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

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WEDNESDAY

June 4, 2008

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The Commission convened at 9:00 a.m., the Honorable Dale E. Klein,
Chairman, presiding.

NUCLEAR REGULATORY COMMISSION

DALE E. KLEIN, CHAIRMAN

GREGORY B. JACZKO, COMMISSIONER

PETER B. LYONS, COMMISSIONER

KRISTINE L. SVINICKI, COMMISSIONER

1 PANEL 1: NRC STAFF

2 WILLIAM BORCHARDT, Executive Director for Operations

3 JIM CALDWELL, Regional Administrator, Region III Office

4 ELMO COLLINS, Regional Administrator, Region IV

5 ERIC LEEDS, Director, Office of Nuclear Reactor Regulation

6 CHARLES MILLER, Director, Office of Federal and State

7 Materials and Environmental Management Programs (FSME)

8 VICTOR McCREE, Deputy Regional Administrator for

9 Operations, Region II

10

11 PANEL 2: ARIZONA PUBLIC SERVICE

12 BILL POST, Chairman of the Board, Arizona Public Service

13 DON BRANDT, Chief Executive Officer, Arizona Public

14 Service

15 RANDALL EDINGTON, Executive Vice President and CNO,

16 Arizona Public Service

17

18 PANEL 3: NUCLEAR FUEL SAFETY

19 DWIGHT FERGUSON, JR., President and CEO, NFS

20 TIMOTHY LINDSTROM, Executive Vice President and

21 General Manager, NFS

22 B. MARIE MOORE, Vice President, NFS

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

2 CHAIRMAN KLEIN: Good morning. We have a missing
3 Commissioner that I assume will appear momentarily. We called his office
4 and we're not sure exactly where he's located. So, we'll go ahead and get
5 started.

6 Obviously, it's a long meeting today. We're going to hear from the
7 NRC staff, then we're going to hear from Palo Verde and then from
8 Nuclear Fuel Services. So, we'd like to keep on schedule as much as we
9 can.

10 This is an opportunity to learn a new acronym: AARM. So, I'm
11 trying to remember that it's the Agency Action Review Meeting. This is
12 really a very important part, I think, of our process.

13 This kind of a meeting elevates issues to the senior management of
14 the agency and it identifies areas in which we have some problems that
15 we can hopefully address early on.

16 The good thing about the AARM is it's part of our integrated
17 process of looking early on at issues. The reactor oversight program, I
18 think, does a very good job of identifying issues and this aspect of this
19 meeting today will elevate it to the senior management issues where we
20 might want to take some additional action.

21 So, I think this is a very good part of our overall integrated program
22 to ensure safety and security of our facilities for which we regulate.

1 Any comments from my fellow Commissioners?

2 COMMISSIONER SVINICKI: I would just say,
3 Mr. Chairman, that I wanted to thank the staff for the completeness of the
4 preparatory materials. Given my newness on the Commission, I'm highly
5 dependent on the materials provided in advance and I want to thank you
6 for the package that was put together.

7 COMMISSIONER LYONS: Just that this -- to agree with
8 you -- is one of our most important meetings of the year. I'm very much
9 looking forward to it.

10 CHAIRMAN KLEIN: And with that, Bill, we'll start.

11 MR. BORCHARDT: Good morning. The staff is here today
12 to brief the Commission on the results of the Agency Action Review
13 Meeting or AARM as you'll hear it referred to during this morning's
14 meeting.

15 We hold this meeting once a year in accordance with our
16 procedures and, as you know, the Agency Action Review Meeting is an
17 integral part of the evaluative process used by the agency to ensure the
18 operational safety performance of nuclear facilities.

19 I'd like to stress one point that this evaluation of licensee
20 performance is really done on a day-to-day basis by the staff of the
21 regions and the program offices. And it is at this annual meeting that we
22 summarize the results and we do -- one of the strengths of this process, I

1 believe, is the self evaluation and feedback element of this process.

2 So, we use this annual meeting as an opportunity to review the
3 metrics to look if there are program changes that are required and as a
4 calibration point for ourselves, but that the safety review of all of the
5 licensed facilities is done on a daily basis and we don't wait for this annual
6 meeting in order to make a regulatory response to any issues that we
7 think warrant an appropriate response by the NRC.

8 The AARM discussions covered the following four objectives: to
9 ensure that trends in industry and licensee performance are recognized
10 and appropriately addressed; to ensure the efficacy of the ROP in meeting
11 the agency's strategic goals via the ROP self assessment; to allow senior
12 NRC managers to review agency actions that have been taken for those
13 plants with significant performance problems as determined by the action
14 matrix and to identify additional actions as appropriate; and to ensure that
15 coordinated courses of action have been developed and implemented for
16 licensees of concern. Slide two, please.

17 Two plants were in the multiple repetitive degraded cornerstone
18 column of the reactor oversight process action matrix in 2007 and were
19 discussed during our annual meeting.

20 Jim Caldwell will discuss the actions taken for Perry, which is no
21 longer in Column IV. Elmo Collins will discuss the Palo Verde plant which
22 remains in Column IV.

1 After the plant discussions, Eric Leeds will review the results of the
2 Reactor Oversight Process self assessment and the industry trends
3 program. Next slide, please.

4 We'll then transition to the materials and fuel cycle facility
5 discussions. Charlie Miller will lead the discussion on performance trends
6 and Victor McCree will discuss Nuclear Fuel Services.

7 In addition to the facilities that you'll be briefed on this morning, we
8 also discussed Farley Unit 1 at the Agency Action Review Meeting
9 because there are indications that that unit may enter Column IV within
10 the next few quarters; certainly, during 2008.

11 If Farley's performance does in fact meet the Column IV criteria
12 during the third quarter of 2008 then we'll respond as called for by the
13 Reactor Oversight Process action matrix, which includes scheduling a
14 Commission meeting within six months of going into that quarter.

15 So, there is a potential that before our next scheduled annual
16 meeting of this type that we may have a Commission meeting to discuss
17 Farley in accordance with the process.

18 Region II, as I mentioned earlier, is doing the ongoing evaluation
19 and interactions on the Farley Unit 1 process, but it did not meet the
20 criteria for discussion at today's Commission meeting.

21 So, with that, I'd like to turn it over to Jim Caldwell.

22 MR. CALDWELL: Thanks, Bill. Good morning, Chairman,

1 Commissioners. As Bill indicated, my name is Jim Caldwell and I'm the
2 Regional Administrator for Region III, Chicago Office, NRC. I'm here to
3 discuss the Perry nuclear plant today because Perry was in the multiple
4 repetitive degraded cornerstone column or Column IV of the reactor
5 oversight or ROP action matrix for at least one quarter and it was in the
6 first quarter.

7 The Perry plant is BWR/6 MARK III containment that is owned and
8 operated by First Energy Nuclear Operating Company or I'll probably say
9 FENOC later on and is located in Perry, Ohio.

10 As I discussed in the previous AARM Commission meeting, Region
11 III closed the significant cross-cutting issues in human performance and
12 problem identification and resolution, the two related white findings in the
13 Confirmatory Action Letter allowing Perry to transition out of Column IV in
14 March 2007.

15 Since Perry's transition out of Column IV was discussed at the last
16 meeting, I planned to spend this meeting talking about performance that
17 has occurred since exiting Column IV.

18 I'm going to talk a little bit about a performance decline in human
19 performance since exiting Column IV, but before I do that I want to put the
20 overall performance in perspective.

21 Importantly, Perry has operated safely in 2007 and currently in
22 2008. The overall performance is better than it was when they entered

1 Column IV in 2004. One of the most recent indicators of improved
2 performance was their actions taken to address two White findings, two
3 recent White findings.

4 We performed inspection procedure 95001 on each of the White
5 findings and we found that they effectively understood the root and
6 contributing causes; that they identified the extended condition and
7 causes; and that they developed corrective actions sufficient to address
8 the causes and prevent reoccurrence.

9 This is a significant improvement over performance that we saw
10 prior to them entering Column IV. They had a number of issues they had
11 addressed through those inspection activities and we did not have any
12 findings on either of those inspection activities.

13 Having said that, we have seen a performance decline in human
14 performance in the latter part of 2007 and currently in 2008. Our
15 inspection findings in 2007 were sufficient to identify a substantive cross-
16 cutting issue in human performance that was identified during the End of
17 Cycle Meeting at the end of 2007.

18 As I indicated earlier, at the end of 2006 we closed a substantive
19 cross-cutting issue in human performance, so we have seen a change in
20 their performance.

21 Based on the region's findings and observations the plant's
22 operational performance, which they've had a number of forced outages

1 and scrams, and the human performance areas contributed to some of
2 those activities.

3 Other external assessments in FENOC's internal site incorporate
4 their own assessments. FENOC recognized this lack of sustainability of
5 their improved performance in human performance.

6 As a result, FENOC developed and initiated a recovery plan that
7 utilizes, in their words, "the full and collective department of the entire First
8 Energy nuclear fleet organization to drive performance levels, hold
9 accountability and ensure sustainability is ingrained into the operation of
10 the Perry plant."

11 This plan contains seven focus areas. Leadership alignment, and
12 alignment is key here, because one of the issues which I'll talk about in a
13 minute is that they didn't get everybody to buy in on what was necessary
14 for the improvements.

15 Maintenance fundamentals. Again, maintenance has had a
16 number of issues, the human performance issues.

17 Ops Fundamentals: Ops has been a good performer, but there
18 were some day to day issues.

19 Problem identification and resolution, which is a corrective action
20 program.

21 Equipment reliability, which a number of the forced outages were
22 caused by equipment problems.

1 Radiation Protection Fundamentals. They have the highest source
2 term or one of the highest source terms in the country in outage
3 improvements.

4 This plan also has three initiatives, one of which is a
5 comprehensive assessment of the causes of the decline and it's important
6 for them to understand the causes so that they know the actions they put
7 in place will be effective.

8 With this assessment being conducted, the licensee is basing their
9 current assumptions -- their current actions on an educated assumption
10 that they underestimated the resistance of some of the Perry staff to
11 internalize the changes that occurred in 2006.

12 The performance improvement initiative focused affectively on
13 process changes and accountability, but did not fully ensure that
14 alignment had been achieved on the need for these changes and
15 improvements and whether or not the staff internalized these changes.

16 So, when they transitioned from the intense rigor and oversight of
17 their performance improvement initiatives to a more normal operating
18 approach combined with some senior level management changes at the
19 site they effectively reduced the management and oversight and
20 accountability imposed on the Perry staff.

21 However, there's a chance that this change in approach sent a
22 message to some of the folks that the human performance rigor and

1 expectations that had been clear under the performance improvement
2 initiatives were no longer necessary.

3 As I mentioned before, the comprehensive assessment initiative in
4 the recovery plan is designed to validate their current assumption of the
5 cause and of the decline and if necessary adjust that plan.

6 Going forward, Region III will monitor the site's activities, the normal
7 performance of the site, as well as the recovery plan and we will be using
8 the ROP baseline program.

9 So, in summary, Perry continues to be operated safely. It's exiting
10 Column IV and the performance in decline in human performance is
11 recognized and being addressed by the licensee and we will monitor both
12 the site's performance and the recovery plan. Thank you.

13 MR. COLLINS: Slide five, please. Good morning Chairman
14 Klein, Commissioner Lyons and Commissioner Svinicki. This morning I'm
15 going to briefly summarize the steps and actions that led up to Palo Verde
16 Unit 3 being placed in Column IV of the NRC action matrix; what activities
17 have transpired since we met a year ago in this meeting; what our
18 assessment of their current safety performance is today and then the
19 planned actions that we have which we believe are necessary to assess
20 the licensee progress and the effectiveness of the actions that they're
21 implementing at Palo Verde to improve and sustain performance.

22 In review, Unit 3 at Palo Verde was placed in Column IV of the

1 action matrix in December 2006. This was driven by two findings of some
2 risk significance.

3 The first was a finding classified as yellow risk significance
4 associated with voiding an ECCS piping, which was followed by two
5 subsequent supplemental inspections which showed that the licensee's
6 corrective actions were not broad enough or deep enough to address the
7 fundamental performance problems at the time. So, that finding remained
8 open.

9 And then it was followed by a White finding associated with a diesel
10 generator relay where maintenance activities were not acceptable and that
11 placed Unit 3 in Column IV.

12 Also, at Palo Verde since 2005 we've had persistent substantive
13 cross-cutting issues in the area of problem identification resolution and
14 human performance.

15 On June 21st, 2007, NRC did issue its first Confirmatory Action
16 Letter. This letter formalized the actions and the licensee commitments to
17 address the causes and performance problems as we understood them at
18 the time, but I believe NRC recognized then we had yet to do our 95003
19 supplemental inspection and we thought we would at least confirm that
20 and there was a high likelihood that the breath and depth of the
21 performance issues would be understood after that inspection. And I think
22 that's actually what occurred.

1 That inspection, 95003 supplemental, was completed in the fourth
2 quarter of 2007. That team was staffed by what I believe to be highly
3 capable and experienced NRC personnel from all regions and multiple
4 headquarters offices. And they did an excellent job in their work.

5 They accomplished the 95003 inspection procedure objectives and
6 those were to review their performance, first to ensure that the facility was
7 being operated safely. And that team did make that confirmation.

8 But they also did a significant amount of diagnostic work to
9 independently assess their performance and determine if any additional
10 regulatory actions were required beyond that team and there were none.

11 The team did identify 12 key areas of performance problems that
12 the licensee needs to address. Those are documented in the inspection
13 report. I'll just list those -- just read them because I believe they give a
14 sense for the breadth and depth of the performance issues that existed at
15 Palo Verde.

16 The ones I've already talked about, the ECCS finding and the
17 generator finding and those problem resolution issues. In general,
18 problem identification and resolution issues, we're seeing human
19 performance, engineering programs, quality of significance evaluations,
20 safety culture, standards and expectations, change management,
21 emergency preparedness, longstanding equipment issues and backlogs
22 which had built up over the years.

1 I think it necessarily follows then that what we needed to see in the
2 licensee's improvement plans were actions which were sufficiently broad
3 and deep to address these performance problems.

4 Accordingly, after the inspection team did its work and the licensee
5 finalized its improvement plans, we were able to issue a revised
6 Confirmatory Action Letter on February 15th of this year and what that did
7 was formalize licensee commitments to address these 12 key areas of
8 performance problems at Palo Verde which the licensees found and they
9 were independently confirmed by our inspection team.

10 The count outlines the actions and the detailed actions to address
11 these performance areas to improve Palo Verde performance and as the
12 licensee implements these actions these will be our key to knowing when
13 Palo Verde leaves Column IV.

