  We've identified a number of activities and programs that we're evaluating  
12   to encourage people to go out to those sites. I think one of the things that is giving  
13   a short term -- in my view -- false impression is that because of the large agency  
14   growth coming out of the creation of FSME and Office of New Reactors that  
15   created a lot of promotion opportunities for people -- for all staff.

16                  And the residents, I think, as a collective group developed this perspective  
17   that maybe their experience wasn't as valued. There's nothing further from the  
18   truth. It's just we had to fill positions and we took the best qualified candidates at  
19   the time.

20                  Now that we've entered into a more stable hiring practice I think we'll see a  
21   return to five, 10 years ago where it's incredibly highly valued.

22                  COMMISSIONER KLEIN: Thanks. I've got some more questions,

1 but maybe on the second round. I wouldn't want to let Charlie and Luis escape.

2 CHAIRMAN JACZKO: Commissioner Svinicki?

3 COMMISSIONER SVINICKI: Thank you, Mr. Chairman. This is a  
4 great opportunity for me because I have Luis and Elmo right here. You've talked  
5 about the review that was done of resident inspector relocation and retention  
6 incentives and the information paper that came up. I requested with the  
7 indulgence of my colleagues to convert that to a voting matter for the Commission.  
8 This is a chance for me to talk a little bit about it.

9 Luis and I have had an opportunity to talk about this topic one on one, but I  
10 thought it was really important for the Commission to look at the totality of the  
11 review that was done by senior management and to look and make certain  
12 because this is such an important area as was just being discussed in the  
13 back-and-forth here; that it is important that the Commission, I think, intermittently  
14 relook at what's being done there.

15 The other thing that had come up in a couple of Commission meetings was  
16 the time period at the end of which we want to rotate resident inspectors.  
17 Chairman Jaczko has talked about some other studies and looks that have been  
18 done, I think, through GAO and others. And so, I thought it would be good -- an  
19 opportunity for the Commission to look at that question.

20 And what Luis and I had talked about is the housing market now. And it's  
21 my personal view that there needs to be -- senior managers need to have a very  
22 robust ability to look at specific cases and make exceptions. I think that that's very

1 important. My motivation in converting it to a voting matter was so that the  
2 Commission could put its imprint on it and endorse the important elements of this  
3 as they assess them. So, that some of the reason there.

4 It isn't because there's any particular controversy over what's in the paper,  
5 but I think it will be useful to have the Commission weigh in on that. You don't  
6 need to respond. I just wanted to clarify the record on that.

7 Luis, you're so well positioned with your resume to comment on something  
8 that I'm thinking about. This is my only second AARM meeting. Last year I drew a  
9 contrast and this has been talked about a little bit this morning between the  
10 reactors and the material side. I think I could synthesize it to ask you this  
11 question.

12 I wondered if you would agree with me that for the licensee participants we  
13 have today for NFS. In my view it's kind of less clear to them the process that they  
14 need -- I think they probably have a good diagnosis of how they got to be a  
15 participant in last year's meeting and this year's meeting.

16 But in terms of the clarity you have on the reactor side of what you need to  
17 do over the period of performance so that if you desire not to be invited back next  
18 year you have some sense of very specifically the process that needs to unfold to  
19 make that happen.

20 I wonder if you'd agree for a licensee like NFS it's less clear to them, I think,  
21 exactly what they need to do given this different structure that we have. We kind  
22 of have this annual meeting and we have great definition and a language, a

1 common language we speak in the ROP, but I feel on the material side -- and  
2 Charlie talked about this -- it's not as transparent for licensees.

3 So, I would ask if you agree with that? And then I would ask Charlie if it's  
4 true, what are we doing about it?

5 MR. REYES: First, I agree with you and I can add a little bit on what  
6 we're doing about it. We have a senior executive team now looking into how to  
7 risk inform our oversight on the fuel facility side. The industry has now agreed,  
8 and we have received through NEI a letter notifying us that they're a willing  
9 participant in this review. I think going back to the early days of when we made  
10 the transition to the ROP those are the key elements that you need.

11 You need the industry side interested in performance indicators and things  
12 of that nature to be able to monitor that. And for us to formalize that process, we  
13 believe we have a facility that is strongly advocating to volunteer to be a pilot.

14 If you recall we had to do some pilot activities with the reactors because we  
15 needed to try a few things. So, we think we have a large fuel facility who's very  
16 interested in becoming a pilot.

17 We have graciously received a senior reactor analyst from NRR. Eric  
18 Leeds has supported this effort and we have a very experienced senior reactor  
19 analyst. In fact, this week it was one of the first times that the oversight -- this  
20 team met together. They're physically in Atlanta as we speak going through the  
21 early part of looking into this.

22 So, one, I agree with you, and two, I think there's some visible signs now

1 between the industry and the regulator of trying to partnership to move in a similar  
2 way to the ROP.

3 COMMISSIONER SVINICKI: Thank you. Those specifics are  
4 helpful. And certainly, Charlie, I think Luis took a lot of your answer there, but Bill  
5 certainly if you want to chime in.

6 MR. BORCHARDT: I'd put maybe a slightly different twist on the  
7 issue that you raised. I think there is clear opportunity for improvement and being  
8 more objective to how someone gets discussed; what the criteria are for  
9 discussion. I'm not as uncomfortable for how you would come off the list because  
10 at that point there's always a uniqueness to every plant that becomes discussion.

11 It's really a communication between our senior management and the  
12 licensee's senior management that might result in a Confirmatory Action Letter or  
13 some other regulatory tool, but it's the quality of that agreement that will define  
14 what needs to be done to come off and not be invited back next year.

15 But where I think the major opportunity is is what are the criteria that will get  
16 you discussed the first time?

17 COMMISSIONER SVINICKI: Okay. So, going from the conceptual  
18 to the specific and pointing us maybe back to NFS you feel in their case that that  
19 communication -- and it sounds like Luis was talking about some of that -- those  
20 expectations are clear. I notice we also have Mike Weber at the microphone if he  
21 wants to chime in.

22 MR. REYES: Go, Mike.

1                   MR. WEBER: If I could, Commissioner. The specific answer to your  
2 question today is they need to improve their performance so they no longer meet  
3 the criteria that we just put in place. I think Luis did an eloquent job in explaining  
4 where we're going, but it's going to take some time to get there because the efforts  
5 are just starting now.

6                   But for today once NFS if it improves its performance over the sustained  
7 period and we see in place the kind of structures that are necessary to ensure that  
8 that performance is sustained they will no longer meet their criteria and we would  
9 not be discussing them at the AARM.

10                  COMMISSIONER SVINICKI: Okay. Thank you. My time is almost  
11 up and I don't want to take the Chairman's thunder, but I hope that we will, if we  
12 have another round or the Chairman doesn't raise it, that we would talk about the  
13 discussion that happened at the Senior Managers meeting about performance  
14 indicators. Because the Chairman had a suggestion in his RIC speech to look at  
15 maybe the indicators and making them having some movement there over time.

16                  So, if he doesn't raise it, I will in another round, but I know it was discussed  
17 at the Senior Managers meeting. If you have any characterizations of that  
18 discussion to share I'd appreciate it. Thank you.

19                  CHAIRMAN JACZKO: Thank you. Well, I guess I would just start by  
20 following up, I think, on what has been, I think, a very good discussion about, I  
21 think, the stark differences between the Reactor Oversight Program and the  
22 materials program.



1 Charlie is unfortunately saddled with what Commissioner Klein discussed a  
2 wide variety of licensees and different corporate entities -- different business  
3 structures within that wide variety of licensees. The reactor community is a much  
4 more homogenous community.

5 So, I think it is an important point and I think I certainly would encourage the  
6 efforts to develop a program that is more comparable to the ROP and going back  
7 to, I think, there are four basic principles and what the ROP is intended to provide.  
8 I think those are useful aspects. It may be more challenging and we may not be  
9 able to eventually get to that level, but I think it is helpful if we can get there.

10 I would just add, I think, along the lines of what Bill mentioned, which is I  
11 think we're continuing to refine in the materials arena what the criteria are for  
12 participation at the AARM. We had discussions about the VA and their  
13 participation at the meeting and I think that has been following from previous  
14 discussions and refinements to the criteria for materials facilities to participate.

15 I would raise another one and I was potentially going to ask this as a  
16 question, but I may turn to some other things. That would be the events that we  
17 had at Boulder with the contamination event at NIST. That was certainly  
18 referenced, I think, in the materials, but not an event that rose to the level of  
19 participation at the AARM.

20 Nonetheless, it was a significant event. I think sometimes understanding  
21 what the differences are between the facilities that do come and those that don't is  
22 a little bit more complicated here and probably goes more to Bill's point, which is

1     how you get into the AARM may be just as unclear as how you get out of it. So, it  
2     may be a problem on both ends unfortunately. I think something that we'll  
3     continue to work through and continue to struggle with.

4             I wanted to turn to a couple specific questions about an issue that was  
5     touched on briefly and that has to do with those facilities that currently have  
6     deviations from the ROP. I think, Fred, you talked about it. There's two facilities. I  
7     believe it's Davis Bessie and Indian point.

8             MR. BROWN: That's correct.

9             CHAIRMAN JACZKO: Certainly, on Davis Bessie, that deviation is a  
10    result of a serious incident several years ago. And I think as we move and  
11    transition out of Davis Bessie out of the deviation that that's something we  
12    certainly want to have -- certainly from the perspective of the Commission, I think  
13    we would want to have a good thorough information about that and where they  
14    stand right now. I think there are essentially four factors and four criteria for them  
15    to work through as they come out of that.

16            In previous years AARM meetings we have discussed the status of Davis  
17    Bessie and I think that will be an important issue. We want to make sure that  
18    they're meeting all the criteria that we expected for them to transition out of that.

19            Indian Point has been more of an ongoing phenomenon and equally  
20    important, I think, but certainly I think the Davis Bessie event is a significant event  
21    and one that we want to keep an eye on.

22            Turning to an issue then, I think, as Commissioner Svinicki suggested. I've

1     said lots of different things about performance indicators and Mike's not at the  
2     podium anymore, but I tried over the years to interject performance indicators into  
3     the materials arena. I'm glad to hear that industry is interested in moving forward  
4     on that. I think that's something that will be the first step, I think, for us to begin to  
5     put more of an objective measure for performance in the Materials arena.

6             In the ROP for the reactor side I think it's an area where we have a lot more  
7     experience. As I perhaps put out a challenge. In the past the challenge I've put  
8     out has been to try and find a leading indicator of declining performance. I think I  
9     referred to that as the Holy Grail at one point. That's probably still a quest that's  
10    ongoing and will probably always be one that's a challenge.

11            Perhaps we should almost put out a bounty for it. If we could issue  
12    somebody a \$20,000 prize, one of those X prizes to see who could come up with  
13    the leading indicator for declining performance that would be, I think, a useful  
14    exercise.

15            The area that I think -- Fred, I think you touched on this. The experience  
16    really with the MSPI where we had performance that we were trying to measure.  
17    We were measuring it with a particular metric, which I think was safety systems  
18    reliability indicator. I don't know exactly what constituted that criteria.

19            We went to the MSPI which was ultimately an indicator which was intended  
20    to measure the same kind of information and the result has been, I think, as  
21    several people have said. I think Luis said that improvement in performance  
22    because we were looking at the same fundamental information with a new set of

1 eyes, really.

2 If performance is really where we think it is we should be able to measure  
3 that in lots of different ways and get the same outcome. So, that was something  
4 that I proposed and I guess I would just throw that out there as a question if you  
5 want to comment on that idea of what kinds of issues we're looking at right now  
6 with performance indicators to continue to improve that performance.

7 I just want to say I want to distinguish this, too. I think this has never been  
8 an intention on my part to ratchet up or ratchet down as everyone would describe  
9 it the thresholds for green and white, but it's really in yellow and red. It's really a  
10 way to try and ensure that we are in fact measuring actual performance and not  
11 just measuring a value that we think is actual performance.

12 MR. BROWN: I'll try to address the two questions. We did have a  
13 discussion at the Agency Action Review Meeting around the basic agreement on  
14 the staff that constantly challenging ourselves to make sure that we're not  
15 complacent around information we're getting and making sure that licensees aren't  
16 too narrowly focusing their management in a safety area. We all are in agreement  
17 with that.

18 The PI program is a voluntary program. Many of the things in the PI  
19 program actually don't have a regulatory limit or basis or the PIs are set below the  
20 regulatory limit. So, we're actually getting improved performance.

21 So, I think my point was coming out of the AARM we've gone back and  
22 done a scrub to have confidence in the info we're getting, but we do believe it's

1 important to continuously look for improvements.

2           What we discussed at the AARM and I'll give credit to Luis and Sam Collins  
3 was to take a group of executives and go out into the industry and look at what  
4 else they have in existence today. The Division of Reactor Project Directors and I  
5 will be visiting one or more fleet operators where we have a sense of performance  
6 across their fleets and then take a look at their internal indicators to see if there's  
7 anything that we could work with the industry to adopt that would provide  
8 meaningful distinctions between levels of performance that we could pick up in the  
9 voluntary program at an effective cost and in an efficient way.

10           So, that's the principle thing we'll be doing in 2009 and we do believe it's  
11 very important. And the level of involvement, I think, demonstrates our  
12 commitment to be productive here within the construct of really making sure that  
13 we don't divert our attention or licensees' attention from where we have gained  
14 safety in the process.

15           CHAIRMAN JACZKO: Good. I think that's certainly a good initiative  
16 and something that I'll be interested in hearing about next year at the AARM. I  
17 think we'll do a second round of questions. Commissioner Klein?

18           COMMISSIONER KLEIN: Charlie, you indicated that a lot of the  
19 challenges have been in the medical applications. Any idea of how we compare  
20 with violations per application versus other countries? I know that our colleague  
21 Andre Lacoste is concerned about medical applications in France. So, I'm just  
22 curious. Clearly, we probably have more violations, but we also have more

1 applications.

2 MR. MILLER: Right. Commissioner, I had an opportunity two weeks  
3 ago to actually meet with ASN and it's going to be a topic of our upcoming bilateral  
4 agreement. The French will be coming here in June for a meeting and one of the  
5 topics is the medical area where we're going to try to compare further notes.

6 But generally speaking, I think at least for example with the French medical  
7 has become a big area of concern there. The one difference that we're finding  
8 with some other countries that makes the data a little bit hard to characterize is  
9 that our authorities in the United States at the NRC are limited to the radiation  
10 protection aspects of the medical applications. In some other countries where the  
11 regulator is part of the health ministry they have a broader authority to take a look  
12 at that, so some of the data gets mixed.

13 But with regard to the safety of it from the information that I have the  
14 applications in the United States, I would say that we are as safe or safer than  
15 what we're seeing in the rest of the world. I think our regulations put a lot of  
16 oversight with regard to that. Our regulation is translated into the agreement state  
17 requirements, but a lot of oversight over that.

18 COMMISSIONER KLEIN: When there's a medical issue, obviously  
19 we would communicate that back to the licensee fairly quickly, but then the  
20 question is how does that information get spread to other medical applications?  
21 Do we have a good communication network of sending that information?

22 MR. MILLER: One of the things that we do is FSME puts out a

1 newsletter periodically and one of the parts of our newsletter is to highlight some  
2 of the significant events and violations that have taken place for the benefit of the  
3 industry. The feedback I've gotten visiting several licensees are that they find that  
4 to be a good vehicle.

5 Secondly, when we see something that we think warrants the attention we  
6 try to put out a generic communication that goes to all the NRC licensees and to  
7 the Agreement States so that they can disseminate that to their licensees.

8 Thirdly, we have the access to our Advisory Committee for the Medical Use  
9 of Isotopes who are special government employees as they serve on the  
10 committee, but in many cases are licensees as they go about their day-to-day  
11 duties.

12 So, events of significance and areas of interest are discussed at those  
13 meetings and shared. So, there's some vehicles that we use.

14 Fourthly, we put out the NMED report annually so that people have an  
15 opportunity to see what we analyze with regard to the nature of those events.

16 COMMISSIONER KLEIN: Thanks. Luis, obviously the material that  
17 NFS handles is challenging at times and we'll hear from them later on. But from  
18 your perspective, how would you describe their safety culture in terms of trends in  
19 past and hopefully future?

20 MR. REYES: In 2008, we saw a significant improvement that we  
21 have not seen previously. In the past if I had to characterize the performance of  
22 NFS we had a concern with what I would characterize as a pervasive failure to

1 follow procedures. If you go back to 2005 when we felt we had to put two resident  
2 inspectors.

3 But I think the enforcement issues that led to the alternate dispute  
4 resolution meeting and the order that came out of that, I think the licensee and the  
5 regulator agree that the traditional processes we had for enforcement, et cetera, et  
6 cetera, were not getting the outcomes that were desired and there was an  
7 understanding from both parties that something more comprehensive had to be  
8 performed.

9 There comes the third party safety culture assessment and the  
10 improvement plan, et cetera, et cetera. I tried to give a prospective on how we  
11 expanded the length of the licensee performance review. The very pointed  
12 inspections that I mentioned to you we already have executed two of those with  
13 positive outcomes.

14 The only thing is -- and I'll echo what Elmo had to say -- which is that  
15 consistent sustained performance into the future is going to be the challenge.  
16 There's a new owner that came on at the end of 2008. The new owner  
17 commitment appears to be there with continuing improvements and putting the  
18 resources on the management team to make it happen.

19 So, I'm cautiously optimistic that the improvements we have seen are going  
20 to continue. But we have experiences in the past and I think Elmo hit it right which  
21 is it is a challenge to continue the self -- continue the good performance because  
22 when the regulator reduces its external stimuli its normal to organizations to try to



1 react to that.

2 So, that transition is a challenge and that would be my answer to your  
3 question.

4 COMMISSIONER KLEIN: Thanks.

5 COMMISSIONER SVINICKI: Thank you. Elmo, you talked a little bit  
6 about resourcing the enhanced inspection regime for Palo Verde. Did you draw  
7 upon any personnel or resources from other Regions and do you feel -- or from  
8 headquarters -- and do you feel that whatever you needed for your Region in  
9 terms of -- again, this is something we budget two years out, so you didn't  
10 necessarily plan for this? Do you feel that you had access to the people and the  
11 resources you needed?

12 MR. COLLINS: Yes, we did draw resources from other Regions and  
13 from headquarters. And I think what allowed us to be successful with that was the  
14 planning that Tony put into that effort. With the Confirmatory Action Letter we  
15 knew we were looking at a 12, 15 month maybe longer period of time. We didn't  
16 have to do everything at once, but we could do the program management piece of  
17 it then and coordinate and liaison with the other Regional offices and  
18 headquarters.

19 I think without that we would not have been able to implement the oversight  
20 program.

21 MR. BORCHARDT: I'd like to congratulate the Regions and NRR  
22 because in one of the lessons learned from 9/11 was this idea of sharing

1 resources across boundaries. That's a behavior that's carried forward and I think  
2 is now completely within the structure of how we operate and how we think.

3 Every time there's a resource gap in one Region, a call goes out and it  
4 largely happens between the Regional Administrators and the Regional  
5 management teams. They're very cooperative. Silos are completely down.

6 NRR has a number of people who are qualified inspectors that have come  
7 to NRR and they go out and supplement inspections where we need it. So, it's a  
8 much more adaptable organization than it was 10 years ago.

9 MR. REYES: If I could reemphasize on that point because the  
10 enabler for Elmo and anyone of us to be successful when we have something that  
11 we couldn't predict two year in advance is what we changed in the budget  
12 modeling. And so, the budget modeling now we have some resources that are not  
13 specified because we don't know what the problem is going to be.

14 So, whatever Region X or Y has a problem then you get into the planning  
15 phase and I know that I have resources to help Region IV, or III or I if the problem  
16 is there and they have the same understanding if the problem is in Region II. It  
17 requires a lot planning and execution and I think Elmo highlighted Tony's effort.

18 But the enabler to do all that is what Bill talked about; that we change the  
19 way we did business in the past because we had some difficulties in the past. And  
20 now I'm pretty comfortable that we have succeeded there.

21 COMMISSIONER SVINICKI: That's very encouraging that we're  
22 giving ourselves a reasonable amount of flexibility. I don't think we're ever going

1 to have the predictive fidelity there of 100%. So, I appreciate that the silos are  
2 down and that the resources are made available. I commend everyone who's both  
3 the donors and the recipients of whatever resources need to be provided. So,  
4 thank you for that.