14 We're going to look for observable and sustained performance
15 improvement in those areas and that will be confirmed by inspection and
16 then that will be the basis for removing Palo Verde Unit 3 from Column IV
17 of the action matrix.

18 I think its importance to note that last summer the licensee
19 committed in their corrective actions and their reviews to treat the entire
20 site as if it were in Column IV, not just Unit 3, which was appropriate. As it
21 turned out, many of the issues were site issues and not unit specific. Slide
22 six.

1 We noted some performance improvement in Palo Verde's safety
2 performance. We're now beginning to see numerous organizations on site
3 actually implementing the changes that were planned and that were trying
4 to be achieved by the plans.

5 I think examples of this include the operations department has been
6 taking the initiative by becoming a demanding customer and also our
7 inspectors have seen examples where the licensee's formalized
8 troubleshooting process and problem analysis process has produced a
9 better result in terms when they deal with immediate equipment problems,
10 it's much more rigorous.

11 But, I think we all recognize and the licensee recognizes that
12 they're still early in their stages of performance. A lot of work remains and
13 one of the licensee's challenges will be to instill and institutionalize these
14 changes consistently in all areas which need performance improvement.

15 Region IV does plan to conduct Confirmatory Action Letter
16 inspections to independently confirm satisfactory completion and effective
17 implementation of their actions. These inspections will consist of at least
18 five discrete on-site inspections, one of which we've already done, and
19 that will be combined with ongoing reviews by region staff and resident
20 inspectors at Palo Verde.

21 The first inspection was completed in March. We did see
22 numerous improvement items which were completed, but some of them

1 were still undergoing their final reviews and effectiveness checks. The
2 licensee was making progress in closing items and they were improving
3 the documentation of their closure packages.

4 As part of our effort to keep the public informed with the status of
5 Palo Verde's improvement activities, Region IV does plan, along with the
6 periodic inspections for the Confirmatory Action Letters, to conduct public
7 meetings where we will assess Palo Verde's progress.

8 We had one on March 20th in conjunction with the End of Cycle
9 Meeting and our next meeting at Palo Verde is scheduled for June 30th
10 after our next confirmatory action inspection.

11 In summary and to close, the NRC has implemented the actions
12 prescribed by the Reactor Oversight Process and an important outcome of
13 that was we were able to confirm that Palo Verde is being operated safely
14 notwithstanding there are performance areas which need much attention.

15 The licensee and our team has concluded and we also believe we
16 understand the fundamental causes for the performance issues at Palo
17 Verde and we confirmed that through independent inspection and the
18 licensee has committed to take the actions necessary to make
19 performance improvements in these areas.

20 Those actions are formalized in a letter, the Confirmatory Action
21 Letter, and that forms the basis for our focused inspections moving
22 forward. There's a lot of work yet to be done by the licensee and we will

1 be watching very closely at how well they make progress. Eric?

2 MR. LEEDS: Thank you, Elmo. Good morning

3 Mr. Chairman, Commissioners. I'm going to speak about the reactor
4 oversight process and the industry trends program. We should be on slide
5 seven. Thank you.

6 As you know, we perform a self assessment of the Reactor
7 Oversight Process and report the results in an annual Commission paper.
8 The calendar year 2007 self assessment results were documented in
9 SECY-08-0046, which was dated April 2nd, 2008.

10 Overall, the self assessment results indicated that the Reactor
11 Oversight Process appropriately focused on the right issues. The ROP
12 provided effective safety oversight as demonstrated by meeting the
13 program goals and achieving its intended outcomes.

14 We solicited and received feedback from external stakeholders in
15 2007 through our monthly public meetings and external survey that we
16 performed in October. And we also got feedback during the annual
17 Regulatory Information Conference.

18 As a result of meaningful stakeholder input we continue to improve
19 various aspects of the Reactor Oversight Program using feedback from
20 meetings and surveys as well as our own lessons learned. Next slide,
21 please.

22 In 2007, the staff completed a number of Reactor Oversight Program

1 related actions as directed by the Commission. The action matrix and
2 associated guidance was revised to require that licensees, which
3 transition to Column IV or the multiple repetitive degraded cornerstone
4 column, meet with the Commission within six months of entering the
5 column.

6 Licensees which remain in the degraded cornerstone column or
7 Column III for three years may also be invited to meet with the
8 Commission. The staff included more detail on resident demographics in
9 this year's paper as requested by the Commission.

10 The staff found the experience level remains high for both resident
11 inspectors and senior resident inspectors; however, the resident turnover
12 rate increased in calendar year 2007. We plan to closely monitor resident
13 demographics and site staffing in 2008.

14 A task force is currently assessing resident inspector program
15 retention issues and barriers for entering the program.

16 The staff continues to improve the performance indicator program.
17 We implemented the Unplanned Scrams with Complications performance
18 indicator in 2007 and the Mitigating Systems Performance Index provided
19 a significant input to the action matrix. We're currently evaluating several
20 other changes to the performance indicator program.

21 In order to further improve our communication with the public and
22 other stakeholders on reactor oversight the staff provided additional detail

1 on overall reactor performance in the annual and mid cycle assessments
2 letter and our press releases. Next slide, please.

3 With regard to deviations, the staff approved a one time deviation
4 for Peach Bottom in 2007 to address security related concerns at that site
5 in the areas of safety conscious work environment, inattentative issues
6 and the transition to an in-house security force.

7 We also extended a deviation for Indian Point and Davis-Besse for
8 another year. We previously revised the program guidance based on
9 lessons learned from the Indian Point and Davis-Besse deviations and we
10 continue to evaluate the Peach Bottom deviation for program implications.

11 During the AARM we discussed several ongoing enhancements to
12 the Reactor Oversight Process. These included lessons learned from the
13 implementation of the safety culture enhancements and the initial
14 implementation of the revised inspection procedure 95003, the
15 supplemental inspection that was performed at Palo Verde, and the
16 results of the Reactor Oversight Process realignment of inspection
17 resources, which resulted in changes to about 60% of the base line
18 procedures.

19 Overall, ROP related resources have been fairly stable for the last
20 three years after implementing a number of changes in the security area
21 and in response to the Davis-Besse lessons learned.

22 In 2007, the staff continued its efforts to improve public

1 understanding of licensee security performance by issuing publicly
2 available security inspection report cover letters and initiating actions to
3 further assess the level of openness and transparency and associated
4 with the security cornerstone.

5 Next slide, please. We should be on slide 10.

6 Now I'll transition to the industry trends program. This program
7 looks at overall industry performance by tracking various industry
8 performance indicators combined with the results of the accident
9 sequence precursor program.

10 The industry trends program allows us to step back and look at a
11 broad long-term performance of the industry and to assess whether there
12 are trends that warrant more staff attention.

13 The results of the program are posted on our public website and
14 they're reported to the Commission in an annual Commission paper.

15 The industry trends program also complements the Reactor
16 Oversight Process and is an input to the agency performance goals which
17 are reported to Congress. Next slide, please.

18 In fiscal year 2007 there were no statistically significant adverse
19 trends in overall industry performance identified based on our long-term
20 trending. On an industry-wide basis the performance indicators that we
21 trend remains significantly improved compared to 10 to 15 years ago.

22 We also look at short-term changes and in fiscal year 2007 none of

1 the indicators exceeded its short-term prediction limit and no issues were
2 identified that warrant further analysis or program adjustments.

3 The Accident Sequence Precursor Program which is implemented
4 by the Office of Research did not identify any significant precursors. The
5 change to the ASP program in fiscal year 2000 which increased its scope
6 with the inclusion of external events and inspection findings has resulted
7 in reporting a higher number of lower risk precursors. Next slide, please.

8 Indicator Development: As we discussed in last year's Commission
9 meeting the staff has developed a new performance indicator for the
10 industry trends program, the Baseline Risk Index for Initiating Events or
11 BRIIE. I prefer to call it the Initiating Events Indicator.

12 This indicator is an industry-wide risk informed indicator that tracks
13 specific initiating events. In response to Commission direction, the staff
14 issued a paper last year which requested approval of implementation of
15 the initiating events indicator.

16 The Commission approved the staff's recommendation, but directed
17 the staff to develop and implement a public communications strategy to
18 explain the meaning of this indicator before making the information
19 publicly available.

20 The staff has recently completed the last of its required actions and
21 the industry trends website now includes a public-friendly description of
22 this indicator and the supporting data.

1 The staff will include the initiating events indicator results in next
2 year's Commission paper on the results of the fiscal year 2008 industry
3 trends program.

4 At this point, I'll turn the presentation over to Charlie Miller.

5 MR. MILLER: Thanks, Eric. Good morning, Chairman,
6 Commissioners. The objective of what I'd like to talk about today is
7 two-fold. First, I'd like to provide a brief summary of the material and
8 waste programs performance and trending analysis for fiscal year 2007.

9 In addition, I'd like to discuss how we addressed an issue that the
10 Commission raised last year at this meeting and directed the staff to do,
11 which was to revise the annual report for the nuclear materials events
12 database.

13 To put my presentation in perspective, the first thing I'd like to make
14 sure that we refresh our memories on is we're dealing with a very large
15 number of licensees here, approximately 22,000 licensees nationwide;
16 4,000 or so of which are in the NRC realm and over 17,000 licensees in
17 Agreement State realm.

18 More importantly, dealing with the wide variety of applications that
19 we see, you have issues that relate to industrial use, medical use and also
20 academic use.

21 In some cases these applications include intentional exposure to
22 radiation, such as diagnostic or therapeutic medical procedures. And in

1 other cases it requires a careful practice of the use of radioactive materials
2 for other peaceful purposes.

3 When we discussed the trends and the reportable events it's
4 important to keep in mind that there are a number of activities conducted
5 every year. This number is very large.

6 For example, Society of Nuclear Medicine in their 2006 annual
7 report indicates that there are over 17 million -- that's 17 million nuclear
8 medicine procedures conducted annually.

9 Over the past 10 years we've had an average of about 38
10 reportable medical events, which is based on our NMED annual reporting
11 data. This represents a very small percentage of the procedures that are
12 conducted annually.

13 This also has implications when we do our trending analysis. We're
14 dealing with very small numbers in terms of statistics. Furthermore, the
15 denominator is large, but we're uncertain as to the total number of
16 procedures that are conducted every year and the activities conducted
17 that are not in the nuclear area.

18 It's important to keep in mind these things when we're looking at the
19 various plots of data -- may I have slide 14, please.

20 How do we run our evaluation program? Industry data is collected
21 and monitored and evaluated on an ongoing and periodic basis. The
22 process is intended to identify significant licensee performance issues or

1 NRC program issues and gaps warranting management attention and
2 awareness at the AARM.

3 The AARM review is part of a broader oversight process which
4 includes licensing, inspection and licensee performance reviews and
5 enforcement.

6 The current criteria was identified in the 2002 timeframe and it
7 identifies those issues and licensees that rise to the level of needing
8 discussion at the AARM. The criteria for doing this and the target criteria
9 for doing this in the most critical areas involves very serious events; those
10 triggering strategic level measures, significant licensee performance or
11 program issues that can't be handled through our normal inspection and
12 enforcement processes; NRC or Agreement State program gaps or
13 failures identified or the NRC or the Agreement State processes were not
14 able to address the issue or the performance problem.

15 May I have the next slide, please; slide 15.

16 What are the performance criteria? This slide shows the goals and
17 criteria that we monitor against. It emphasizes a graded approach from a
18 higher level higher consequence including strategic outcomes,
19 performance measures and abnormal occurrences that are reported to
20 Congress to a lower level which are precursor monitoring which are
21 reported only within the NRC.

22 This graded approach provides us with the ability to focus our

1 management attention on higher level items while providing an early
2 indication of any programmatic issues allowing for early action on our part
3 with lower level items.

4 I'll now address how each of these fit into the process. May I have
5 slide 16, please?

6 I'm happy to report that all strategic goals and performance
7 measures were met in fiscal year 2007.

8 Strategic outcomes: There were no acute radiation releases
9 resulting in fatalities. No releases of radioactive materials resulted in
10 significant radiation exposure. No releases where radioactive material
11 caused significant environmental impacts. And finally, there were no
12 criticality events.

13 With regard to our performance measures none of the performance
14 measures exceeded the established goals. In particular, there were no
15 unrecovered lost or stolen risk significant sources. These are sources that
16 have fallen into the IAEA Category 1 and 2. Slide 17, please.

17 However, there were 11 abnormal occurrences in fiscal year 2007.
18 They were all in the medical area. One of the events included a dose to
19 an embryo fetus. What we're seeing is for the past 10 years medical
20 related events generally dominate the total number of abnormal
21 occurrences for a given year.

22 Some of the possible reasons for this are: There's a large number

1 of medical procedures done every year as I articulated and in the medical
2 procedure you're using radioactive material intentionally, which is the only
3 area that we regulate where we really do that.

4 Human error dominates this. It includes incorrect data input into
5 treatment planning software and it continues to be the primary contributor
6 to the root cause.

7 There were no discernible trends in the total number of AOs from
8 year to year. When comparing the NRC and Agreement State data,
9 there's no discernible trends, also. Slide 18, please.

10 With regard to escalated enforcement, in the past annual materials
11 and waste program reports escalated enforcement data was provided for
12 the fiscal year. In 2005, the Office of Enforcement began tracking and
13 reporting the agency's enforcement activities on a calendar year basis.

14 So, for this year we've extended the period that's reported in this to
15 a 15 month period so that we can capture all of the escalated enforcement
16 actions that fell within that range.

17 There were 84 such escalated enforcement actions during this 15
18 month period. Only one, however, rose to the level of a Severity Level II
19 violation. This was a situation where a transportation package was written
20 as being certified by the licensee -- certified that it was an NRC certified
21 package when that was not the case.

22 May I have slide 19, please?

1 This part of our program looks for gaps in our program. What we
2 found was that the criteria for looking at this is very serious events,
3 significant licensee performance and finally gaps that we see in looking at
4 the other two.

5 For 2007 there were no nuclear material licensees that met
6 significant issue criteria as described by our AARM criteria. Following my
7 presentation, Victor McCree will provide an update on the status of
8 Nuclear Fuel Services, which met the criteria last fiscal year, and discuss
9 the ongoing corrective actions.

10 Finally, I'd like to just alert the Commission that we always try to
11 look for improvement in our criteria and in the criteria that we use to
12 evaluate licensees for the AARM. We are in the process of trying to
13 propose a revision for that and you'll be getting a paper on that in the very
14 near future. Slide 20, please.

15 I'd like to spend a couple minutes focusing on the NMED report, the
16 new NMED report. If you go back to last year, for those Commissioners
17 that were here at that time, you'll remember that former Commissioner
18 McGaffigan was really the champion in looking at this and breaking down
19 the data in challenging the staff on behalf of the Commission to improve
20 the way we report the data in that regard. Well, I took his challenge very
21 seriously.

22 The Commission challenged us in the SRM to retool the NMED

1 report and we've made an attempt to do that. I personally got involved. I
2 had a commitment to Commissioner McGaffigan before he died that I
3 would do that and I feel that I've honored that commitment.

4 I'd like to acknowledge at this time the strong support that I got from
5 our contractor at the Idaho National Engineering Lab. They're providing
6 us tremendous support with regard to NMED.

7 Some of the primary features of the new report are that it focuses
8 on high risk significant events. It shows the comparison of the event data
9 between the NRC and Agreement States. It changes the focus from a
10 quarterly to an annual basis which better focuses on long-term and an
11 annual summary data to better support the AARM and our annual report to
12 the Commission.

13 And finally, it adds an IAEA categorization of sources to focus the
14 definition of risk significance of lost source data to the IAEA definitions.
15 These changes were addressed specifically in the Commission guidance
16 to us as changes that you felt needed to be made. Slide 21, please.

17 Okay. Now, we've trended this data in that regard and what we've
18 looked at over the past 10 years we found that there's been a little over
19 5,000 materials events. There haven't been any significant performance
20 trends identified. And there were no significant change from the previous
21 ten-year period.

22 The proper perspective here is that the number of reportable events

1 has remained very small relative to the number of activities that are done
2 every year and our review did not identify any common causes.

3 However, for some event types such as lost or abandoned or stolen
4 material or released licensed material or contamination, the data indicated
5 that there is a statistical trend and you can see that in the annual report as
6 we now graph it. Next slide, please.

7 One of the things that the staff does every year is pick a focus area
8 to do a more in-depth study. For 2007, we focused on portable gauge
9 losses and thefts. The staff did this special study and reviewed the data
10 on portable gauge losses and thefts to determine if there were any trends
11 in the area of portable gauge losses and thefts in general and the
12 measurable results from 10 CFR 30.34(i) rulemaking in 2005.

13 And to refresh your memory on that, that was the rulemaking where
14 we promulgated a rule to require a double security barrier, either double
15 chains or encasement in a compartment with a second security barrier
16 required. It's a little too early to determine if there is a trend. If I can point
17 to slide 23, please.

18 The short term data shows that there's a possible drop in losses
19 and thefts after 2005, but we're going to need to monitor this for the next
20 two or three years to see if there is a trend.

21 Thank you and I'd now like to turn the presentation over to Victor
22 McCree.

1 MR. McCREE: Thank you, Charlie. Mr. Chairman,
2 Commissioners, good morning. As Charlie indicated, Nuclear Fuel
3 Services, NFS, did meet the criteria last year and was discussed at last
4 year's AARM Commission meeting. Although NFS did not meet the
5 current Commission approved criteria this year, for discussion we felt that
6 the specialized nature of the oversight tools being employed at NFS
7 warranted it being discussed today.

8 Specifically, the Confirmatory Order that we issued -- the NRC
9 issued to NFS in February of 2007 and that Confirmatory Order stipulated
10 the need for an independent assessment of safety culture at NFS and
11 concurrently the staff established a safety culture and configuration
12 management improvement oversight panel to provide additional focus
13 level of oversight at NFS.

14 Part of last year's AARM Commission meeting, the staff identified a
15 number of areas requiring improvements from a recent -- excuse me; from
16 successive licensee performance review cycles dating back as far as 2002
17 at NFS.

18 It included procedural adherence issues in the areas of operations
19 as well as material control and accountability, use of the problem
20 identification and corrective action program at NFS, as well as in the
21 engineering design verification and configuration management areas.

22 In addition in March 2006, a significant safety event involving a spill

1 of a high enriched uranium solution due to poor configuration control of
2 equipment in the blended low enriched uranium portion of the facility
3 occurred at NFS.

4 As a result of those events in February 2007 the NRC did issue a
5 Confirmatory Order with three specific mandates. First, that NFS institute
6 a safety culture assessment and improvement program. Secondly, that
7 NFS modify its configuration management program via a license
8 amendment. And thirdly, that NFS implement specific corrective actions
9 to address the remaining escalated enforcement actions.

10 In order to provide specific oversight of NFS's implementation of the
11 order, NRC did implement and form an oversight panel. This panel
12 consists mainly of first-line supervisors in Region II, NMSS, as well as the
13 Office of Enforcement, and it includes an advisory group of staff that
14 include those offices as well as the Office of Nuclear Security and Incident
15 Response.

16 As part of its activities, the panel reviewed the qualifications, the
17 plan as well as the schedule of the independent third-party. The panel's
18 review prompted the licensee to augment its initial assessment strategy to
19 include a more thorough data collection mechanism which involved written
20 surveys to the staff.

21 And to provide NFS additional time to incorporate this feedback, we
22 extended the due date for the independent safety culture assessment by

1 90 days.

2 In addition to the ongoing work of the oversight panel, the staff is
3 rigorously implemented the core inspection program at NFS. We maintain
4 two resident inspectors, a senior resident and a resident inspector at NFS
5 and we also extended the amount of core inspection hours that we
6 implement at NFS.

7 Normally, we implement 2,500 hours. In 2007, we actually
8 implemented over 3,500 hours of inspection effort at NFS.

9 As for the staff's assessment of NFS's current performance, in
10 February 2008 we conducted the Licensee Performance Review which is
11 the assessment process that culminates in a meeting -- public meeting
12 with NFS for the period covering July through December of 2007.

13 NFS's current performance which is based primarily on the
14 violations identified over the last year indicates that adherence to
15 operational radiological protection and engineering procedures is an area
16 that warrants additional NFS management oversight.

17 This area of improvement is particularly noteworthy because it's a
18 longstanding area needing improvement at NFS and it was identified in
19 two of the three previous licensee performance reviews.

20 In addition, the challenge in this area underscores the importance
21 of improvement in the area of human performance which, of course, is
22 part of the safety culture improvement initiatives at NFS.

1 Finally, the February 2008 licensee performance review identified
2 that management oversight of the planning and quality of licensing
3 requests is also an area that warrants improvement. Several recent
4 licensing requests were not adequately supported to meet NFS's desired
5 operational request.

6 This lack of planning and quality required multiple changes on their
7 part and certainly made our efforts as well as NFS's less efficient than
8 they should be. So, we provided them that feedback. The next Licensee
9 Performance Review at NFS is scheduled late this summer.

10 As far as the Independent Safety Culture Assessment, we did
11 receive the NFS report on May 15th. The data collection based on our
12 preliminary assessment involved a company wide survey as I alluded to
13 earlier and a significant majority of the workers at NFS participated in the
14 survey. So, we believe its representative of the safety culture at NFS.

15 Preliminarily, the assessment identified 41 findings; 21 were
16 characterized as "most significant" with nine major themes, if you would,
17 several of which NFS did not identify in its parallel safety culture study.

18 And just briefly, those nine areas are organizational values,
19 standards and expectations; the communication of those values,
20 standards and expectations; human performance; ownership and
21 accountability; resources enhancing the effectiveness of programs and
22 processes; tolerance of degraded condition; continuous improvement and

1 benchmarking.

2 The NRC Safety Culture Oversight Panel has already started
3 reviewing the results of the safety culture assessment as well as the
4 accompanying comprehensive safety culture improvement initiative which
5 describes NFS's plans going forward to address the independent safety
6 culture report.

7 Although preliminary, it appears that the assessment was
8 comprehensive, that it addresses the 13 components of safety culture
9 identified by the NRC and our Regulatory Issues Summary 2006-13
10 issued in July 2006.

11 We will -- in fact, we've already initiated our review with the support
12 of the oversight panel. We will review the independent assessment team's
13 report to determine if their recommendations and their findings cover all of
14 the areas and if they appear to be reasonable and accurate. We will also
15 assess whether the findings and recommendations were appropriately
16 addressed in NFS's implementation plan.

17 And finally, upon completion of that review we will target and
18 refocus our inspections to verify implementation of NFS's plan including
19 the revised configuration management program.

20 With that, I'll turn it back over to Bill Borchardt.

21 MR. BORCHARDT: Thank you, Vic. Last slide please. In
22 conclusion, it's our assessment that the oversight and inspection programs

1 for both the reactors and the material licensees has been demonstrated
2 again to be both predictable and transparent.

3 There's been good communication with all stakeholders and I think
4 this is one of the great strengths of this program.

5 With that, our presentation is complete and we're ready for
6 questions.

7 CHAIRMAN KLEIN: Thanks. I'd like to compliment you on a
8 good presentation and as Commissioner Svinicki said, a lot of briefing
9 material was presented prior to this that we all pored over, so it was a
10 good job. We'll begin our questioning with Commissioner Jaczko.

11 COMMISSIONER JACZKO: Thanks. I apologize I missed
12 the beginning part of the discussion, so if some of these issues were
13 raised. We can skip over those.

14 I wanted to start with a little bit of a focus and we'll have Palo Verde
15 here and we can talk specifically, I think, about that facility and about
16 some of the other facilities with them as well.

17 I wanted to talk a little bit about some of the general issues with the
18 ROP and the self assessment because I think it's always a good -- this
19 meeting is always a good opportunity to really reflect on those and reflect
20 on how things are working.

21 I thought maybe the first question, Elmo, maybe you could answer
22 this and talk a little bit about the self assessment that we did on the 95003

1 process and the lessons learned from that.

2 In particular, with a focus on -- this was the first time we had a plant
3 move into the Column IV and engage the safety culture elements of the
4 95003 changes. And maybe you can comment a little bit on how that
5 process worked and where the lessons learned report stands and what we
6 intend to do with those.

7 MR. COLLINS: Commissioner, I'd be happy to just
8 summarize that. The process for that comes out of the procedure for
9 95003 and it's a team product. The people who did the work afterwards
10 collected and coalesced their thoughts on about how it went and was it
11 working, wasn't it working and what could be done differently.

12 Obviously, the area of the independent safety culture assessment
13 that we performed was a key area of interest. It was an interest going in
14 and we thought a lot about it. It was of much interest coming out with
15 what the recommendations were. It's the first time we've done it. It's the
16 first time I think we've at least at this level asked a licensee to do an
17 independent safety culture assessment at a facility.

18 I think one of the key learning points that we had was to do that
19 assessment is more than just a survey. And so, the Palo Verde licensee
20 in addition to their survey brought in teams of people to really talk, ask
21 questions, hear from people on what was going on and did a very good
22 job, I believe, in complementing their survey results with those interview

1 results and came up with a very complete picture of the culture at Palo
2 Verde.

3 We did not do a survey, but we did extensive interviews and focus
4 interviews on this site and spent a high level of effort to do that.

5 What came out of our interviews was consistent with the results of
6 the licensee's assessment. So, I think one of the lessons and I'd like to
7 see us move forward in that area is to have -- understand what it takes to
8 complete that assessment in a meaningful way and then I think NRC's
9 activities could be scaled back and we could be confirmatory in nature and
10 sampling in nature to confirm the results of a licensee assessment that
11 was done under an understood and prescribed methodology. So, that
12 was one key.

13 All the lessons learned have been fed into the program office via
14 our feedback process and are under consideration.

15 COMMISSIONER JACZKO: Maybe if I could just follow up
16 on that, too. I think this is something that Commissioner McGaffigan had
17 been a big proponent of was having our own internal lessons learned
18 tracking system or lessons learned program accountability system.

19 I can't remember exactly what the name of the program is. I'm
20 wondering to what extent any of these things will get captured into that
21 into the formal agency lessons learned program or do these not rise to the
22 level? Do they not meet the criteria to be incorporated into that? What

1 mechanism will they be dispositioned?

2 MR. BORCHARDT: The agency program on lessons
3 learned has a steering committee that's associated with that. The criteria
4 for getting an item into that is quite high.

5 All of these would clearly fall within the reactor oversight program
6 feedback process. I'll let NRR talk about that. I wouldn't think these would
7 rise to the agency level.

8 MR. LEEDS: Thanks, Bill. Just to repeat, they do come to
9 the program office. They are part of our self assessment, our lessons
10 learned and we do feed it back into the program. We get a lot of great
11 information back from the regions on that program. We're constantly
12 evaluating.

13 COMMISSIONER JACZKO: I appreciate that. While I agree
14 that maybe these don't rise to the level of the agency program, I don't
15 know that there are very many since that program has been initiated that
16 have actually risen to the level of being incorporated. That may be
17 something we want to take another look at.

18 I recall at the time that the criteria were somewhat restrictive and
19 unlikely to really ever be conducive to items being included into that
20 program. I think it is a good one and I think it's one we want to make sure
21 that we use.

22 An issue that I think as I was going through the materials -- and

1 again, I apologize I missed the discussion of this issue earlier. I think it's
2 really an important one and it's something that I'm concerned by. I'm
3 seeing kind of first and as I've gone out to sites over the last year and that
4 is our ability to make sure that we can retain and maintain resident
5 inspector staffing at all the reactor sites.

6 I know the staff is working hard on this. Maybe you could just talk
7 in more specific detail what are the steps that you're taking and what are
8 the things at the Commission level we need to be doing to make sure we
9 continue to retain and maintain the staff in the resident positions?

10 MR. COLLINS: Commissioner, I'll start again. To start with,
11 I'll emphasize we understand and I think everyone does, but it's worth
12 saying again. Safety oversight of 104 operating nuclear power plants is
13 our top priority.

14 That outcome I believe is achieved by NRC staff which perform
15 many functions. Those functions include technical reviewers, inspectors
16 and a subset of that are resident inspectors. And because of their remote
17 location and the specific role they play in the day-to-day safety oversight
18 of nuclear power plants and the importance of that, we do think about
19 them a lot.

20 We do believe that we maintain that function at each nuclear power
21 plant with qualified inspectors. I think it's no surprise as with many of the
22 NRC programs we have highly qualified and capable people in that

1 program. We expect some turnover and we know we're going to get it and
2 it changes from time to time and the dynamics change.

3 We do pay attention to that and we do think about it and we do try
4 to anticipate those vacancies when they come up and we have had some
5 challenges.

6 I'll just mention we have had a recent specific review on that topic
7 to ask ourselves once again are there any other actions we need to take
8 or consider in addition to what we're already doing to attract and retain
9 highly capable people in that program? I think Eric is going to speak to
10 that.

11 MR. LEEDS: Thanks, Elmo. Last year we established a
12 task force to take a look at this issue. The task force was made up of
13 managers and senior staff. The task force is focused on three areas.