5 Just briefly I'll turn to one last topic that I'll quickly be out of my depth. The  
6 significance determination process -- we talked some about PIs, but my  
7 understanding is that at the AARM review senior managers also talked about  
8 continued improvement and relooked at the significance determination process.

9 Maybe this is Fred. Could you just give me a few more sentences on that?  
10 I'm really trying to increase my awareness and understanding in that area. So, if  
11 you could kind of tell me what's the state of the art thinking on that?

12 MR. BROWN: Yes. I think the areas we mentioned in the annual  
13 paper that we're really looking at most closely is shut down and transition risk.  
14 We've had several events over the last year where multiple barriers in operations  
15 broke down. Those don't model well to our core damage frequency standards for  
16 at-power.

17 So, currently, for shutdown risk we use a surrogate of inventory and  
18 protecting top of fuel. We're looking at both refining how we model that and in  
19 addition looking at other surrogates or ways to account for some of the things  
20 we've seen. I personally think it's important.

21 I'm glad you asked the question because it's important we keep this in mind  
22 as we think about performance indicators. I think that the SDP really is a tool that

1 we get to the problems we see in the industry today. And continuing to evolve and  
2 make sure we've got the right tools is critically important.

3 COMMISSIONER SVINICKI: I appreciate your comment on the  
4 important hand-in-hand complementary. Again, ROP is the real strength there is  
5 this transparency that we talked about and the ability to move towards objectivity.  
6 And the SDP is important to complement the PI. I'm glad that you all have a good  
7 focus on that. Thank you. Thank you, Mr. Chairman.

8 CHAIRMAN JACZKO: Thank you, Commissioner Svinicki. Again, I  
9 think that's an important issue and I'll have just a few questions about the SDP.

10 I have one brief question, Charlie, back on the issue of the Department of  
11 Veterans Affairs and some of the incidents that we're continuing to deal with there.

12 I just wanted to clarify one point. This incident involved medical events and  
13 certain procedures there and involved a number of physicians. I'm wondering if  
14 you can just tell me what the status is right now of those activities at the VA. Have  
15 they been suspended?

16 MR. MILLER: At this point the incidents occurred at the Philadelphia  
17 VA Medical Center and based upon the notification and the determination of the  
18 total number of events that had taken place they had suspended operations with  
19 regard to conducting that activity.

20 I think that they're trying to take a broader look at the VA centers around the  
21 country as well as our Region III staff is trying to look at that to get our arms  
22 around this. Is it isolated. Is this isolated to the VA in Philadelphia? Is there a

1 broader problem with the VA?

2 We're going through our look at that and our analysis of that as well as out  
3 of the VA published inspection reports that had some proposed violations in it. So,  
4 we're going through the analysis of those violations and what, if any, enforcement  
5 actions -- the appropriate enforcement action and what is the focus of that. And  
6 so, that's kind of where we are today.

7 CHAIRMAN JACZKO: I appreciate that and look forward to the  
8 outcome of that from the staff.

9 Turning a little bit to the SDP. Fred, maybe you could comment on some of  
10 the issues that were discussed. One in particular I think as the results of this  
11 survey that was done on staff in particular and their use and comfort with the  
12 significance determination process. Commissioner Svinicki, you're not the only  
13 one finds it a challenging process.

14 One of the things that struck me was even after several years of experience  
15 with the process and with the program I think it was something like 55% of staff  
16 said that they don't feel that training is effective -- I'm sorry, only 55% said they  
17 thought training was effective. I don't know if the 45% said it was ineffective or  
18 what the rest of the staff. That's not probably as high a number as we would  
19 expect at this point.

20 I'm wondering if you can comment on that and how the staff intends to  
21 address that issue.

22 MR. BROWN: Yes, definitely. In two prongs and then I'll -- the

1 people that are smarter than me on this subject can help correct me on whatever I  
2 say incorrectly.

3 Two things we are doing within my staff. We are sending our senior reactor  
4 analysts out to the counterpart meetings for a refresher and continuous training  
5 because 55% is too low for positive feedback.

6 The other thing is the Phase III evaluation which right now is driven by  
7 pre-calculated sheets based on more generic models for individual plants. We're  
8 in the process with the Office of Research looking at a new online tool to automate  
9 that to make hopefully with an interface that's more user-friendly and is more  
10 accurate to the specifics of each individual plant.

11 That's a couple of year effort that we're right now underway with piloting.  
12 We've got the typical software issues of software and operating system and  
13 getting it to run in a timely way and having good interface tools and menus and  
14 things.

15 But I think that that ultimately if we can get to that state where an inspector  
16 can just type in here's what the configuration was and push the button and get an  
17 answer that will help a lot. I think I've exhausted my level of knowledge at this  
18 point.

19 MR. REYES: I'm just going to echo what Fred is saying. First of all,  
20 we're making the tools in such a way to formalize it and make it easier. You have  
21 to remember that for the average inspector doing a significant determination  
22 process is what you will refer to in the training lingo an infrequently performed

1 evolution. It's not something they do every day.

2 CHAIRMAN JACZKO: And it's not a trivial task, either.

3 MR. REYES: And usually one is a simple system failure to function  
4 or something like that. It's fairly straightforward. Where you get complicated is --  
5 and undoubtedly you'll have some of that -- is when you get human performance  
6 issues, length of duration issues that are not clear.

7 And so, I think Fred is right. The easier part or the best way to do it is to  
8 make the tools easier and continue to have individuals that are very  
9 knowledgeable that can be used as a reference point because we really don't  
10 need to make every inspector an expert on something that's going to be frequently  
11 performed.

12 We need to have them know enough to engage in the process and we  
13 should kind of take the heavy lifting out of the process if we want the inspector to  
14 continue to inspect and be a party to the process of significance and all that, but  
15 not necessarily burden them with that.

16 So, I think those tools are going to go a long way. It's always going to be  
17 an infrequently performed evolution. So, we're always going to have an issue or  
18 an opportunity challenge with that.

19 CHAIRMAN JACZKO: Well, I appreciate that. I think as I've gone --  
20 in the four years that I've been a Commissioner as I go to sites and talk to  
21 residents in particular, the evolution, I think, has been good because the  
22 pre-programmed sheet that was an improvement and enhancement for residents.

1 For a lot of configurations it gave them a quick and easy way to know immediately  
2 what the risk numbers would be. Improved tools and improved technology tools  
3 will only enhance then as we go for. But certainly, I think, an area that we want to  
4 improve where we can.

5 I have just one more question for Charlie. You touched on the issue with  
6 tritium exit signs. Maybe you can perhaps give a little status. We sent out a  
7 demand for information. Perhaps you could just comment on where we stand with  
8 responses to that.

9 MR. MILLER: We sent out a demand for information when we pulled  
10 the information from our database for general licensees that we believed had at  
11 least 500 signs. We set the threshold there to see what it tells us. What we're  
12 trying to determine from the information that we'll get back is is the problem  
13 broader than Wal-Mart? In other words, are you finding the same thing.

14 But what we also found when we put out the demand for information is a  
15 large percentage of licensees asked for some extra time to gather the information.  
16 So, I think what we saw was some of the same response from Wal-Mart. It took  
17 Wal-Mart a while to get its arms around the problem.

18 When you look at the population of people who have these things, there's a  
19 large number of entities who have these tritium exit signs or purportedly have  
20 these tritium exit signs are the places we all shop and eat; Large corporations.  
21 And in many cases if you look at it at the corporate level they didn't even know  
22 they were in the nuclear business.



1           So, they've asked for some extra time where it's reasonable. We've  
2   granted that time. So, I think by this fall we'll have a pretty good handle on the  
3   responses for that.

4           Based upon the responses that we get and the determination of what they  
5   found on anticipating that if they determined they've got a large number of missing  
6   signs, well then we'll get a plethora of event reports like we did from Wal-Mart. If  
7   not, we won't and then we'll determine where we go from there.

8           In other words I think the staff is prepared to say, "Okay, if this results in  
9   that there's still a problem do we go down further and look for people who have  
10  200 signs?" And so, that's kind of where we are.

11          And aside from that we're going through the process with regard to  
12  Wal-Mart of the enforcement process and taking the violations and determining  
13  where we go from there with them.

14           CHAIRMAN JACZKO: I appreciate your response. That certainly  
15  will be a challenge as we go forward and one we'll want to keep an eye on.  
16  Probably one of the biggest challenges that I've always seen with the general  
17  licensing of devices is that very often people don't know that they've been  
18  generally licensed to do something. And so, it is a challenge as we go forward  
19  and those responses, I think, will be telling as we get them.

20           MR. MILLER: We'll get lessons learned from that determining what,  
21  if anything, we need to do on our end. But it's very interesting. If you'll indulge me  
22  a minute. In some of those responses for extra time it gets you to some

1 interesting things that you never thought about, like a licensee will call and say,  
2 "Well, we think we've got signs, but they're on the north shelf in Alaska. Could we  
3 have until spring to go there and look at them because we can't get access to  
4 them?"

5 That's some of the real kinds of information we're getting back. So, most of  
6 the requests were reasonable.

7 CHAIRMAN JACZKO: Thanks. Any other questions? Again,  
8 appreciate the staff's presentation and there's a lot. We had both a discussion  
9 here on facilities and we'll have a chance, I think, to focus more on the facilities  
10 themselves in previous discussions. I think there's been a lot of good discussions  
11 and a lot of good areas for us to continue to work on in the oversight process  
12 themselves, not only in the area where we have a lot more established process  
13 with the reactor oversight, but in the area of the materials.

14 I think there's been a lot of good discussion, a lot of good opportunities as  
15 we go forward. So, thank you very much. I think we'll take just a five minute break  
16 and then we'll begin with Palo Verde.

17

18 PANEL 2

19 CHAIRMAN JACZKO: Good morning and welcome to the second  
20 part of our Agency Action Review Meeting. We'll now hear from Palo Verde  
21 Nuclear Generating Station to hear about your improvements and continuing  
22 challenges and plans for sustained improvement and sustained performance as

1 we go forward.

2 MR. BRANDT: Mr. Chairman and Commissioners, my name is Don  
3 Brandt. I'm Chairman of the Board and Chief Executive Officer of Arizona Public  
4 Service Company and APS's parent, Pinnacle West Capital Corporation.

5 With me today to my right is Mike Gallagher, a member of our Board of  
6 Directors and Chairman of our Board's Nuclear Committee. And to my immediate  
7 left Randy Edington, APS's Executive Vice President and Chief Nuclear Officer.  
8 Also with us today from Palo Verde, Maria Lacal and Scott Bauer.