14 The first was we found out that we actually had some what I would
15 call financial disincentives to the folks in our Nuclear Safety Professional
16 Development Program, NSPDPer, from going while they're in that
17 program into the resident program.

18 COMMISSIONER JACZKO: Can you explain what you
19 mean by financial disincentive?

20 MR. LEEDS: Well, once you're in an NSPDP program, they
21 have step grades and they can go up to a 13 step, I think, five. If they
22 leave the NSPDP program and go into the resident program, the resident

1 program has a number of different compensation type factors.

2 Well, it turned out that going into the resident program they would
3 actually end up not getting paid as much as if they'd finished out their
4 NSPDP program. So, we've already taken care of that.

5 I know Bruce Mallett has worked with Jim McDermott and HR so
6 that we can get an exemption for that to allow folks -- if they want to move
7 from the NSPDP program into resident inspector early in their careers its
8 not a financial disincentive.

9 Two other areas that the working group focused on. One was how
10 do you attract and keep a pool of candidates ready? The situation is so
11 dynamic right now within the agency and the agency growing, resident
12 and senior residents are very valued for their experience. They move on
13 to other jobs. We want to have a pool of candidates ready and qualified to
14 step into that void and fill those positions.

15 And the other item that the task group looked at was the overall
16 compensation for the resident inspectors. That takes into account all the
17 relocation and time spent away. There are a number of factors.

18 The task group will present their recommendations to Bruce later
19 this month, I think June 24th, and we'll go forward from there to address
20 those two other issues.

21 COMMISSIONER JACZKO: In general, on the
22 compensation -- of these three factors were you able to determine which

1 was, if any, most important among the three in terms of the staffing levels
2 that we want to have?

3 MR. LEEDS: Well, certainly they're all important.

4 Commissioner, I'm not really sure that I would point to one above the
5 other. One of the regional administrators? Bruce?

6 MR. MALLETT: I can help you out. There was really no one
7 area that was more important than the others. What I think was important
8 was the review was done by all levels and the regional offices and NRR
9 and NRO. They factored in what could we do without any limits to help
10 the situation and I think they got some good recommendations that will
11 help.

12 I would also add that we take individual cases and the regional
13 administrators have made a case in those individual cases to change the
14 compensation where appropriate.

15 For example, there are a couple sites that are in high-cost areas in
16 the country. I think actually three we did in total and we changed the pay
17 scale for those people in those areas and got great cooperation from
18 Human Resources and OGC to do that.

19 So, I think we're acting at a point where we see an issue and
20 hopefully that will not be a deterrent, but a positive approach for people to
21 enter into the program.

22 COMMISSIONER JACZKO: Well, I appreciate the efforts. I

1 think it's an important area and as I've been to sites, I'm always noticing --
2 again, this is just anecdotal for me, but we've seen more residents that
3 were newly in their positions than I think we've seen in the past, which is
4 not necessarily a negative, but it shows that we are having turnover and I
5 think it's important that we do stay on top of it. I certainly look forward to
6 seeing the recommendations when they come up.

7 Another question I have and then again -- and I don't know. Is my
8 seven minutes over?

9 CHAIRMAN KLEIN: Why don't we do the next round?

10 COMMISSIONER JACZKO: Okay, that's fine.

11 CHAIRMAN KLEIN: Commissioner Lyons?

12 COMMISSIONER LYONS: Thank you. I'd certainly start
13 with thanking the panel. This, as we said at the start, is a very, very
14 important meeting where we take stock of safety performance during the
15 past year and I really do appreciate the effort that we put into it.

16 One of the areas I practically wanted to highlight -- Commissioner
17 Jaczko already was well into and you pretty much covered the resident
18 inspector area, but I, too, would like to add at least my view that the
19 resident and regional inspectors really are our front-line first-line human
20 resource. I think their effectiveness truly does add immeasurably to the
21 confidence that the public can have in the operations of the NRC.

22 So, I also along with Commissioner Jaczko and I'm sure my other

1 colleagues paid careful attention to the statistics that you provided in this
2 information on the resident inspectors.

3 On the one hand, the experience level of the inspectors continues
4 to be high and certainly, I feel very confident in that. As I visited various
5 sites over the last year, I continue to be tremendously impressed with the
6 confidence and the dedication that our resident inspectors bring to their
7 challenge.

8 At the same time, I do recognize the increased attrition, perhaps
9 some extenuating circumstances this last year with large numbers of
10 opportunities for advancement. It may have contributed to that, but still I
11 very much appreciate that all of you are focusing on the issues of the
12 cadre of inspectors. I appreciate the effort that Bruce and others have led
13 in this area.

14 I just wanted to make the comment that to the extent the teams that
15 are already evaluating this see a need for additional access from the
16 Commission. This would certainly be an area where I, too, would be very
17 supportive of getting those actions raised to the Commission level.

18 A couple of points that I would at least wonder about possibly
19 considering in this. I think it was the last Commission meeting Jim
20 McDermott mentioned a category of compensation that might become
21 available or might even be available to the NRC so-called critical
22 employees in critical pay.

1 I know very little about that category, but if this -- if the evaluations
2 that are being done on the resident demographics and the reasons for
3 leaving do reflect a need to have further compensation that may be still
4 another path we could take.

5 And just in general, I would be very, very supportive of looking at
6 opportunities to continue to draw our best into the resident ranks.

7 I also think maybe we could be somewhat more forceful in our
8 statements that we regard experience as a resident or regional inspector
9 as being critical in advancement opportunities within the NRC. To me,
10 that's a very important attribute that folks can bring to senior management
11 positions.

12 To go to other areas, Charlie, I very much appreciated your
13 comments on the NMED, the Nuclear Materials Events Database. I think
14 the improvements in that report that, again, Commissioner McGaffigan led
15 the charge on last year. I think those are very important and I'm very
16 pleased to see them.

17 You did mention that the number of abnormal occurrences is more
18 or less constant; at least no significant trends one way or the other of the
19 order of 10 a year.

20 I have no idea if we can drive that lower or not, but I'm curious in
21 your thoughts as to whether there are opportunities to drive that still
22 lower?

1 I'm curious if you have any feeling or if we could get any statistics
2 on the incidence of significant errors in the radio medical side of medical
3 practice as opposed to the broader areas of errors in general medical
4 practice.

5 I've certainly heard that our percentage of errors is extremely low in
6 the radiopharmaceutical area, which is certainly the good news. I wonder
7 how it compares and I wonder if you see any hope of driving it still lower?

8 MR. MILLER: Yes, Commissioner. Again, I've got to start
9 by always putting it in context. With millions of procedures that are
10 performed every year, we do still get a very low percentage. Now, the fact
11 that you get medical procedures dominating the AO report obviously
12 brings attention to that matter.

13 If you recall in my remarks I talked about the fact that it's primarily
14 due to human error. We try to pay constant vigilance to, of course,
15 encouraging licensees to pay close attention to the procedures that are
16 done, but I think our regulations are appropriately prescriptive.

17 In fact, the medical community sometimes feels that they're too
18 prescriptive and too binding. Certainly, I would strive to try to get it lower.
19 Whether that's achievable or not I think given the large number
20 procedures that are done every year is really a challenge, especially in
21 light of the fact that every year new modalities are being developed with
22 regard to medical procedures and using nuclear techniques. They present

1 challenges in and of themselves with regard to radiation protection.

2 I think our challenge is to make sure that the licensees have the
3 appropriate perspective with regard to radiation protection. ACMUI has
4 informed me that there isn't much time in medical school for the
5 opportunity to cover radiation protection as part of a very stringent medical
6 program, so it has to be done through other opportunities for training.

7 That added to the fact that in a lot of these procedures there are
8 technicians that are actually performing the procedures under the written
9 directives by the physicians. So, it becomes a challenge to drive that
10 down farther.

11 With regard to your second question, we don't have any information
12 for procedures -- how we would stack up against all of medicine. We just
13 don't have information available. We've talked with ACMUI about that in
14 the past.

15 I guess there are various places where it can be accumulated, but I
16 haven't seen any accumulation of the results of okay, there's 17 million
17 medical procedures in the nuclear area done. There's 10 AO's. How
18 does that stack up against miss-administrations of other medical practices
19 where nuclear material isn't used? We just don't have that information.

20 COMMISSIONER LYONS: Well, I'm over my time, but I
21 guess I would be interested to the extent I think ACMUI is the right place
22 to try to do it, to the extent that we can identify any of the metrics for

1 comparison and we've talked a lot about trying to inject more of the
2 elements of safety culture into the materials area. I know it's a challenge.

3 Nevertheless, I continue to be hopeful that even the low numbers
4 that we now have can be driven still lower in the future.

5 MR. MILLER: Just in closing, one thing I would say is that
6 everything else we do at the NRC is to prevent people from being exposed
7 to radioactive material. In the area in medical where you're intentionally
8 being exposed to it, I think the concern that I have is that we continue to
9 strive to make sure that the doctors are in charge of prescribing what dose
10 of radiation a patient is to receive.

11 We just have to be vigilant to make sure that those patients receive
12 the dose of radiation that's required for their medical treatment without
13 passing judgment on the doctors purview.

14 That's the area that really needs the focus. If they're supposed to
15 get so much, that they get that much. I'd like to see it driven to zero, but
16 realistically, human error I think is in everything that everybody does.
17 There's probably going to be a low percentage of it from a realistic basis.

18 COMMISSIONER LYONS: Thanks, Charlie.

19 CHAIRMAN KLEIN: Commissioner Svinicki?

20 COMMISSIONER SVINICKI: Thank you. I think
21 Commissioner Lyons and I have been colleagues for too long. I had the
22 exact same question about the comparison. These incidents, while the

1 number is low is certainly to those patients and their families it's a very
2 significant event and I appreciate your commitment to want to try to drive
3 that number ever lower.

4 My gut tells me that for the pharmaceuticals as a whole the
5 misapplication is probably a higher percentage, but I can take your sense
6 of it's probably just very, very difficult to get that data. As someone was
7 commenting at a previous meeting, it's the NRC, so we love our data. I
8 was curious about that as well.

9 I want to step back for a minute and express my gratitude to each
10 of the regional administrators who stopped by my office yesterday. I think
11 some of them thought they were coming for 15 minutes to just shake my
12 hand and put a face with a name, but I found myself such a beneficiary of
13 their many years of experience and it was an opportunity for me to learn
14 more about the regions.

15 I was reflecting. You know, I started my career in Federal service
16 in a field element of a Federal agency. And so, I was remembering or
17 reminded once again of the importance of the work the NRC is not just in
18 Rockville, Maryland. It is truly the foundation of everything we do. This is
19 uniquely true of the reactor oversight process is the residents and senior
20 residents and the staff and the regions.

21 So, through meeting those gentlemen and Victor and I have
22 traveled to a couple of reactors in his region. So, his was a second visit,

1 but thank you all for the work you do and on behalf of the folks that you
2 represent out there, I think I've got some travel coming up because I think
3 I've promised all of you to come visit and I'll follow through with that as
4 time progresses here.

5 I wanted to ask a little bit different question. I was commenting
6 earlier as I prepare for these meetings, I don't have to just get current from
7 last year. I have to -- I joke with my staff that we start with this is the atom
8 with me. I have to go back.

9 I was studying on how the Reactor Oversight Process came to be
10 developed; where the agency was at that point in time. Mr. Borchardt
11 made the comment and this is important for an annual update to say that
12 the ROP in the assessment of the agency is predictable, transparent,
13 effective, achieving its outcomes. But I would ask a little bit different
14 question.

15 Would any of you opine that the Reactor Oversight Process is
16 mature? And if you feel it is mature, what do you base that on? If it's not,
17 where does it have yet to mature and evolve? I don't know who would like
18 to take that question. Perhaps none of you would.

19 MR. BORCHARDT: I'll start. I believe it has reached a
20 degree of maturity. It came out of an inspection program and
21 management oversight of that program that did not have a lot of
22 predictability and transparency to it.

1 It was developed using the collective wisdom and input from all
2 stakeholders. It was not done within the NRC staff. It took the industry, it
3 took interested stakeholders from outside the industry as well to come up
4 with a process that was predictable and transparent and have all those
5 good adjectives associated with it.

6 There were a number of changes that were made as the program
7 was developed, but if you see that this year, for example, the changes that
8 are being made have more to do with performance indicators than any
9 other area.

10 That was a new activity for us when we started the Reactor
11 Oversight Program. So, that's evolving, but the changes are really
12 refinements and just exploring more insightful ways of using the data that's
13 available.

14 I think it is mature. The inspection program has definitely matured.
15 There's a developing area on safety culture. That's a new area and there
16 will always be some new areas and some new techniques that will be
17 used, but I would judge it as being mature.

18 And the best part of it is that it has this continuous feedback
19 process where every time we have a lesson learned or an observation by
20 a field inspector or the industry that all of those people and stakeholders
21 that help participate in the development can provide feedback on the
22 process and that's evaluated.

1 So, I believe a mature process is not a stagnant process, but it has
2 the ability to continuously be improved.

3 COMMISSIONER SVINICKI: Would anyone from the
4 regional administrators want to comment on that from where you see it?

5 MR. McCREE: I agree.

6 MR. CALDWELL: I also agree it's a mature process. It's a
7 tool for the inspectors and they have become very familiar with it and they
8 know how to use it, but as Bill said, I'll say it's a continually evolving
9 program based on the feedback and what we know and things that we
10 learn as we go along.

11 Although it's mature, I think it is flexible enough to change as we
12 become more knowledgeable.

13 COMMISSIONER SVINICKI: Do you think we'll arrive at a
14 set of performance indicators that we would be content to stay with for a
15 long period of time? I wasn't provided enough briefing material, so I pulled
16 out transcripts from previous AARM meetings and read those as well.

17 Last year there was a lot of discussion between the Commissioners
18 about the Holy Grail and finding the right performance indicators. In there
19 was a deep philosophical discussion about whether indicators that never
20 are anything but green are appropriate.

21 So, it seems to me and I know that's a very high level discussion,
22 but since Bill, you mentioned performance indicators, will that always be

1 changing or are we going to get there?

2 MR. BORCHARDT: Yes. That would be my prediction for a
3 couple reasons. One is that we're still searching for the predictive
4 performance indicator. We haven't found it yet. I don't know that we ever
5 will, but we'll never stop trying.

6 The second reason is for new reactors. They have a different risk
7 profile than the current operating reactors. I think that especially with the
8 passive designs will require a different set of performance indicators for us
9 to be able to have some kind of assessment using data.

10 COMMISSIONER SVINICKI: I noticed Dr. Mallett is at the
11 podium. Does he want to weigh in?

12 MR. MALLET: I'm Bruce Mallett. I wanted to make a
13 couple comments if I may. I agree as well that the Reactor Oversight
14 Process is mature now, but there's two key things that were put into that
15 process, I think, that are very important to keep in mind.

16 One is that several people mentioned that you continually review
17 the program to see where it needs to be refocused. We do that through
18 our self assessments and the feedback with the inspectors that actually
19 perform the program.

20 The other we didn't mention. It is an inspection program, as Bill
21 says, but it's only a tool. The key to the whole program are the people that
22 actually implement that program from the inspectors to the managers to

1 the regional administrators. You've got to keep that expertise up in those
2 people that you talked about.

3 COMMISSIONER SVINICKI: On that note, I know I'm over
4 my time, but since everyone has gone over their time, I won't feel guilty
5 about it.

6 Bruce, all of the Commission offices were provided the presentation
7 that was given to you by the working group on the resident inspector.
8 Judging from that which my staff provided to me, I think that there's good
9 thinking here.

10 It's not confining itself to how have we done things before. It is
11 representative of some out of the box thinking because obviously the
12 resident inspectors and the senior inspectors are a pillar of everything we
13 do.

14 The one thing that surprised me -- I'm looking at this presentation,
15 again, given to you at the end of May or March; I can't recall. There was a
16 potential concern identified about the agency not expressing or losing
17 sight of the value of resident inspector experience.

18 It says continue to show how resident inspector skills are valued by
19 the agency. Is there some concern -- why that surprised me is my
20 colleagues here on this side of the table to a person -- I have never heard
21 anything but the strongest endorsement of the importance of that work.

22 Is that potential as in we're worried about it sometime in the future

1 and it's not being expressed now or we need not to lose sight of it?

2 MR. MALLETT: You want me to take this first, Eric or do
3 you want to take it?

4 MR. LEEDS: Go ahead, Bruce.

5 MR. MALLETT: Thanks, Eric. I would say -- and we've
6 talked about this much. Regardless of the group that you have in the
7 agency, whether its resident inspectors or regional inspectors, there are
8 perceptions from time to time that those groups are not valued any more.

9 When they look at the cadre of people that are moving up in the
10 agency and I think we've had a lot of change and a lot of opportunities for
11 all those groups over the past couple of years. And so they see more and
12 more people that have not been in the resident inspector program also
13 moving up in the organization.

14 I think that's okay and that's a good thing. We have many talents,
15 but I think some of the people have fed back to us it's a fact that there's a
16 perception that we're no longer the only path that can move up in the
17 organization.

18 I think what we owe them is feedback on that process and that's
19 probably the greatest one we're struggling with in the group. I think each
20 of the regional administrators has to feed back to their staff that you're all
21 important; you're all part of this process. We all have equal opportunities
22 and the residents are not any less important than they were in the past.

1 I know that's a very general answer, but it is a perception from
2 them.

3 COMMISSIONER SVINICKI: I can't argue with it if that's the
4 feedback you're getting. But let me add my voice that I don't know how
5 we could be successful in anything else if we didn't have the strong
6 resident inspector program. I think that view is shared by my colleagues,
7 but I'll add my voice to that. Thank you.

8 COMMISSIONER JACZKO: Can I just follow up? How
9 many people at the table have resident inspector experience?

10 MR. CALDWELL: Resident inspector experience?

11 COMMISSIONER JACZKO: Or were resident inspectors.

12 COMMISSIONER LYONS: How about resident or regional?

13 MR. BORCHARDT: Four of us and three of the last four
14 EDOs were resident inspectors. Before that there was no resident
15 inspector program.

16 COMMISSIONER JACZKO: And Sam was raising his hand,
17 too. I don't know if you counted Sam.

18 MR. COLLINS: We count Sam.

19 CHAIRMAN KLEIN: Thanks. I think you can tell by the
20 questions and the fact we're all going over time indicates we'll clearly have
21 a second round and maybe even a third round. This is obviously a very
22 important project and a discussion area.

1 I'll go in the order of the presenters, so I get to start with Jim. I was
2 disappointed to see the declining performance on Perry. The fact that
3 they've been in Column IV you would have thought they would have
4 gotten it and they would have had sustained performance.

5 I guess the bottom line question is did we take them out of Column
6 IV too early?

7 MR. CALDWELL: Well, obviously, when we saw -- the
8 declining performance was really at the latter part of 2007; when we
9 finished our inspections up that was in 2006. When we start identifying
10 the performance -- the human performance issues we went back and
11 looked. We asked ourselves the same question.

12 We went back and looked. We looked at the criteria we used and
13 to be honest with you the performance at the time we made the decision
14 was different than it currently is in the human performance area.

15 So, they had achieved the performance necessary for them to be
16 able to exit Column IV and as I indicated the potential cause is that a
17 number of the people were complying using the human performance tool,
18 applying the right rigor because they had a lot of oversight and a lot of
19 prescriptive type activities going on. The folks understood they had to do
20 it.

21 The assumption is that once that was relaxed a bit, some of the
22 folks did not internalize the need for that change in expectations and

1 standards and started to drift back to the performance they had before.

2 So, at the time we made the decision they had achieved the
3 necessary performance to exit Column IV.

4 CHAIRMAN KLEIN: I guess I would just encourage you all
5 to look at that process because it's not a good trend. You would have
6 expected someone that had been in Column IV would continuously be on
7 a positive slope and not go negative again. It's just not a good trend to
8 see that.

9 I know one of the things we always look for is sustained
10 performance. It used to be \$0.50 and a promise would get you a cup of
11 coffee. Now it's more -- if it's Starbucks -- it's more like \$5 and a promise
12 would get you that cup of coffee.

13 I think we're going to have to reexamine that and be very careful
14 when we take people out of Column IV that they don't revert back. Again,
15 it's a disappointing trend.

16 MR. MALLETT: Chairman, I would add based on what Jim
17 had fed back to us at the Agency Action Review Meeting that we took that
18 on as an action item so we are looking at that very issue.

19 CHAIRMAN KLEIN: Okay. Thanks. Well, I guess since
20 Elmo is next. When you look at Palo Verde going into Column IV and I
21 realize you came to Region IV about the time that had occurred, so this
22 may be a question that we can blame Bruce for or at least let him answer.

1 Knowing what we know now, did we as an agency give all the
2 signals we should have to Palo Verde?

3 MR. COLLINS: Seeing no one at the podium, I'll start. I
4 believe, Chairman, that we gave all the signals that the Reactor Oversight
5 Program could give. I think our discussion with the licensee articulated we
6 had concerns with their performance.

7 I believe we communicated that the concerns weren't being
8 addressed as we thought they needed to be and then over time the same
9 message and the same concerns persisted.

10 And so, we were pulling every lever that we could given the
11 significance of the issues which were present. And so, it's a dynamic
12 process. It's a dynamic interaction between the regulator and a licensee
13 when performance issues emerge on what happens, but on balance and
14 in general the NRC did communicate those issues.

15 CHAIRMAN KLEIN: Thanks.

16 MR. COLLINS: That might be a good question for Palo
17 Verde after this meeting if they thought that was the case.

18 CHAIRMAN KLEIN: Okay. I must say from the dialogue
19 and the discussion I've been in with Farley, I think we've communicated
20 the concerns pretty adequately and with 20/20 hindsight were there
21 anything we should have learned and done differently on Palo Verde
22 because I think in terms of Farley we're sending that signal pretty clear as

1 well.

2 Well, Eric, in terms of -- let me just join my colleagues and saying
3 our eyes are very important. The resident inspectors, I think, are key.
4 When I go into the plants the first place I stop is the resident inspectors. I
5 think that's really a good system that gives us confidence in the infamous
6 boots on the ground. They really have a feel for what's going on.

7 You indicated that turnover was a little higher in 07, I guess. Where
8 did they go?

9 MR. LEEDS: Well, Mr. Chairman, I think that reflects all the
10 opportunity that was in the agency at the time. The expertise that these
11 people have is very valued throughout the agency. I remember being a
12 first-line supervisor here at headquarters and actually targeting -- I
13 shouldn't say this in front of the RA's, but targeting residents to bring them
14 to headquarters to get that experience, get that expertise, get that
15 perspective into my staff here at headquarters.

16 So, we've watched them get promotions. We've watch them go to
17 different areas within the agency so that we can take advantage of that
18 experience and expertise.

19 CHAIRMAN KLEIN: I was hoping that was the case that
20 they weren't leaving the agency. I think turnover is not necessarily bad if
21 we can bring in a new fleet of resident inspectors and take advantage of
22 that knowledge. So, I was hoping that was the case.

1 Well, we'll continue with the second round with Commissioner
2 Jaczko.

3 COMMISSIONER JACZKO: I certainly want to agree with
4 the statement that the Chairman made about Perry and the disappointing
5 performance. I think as Commissioner Svinicki mentioned, too, a lot of the
6 discussion we had either last year or at the Palo Verde meeting we had
7 was focused on this idea of performance integrators being leading
8 indicators of declining performance.

9 We still have a situation where there's a little bit of a lagging
10 situation with most of our indicators, but I think certainly my perception
11 with Palo Verde is we were well aware of the issues. I think perhaps it
12 would be interesting to hear from Palo Verde as well as Elmo suggested
13 that I think there was a challenge on the part of the licensee to fully
14 appreciate the information that we were providing them of the situation
15 and the declining performance.

16 I think that that will always be the challenge, I think, is to be able to
17 communicate that and have licensees pay attention in the right way.

18 I think certainly what I see now the performance at Palo Verde is
19 there is an awareness of the challenges and there is a willingness to work
20 to address those and fix those. I think that if anything is probably one of
21 the biggest changes in performance.

22 I think it is -- it's always going to be, I think, the challenging issues

1 that we have with the ROP is how do we have a leading indicator and then
2 more importantly the ROP is really in many ways an indicator and it's a
3 way, it's how we determine what our inspection activities will be.

4 So, it isn't directly tied to enforcement actions necessarily as a way
5 to necessarily move people from one column to another until we really get
6 to Column V and we have to make that decision about a shut down of a
7 facility.

8 I did want to turn to some other issues. I think
9 Commissioner Svinicki asked some interesting questions about the
10 maturity of the ROP. I think, Bill, you suggested that we should always be
11 changing performance indicators or that they will always be changing. I
12 don't want to say "should".

13 I think that's an important message and I think in particular as we
14 have more and more indicators that are -- and should be ultimately more
15 often green than anything else, I think we do need to constantly
16 reevaluate, resupply, modify the existing indicators so that we're
17 continuing to get useful information and not necessarily just have plants
18 tailor their performance activities to ensure that indicators are green.

19 So, we always want to have, I think, a good spectrum of indicators
20 and I think that will always require changes. I think one of the things that
21 we've really seen certainly with the MSPI is that it has provided a large
22 number of findings of greater than green findings, which I would suspect is

1 probably more than originally anticipated. Some of that is, I think, a
2 function of actually the indicator doing its job which is identifying areas of
3 deficiency.

4 Some of it I think is still a function of the black box nature of that
5 indicator and not everyone necessarily being able to fully predict how it's
6 going to turn out in the end.

7 I think those are important points. I didn't really get to a question. I
8 guess I'll just briefly make one more comment at this point and if we do
9 have one more round I did have some questions for Charlie and for Victor.

10 I just want to say something that was touched on briefly in the
11 slides. I think it's an important issue. It's the issue of openness in
12 particular with the security area. I know Roy is sitting back there and he's
13 been certainly leading, I think, a very systematic effort to improve that. I
14 think, certainly, we've made some steps with providing the cover letters for
15 findings in the security arena.

16 I think we're really at the point where we can begin to reexamine
17 ways that we can provide further information in particular in situations
18 where vulnerabilities have been corrected. I look forward to further staff
19 efforts in that regard and working on further improving, I think, what has
20 been very good work up to this point to really continue to reevaluate the
21 right way to present information in the new security environment that we
22 find ourselves. Thank you.

1 CHAIRMAN KLEIN: Why don't you go ahead and ask
2 Charlie your question since we have two more panels.

3 COMMISSIONER JACZKO: Sure. Now, I'm unprepared.
4 Charlie, two questions I have for you. One question I have for you -- one
5 of the things I was looking at as I went through some of the data,
6 particularly the lost, abandoned and stolen material. I certainly think there
7 are improvements in how we presented the information compared to past
8 and try to break out the risk significance a little bit more.

9 One of the things I thought was interesting is there really doesn't
10 seem to be much of a change overall over the last 10 or so years in the
11 number of lost, abandoned or stolen sources. That number has held
12 relatively flat.

13 We may simply be at the point that that's where the numbers are
14 always going to be, but one of the things I thought was interesting was in
15 that time we certainly have implemented, I think, the general license rule
16 and in particular the general license tracking system.

17 I'm wondering if you could comment if you sense that that really
18 hasn't done much to help us better track and identify sources. Is that
19 something that's fulfilling its purpose or what it was really intended to do?

20 It's kind of an open-ended question and I'm not sure if you have an
21 answer for at this time.

22 MR. MILLER: I'll take a shot at it. If you look at the trend of

1 lost or stolen sources, you're right. It hasn't changed much. The good
2 news is we haven't had any risk significance sources that haven't been
3 recovered.

4 For the most part, even those that fall below -- many, many of these
5 lost or abandoned sources fall within the category of gauges that fall off
6 pickup trucks because they're not secured or the pickup truck is stolen
7 because they're not really after the gauge, they're after the truck.

8 We get a lot of these back, but they're lower risk activities. It's one
9 area where actually advertising in the media has helped us or the
10 Agreement States recover these sources.

11 With regard to the GLTS, the General License Tracking System --

12 COMMISSIONER JACZKO: Again, most of these are
13 generally licensed devices, I assume?

14 MR. MILLER: Some are specifically licensed, some are
15 generally licensed. The tracking system itself isn't necessarily designed to
16 track lost or stolen sources, but it's to try to get a better handle on who has
17 these things. Once we issue a general license, it allows for various
18 entities to use this material under a general license.

19 For many years, we couldn't even get our arms around who it was
20 that were even using these materials under a general license that well. I
21 think we've made a lot of improvements in that category. I think there's
22 more to be made.

1 At one point a number of years ago we had what we called
2 affectionately a "gumshoe contract" where we actually had investigators
3 going out to try and track down general licensees and who they were.

4 And so, we have made improvements in that area.

5 COMMISSIONER JACZKO: That's good to hear. I raise it
6 again because we may just be at a point at which there isn't that much
7 more we can do to better prevent the loss of some of these sources, but
8 I'm always reminded the more that I think, in particular with the General
9 License Tracking System, the more that licensees recognize what their
10 responsibilities are under general license, I think the more likely we are
11 again, to prevent their loss or abandonment or other kinds of activities.