9 Safely and efficiently generating electricity for the long term is our mission  
10 at Palo Verde. Our business plan that we've designed is directed towards  
11 achieving sustainable industry first quartile performance across all aspects of plant  
12 operations.

13 We've made significant progress since our last meeting here in June  
14 of 2008, but we recognize we have a tremendous amount of work ahead of us.  
15 Completing the Confirmatory Action Letter was but one milestone in our business  
16 plan, but it was a significant milestone and it was also a significant learning  
17 experience.

18 Randy will address the specifics of the Palo Verde business plan, but I  
19 wanted to take a minute to talk about the Board governance and executive  
20 management aspect of that business plan that we have designed into it to assure  
21 the continuing improvement and ultimately sustained excellence at Palo Verde.

22 I and our Board of Directors continue to be engaged with the plant. In

1 addition to direct input from Randy and his management team we are using  
2 multiple sources of data to assess and corroborate Palo Verde's progress.

3 Three years ago our Nuclear Oversight Committee or NOC I'll refer to it as  
4 reported to plant management. The NOC now reports directly to me as the Chief  
5 Executive Officer and to Mike Gallagher as Chair of the Board's Nuclear  
6 Committee.

7 Every four months the NOC spends three full days on site reviewing Palo  
8 Verde operations. At the end of the NOC term at Palo Verde they have an exit  
9 meeting with me and then the NOC's Chair extensively briefs the Board's Nuclear  
10 Committee on their findings and assessments and conclusions.

11 During most NOC on site plant visits I personally will spend one full day with  
12 the NOC and also typically Mike or other directors and non-nuclear corporate  
13 officers, for example, our Chief Financial Officer will also accompany the NOC on  
14 their site visit.

15 Further, we look to independent data inputs from INPO, Palo Verde's offsite  
16 safety review committee, plant walk-arounds and your own resident inspectors.

17 I walk the site on my own including unescorted access to the protected area  
18 to communicate with employees to gauge their morale, commitment and  
19 engagement. In addition, I regularly meet with employee groups in the field  
20 including security officers, operations people, maintenance people, the Young  
21 Generation Nuclear Organization and I speak before several times each class of  
22 initial licensed operator training.

1 I and our Board will continue to support and drive excellence at Palo Verde.

2 Thank you for your time and I'll turn it over to Randy now.

3 MR. EDINGTON: If I could have the opening slide, please. As

4 Mr. Brandt said we have completed a major milestone, but we fully recognize that  
5 we need to build on that milestone, continue our improvements and solidify and go  
6 forward for even further improvement.

7 I would like to recognize that there's 2,500-plus employees at that site that  
8 has been on this effort throughout these two years and without their dedicated  
9 focus and attention we would not have been able to achieve the performance we  
10 have, but again recognize we have more. Also, our owners and the resources that  
11 they have provided and will continue to provide.

12 And last and certainly not least is the support of the nuclear industry where  
13 many have been engaged with us and gave unselfishly of their time to support us  
14 during this time as we share information with them constantly. Next slide, please.

15 This pyramid here represents our overall framework for the business  
16 planning efforts that we've done. We started with a business planning. We did do  
17 a significant root cause review and developed what we call a SIIP or Site  
18 Integrated Improvement Plan. And NRC did their independent looks at us and the  
19 CAL was developed. All of that was embedded in our business plan for the site.

20 They used this business plan constantly although they can identify specific  
21 actions in there. This continues evolution as we go past and as the CAL closes  
22 our action plans keep us going forward as we upgrade them.

1           The CAL does have 16 actions left that we are tracking to completion and  
2   the SIIP action plan, which we'll finish this year has 150 actions left plus an  
3   additional 100 that we added as we did our beyond and broader than CAL  
4   reviews. So, we'll continue that effort. We're upgrading our business plan now.

5           The five red boxes on this pyramid I'll discuss just slightly as we go forward.  
6   Next slide, please.

7           This represents the journey that we have and if you kind of use the base  
8   camp as an area where we rebuild our programs and our processes, e identified  
9   backlogs and we're well past that and driving on through it, but we do recognize  
10   the importance of a solid base camp, a solid foundation on everything we work.

11          One example there and Mr. Collins mentioned we still have some things to  
12   deliver, like the CDBR effort, component database review. It's still ongoing. It was  
13   risk reviewed. We have got the higher risk areas. Still another year of actions to  
14   complete those. Various backlogs that have been risk reviewed and many of them  
15   cleared up. We're still completing those. So, we do have actions to complete and  
16   drive forward as part of just building our foundation, but we are also striving for the  
17   next levels of performance as we go forward. Next slide, please.

18          Sustaining continuous improvement: beyond and broader than CAL. Those  
19   are the probably the most operative words. From the very beginning we designed  
20   a plan that took us beyond and broader than CAL. We did take the industry  
21   experience that was available at the time and have continued to look at it. We're  
22   very much aware of plants who have achieved this level and had a dip afterwards.

1           So, our plan started with going beyond and broader than CAL and we spent  
2   an extensive amount of effort reviewing our CAL closures and what is it that's  
3   continuous, and what needs to be reinforced and what needs to be changed as we  
4   transition through here.

5           The first major area certainly is safety culture. There's absolutely no  
6   question that safety culture is our number one item for this industry and at Palo  
7   Verde. The aspects of it from SCWE or Safety Culture Work Environment, we feel  
8   like we've had a very well area there and the broader areas we had to spend a lot  
9   of time on improving, but we spend continuous effort there.

10          We have constant monitoring. We have dedicated resources. We've  
11   worked with industry and continue to work with industry on how to continue this  
12   monitoring as we go forward and have formal plans on how exactly we'll monitor  
13   that and keep it back to a baseline.

14          The industry engagement I talked about earlier. Not only must we be  
15   involved with the industry, we want to share with the industry our lessons learned  
16   and make sure that at every place we can learn from each other. You get into our  
17   planning area -- very important that -- again, we started with a beyond CAL  
18   attitude. What we want to be in five and 10 years and we continue that. Important  
19   to the CAL is extremely important, but making sure you make that transition is also  
20   extremely important.

21          We have our alignment to missions, values and behaviors. I put all those  
22   on purpose. It's not just a mission, but getting our behaviors right and our

1 standards in the field which is an area that we worked hard on for quite a while  
2 and struggled initially, but we feel like we really achieved that well now and got  
3 more to do. But also aligning on our values and using the tools we have. I'll  
4 mention that in our leadership model a little bit later.

5         The next four blocks represents the five red we talked about. We already  
6 talked about safety, but the four that I'll hit very quickly -- equipment. Obviously,  
7 the technical part of our business is ensuring that that equipment is analyzed and  
8 maintained at very top condition. I'll emphasize the minor mods part of it. That's  
9 the equipment that the operators and the RP and the chemistries.

10         A lot of times our major equipment gets taken care of well, and our minor  
11 equipment doesn't. We've built a program that insures that minor equipment is  
12 constantly maintained, has dedicated resources to it and all an operator or  
13 maintenance or engineering has to do is prioritize that and they work that issue off  
14 and that keeps our equipment very well.

15         People we can spend hours on. As you all know any success for any  
16 organization is our people. I cannot say enough about the people at Palo Verde  
17 and in the industry. Emphasis there is ensuring that people are focused on what  
18 they do for a living.

19         We have our initial hiring to our development to hiring the experienced  
20 people that we've been able to work into the experience organization at Palo  
21 Verde and certainly the retention as we go forward. We have put extensive effort  
22 in ensuring appropriate retention as we make it through this transition because we



1 are aware of transition problems at other plants where you've lost resources. We  
2 feel like we've done a pretty good job and we're sure that that's locked and we're  
3 very much aware of it.

4 Of course, then the corrective action program. I can never say enough  
5 about the corrective action program. As I say at the site I love the corrective  
6 action program and so will everybody else. It's just something that you constantly  
7 must stay on top of and monitor and insure that it's dedicated in the organization.  
8 My expectation is all directors and managers can talk accurately about corrective  
9 action program and their specific items at any time even if I'm walking down the  
10 hallway and ask them.

11 The next slide is a few other areas. The last block I'll talk about that was in  
12 our business plan is knowledge and training. Again, I would love to spend hours  
13 on that. I have a passion for knowledge and training. We use training to drive  
14 knowledge and understanding and create a learning environment.

15 We feel like one of the important parts of why we are sustainable and we  
16 will continue to improve is we think we have that knowledge and that passion to  
17 learn. There's more work to go there. There's a constant effort, but I cannot  
18 emphasize enough and we have set out that every single person on site will get at  
19 least four weeks of power plant training, no matter what position you are, whether  
20 it's an admin tech to a licensed individual. At least four weeks. If you're in  
21 engineering and ops you get more obviously.

22 So, everybody on site is getting four weeks of power plant training. We've

1 started on that process and will continue that for another two years and ensure  
2 that that's completely saturated on-site.

3 Measures. There were discussions before on measures and the  
4 importance of them. The main thing I would say is metrics are very important and  
5 what we're doing is resetting our metrics from where we're at now to industry best.  
6 And always conscious of where the industry is and what we've got to do to  
7 improve that performance.

8 Self assessments. Again, another area when you go through the CAL  
9 process you have a lot of effective reviews. You do big assessments very well.  
10 Now we got to make sure our departmental assessments are very well driven in or  
11 in fact have dedicated resources been developed for that to help the departments  
12 learn and create that infrastructure and replace effectiveness reviews with  
13 assessments in a more productive manner. So that is an area that we're aware of  
14 on transitions and must be driven in and we're putting dedicated resources to do it.

15 Last is trending and analysis. No matter how good your indicators are they  
16 are just numbers. Without the different ways of trending and analysis of what's  
17 behind those. This is also an area that we're very aware that in these transitions  
18 and I've had experience with this at previous plants where you make sure your  
19 trending and analysis is really beefed up during this period of transition. So, you  
20 better understand and get more predictive.

21 Oversight. Mr. Brandt and Mr. Gallagher have talked some about that. The  
22 breath and depth of oversight is so important. You must have multiple ways of

1 information flow. We have a design where our Board and our officers get  
2 information from all angles. I encourage them and certainly take it up to go out in  
3 the field and talk to all levels of employees.