12 So, I appreciate your comments.

13 Vic, I just wanted to briefly comment on the NFS safety culture, the
14 report. I guess it's the SCABA Team, I guess, is their acronym. As I was
15 going through in preparation for this meeting, I think it certainly makes
16 some very interesting findings and I think it is -- it demonstrates there's a
17 lot of challenges in this area, I think, for NFS.

18 As I said, I think this decision that we made with NFS is really a
19 good opportunity. It was, I think, a good use of the alternative dispute
20 resolution process and really presents us with an opportunity to really
21 make some real progress at what we think is really the underlying issue
22 here, which is safety culture problems.

1 I was as I read it, really surprised to see that in almost all of the
2 areas that we've identified as the safety culture attributes that there were
3 significant needs for improvement in those areas. And some very
4 troubling, I think, assessments about where resources have been used
5 and how resources have been used at the facility.

6 I certainly think it's an important step and I think the issues here will
7 really be about moving forward and getting these issues addressed.

8 I don't know if you want to make some comments about what you
9 see for progress and how this report will be implemented and its findings
10 will be implemented.

11 MR. McCREE: Thank you. I agree it was a very good use
12 of the alternate dispute resolution process and we were able to come up
13 with a framework to move forward on the issues at NFS that we believe is
14 appropriate.

15 Safety culture is a big part of that and certainly the Configuration
16 Management Program improvements which they have submitted a license
17 amendment for and we're reviewing is another large component of that as
18 well as their commitment to specifically address the violations that had
19 been identified prior to that.

20 So, based on our preliminary assessment of the safety culture
21 board of advisers, the SCABA Team report as well as NFS's
22 implementation plan, we do believe it represents a good start. Our

1 assessment of that, specifically the findings and recommendations in
2 there, is ongoing.

3 If we determine that it is comprehensive and thorough then the
4 challenge for NFS -- and I'm sure they'll speak to that in a few moments --
5 will be to implement those actions, certainly resource them in a way that
6 ensures that they're effective and that they're sustained in the long term.

7 We look forward to that and certainly will be on-site to inspect those
8 actions to assure that their effective.

9 COMMISSIONER JACZKO: Thank you.

10 CHAIRMAN KLEIN: Commissioner Lyons?

11 COMMISSIONER LYONS: Thank you. Both Commissioner
12 Svinicki and Commissioner Jaczko talked a little bit about performance
13 indicators. I think I would like to add to that discussion a little bit.

14 On the one hand, I appreciate that we continue -- we're continuing
15 a quest towards a leading indicator that can show a degradation in
16 performance and give us some indications. I think that's important to do.

17 But on the other hand, I note that our own internal metrics on
18 performance indicator effectiveness did not meet one of our criteria
19 because of the public perception that performance indicators are always
20 green.

21 I can't help wondering if we're beating ourselves up a little too much
22 on performance indicators and the fact that they're usually green. I

1 wonder if instead of that internal criteria that we use for evaluation we
2 should perhaps shift our thinking towards a view that green performance
3 indicators are a measure of adequate performance and that's our target.

4 I would just be interested in your comments, it might be Eric, it
5 might be Bill or any of the others, on whether we may be being too critical
6 on ourselves in this area of performance indicators being green and
7 simply say, "Well, we've set them appropriately and they are indicative of
8 adequate performance. We expect them to be green."

9 Any comments?

10 MR. LEEDS: Commissioner, I tend to agree with you. What
11 the regulator focuses on, the licensees will focus on. We set up a set of
12 performance indicators that we believe are safety significant; that have
13 significance; that are a measure of performance.

14 We expect our licensees to work to make sure that they are green,
15 that they do perform well. We expect licensee performance to meet these
16 performance indicators and for licensees to strive to operate their facilities
17 safely.

18 So, I tend to agree with the idea that having a lot of green findings
19 that's not a bad thing; it's a good thing. That's what we're after. We still
20 have plants that fall into lower columns. We have Column IV plants. That
21 indicates to me that the program is identifying issues, that it is useful to the
22 licensees and to the regulators, to us, to make sure that we try to get the

1 entire fleet up at the correct level operating safely. I tend to agree with
2 you.

3 MR. BORCHARDT: I would just add I don't think the staff's
4 beating ourselves up because of this. This was feedback, if I remember
5 correctly, from external stakeholders who have perhaps a different
6 perspective and there's a certain view that they think that thresholds for
7 performance indicators should be constantly adjusted so that there's some
8 percentage of indicators that are non-green.

9 Whereas, we've chosen to pick thresholds that are appropriate for
10 their safety significant. So, there's a philosophical disagreement, if you
11 will, or difference of opinion between the two comments.

12 I think we're comfortable with threshold's that have been set and
13 the indicators will be what they are. I don't think we're beating ourselves
14 up because of the number of green indicators.

15 COMMISSIONER LYONS: Okay. Well, I'm glad to hear
16 that, Bill. My choice of words probably wasn't completely appropriate, but
17 perhaps we can be even more vocal in making the point that performance
18 indicators -- that green performance indicators are a measure of adequate
19 performance and that's what we expect. At the same time, I'm all for
20 continuing the quest for that leading indicator.

21 MR. CALDWELL: One comment. On the green
22 performance indicators, we do monitor them and as they move through

1 the green band if they're moving towards the green/white threshold it gives
2 us information on where to focus. So, there is information even though it's
3 in the green band.

4 COMMISSIONER LYONS: I certainly have more questions.

5 CHAIRMAN KLEIN: Why don't you go ahead? Since we
6 have more panels, why don't you go ahead and ask your questions.

7 COMMISSIONER LYONS: Okay. One more question on
8 the significance determination process where I believe for seven years in
9 a row it has not yet met our criteria of meeting external stakeholder
10 perceptions.

11 At the same time, I think we have continued to improve the SDP
12 process. It is a very open process and as I said certainly one we've
13 improved substantially.

14 I'm curious if some of those external stakeholders who have
15 expressed concerns about the SDP process have said really how much
16 more improvement do they expect in this?

17 This is another case where I wonder if maybe some of these
18 external criticisms are well justified or if we should be quite quick to say
19 that we've made substantial progress.

20 MR. MALLET: I appreciate the question. We talked about
21 this and I think from two aspects I would answer. One, we take these
22 survey results and I think it's always important to look at them; is there

1 something different we could do in the program. I think that's a healthy
2 thing to do.

3 I agree with you. I think everybody here would agree with you,
4 Commissioner, that we've made several improvements in the significance
5 determination process. We benchmarked the program within the last
6 couple of years and out of that improved our timeliness significantly.

7 We also gave back to industry something they desired as a book on
8 how we do our analysis so we could compare our analysis with theirs. I
9 think it's always healthy to take that with a grain of salt what they give us
10 back and say is there something more we can do.

11 So, what we believe that survey result was indicating was industry
12 believes there's still more work to be done in areas where you can't get a
13 number. I would call those the Red Protection Areas, security areas,
14 emergency preparedness and those areas where they believe that we
15 could do more work to make it a more defensible significant determination
16 process.

17 We take that with a grain of salt and we're working in that area and
18 we have made improvements. I don't know if Fred wants to add any more.
19 Does that answer your question?

20 COMMISSIONER LYONS: I appreciate that, Bruce. I hope
21 though that as the external stakeholders continue to suggest we need to
22 improve that there is recognition that there has been substantial

1 improvement.

2 MR. MALLETT: We recognize that and as I said I think it's
3 always important to look, is there something else we can do.

4 COMMISSIONER LYONS: No argument. Thank you.

5 CHAIRMAN KLEIN: Commissioner Svinicki?

6 COMMISSIONER JACZKO: Can I just make a comment?

7 Do you mind? I think this is an excellent question that
8 Commissioner Lyons has raised and it may be worth considering either at
9 the next AARM meeting that we bring in stakeholders to talk about some
10 of these issues as well so that we hear more directly what some of the
11 concerns are.

12 I certainly hear a lot of concerns about ROP at different levels. It
13 maybe worth considering at the next AARM that we have a stakeholder
14 panel to discuss specifically that issue so we're getting that feedback
15 directly.

16 CHAIRMAN KLEIN: I think we can take a look at where that
17 might be appropriate. It may not be necessarily the AARM, but some
18 forum in which we could hear from them. Commissioner Svinicki?

19 COMMISSIONER SVINICKI: Thank you. One comment
20 and a question. Charlie, I wanted to add my compliments on the Nuclear
21 Materials Events Database report. I thought the positive changes that
22 have been made to that make it better at identifying trends and raising

1 issues of significance. I had not realized that was an initiative of
2 Commissioner McGaffigan, but hearing that I'm in no way surprised that
3 that motivation to do that originated with him.

4 Victor, I wanted to ask you if this question reflects my imperfect
5 knowledge of the response to NFS, I apologize for that in advance. As I
6 was contrasting the materials regarding Palo Verde and then NFS I drew
7 from their reaction that it's a bit more challenging in responding to a
8 nonreactor situation in that the ROP, I don't mean this in a negative sense,
9 but it's somewhat formulaic in that it's very regimented and in terms of a
10 graduated increased oversight and inspection process it is formulaic in my
11 view and I mean that in a neutral sense.

12 In responding to NFS I don't know if there's anything here you'd
13 care to react to, but in terms of the judgments that the region and NRC
14 need to make in terms of responding, is it less clear kind of how to
15 gradually increase response in an enforcement inspection as a result of
16 something when it's not a reactor?

17 MR. McCREE: First of all, I think that's a very good
18 question. Secondly, I believe that the inputs, the inspection information
19 that we've obtained, the events that we've used to characterize the
20 performance of NFS support the actions that we've taken. The
21 Confirmatory Order that we issued in February of last year I believe was
22 an appropriate vehicle to continue to address the performance issues at

1 NFS.

2 COMMISSIONER SVINICKI: I agree fully.

3 MR. McCREE: Having said that, both Mike Weber and I
4 have had dialogue on the usefulness of evaluating an approach to the
5 oversight of fuel cycle facilities in general that is more analogous to the
6 reactor oversight process.

7 We have just been recently been able to identify some resources
8 that should over the coming months enable us to make some progress in
9 that regard. Certainly, with the interfacing with the fuel cycle facilities to
10 build an analogous program.

11 We believe because many of us also have had experience in the
12 Reactor Oversight Process that it would be useful and more predictable
13 and more transparent and more structured to have a similar program in
14 the fuel cycle --

15 COMMISSIONER SVINICKI: "Structured" is a better word
16 than "formulaic". Thank you for that.

17 MR. McCREE: -- in that area. So, we are moving in that
18 direction.

19 COMMISSIONER SVINICKI: Thank you. Someone with
20 your experience and Mr. Weber's and your brain power thinks that, I'm
21 feeling better. I'm coming up the learning curve, Mr. Chairman. Thank
22 you.

1 COMMISSIONER JACZKO: I would just add to it that the
2 Commission following the infrastructure meeting we had certainly put
3 language in the SRM to encourage the staff to look at working at the
4 material side of the house to make a program that is more risk informed
5 that involves performance indicators that has that kind of structure that the
6 ROP does. The staff has the Commission endorsement of that as well.

7 CHAIRMAN KLEIN: Well, Charlie, the question that you
8 talked about lost and stolen sources brings back fond memories of my
9 days on the Texas Radiation Advisory Board. That always gave us a
10 challenge, the lost and stolen sources and they do fall off pickups and
11 people do steal trucks and they just find out they have a source that was
12 on the back.

13 I guess with the technology that's coming out on RFIDs for
14 example. Have you and the Agreement States thought about is there a
15 way that on certain sources that we should look at putting tracers on
16 those? Again, that are fairly low cost, but yet might assist us in recovering
17 and identifying lost and stolen sources?

18 MR. MILLER: We have talked about it and thought about it
19 and I guess the sources come in all varieties of sizes and shapes. In
20 some sources they would probably be amenable to some kind of tracking.

21 We try to keep the focus on which are the higher risk sources,
22 Category 1 and 2 quantities.

1 In some cases it's impossible for some of the radiopharmaceuticals,
2 seeds, things like that are in such small packages it's pretty hard to put a
3 label on them. But for larger sources, it theoretically could be done. I
4 think the question becomes is that something that we should make part of
5 our regulatory regime or not?

6 There's a lot of different views with regard to that both amongst the
7 staff and the Agreement States. It's an issue that we have to continue to
8 look at, Chairman.

9 CHAIRMAN KLEIN: I would encourage you with the
10 Agreement States to just look at opportunities because the technologies
11 for RFIDs is changing so much and the cost is coming down. So, it may
12 be an opportunity for those sources that seem to be lost or stolen more
13 that we can look at how we might do that. Again, I wouldn't propose
14 regulatory structure now, but I think it's something we should just consider
15 options.

16 MR. MILLER: The Governor of Washington actually made
17 such a proposal to us. So, that kind of kicked off our initial evaluation of it.

18 The other thing I would say, though too, is that where it could serve,
19 if it were properly done, is sometimes sources disappear in the
20 transportation system and then they suddenly reappear maybe at another
21 location that they weren't supposed to be at. Maybe sometimes they were
22 always there and never noticed. So, it could be utilized in some way in

1 that regard.

2 CHAIRMAN KLEIN: Thanks. Well, Victor, following up on
3 what Commissioner Svinicki raised with NFS, I think when you look at
4 what NFS handles in the material there are unique characteristics there
5 that we don't see in other nuclear commercial facilities for example.

6 I guess just at the general level, obviously, criticality is certainly an
7 issue that we always look at at all our facilities, but in particular NFS.
8 Could you talk a little bit about what you see as a performance indicator
9 for an understanding of the criticality safety culture?

10 MR. McCREE: Well, again, in the current scheme in our
11 assessment of NFS's performance we have not of late identified issues,
12 performance issues in the area of nuclear criticality safety. The issues
13 have been associated with procedural adherence and the operations,
14 radiological controls and engineering area.

15 If your question was focused on if we were to identify a
16 performance indicator in NCS what it would be, I'd probably want to ask
17 Mike Weber if he could probably speak to that one.

18 MR. WEBER: Thanks, Victor. I'm Mike Weber. I'm the
19 Director of Nuclear Materials Safety and Safeguards. As Victor has
20 already alluded to we have not established an indicator for nuclear
21 criticality safety.

22 You may recall some years back the staff had embarked on an

1 ambitious effort to establish performance indicators, modeled in line with
2 the ROP and for a variety of reasons the Commission determined it was
3 premature to go there because at the same time we were implementing
4 revisions to our regulations in 10 CFR Part 70 to impose more of a risk
5 informed approach.