4 In fact, our Nuclear Oversight Committee and Offsite Review Committee's  
5 charters require them to go out in the field and talk to front-line employees, not just  
6 management. As Mr. Brandt says, he stays wandering around all the time. I have  
7 to keep up with him every once in a while, but he does a great job with that.

8 I can't say enough about the importance of oversight. We think we've  
9 embedded that and we've got multiple levels and reviews.

10 The last would be communications strategy. That begins with and ends  
11 basically just create an open environment and talk to all stakeholders as  
12 straightforward as we possibly can. And that is our desire. I believe that's what  
13 we've been able to accomplish. I know that's where we'll strive from here. Next  
14 slide, please.

15 We have worked to try to take these philosophies and tools and put them in  
16 place. Here's just a few representation. The top one is our hiring model. We  
17 carry these books and we continue to upgrade them. We use these books  
18 available. People have them. They look. If you go from left to right its "Safety  
19 Culture, "Human Performance" to our "Standards and Expectation" book. That  
20 actually combines all of them and that's going through a major rewrite right now to  
21 continue to put our leadership model in and put that in people's hands as they  
22 walk out in the plants. Next slide, please.

1           And I'll end it with Palo Verde Leadership Model. This is something that  
2   we've been building from the beginning. It also gets into levels of values and  
3   behaviors. We've had many a retreat on it when our management teams go out  
4   on it. We have another one scheduled in July and we work through those values  
5   and behaviors, such as integrity and respect and trust and how do we establish  
6   that and keep it. This is an important part of solidifying our culture.

7           With that, I appreciate the opportunity. We have achieved a major  
8   milestone. We know we have a lot more work to do. We're anxious in going  
9   forward with that. If anything, the site say I think we were doing 90 miles an hour  
10   when the CAL was closing. We're now doing 110 trying to ensure that we get  
11   ahead and move that ahead. So, the site is working very well together. We're  
12   focused on our next milestones as we go forward. Thank you for the time.

13                   CHAIRMAN JACZKO: Thank you, Randy. We will begin our  
14   questions with Commissioner Klein.

15                   COMMISSIONER KLEIN: Thanks for the update. I've had an  
16   opportunity to come out to your plant twice and check on the initial event and then  
17   the follow-up. Clearly, progress has occurred. I think your comment about people  
18   was certainly a good one. And your Wygen group is certainly impressive. Very  
19   energetic group; that's quite good.

20           I also would like to compliment you on bringing a Board member to the  
21   process. I think having an oversight Board member active and so forth is certainly  
22   a positive sign that you are getting information from a variety of ways. I'm sure

1     when Mike wanders through the plant they might tell him things that they wouldn't  
2     tell others. So, that is another source of input.

3             You talked about a key aspect of training in this scenario. I guess I'll shift  
4     the training question to Mike. If you could just talk a little bit about your training  
5     that you went through at INPO for Board members and what you thought of that  
6     process and the value of it?

7             MR. GALLAGHER: Well, Commissioner Klein, I think it's one of the  
8     most informative things a non-nuclear type could ever be exposed to because it's  
9     not geared for nuclear engineers. It's geared for Board members like myself who  
10    find themselves involved in nuclear programs.

11            My memory was it was a three-day program at Emory, I think. Everything  
12    was very professional. It was comfortable. You had time to do your work and you  
13    had to do your homework. I think I would encourage every company to send a  
14    Board member. I went to the first one with one of my colleagues. We've had  
15    other Board members go to other INPO programs down there. Everybody  
16    universally has come back and said it's a great program. I found it very helpful if.

17            COMMISSIONER KLEIN: Good. Well, Randy, obviously a lot of  
18    progress has occurred. Looking forward what do you think your biggest challenge  
19    is?

20            MR. EDINGTON: I think at this point we still are dealing with  
21    volumes and we need to stay after things like backlogs and drive them to complete  
22    drive down. Ensure we continue to prioritize our resources and handle new issues

1 as they come forward and make sure that we don't forget that there's still a history  
2 of things to clean up and drive forward as we go forward.

3 Its volume and resources. I would say the attitude and the morale aside is  
4 extremely high even though they've all been working very hard and they just seem  
5 to be focused. As you make successes people build on those successes and they  
6 want more. I believe we got a long journey to do, but I think we have the  
7 organization to do it.

8 COMMISSIONER KLEIN: Thanks. I thought your slide 3 was  
9 interesting in terms of your base camp and where you start. So, just looking at  
10 that where do you think you are now? Is it where all the people are? Where do  
11 you --?

12 MR. EDINGTON: I think we're beyond the base camp, but we also  
13 are still solidifying the base camp and that we mentioned the CDBR process.  
14 We're constantly building that base camp and putting more tools and building on it.  
15 We are beyond base camp and moving forward on that. At this point we're really  
16 going through a process of verifying industry metrics and where we stand at the  
17 best. So, we're making those adjustments as we go.

18 COMMISSIONER KLEIN: You talked about hiring people on one of  
19 your slides and I guess the question since Bill and Bruce are still here regarding  
20 the hiring. How long does it take you to hire an individual?

21 MR. EDINGTON: Actually, the first thing I did two years ago was  
22 hire more in the HR department so I could hire better. It takes quite a while. It's a

1 variation and it depends on the type of individual we're looking for. So, we're  
2 constantly working with Engineering.

3 We have a lot of feeder groups. We have an apprenticeship program. We  
4 have an intern program that can convert to an apprenticeship program with the  
5 craft. We have associate degree programs working with the craft.  
6 Engineering has what we call a legacy program where we work with all the  
7 different colleges and when we bring somebody in they go through 18 months of  
8 training before they're assigned out. So, they work in different departments. So  
9 we have just such a wide variety of hiring that if you give me a specific area I could  
10 tell you a little more. But I'll just use engineering.

11 Although we hire twice a year we have constant contact with all the various  
12 colleges. Even security, we've moved that to where we hire at least twice a year  
13 to ensure that we get a good population. And we also allow if you find the right  
14 candidate -- let's say a security class just started and you found the right candidate  
15 three months later you can go ahead and hire him and hold him for the next class  
16 to ensure that we populate those classes as strong as we can. It's a wide variety  
17 of hiring, but it takes quite a while.

18 COMMISSIONER KLEIN: I think the NRC has done a good job with  
19 Lean Six Sigma to modernize our practice, but it still takes a while. It will be  
20 interesting at some point to compare notes and see how long it takes to hire  
21 specific individuals at your plant compared to how long it takes us. It would be a  
22 good benchmark just to take a look at. Thank you.

1                   COMMISSIONER SVINICKI: Thank you. Thank you all for the  
2   update and the messages that you've shared with us today. I think I'll just return to  
3   a couple of topics. One is, Randy, you mentioned communications. I'm always  
4   struck with your units taken all together. Did you say 2,500 employees? It's a big,  
5   big site.

6                   MR. EDINGTON: Big site, yes.

7                   COMMISSIONER SVINICKI: And so, I know the first thought is often  
8   with an employee population that large are they hearing and understanding and  
9   internalizing the messages that management gives? I kind of look at that from the  
10   other direction, though. With that many employees are the mechanisms in place  
11   for them to feel heard and to really be a part of this process, not just something  
12   that is coming at them from the top down, but something that they're driving from  
13   the bottom up?

14                  Could you talk a little bit about communication strategies that try to get that  
15   communication flowing in both directions?

16                  MR. EDINGTON: Absolutely. Communication is an extremely  
17   important part of our whole operation. Shortly after I got there we took the  
18   communications organization reported directly to me. We hired a Director of  
19   Communications. We have staffed it well. We also -- each department has a  
20   Communication Liaison that is a department worker. So, whenever we send  
21   messages out we usually two to three days later gather those and say, "I know  
22   what I said. What did you hear?" And we get feedback on that.



1           So, we use all the tools from technologies from videos. We put out a  
2   weekly video. We do feature videos also besides the regular weekly videos. We  
3   use that. We have a great organization capability of that.

4           Throughout the outage you get regular messages and videos every single  
5   day. We do emphasize that a core business of communication is still in place. No  
6   matter how good our tools are and how much you use technology it never replaces  
7   a face-to-face communication.

8           COMMISSIONER SVINICKI: So, consequently you spend a lot of  
9   time in meetings, I think, is what you're about to say?

10          MR. EDINGTON: A lot in meetings. A lot of walk arounds. A lot of  
11   different types. We'll go all the way to first line. We bring different groups in; slice  
12   the organization many different ways and look for information.

13          But the last piece I will say is when you moved into the initial CAL as much  
14   as we were inclusive and could be a lot of that was driven by the due dates and  
15   the actions. Now, we're redeveloping our business plan and the framework is laid  
16   out. But now we have work groups coming everywhere from first-line craft to  
17   operators.

18          And mixed groups. We have a multi disciplined effort where we mix groups  
19   all the time. So, they are now feeding into all these business plans as we go  
20   forward. It's much more inclusive of ownership. Due to the need of speed before  
21   you had to use slightly different techniques to drive that in and communicate in the  
22   different areas.

1           I can't say enough on the importance of communication. I use every single  
2   tool I can and I'm constantly looking. But I'm also, as part of safety culture, no  
3   matter what -- as I say, it's not what I say that's important, it's what you heard  
4   that's important. So, my intention of communication versus actual when its  
5   2,500-plus employees you must constantly be out there measuring and monitoring  
6   and see what people are hearing.

7           COMMISSIONER SVINICKI: Thank you. Mike, we've heard a little  
8   bit about the time that you spend on the site as a Board member. Is there any  
9   impression that you would share in terms of the time you spend there and you  
10   interact directly with employees? What is your general sense?

11          We've heard a lot about the status and the continued drive on the  
12   improvement plan, but when you spend a day on the site and come away most  
13   recent visits what are your impressions of the moment?

14          MR. GALLAGHER: I think it has a number of positive impacts,  
15   Commissioner. Number one, if you're out on the site you've got some idea what  
16   the site is all about, which you don't have if you're sitting in an office. Just how to  
17   get around; where these people go everyday for work, what's involved?

18          We have the opportunity to meet with all levels of employees privately in  
19   small groups with no management around. We ask tough questions. They're very  
20   candid. I think I have a decent feel on how people in general feel about working at  
21   Palo Verde and feel about different challenges as they come up.

22          Just very briefly. I was at lunch with a group the other day. We had a

1 formal Board meeting with a lunch. I was seated with a wide spectrum of people.  
2 I was congratulating them on getting out of the CAL. I was saying, "Boy, a little  
3 breathing room, huh?" Because I knew how hard they'd worked. They looked at  
4 me like I was from Mars. They made it very clear there's no breathing room. This  
5 work is just starting. We're at step one.

6 I don't think I could get that feel sitting 50 miles away in a Board room. So,  
7 I think it's a good exercise. I've learned a lot. I've gotten a lot more out of it than I  
8 given to it, so it's been a good thing.

9 COMMISSIONER SVINICKI: Okay. Thank you and thank you for  
10 coming here today. Thank you, Mr. Chairman.

11 CHAIRMAN JACZKO: Randy, maybe you could talk a little bit about  
12 in more specifics some of the safety culture initiatives you have and how you  
13 intend to perhaps measure the performance there and continue to make  
14 improvements.

15 Of course, the original findings that led to Palo Verde being in Column  
16 4 had to do with a variety of different safety issues. But in the end it was really the  
17 challenges and the crosscutting issues that ultimately kept the plant in Column  
18 4 for the time period that it did.

19 So, some of those softer issues perhaps unless -- are more challenging to  
20 measure areas that some of the problems really existed in. So, maybe you can  
21 talk a little bit about that?

22 MR. EDINGTON: On the safety culture itself, and again, it's a very

1 broad base area when you put in all 13 attributes from corrective action to human  
2 performance, et cetera. And there are certain key pieces such as SCWE part. We  
3 do a wide variety of monitoring.

4 First, I have a dedicated group that's working on it and we have monthly  
5 meetings where we bring a wide variety from human resources employee  
6 concerns and we talk in general what has been seen, what is our metric showing.  
7 But we also talk about what's coming up and how should we get this information  
8 flowed out and stuff. So, we anticipate things and we try to get out there and use  
9 our communication tools in order to preset that.

10 Then we have very specific -- if we see a hint of an area we have people or  
11 groups that will bring in and we'll do wholesale walk-downs. We might do a quick  
12 sample or sometimes we go interview everybody in that group or half of them. We  
13 may bring in a third party to look at it. We have a wide variety of people that's  
14 done that for us now, so they keep a good sample.

15 So, if we need to know more about an area or sense there might be a  
16 problem, we sample that. And then we are of course using every two years we've  
17 been using the full blown surveys. We did that about every year for a while.

18 We will be going every two years, but we're going to mix the USA and the  
19 Synergy surveys to do both of them, look at the gaps and deltas behind them and  
20 then we're going to start expanding those so that we can compare. They are two  
21 different tools, but when you look at the -- we normalize them and look at that.  
22 That's kind of like a foundation.

1           But the monthly meetings and walk arounds, the reviews; looking at our  
2   metrics and saying is there any indication. I think probably one of the biggest ones  
3   is anything happening in industry right now where we're about to change that we  
4   need to get out ahead of it and communicate it well and just tell people why. Most  
5   people are more than willing as long as you tell them why.

6           If we do a poor job of telling them why and why this needs to be done, then  
7   that usually creates the problem.

8           The standards and expectations I can't say enough about that. When  
9   you're trying to align an organization and you're trying to update your standards  
10   and expectations that's always very difficult. It's one where you have to have  
11   employee groups come in, work with us, look at your gaps, go and see why that  
12   particular group is not working. You never get that overnight. It's not like you can  
13   just blend this in.

14          Even today we have different levels of performance. Some of it much  
15   further along and others that need continuous monitoring and making sure that it  
16   stays so that we don't slip back into a bad habit.

17                 CHAIRMAN JACZKO: I appreciate that. Certainly, as we go forward  
18   and obviously we're not ending our oversight and activities at the site. With the  
19   closing of the CAL we'll be moving to a slightly different regulatory and inspection  
20   regime. We will certainly continue to monitor and want to see continued and  
21   sustained performance at the site.

22          That's probably the most important message I think that we can leave.

1 Certainly, the performance in the past was not where we wanted it to be. And over  
2 the last several years changes have apparently been made. Those changes  
3 appear to have improved performance to the point now where we can reduce our  
4 inspection oversight, but we will continue to monitor.

5 I think as the Chairman indicated earlier not want to see the plant cycle  
6 through and have another period of degraded performance. So, we look forward  
7 to your continued efforts in that regard and our efforts will continue.

8 Any other questions?

9 COMMISSIONER SVINICKI: Could I look at your little flip book? I'll  
10 give it back.

11 MR. EDINGTON: You can have it. We have many extras.

12 CHAIRMAN JACZKO: Again, I just want to close then with  
13 appreciate your coming and presenting this information. It's certainly, I think,  
14 important lessons here at the site that you have learned. There's important  
15 lessons, I think, to continue to share throughout the industry about the changes  
16 that you have made and in particular some of the structural changes that you've  
17 made and how that can be, I think, an enhancement. I look forward to continuing  
18 improvement in your performance. Thank you.

19 MR. EDINGTON: Thank you.

20

21

22

1 PANEL 3

2 CHAIRMAN JACZKO: We will now have the third part of our  
3 meeting where we'll hear from the Nuclear Fuel Services to describe their efforts to  
4 continue to improve performance there and the challenges that you're dealing with  
5 and how you intend to address them. Please go ahead.

6 MR. KUDSIN: Mr. Chairman and Commissioners. I'd like to thank  
7 you for the opportunity to discuss the progress Nuclear Fuel Services has made in  
8 improving their safety culture. My name is Dave Kudsin. I'm the President of NFS  
9 and I'm cautiously optimistic about the progress we have made and the direction  
10 we are heading. Next slide, please.

11 The past year has been one marked by transition. There was some  
12 mention earlier that at the end of 2008 NFS became a member of the Babcock  
13 and Wilcox family of businesses. With that event, it basically ended two decades  
14 of private ownership and saw the retirement of some of NFS's more experienced  
15 leaders.

16 In the midst of this change NFS continues to operate to the highest  
17 standards of safety and security. As a 33 year employee of Babcock and Wilcox  
18 Company, you have my personal commitment to the continued safe, secure and  
19 compliant operation of NFS.

20 Let me highlight some areas where B&W ownership has already made a  
21 positive impact on the NFS organization through improved accountability.

22 We now have increased independent corporate oversight. An example of

1     that, there was a recent audit of NFS's environmental safety and health programs  
2     by the corporate audit team. This was a very valuable tool in identifying additional  
3     areas for potential improvement and also served as a benchmark of the NFS  
4     facility against the other B&W facilities.

5             We have also formally adopted the McDermott Ethics and Compliance  
6     Program and trained all of our employees on their responsibilities to report  
7     situations that could put the company in jeopardy. I'll dwell on it just a little bit.

8             For those that may not be familiar, Babcock and Wilcox Company is a  
9     subsidiary of McDermott International, Inc. That's the connection with McDermott.  
10    And the centerpiece of the Ethics and Compliance Program for McDermott really is  
11    contained in what they identify as a Code of Business Conduct. Inside this  
12    document what you'll find is a wide variety of expectations on how the corporation  
13    expects each employee to conduct business.

14            Included in here is a section on health and safety and it matches up very  
15    nicely with the efforts that have been ongoing at NFS in the area of safety and  
16    compliance, a conscious work environment. It also includes -- the ethics program  
17    includes another opportunity for our employees to identify issues anonymously  
18    through a corporate ethics hotline.

19            Another item has to do with the fact that NFS is now part of a multinational  
20    company with 20,000 employees, which means that NFS now has greater access  
21    than ever to the resources of a large corporation with many capabilities.

22            We've already begun engaging at this point primarily with what we'll call



1 kind of a sister facility in Lynchburg, Virginia with the counterparts and  
2 management team to talk about common issues, to discuss best practices, to look  
3 for opportunities for improvement and as time goes on we will start to drive that  
4 further down in both of the organizations.

5 It's also allowed NFS to expand their frame of reference and also to  
6 increase the diversity of opinion. They also have access to a large number of  
7 nuclear operations experts across the country. You're probably familiar that B&W  
8 has contracts at many of the DOE facilities and have access to individuals within  
9 those facilities. Next slide, please.

10 Overall our plan is on track and most of our performance indicators and  
11 metrics are positive. For example, we are seeing more and more examples of  
12 employees embracing the Human Performance Principles that they've been  
13 taught. The indicator there is a significant increase in the use of the corrective  
14 action system.

15 However, like any plan our progress has challenges. One challenge we  
16 face was the difficulty in coordinating safety culture efforts and communicating the  
17 status effectively. I've addressed that issue through the assignment of a Senior  
18 Project Manager with an extensive Naval reactors program experience.

19 I have also hired a Communications Manager who should be on board next  
20 week and then have another communications position that we're in the process of  
21 filling.

22 We've also been slower than planned in some areas such as the role out of

1 our Human Performance Supervisor, coaching and positive reinforcement  
2 program. While slower than desired the Human Performance is a key area that  
3 must be done right the first time.

4 As a cornerstone of our safety culture improvement initiative a delivered  
5 approach is being used which we believe will pay higher dividends.

6 So, in spite of the difficulties I believe our 2011 goal of industry recognized  
7 excellence is achievable.

8 I'd like now to introduce Tim Lindstrom, my Vice President of Operations to  
9 conclude the presentation.

10 MR. LINDSTROM: Thank you, Dave. I just want to speak very  
11 briefly about our plan and accomplishments and then maybe even show some  
12 metrics that tie in. In 2007, we were here with a concept and commitment. In  
13 2008, we added a plan to that and I think now in 2009 we can actually begin to  
14 show real progress. I think that we welcome the staff's assessment of that  
15 progress in 2008.

16 To speak to our strategic plan we have set a goal and we set that goal in  
17 2007 of being an industry best in class in safety culture by 2011. That goal has  
18 been consistent. We haven't wavered from that. We've developed a plan to  
19 achieve that that integrates our own self assessment findings with the findings of  
20 our independent third-party assessment group; what we call the Safety Culture  
21 Board of Advisers or abbreviated SCBA. Within that plan we have actions to  
22 address each finding. They're assigned a date and responsible managers so that

1 we have a lot of accountability there. If we can go to the next slide.

2 One of the ways that we accomplish in the midterm the execution of that  
3 plan is through something called a One Page Planning System. That is integrated  
4 with our business plan, so we're not out there running business objectives and  
5 safety objectives.

6 Each department has a comprehensive, but integrated set of objectives.  
7 Those objectives are tied with thresholds and metrics and action plans with  
8 milestones.