6 Today, NFS and the other fuel cycle licensees have identified
7 so-called IROFS, Items Relied on for Safety, and one of the key
8 consequences that we seek to avoid in establishing the IROFS is nuclear
9 criticality.

10 So, there may be some basis there to look at the availability and
11 reliability of those items relied on for safety, more or less analogous to
12 BRIIE and the other indicators that are used in the ROP. This is all
13 premature and we're sorting this out.

14 I will say that nuclear criticality safety is something that we watch
15 quite closely because of the hazards that are posed by the fuel facilities.
16 This is one of the principal ones that we seek to avoid - inadvertent
17 criticality.

18 So, I'm sure NFS can tell you the amount of attention that we pay to
19 nuclear criticality safety through inspections and also through follow-ups.
20 A lot of the reporting that the agency receives is related back to nuclear
21 criticality safety.

22 CHAIRMAN KLEIN: Great. Thanks. Well, on behalf of my

1 fellow Commissioners let me thank you all for a great presentation. This is
2 a subject obviously you can tell we have a lot of interest in. I think what
3 we'll do is move to the second panel. So, thanks for a good job.

4

5 PANEL 2

6

7 CHAIRMAN KLEIN: Good morning and thanks for being
8 here. I feel like I'm getting to know Palo Verde very well. I think I've been
9 out there three times, so it seems like it's my home away from home.

10 It's certainly the most plant that I have visited, but we're looking
11 forward to hearing the progress that you all have made and I know Randy
12 has been working very hard and he's doing the military tradition and he
13 only works half days. So, he works his 12 hour days even though you pay
14 him for 24. I think you're making some good progress, but we look
15 forward to hearing. Bill?

16 MR. POST: Thank you, Mr. Chairman. Good morning,
17 Commissioners. My name is Bill Post and I'm Chairman of the Board of
18 Arizona Public Service Company. Last year we presented to you the
19 factors that contributed to a decline in performance at Palo Verde.

20 COMMISSIONER LYONS: Is your mic on, Bill?

21 MR. POST: Sorry, it's not. Last year -- is that better?
22 Maybe I just need to get closer to the mic.

1 Last year we presented to you the factors that contributed to a
2 decline in performance at Palo Verde and our schedule to improve
3 performance which included a full critical assessment of the plant and the
4 development of our Station Integrated Improvement Plan.

5 Overall, we met the schedule we outlined to you last year and today
6 we would like to provide an overview of our progress and more importantly
7 discuss the steps we will take to continue our performance improvement in
8 2008.

9 Last year our performance was declining. Today our performance
10 is improving; however, it remains significantly below our goal of
11 excellence. Simply put, we remain intensely focused on the future and the
12 changes we need to safely and efficiently generate electricity for the long
13 term at Palo Verde.

14 This commitment starts with our board of directors which has been
15 actively engaged in our improvement plan. Over the last year,
16 Mr. Edington provided 10 status reports to our board as well as several
17 on-site briefings to individual board members.

18 All of our board members have visited the site, many on several
19 occasions and several directors have attended management meetings,
20 plant training sessions and employee presentations as well as participated
21 in one-on-one discussions with employees.

22 The Chairman of our nuclear committee has been personally

1 involved in several plant activities including an internal drill to assess our
2 plan security. As the Chairman of our board, I've also personally
3 participated in many efforts at the site and let me assure you that our role
4 as directors is clearly defined as governance and oversight and I will
5 ensure it is not confused with the responsibility and accountability of
6 management.

7 As to oversight, we have reconstituted our Nuclear Oversight
8 Committee and as I described to you last year we moved its reporting
9 responsibility from the plant to report directly to the nuclear committee of
10 our board and the CEO of Arizona Public Service Company.

11 Our board is fully committed to improving performance at Palo
12 Verde. Don Brandt, the CEO of APS will discuss our company's continued
13 commitment to achieve excellence. Don replaced Jack Davis who retired
14 in March. Don has been with Arizona Public Service for five years and
15 most recently as its President. Don?

16 MR. BRANDT: Thank you, Bill, and good morning
17 Mr. Chairman and Commissioners. I want to reaffirm to you today our
18 commitment. Both I, as APS's Chief Executive Officer, and the entire APS
19 organization are focused on Palo Verde's improvement for the long term
20 and we will fully fund whenever human and financial resources are
21 required to achieve and sustain the site integrated business plan that
22 Randy will discussed further today.

1 As APS's CEO I need to assure myself that we're achieving
2 sustained deliberate progress and that we are driving positive human
3 behaviors and embedding safety consciousness and a questioning
4 attitude in everything we do.

5 To attain this level of assurance, I pursue multiple channels of
6 communication and I am personally committed and engaged at the plant
7 site. In addition to the traditional vertical organizational channels of
8 communication, the Chairman of our Nuclear Oversight Committee reports
9 to both the chairman of our board's nuclear committee and to me, as Bill
10 just mentioned.

11 I accompany the NOC for one full day during each of their site
12 visits. In addition, the NOC members and I discuss issues on a regular
13 basis.

14 I have unescorted access to all areas at the site and I make use of
15 that access. I've been there during the day, at night, on holidays to walk
16 the site for the purpose of communicating with our people at all levels, to
17 gauge their morale, commitment and engagement and to let them know I
18 have a keen interest and to tell them I personally appreciate the hard work
19 and dedication to achieving long-term excellence at Palo Verde.

20 I visit the Security Control Centers, the unit control rooms, the
21 outage management centers, the maintenance job sites, your resident's
22 office and just about anywhere else I can find people. The feedback I get

1 is invaluable and it gives me confidence that we have truly turned the
2 corner.

3 Starting last July I undertook a personal effort to become involved
4 with the Palo Verde Chapter of the Young Generation in Nuclear
5 Organization and Palo Verde's legacy engineer recruiting and
6 development program, affording me an outstanding opportunity to be
7 involved with the selection and mentoring of Palo Verde's future leaders.

8 The intellect and infectious positive attitude of these young men
9 and women gives me confidence in the future success of Palo Verde.

10 As Bill just mentioned, recently the Chair of our boards Nuclear
11 Committee and I oversaw and actually we participated in a Palo Verde
12 Force-on-Force security drill.

13 I addressed the auxiliary operator and operator training classes. I
14 asked their opinion about the level of training they're receiving, the
15 adequacy, any comments they might have and their overall experiences at
16 the Palo Verde site. I leave them with my final message that safety is my
17 overwhelming number one priority and I tell them that if anyone ever tells
18 them otherwise my name is in the phone book, call me directly. I want to
19 hear about it.

20 On an unannounced basis, I sit in on management meetings, some
21 of Randy's, some of the other officers and meetings such as the plan of
22 the day meeting that occurs every morning.

1 Significantly to me, my engagement and presence at the plant is
2 welcome and encouraged up and down the organization from Randy and
3 his officers' team down to the occasional security officer that has to
4 occasionally help me find my way out.

5 Safely and efficiently generating electricity for the long term is our
6 mission at Palo Verde. We have made significant progress in the last
7 year, but we recognize we have a tremendous amount of work ahead of
8 us. Randy refers to it as a journey.

9 Satisfying your regulatory standards and objectives is but one
10 milestone along that journey. Our business plan is aimed at achieving
11 sustainable first quartile performance at Palo Verde. You have my
12 personal assurance and commitment that we will far exceed your
13 expectations.

14 Thank you for your time and now Randy will walk through the
15 formal presentation.

16 MR. EDINGTON: If I may pick up on the third page of the
17 package, oversight monitoring. Basically, you've already heard some
18 aspect. Our biggest emphasis on this oversight monitoring is get multiple
19 levels of information from multiple sources, whether it's the board, myself
20 or Mr. Brandt and their own walk arounds.

21 We did the offsite review committee, it has been completely
22 restructured brought in with external people and they report directly to me

1 and I moved them up from the bottom of the organization and they also
2 have an independent report to the board once a year.

3 If you look at our management review meetings we have copied
4 those off of where the industry norm is where we bring in external people.
5 We do extensive reviews about every two months now. About a four hour
6 review of various indicators, challenged them to the industry and bring in
7 many external people supporting that, so it's not just ourselves looking at
8 ourselves.

9 If you look at the next page, continuing oversight and monitoring.
10 These are a planned part of our building where we created these
11 challenge boards and we did this on purpose because we wanted to
12 ensure that we focus on the quality and the behaviors of rigor and close
13 out material correctly. This is part of carrying through on past our initial
14 plan.

15 These boards will shift as we go through different stages, but there
16 will be other items replacing them. Again, its intent is to ensure that we
17 get that quality and the rigor and sustainability and change the behaviors
18 of our organization. Next slide, please.

19 This is a slide that we presented last year. It's history now. I do
20 want to quietly cover it. The green blocks on top were where we
21 aggregated all the various action plans out there into one. There were
22 numerous plans everywhere so we consolidated them all.

1 The blue blocks represented that five to six year history review that
2 we did to do all the impact of self; root cause, et cetera. And the red
3 blocks on the right indicate where the Confirmatory Action Letter and the
4 95003 efforts were done by Nuclear Regulatory Commission.

5 If you look at the top right hand pyramid that is our business plan.
6 Our business plan is a three to five-year plan. It incorporates all of these.
7 The Site Integrated Improvement Plan is a subset of that which came from
8 all our evaluations and the information we get on the Confirmatory Action
9 Letter is a subset of that. So, we're working off of one tool as we drive
10 forward. Next slide.

11 Completed activities: Again, just to clear the slide, we list on the
12 left-hand side the regulatory plant assessments and activities. If you look
13 across the regulatory those are only the major regulatory inspections that
14 we've had associated with this 95003 process.

15 We've had many other scheduled inspections as you know. The
16 emphasis here is throughout this time we were working on improving the
17 plant, but we did the significant evaluations and assessments, impact
18 assessments, did the safety culture assessments.

19 We were not waiting for them. We had the framework. We were
20 putting activities in and actions in place. So, this is a history and then you
21 can look at the bottom and see some of the major equipment issues we
22 fixed and major outages. That is up to date to where we are today.

1 We end up with a pyramid that we represent our Site Integrated
2 Business Plan. Again, the key part of this is this is a planned transition
3 from day one where we framed this out and as we got more information
4 we fed into it.

5 Every one of these blocks have numerous actions and activities
6 behind them. They are open. They are available on the site's Web site,
7 so any employee can look at it and look at those actions and the status of
8 them.

9 Last year we told you we were building a plan. We have the plan.
10 We are now executing that plan and we will continue to execute that plan
11 and update it as we go forward.

12 If more importantly, this is key for the transition. Based on my
13 experience at Cooper and Indian Point in years past, many times you
14 have an improvement plan and it kind of ends and it's where to from here.
15 This plan overlaps it as the SIIP and the CAL collapses underneath it and
16 we complete those. This plan will continue on and transition through it.

17 In fact, our goal is where we want to be five years from now and 10
18 years from now, not where we want to be next year. Clearing the
19 milestone of the Confirmatory Action Letter is an important milestone, but
20 it is only a milestone. We're shooting past through that and folks know
21 where we want to be, not where we're at.

22 I will bring out in those blocks there's four, excuse me, there's five

1 red blocks there. Those are core business areas and then we customize
2 the green ones. I will mention one of them, knowledge and training. I
3 have an absolute passion for knowledge and training.

4 We've gone back into our training areas and we reconstituted
5 those, but more importantly we're focusing on getting the knowledge. One
6 example is how many training opportunities or knowledge opportunities is
7 in a control room on a shift.

8 The training is formal. We raised the testing. We raised all those
9 standards. The pursuit of knowledge is something you do constantly
10 every single day at all levels.

11 If you go to the people slide on the next. I pulled that out of that
12 block. This just represents our hiring and if you say it's hiring development
13 for our future. Where do we want to be in five and 10 years? That's the
14 way we structured our organization.

15 We have done initial hiring. If you look at the side stream on the
16 side it's very important to bring in external mix and external experience
17 into this organization. Currently about 25% of our management team
18 representing almost every plant and fleet in the industry has been mixed in
19 with 75% of our existing. From that we think we get strong synergistic
20 effects.

21 Next slide shows the core indicators. These only represent 40 core
22 indicators that have been picked and selected to monitor directly on the

1 SIIP and CAL. We have hundreds of other indicators and as I said we go
2 through them end to end.

3 Many of these are indexes, so there's multiple items before them.
4 You can see the overall trend. We do feel that the majority of our
5 indicators has turned. We're moving in a positive direction. The ability to
6 see these and move forward is extremely important to us.

7 As you mentioned, the indicators and the questioning, we use the
8 NRC indicators, but we measure to the band of green and that we will set
9 our red indicator at the transition from green to white.

10 So, we're always trying to measure -- our objective is to stay green,
11 but very high in the green. We use those and we put our own thresholds
12 on it.

13 Next will be forecasted activities. This just shows where we're at
14 through the end of next year. Basically, at the end of this year we expect
15 to be 85% to 90% done with the current activities of the CAL and SIIP.
16 This is a living process.

17 We may add some actions, but in general that's our current plan,
18 based on current actions and we'll be about 95% by the end of June with
19 mainly effectiveness reviews and follow up looks at that time.

20 You can see the emphasis on our leadership training has been
21 continued and we'll move on through with that area.

22 I'll end it with where are we going from here. We can talk about all

1 these areas, but obviously they will always be a safety emphasis, nuclear,
2 industrial, radiological and safety culture. We think we've used that to our
3 area excessively where our people are very much bought into this area
4 and using it constantly.

5 Our improvement plan is based on managing a large volume and
6 priorities and keeping our focus and keeping the focus on that core
7 business.

8 Field execution and maybe the biggest challenge we have to
9 complete here is transition and all those behaviors and standards where
10 they're consistently and constantly in the field over and over. We've had
11 areas of improvement there and we have areas that we need to continue
12 to focus and drive as any time.

13 And last, I'll end it with evaluations and inspections. We'll be doing
14 our own self assessments and you have numerous inspections already
15 scheduled throughout this year working with the Nuclear Regulatory
16 Commission and we'll drive forward until we not only clear the important
17 milestone of a CAL and SIIP, but we'll drive right through that and go on to
18 focus on the years before that.

19 The last slide, again just represents the pyramid and where we're
20 going from here. With that, I'll turn it over to you all for questions.

21 CHAIRMAN KLEIN: Okay. Well, thank you very much for a
22 good update. Commissioner Jaczko?

1 COMMISSIONER JACZKO: I guess if I could maybe start
2 with you Bill or anybody who wants to answer these. At the meeting we
3 had previously one of the points you highlighted was the importance of
4 communication and making sure that you were getting honest information
5 all throughout the organization and Don you touched on that a little bit.