9 Annually we get together as a management group and hold workshops to  
10 develop those strategic plans that flow down four levels within the organization.  
11 Those annual workshops are very important in that they allow us to assess our  
12 prior year's performance to look at where we need to have both horizontal and  
13 vertical alignment and adjust the plans accordingly for the upcoming year.

14 We execute the plans through a series of monthly meetings where we  
15 review the objectives, the metrics, review the action plans and identify roadblocks  
16 and opportunities for acceleration and add that ultimate accountability step. If I  
17 could have the next slide.

18 I'll talk very briefly about project management on this. We had over 200  
19 initial commitments and we're about 50% complete on that with expected to be  
20 70% complete by the end of this year. We are on track. We're achieving what we  
21 initially set out to do.

22 Now, each of those commitments goes through a senior management

1 effectiveness review and we can assign downstream effectiveness evaluation  
2 where necessary to make sure that the progress is in fact being sustained.

3 As Dave said, we hired a full-time manager. While we think the actions are  
4 effective we really have struggled as I think most groups do with developing a  
5 comprehensive set of cultural change metrics. How do you know that the  
6 behaviors you're seeing are as a result of cultural change? And how do you  
7 assess the long-term sustainment? We're working on that in 2009. If I could have  
8 the next slide.

9 I just want to very briefly talk about some accomplishments and then maybe  
10 tell a story through some metrics. In human performance which we really view as  
11 a cornerstone of our program we have established a site-wide event clock. We  
12 have seen the resetting of that clock -- the mean time increase. We think that's a  
13 very positive thing relative to actual events. But that's really a trailing metric, not a  
14 leading metric. It doesn't talk to cultural change or future.

15 A year ago we had no plant personnel fully trained in human performance  
16 tools and familiarization. Right now, we have about a third of our work force fully  
17 trained using the tools and we expect to have all of our folks trained by year end.  
18 The security forces will be trained in 2010.

19 We see the results of our human performance efforts in conservative  
20 decision-making and while we are yet to develop a good metric for measuring that  
21 we have some anecdotal evidence.

22 This year we had a young engineer who identified a calculation

1 inconsistency between what he was doing on a new process and what had been  
2 done in the past. His questioning attitude led to an investigation. Ultimately, we  
3 shut down 23 of our wet process enclosures to resolve that discrepancy.

4 Again, an example of a conservative decision. We ultimately changed  
5 some design calculations and we changed some physical equipment to address  
6 that issue throughout the plant.

7 We then took that event and highlighted it to the work force as an example  
8 of good, positive cultural attributes of the questioning attitude and conservative  
9 decision-making.

10 I'm going to go on to the next slide and begin to tell that story. You can see  
11 through how we have changed our maintenance backlog by adding resources and  
12 by prioritizing and better management.

13 If you look at the next slide one of the results we think of decreasing that  
14 backlog is increased employee confidence in the corrective action system. There  
15 was some reluctance to put in an issue if there was no expectation it was ever  
16 going to get fixed.

17 So, you see through the years there the increasing use. Not only have we  
18 done better -- set better expectations and lowered the threshold, but we've also  
19 increased employee confidence.

20 If you look at the next slide you'll see that we have not only gotten more  
21 identification, but we think that overall we've lowered the risk. I'd like you to look at  
22 particularly at the red. Difficult to ascertain those numbers, but the high risk items

1 in 2006 there were five. In 2007, there were two and in 2008 there were zero. So,  
2 again, we're identifying the smaller items and we're eliminating the high risk.

3 Ultimately, if you go to the next slide, you'll see how that is perceived by the  
4 work force and their overall satisfaction with the initial identification through  
5 problem closure and a very positive increase through 2008. Again, what we think  
6 relates to employee confidence in the system and their willingness to use it.

7 Finally, while we think that all paints a good picture relative to use of the  
8 corrective action system, we don't think that that is all we need to do. Our focus is  
9 on continuous improvement and we have recently launched an employee  
10 concerns program to provide yet another avenue for addressing concerns. And  
11 we've also enabled anonymous corrective action reporting so that again we  
12 increase the willingness of a reluctant employee to provide an input.

13 Bottom line, we are not satisfied with the progress that we've made. We're  
14 committed to continuous improvement and ultimately excellence.

15 With that, I'll turn it over to you for questions.

16 CHAIRMAN JACZKO: Thank you for that presentation. I'm sure  
17 you'll hear from all of us here. Certainly, our concerns in wanting to see continued  
18 improvement and our interest in wanting to see continued improvement. And the  
19 importance that we place on that improvement in particular at this facility with  
20 some of the challenges there have been in the past.

21 We'll begin with Commissioner Klein.

22 COMMISSIONER KLEIN: I think your reach back capabilities

1 through both B&W and McDermott probably help you with a lot of talent that you  
2 can go back. I'm sure that helps quite a bit. I just have a couple questions.

3 On your document about the conduct of operations. How do you distribute  
4 that and then how do you measure whether people really read it?

5 MR. KUDSIN: Actually, there was training that was provided. I  
6 guess it was about six weeks after the acquisition that actually had some folks  
7 come in from corporate and they actually went through a training course for all  
8 employees at the facility. And then, it also is part of the training when we have  
9 new hires that come in and they actually get a copy of this book.

10 COMMISSIONER KLEIN: Thanks. On your slide 11, you're talking  
11 about corrective action programs and the confidence. It was interesting to see the  
12 trend changes. You have a couple of big dips then it gets better then it goes down  
13 again. Can you explain?

14 MR. LINDSTROM: Of course, these are month to month data points  
15 and we really think you have to integrate over any one individual month. We did  
16 look at the specific dips, particularly the one in December. We kind of related to  
17 some issues that were occurring; a high level of overtime. And then we looked  
18 back in June. Again, we were suffering a high level of overtime in that period  
19 relative to some production issues.

20 While we can't firmly tie that -- we did look very hard at why those occurred  
21 and tried to find a root cause. Bottom line, I think you really need to integrate over  
22 longer than a month. We're beginning to learn that in a lot of our metrics that

1     where we look at it on a too frequent basis we see some pretty wide swings.  
2     When you integrate it or take some kind of a rolling average it smoothes the data  
3     out. I think it gives you a better indication of where you are.

4                 COMMISSIONER KLEIN: It's interesting looking at the data because  
5     you've got a couple of areas where you really increase the confidence, and then  
6     you've got others clearly showing going down. It's interesting to try and figure out  
7     what causes those.

8                 MR. LINDSTROM: We do look at those on a monthly basis.

9                 MR. NAGY: Can I just add one thing real quickly to that?  
10    Importantly, this is something that we weren't even measuring going back a few  
11    years ago. The very fact that this is something we're measuring and tracking now  
12    with the senior management team is a very positive indicator to me outside of the  
13    data itself, which of course, we need to analyze and understand the trends for.

14                So, this is just -- and getting back to employees and asking them how do  
15    you think the system works for you. And getting their feedback. That wasn't  
16    something we were doing a few years ago and that's something we've learned  
17    from others in benchmarking and a good practice that as we take it forward we  
18    think will reap benefits for us.

19                COMMISSIONER KLEIN: Thanks. No more questions.

20                COMMISSIONER SVINICKI: Thank you for the presentations. I  
21    believe you were in the room during the NRC staff panel and I had had a  
22    back-and-forth with them about the comparisons with the Reactor Oversight



1 Process and the materials area stated in its plainest terms. I said to folks  
2 licensees in the materials area understand how to not be invited back. Do they  
3 understand the regulatory expectation over the performance period so that they  
4 will transition out of being part of this AARM review?

5 I know that some of the responses I got were that there is not an ROP, but  
6 there is a clear communication and documentation of what is expected.

7 Would any of you care to comment on that from your side in terms of that  
8 communication with the Region and understanding clearly the performance  
9 expectation over say this period leading up to next year's AARM?

10 MR. LINDSTROM: I would say that the performance expectations  
11 are clear and are very much in alignment with our expectations of performance. In  
12 fact, I hope that our own expectations of continuous improvement and goal of  
13 excellence are actually higher than regulator's expectations.

14 But also, we recognize that we're not here because of our performance in  
15 2008. We're here because of our performance over a broader period. On  
16 long-term systemic issues we have to demonstrate, I think, some longer-term  
17 sustained performance and progress in order to engender the regulator's  
18 confidence.

19 I think our relationship with both the Regional folks and the folks in the  
20 oversight committee in headquarters is such that we recognize that. We're  
21 pleased that the staff's assessment of our performance this year was good. We  
22 also understand that this is a long-term issue. It didn't occur overnight and it's not

1 going to be solved overnight. We're in it for the long-term.

2 My goal next year is not to be here at this meeting, but that's not what's  
3 important. What's important is our performance in the plant and sustaining that  
4 beyond 2009 and 2010.

5 COMMISSIONER SVINICKI: Is a somewhat related issue here the  
6 topic you mentioned of saying that it's hard to come up with metrics on assessing  
7 a cultural change? You talked about the challenges and that's not unique to NFS,  
8 at least in my experience. That's a tough nut to crack. Is that part of how this  
9 demonstration and building confidence is you're going to have to be able to build  
10 some metrics and data in that area?

11 MR. LINDSTROM: I believe that's true. One of the challenges that  
12 we faced and that's been pointed out by our independent third-party and by the  
13 NRC staff, is that we really haven't developed a comprehensive assessment tool,  
14 a set of metrics.

15 We have some very good metrics in some very specific areas. Some of the  
16 areas are much more difficult to measure; the operating experience, for example.  
17 How do you culturally measure operating experience? It becomes very difficult.  
18 We're working on that and working with the NRC staff and with INPO and the B&W  
19 folks.

20 COMMISSIONER SVINICKI: Does the facility in Lynchburg provide  
21 you an opportunity to do some kind of at least benchmarking? Obviously, going  
22 through an acquisition process you have some idea of what you're acquiring, but

1 post acquisition you've got a chance to really do some benchmarking of maybe  
2 even just corporate atmospherics and other things at the two facilities.

3 Is that something that you've undertaken and will that be of help?

4 MR. LINDSTROM: Absolutely. I have gotten great value out of the  
5 acquisition already just in that there's somebody I can call who is also a CAT 1  
6 licensee who goes through much of the same issues to just bounce an idea off of.

7 COMMISSIONER SVINICKI: We see some of that on the reactor  
8 side where people have built fleets and eventually got around to looking at  
9 procedures and saying every plant in my fleet has a different access control  
10 procedure. We could have kind of the best practices of all of them. So, with two  
11 facilities there's fewer data points, but it's the same concept.

12 MR. LINDSTROM: Right. On a more formal level we recently got  
13 together with the Lynchburg facility at the senior level and are beginning to put  
14 together a how can we identify the best practices in every area and come together  
15 to implement those best practices for the mutual benefit.

16 That will be a long-term project and certainly we'll try to prioritize and look  
17 for the low hanging fruit where we can implement quickly and get a lot of value, but  
18 ultimately we would like to see both facilities come much closer together  
19 operationally.

20 MR. NAGY: If I could just add. There is the Lynchburg facility and  
21 obviously there are a lot of parallels there. There are a number of other fine and  
22 strong organizations within this company that we're now part of that we are

1 increasingly becoming aware of.

2 I was at a conference this week on ethics and compliance in Charlotte and I  
3 was in a conference of 40 plus people from labor relations and legal and ethics  
4 and compliance oversight; all in the same company. It was like being at a  
5 professional conference, but you were all in the same company. That was a very  
6 unique environment to be in.

7 We shared a lot of things about the programs we're doing and strengths  
8 and I think there's going to be a lot of synergies that will come from that. A lot of  
9 strengths that will come from that to NFS just from the greater B&W and  
10 McDermott companies that are out there. Regardless of if they're in the nuclear  
11 industry or not.

12 MR. KUDSIN: I think there's clearly an expectation particularly with  
13 the Lynchburg facility and the Erwin facility that those resources would be  
14 leveraged to lift both organizations up as far as improvement goes.

15 As Tim mentioned, we've had two senior management -- we call them  
16 "meet and greet meetings" to make sure that everybody within the two  
17 organizations understand who their counterparts are and that we can then start to,  
18 like I said before, kind of move that orientation process down a little bit farther in  
19 both organizations kind of where the pedal meets the metal or whatever; to get  
20 some real thinking about what are the practices of both facilities and which ones  
21 make sense to transport from one facility to the next in order to try to improve.

22 COMMISSIONER SVINICKI: Thank you. I don't have any further

1 questions.

2 CHAIRMAN JACZKO: I think another area that I think in the past  
3 we've discussed this for information sharing is INPO. Maybe you could comment  
4 on what your relationship is with INPO and what ability you have to interact with  
5 INPO for a lot of these areas?

6 MR. KUDSIN: We are a member and I don't know the exact term.  
7 I'm kind of new to --

8 MR. LINDSTROM: We are a supplier participant.

9 MR. KUDSIN: Okay. Supplier participant. So, we have access and  
10 I think we just had access -- NFS had access individually. B&W had access  
11 individually to the best of my knowledge and together we're kind of now one part --  
12 one membership, I guess, in INPO. We do have access and we have used it to  
13 benchmark.

14 The one that comes to mind that I'm aware of as Tim mentioned the  
15 employee concerns program. I believe there was a fair amount of benchmarking  
16 that took place with INPO participants in order to try to find best practices and not  
17 reinvent the wheel so that we could have a program that would be there for the  
18 long-term.

19 We also have done additional benchmarking in other areas.

20 MR. NAGY: We've also had a number of INPO assist visits now.  
21 This has opened up some great doors for us having the professionals from INPO  
22 come and spend time looking at a configuration management program was one

1     that we did recently. Work controls, maintenance and Rad protection standards;  
2     how we run that organization. Those have been huge.

3             Our folks go to training at INPO. We get into their supervisor training.  
4     We've had one of our senior folks go to the senior nuclear plant management  
5     courses, the five-week class. In fact, I'm going to go to that starting in about a  
6     month. I'll spend five weeks in Atlanta doing that course.

7             Those are great opportunities for us to integrate better within the greater  
8     nuclear community and really learn a lot. Opening a lot of doors. Opening a lot of  
9     insights for us at NFS. These are all things that are going to pay benefits in the  
10    future. Absolutely.

11            CHAIRMAN JACZKO: I certainly agree that I think INPO is a very  
12    valuable organization. In particular it provides that opportunity for information  
13    sharing and for learning, in particular, in a lot of the core kinds of nuclear safety  
14    ideals and practices. So, it's good to hear that you are engaged and working with  
15    them on those activities.

16            I wanted to focus most of my questions really around the safety culture  
17    Board of Advisers. Their report came out about a year ago, I think, today. I guess  
18    the first question I would just ask is maybe you could go through the  
19    recommendations of the Advisory Board and where you see progress in those  
20    specific areas right now.

21            MR. LINDSTROM: Let me field that one. They had, I think, over 40  
22    specific what we would call significant findings and those findings all got rolled into

1     our strategic plan. They were in all of the 13 safety culture component areas.

2     They were not concentrated in any one.

3             They also organized those findings into a different taxonomy that they

4     called kind of a crosscutting cultural area; things that we needed to focus on.

5     They were things like management or communications.

6             In many cases we have directly addressed the findings. For example, in

7     the area of resources they identified a number of resource shortages relative to

8     our goal of excellence in different safety culture areas. We've resourced those

9     deficiencies.

10            Safety -- industrial safety specialists, some radiological safety folks, some

11     engineers and some mechanics to achieve the zero backlog or the planned

12     backlog.

13            In human performance, one of their big recommendations was a

14     comprehensive human performance program. We had already embarked on that

15     road and folded their recommendations into our plan. We have, I think, achieved a

16     great foundation in human performance. We have been a bit slower than our

17     original thought, but as we got into it we recognized the magnitude of the

18     commitment that we have to make in each individual area as we roll it out and we

19     have made that commitment both in training and in maintenance and engineering

20     resources to address concerns as they're brought up.

21            Configuration management, work control; all areas where we have directly

22     taken their recommendations and put into place programs to meet them.

1           Some of the areas we have not moved as quickly as the SCBA would like  
2   and frankly it's a case of change management. We recognize that what we do we  
3   want to do well. We don't want to overwhelm the organization with change. So,  
4   there's some things that we intentionally put on the back burner with an intention  
5   and part of our plan to get to those things either in 2009 or 2010. The one that  
6   comes to mind is operating experience.

7           Today, we look at individual events and input of operating experience and  
8   we track and look at those. We don't really have a comprehensive system that  
9   goes out and pulls information and organizes it well. We've made the conscious  
10   decision not to do that until the end of this year.

11          So, I think for the most part we have addressed the high priority findings.  
12   We have put resources towards those findings and in many cases developed  
13   programs associated with those findings.

14          Our assessment of effectiveness -- we're really too soon to tell. In many  
15   cases we have put into place programs this year -- to the employee concerns  
16   program. That was one of the findings. I think we put it in place in March. It's  
17   certainly too soon to tell whether it's had any affect. We think it's a good program.  
18   It's based on an INPO model. We'll see.

19                 CHAIRMAN JACZKO: You talked about you haven't really  
20   measured effectiveness yet. How will you go about doing that? Will you have  
21   metrics then or the ability to measure each of these areas as you go forward? Or  
22   will it be up to the Safety Culture Advisory Board to do an additional analysis then



1 to determine the effectiveness of your programs?

2 MR. LINDSTROM: We we'll measure the effectiveness certainly of  
3 each program. What we are struggling with and one of the reasons we brought on  
4 a dedicated manager in this area is kind of trying to tie programs with safety  
5 culture components to metrics.

6 In other words, the set of metrics that I show here are they resources? Are  
7 they corrective actions programs? Are they safety conscious work environment?  
8 There are elements of all three in there and probably other components.

9 And so, if you want to assess your performance say in safety conscious  
10 work environment, which of the 10 metrics that we might choose are really  
11 relevant and what are they telling you?

12 We haven't developed a good way of distilling that down yet. And that,  
13 frankly, is work that we are engaged in today. We expect to brief the Safety  
14 Culture Board of Advisers on that work in July and get feedback from them as to  
15 whether we've kind of achieved what they think is a good way of doing that.

16 MR. NAGY: There is a planned follow-up survey. If you recall one of  
17 the things the SCBA team did early on was they came in and they did a very  
18 sophisticated survey instrument and applied it at NFS. They will apply that same  
19 instrument again in late 2009, early 2010 timeframe. That will be very important to  
20 be able to lay those two next to each other and see is there improvement here.  
21 That's something they're looking for.

22 But more importantly and their M.O. has always been teaching us, if you

1 will, through the process of how to get there and maintain it on our own without  
2 their involvement. They are tough folks in that regard, but they're doing a good job  
3 in that regard as well.

4 So, I do suspect we'll have a pretty robust set of metrics coming out of this  
5 that will help us understand things as we go forward.

6 CHAIRMAN JACZKO: I certainly think as I've seen the issues at  
7 NFS this really was, I think, for this agency a unique situation and we dealt with it  
8 in a very unique way. The order that came out of the alternative dispute resolution  
9 really focused on safety culture and that was really the root of the challenges of  
10 the issues. And that really is going to be, I think, then ultimately where the  
11 solutions are going to be found is working in those areas and improving the safety  
12 culture aspects of the facility.

13 And certainly one of the reservations I continue to have about the order that  
14 we ultimately adopt was that the Board of Advisers is not a permanent fixture at  
15 the facility. I think as we go forward that will be one of the things that I will be  
16 keeping a focus on is really, I think, as you said John, is ensuring that you have  
17 institutionalized those lessons so that absent the Board of Advisers you're able to  
18 continue to maintain good performance in the area of safety culture ultimately.  
19 That's where we found the root of the issues at the facility.

20 I appreciate your coming today and we certainly -- I think the NRC has seen  
21 improvement, but there continues to be areas where there are challenges and  
22 we'll look forward to continued improvement in that area and we'll continue to

1 perform our oversight and our inspection activities to identify areas where we have  
2 concerns and bring them to your attention. Thank you.

3 Any other questions from Commissioners? Thank you.

4 With that, that concludes our meeting and I want to thank the staff as well  
5 as Palo Verde and NFS. For both Palo Verde and NFS this was really an  
6 opportunity to present your plans for improving performance at your facilities and  
7 for the NRC I think it was an opportunity to talk about overall our activities and how  
8 we do our oversight as well as to reinforce, I think, for the facilities that were here  
9 and really for the public the importance we place on safe operations at all the  
10 facilities that we regulate.

11 So, I thank everybody for a good meeting. We're adjourned.

12 (Whereupon, the meeting was adjourned.)

13