6 I was wondering if you can go into some more specific details about
7 how you've improved the communication channels and how you feel now
8 if you feel better that you're getting more accurate and more honest
9 information about performance at the site?

10 MR. POST: The short answer to that is yes. We have
11 expanded it in many different ways. [Audio lost] and already review
12 various issues. We put a separate category into that meeting at the end of
13 the meeting to say, "Okay, now tell us your feelings about what's going on
14 at the plant."

15 It doesn't have the same rigor. It doesn't have the same hard,
16 factual content that the metrics and some of the things that we do, but we
17 added specifically a segment of that agenda to talk about attitudes and
18 perspectives and really their feelings about -- intuitions about what they
19 think is going on at the plant. That is one form of communication that I
20 think is helpful.

21 As far as our communication with you, the NRC, we've increased
22 that significantly. Both Don and I have had individual meetings with your

1 residents and frankly I highly recommend that. We've had one-on-one
2 meetings and they've been very honest and frank with me and I with them.
3 I think that is a very positive step and I think something that I would
4 suggest is a very useful thing to do.

5 Having direct participation in the management meetings. One
6 meeting that Randy does is with groups of 30 to 40 people crosscutting
7 through the organization. These are two hour meetings that are very, very
8 personal meetings about what it means in terms of accountability and
9 responsibility; what it means to generate efficiently over the long term, et
10 cetera. Those two hour meetings are very critical.

11 He is about halfway through 2,500 people. That participation in that
12 process in terms of communication is very, very personal and very, very
13 important.

14 Managerial meetings, as Randy mentioned, they have weekly
15 Monday morning meetings with the management team. Both Don and I
16 have participated in those meetings. In fact, board members have
17 participated in those meetings. We are doing everything we can to build
18 parallel paths of communications.

19 One of the questions that came up a little earlier by the Chairman
20 was were we given full understanding as we had the issues before us in
21 terms of a Column IV and 95003. I remember discussions with Doctor
22 Mallett and Mr. Reyes and others where we explained that at that

1 particular point in time although there was uncertainty, I must tell you in
2 terms of the diesel generators and whether or not there was going to be a
3 white finding there or not and whether or not that would put us in Column
4 IV or not.

5 So, there was uncertainty around that. There was no uncertainty
6 on our part and we had communications with various members of the
7 NRC that we were moving forward on our station integration improvement
8 plan regardless of whether we went into Column IV or not.

9 I think what you mentioned and what I recall was more of a denial
10 in 95002.

11 COMMISSIONER JACZKO: Absolutely. I appreciate you
12 clarifying that. That was very much the original voiding issues. I think
13 when those happened initially there was a tremendous lack of
14 acknowledgment of the lack of engineering rigor that led to that situation in
15 particular. And that led to problems with the 95002. I was very much
16 referring to that time period and not the later time period.

17 MR. POST: You're absolutely right about that. So, that was
18 a long answer to your question, but I must tell you in terms of
19 communication its one of the most important things we do.

20 COMMISSIONER JACZKO: I appreciate that and I think it is
21 certainly an important factor. I would just maybe briefly, just say -- and if
22 we do another round I'll have some more questions. Again, I think those

1 issues that certainly from the staff and what our people have identified as
2 important it's the engineering rigor that is something that we've seen
3 throughout this. It's having an effective corrective action program.

4 It's in many ways a softer side of these issues, but these are the
5 challenges that I think continue to be in evidence at Palo Verde and the
6 things where we definitely want to see improvement in and where it will be
7 important to have that improvement.

8 So, I look forward to seeing continued improvement, but again, I
9 think these discussions are very helpful. Again, it gives us a good
10 understanding of where you see the challenges and so we can always
11 compare that back with what we're hearing from our own staff where the
12 challenges are and I think it's been useful dialogue. Thank you.

13 CHAIRMAN KLEIN: Commissioner Lyons?

14 COMMISSIONER LYONS: Well, I do appreciate the attitude
15 that I think you've all displayed here. I think also you've displayed your
16 recognition that the proof will be in the performance that you demonstrate.
17 Certainly, the Commission will be joining you in wanting to assess that
18 performance.

19 By way of a question, are you finding ways in which you can share
20 some of the Palo Verde experiences, positive and negative, with other
21 plants to perhaps avoid them going down the path that Palo Verde has
22 followed most recently?

1 MR. POST: Commissioner Lyons, yes we are. One of the, I
2 believe, most important charges that we have through our involvement
3 with INPO is to make sure that we communicate to all members of INPO
4 on an ongoing basis our status, the issues and how we're reacting to
5 those.

6 In each of the last two CEO conferences I have personally given a
7 presentation to all the CEOs in that meeting and they were basically,
8 along the lines of the presentation that I presented to you last July; very,
9 very direct in terms of the issues that we're facing and how critical it is that
10 you embrace these issues aggressively.

11 I've also presented and they've developed a new program --
12 actually, last summer was the very first program that they put in place to
13 deal with directors of companies. And so board of directors attend a
14 session in Atlanta and I presented in that session as well, not just to the
15 CEOs and the management, but actually to the directors of the companies
16 on how I felt directors should appropriately view their nuclear assets and
17 operations and what kinds of questions and issues should they be dealing
18 with. I'm going to do that again and I believe the Chairman is as well in
19 September of this year.

20 Randy can speak for himself, but he also was in the process of
21 communicating in many different ways, but we believe that's a part of our
22 responsibility to make sure that this is communicated throughout the entire

1 industry.

2 MR. EDINGTON: I would continue on that. I'll be speaking
3 at MIT and a AREVA conference and others on recovering plants and
4 lessons learned. We work closely with special focus plants with INPO not
5 only on the receiving end, but also we send people out to support those
6 areas and we support many benchmarking.

7 There has already been numerous plants that have come to our
8 plant to do benchmarking on our stage; plants that are having some
9 challenges right now are looking at where we're at. So, we constantly
10 share information to that.

11 COMMISSIONER LYONS: I think that's very important and I
12 very much appreciate the role of INPO and Palo Verde specifically in
13 doing that.

14 Perhaps by way of one other question I'd be curious and perhaps
15 you're adding just a little bit to how you measure or how you determine
16 that the various management initiatives are taking root and are moving in
17 an appropriate direction?

18 MR. EDINGTON: We use numerous levels. Again, you start
19 with the metrics itself which is fairly hard numbers and then you get into
20 the whys and stuff. You have all kinds of assessments and those
21 assessments are very customized depending on the situation.

22 In some cases I'll use a safety culture review. For one department

1 we brought in three people to do a detailed review and we followed it up
2 nine months later. For others, we may do a very simple survey because
3 it's a different condition. So, you have the assessments.

4 We're bringing in all the external people to see what those views
5 are and then ultimately just walk arounds. I can't overemphasize
6 enough -- my absolute belief is you must look for multiple levels of
7 information. So, Bill and Don should not get their information just from
8 me. They should get their information from all levels just like I do. That's
9 what I seek out.

10 If he hears something different in the plant or from a senior resident
11 than he did from me then that means we need to understand that delta,
12 that issue. So, that's a combination of various -- some formal all the way
13 to the walk arounds and looking for attitude. We are following up with
14 various surveys and including the industry review that we'll be doing this
15 fall.

16 COMMISSIONER LYONS: I appreciate those responses.
17 Certainly, I will be encouraging you to stay the course that you're on and
18 appreciate the course you've laid out. Thank you.

19 CHAIRMAN KLEIN: Commissioner Svinicki?

20 COMMISSIONER SVINICKI: I'd like to start out by
21 associating myself and aligning myself with Commissioner Jaczko's
22 comments. He began this round of questioning talking about

1 communication and in your response you've said that's your highest
2 priority as well. I've forgotten how many employees there are between the
3 three units. Is it over 1,200? It's a lot of folks.

4 MR. EDINGTON: There's about 2,400 APS employees and
5 another 300 to 500 base line contractors.

6 COMMISSIONER SVINICKI: Okay. So, obviously that
7 communication is a challenge. I appreciate as well the way your pyramid
8 is structured. The business plan is the utmost layer, the site improvement
9 plan and the CAL actions, which obviously as the regulator we're very
10 focused on here.

11 I think at the business plan its thousands of milestones and it
12 narrows down to the CAL being about 450 actions. As Commissioner
13 Lyons has said, it's tough to communicate to folks and to track --
14 accomplish 450 things. So, I appreciate that your vision is beyond what
15 you need to do for the Confirmatory Action Letter, but it's no small and
16 trivial task; even that set of activities is extremely challenging.

17 So, I appreciate that there'll be no rest once you achieve the initial
18 450. But still, again, it's a lot and I think it can be confusing for employees,
19 if there's too many initiatives for them to focus on.

20 We heard from Elmo on the previous panel. He actually stepped
21 through all 12 areas in which it was determined that there needed to be a
22 focus on actions taken in those areas. He said it was broad and deep and

1 the response needed to be broad and deep as well.

2 I appreciate that you're -- as he put to me and you're indicating
3 today -- you're well and truly in the implementation phase of what needs to
4 be done. I look forward to tracking that and hearing from you next year
5 and over time. Thank you.

6 CHAIRMAN KLEIN: Thank you. Obviously, any time you
7 move into Column IV that's sort of a negative side, but I would like to
8 comment on a couple of positive aspects that you all did. One was finding
9 the pipe bomb. I think that demonstrated you've got a robust security
10 activity.

11 When you think of all the people that come into that plant and that
12 you found that was a compliment to your team and the security system
13 that you have in place.

14 The other Don had mentioned when I was out there meeting with
15 the Y-Gen people. You really do have a good group of people. Very
16 dynamic. They're not shy. They're very energetic and so I think that
17 speaks very highly of where you're heading in the future. So, that's also a
18 good sign.

19 Could you talk a little bit, Bill, about your Nuclear Oversight
20 Committee? Who's on it and how many people and how often you meet?

21 MR. POST: Yes. I may need a little help here because this
22 is off the top of my head. We have several participants in the Nuclear

1 Oversight Committee. The past president and CEO and Chairman of
2 INPO, Fred Tollison, is on the committee. Joe Callan, a previous EDO
3 here, is on the committee. Bill Stewart, who was involved in Dominion's
4 plants as well as ours, is on the committee. Mike Sellman, who was the
5 recent head and retired from NMC and had been on our committee as an
6 active CEO prior to his retirement is on the committee.

7 Help me out here. Warren Peabody, who has been involved with
8 this industry for a very long time and a consultant involved with the
9 committee and actually is the chairman of that committee.

10 By the way, he comes to every single nuclear committee of our
11 board and gives a report in every single meeting. So, this isn't something
12 that we do once in awhile. This is an integrated process and they visit the
13 site three to four times a year depending on outage schedules and other
14 things, but they're there at least three times a year in multi-day sessions
15 and spread through various areas.

16 And I'm missing one other -- okay, that's it. I got them all.

17 CHAIRMAN KLEIN: That's good. Well, a question for
18 Randy. When you start the process of identifying problems I think one of
19 the challenges Palo Verde had was you oftentimes identified issues, but
20 you couldn't fix them and sustain them.

21 And so as you went through this I'm sure your backlog grew from
22 when you first started, it got a little bit larger. Is it now getting smaller or is

1 it still getting larger?

2 MR. EDINGTON: Many backlogs are now starting to go
3 down. What we did was identified all the backlogs and then we brought in
4 a group of people to do a risk review determining what's the value of that
5 particular backlog and how we're managing it.

6 The objective is either change those backlogs into a managed
7 inventory. In some cases we're just managing it right now to kill it later
8 and making sure that after we're done the risk review we don't have
9 anything significant in there and we maintain that one or we check it later.

10 In others we've identified and attacked and we've brought in either
11 extra resources or we just do different metrics going out. An example is
12 the corrective action program. We had a large backlog. We had a lot of
13 old ones. We actually do every month a deep dive in the corrective action
14 program so we take the corrective action program and we spend two
15 hours looking completely at the corrective action program, all the metrics
16 and we review all the old ones and how we're going to clear them.

17 We bring in extra resources. It's a mixture of some of them are
18 actively being pursued and driven down right now. Some of them are in a
19 managed inventory, a monitoring mode where we can get to them later
20 and some where we know they're very low risk, but they're out there and
21 we'll be picking them up as we clear off others.

22 CHAIRMAN KLEIN: Good. Well, obviously I've seen your

1 pyramid a few times. You've talked pretty good about that. You heard of
2 our discussion about Perry where they didn't exactly stay on a positive
3 slope. Is your pyramid going to keep you from having the same
4 phenomenon?

5 MR. EDINGTON: I would say yes because I'll go back to my
6 experience at Cooper. We had a plan and when it ended the transition
7 wasn't clear. We started our plans from day one with that pyramid, the
8 framework of the pyramid.

9 The details of it grew some as we got more data and again, you're
10 executing the actions in there. Those are based on where we want to be
11 years from now. Included in there is the SIIP and CAL. As the SIIP and
12 CAL actions are completed and go down and down you still have actions
13 well beyond those.

14 And so you've got to look at it as you're running through the tape, if
15 you would, and that our target is set out quite a bit farther than just hitting
16 this. This is an important milestone; we need to clear it.

17 But we're trying to say what's next, what's next. It was designed to
18 ensure we transition through that because I have seen those challenges in
19 previous plants that I've been associated with.

20 MR. POST: If I could just add one thing to that. That
21 pyramid and that structure was put in place before we received the CAL.
22 We see it before the CAL and it will be there after the CAL.

1 CHAIRMAN KLEIN: Thanks. Commissioner Jaczko?

2 COMMISSIONER JACZKO: I just had one more question.

3 Can you comment a little bit on what you found with your safety culture
4 surveys and if there's been any trends? What surprised you from that?
5 And how you're going to be addressing some of those issues specifically?

6 MR. EDINGTON: Okay. With the safety culture survey we
7 did our individual, we had very specific areas and we had a broad based
8 survey and we had an industry team that came in for two weeks. So, we
9 had a very thorough look.

10 We identified the groups that we thought needed extra attention on.
11 When the NRC did their inspection we had very good alignment. If you
12 look at the 13 attributes that the NRC identified, the four that were SC-WE
13 related were actually fairly clean. We had a very open environment, a lot
14 of discussion.

15 The other nine which we agree with and we had identified were
16 areas kind of like the corrective action program where the backlogs got so
17 big people lost confidence in it. So, the fixed side is to get the system
18 back working and drive it and get that behavior right.

19 So, it's everywhere from individual groups that we've identified that
20 we put in -- each group that was identified gets special plans on them and
21 we've already had follow-ups, individuals on those. Other groups we
22 actually knew we had some barriers ourselves that didn't show up in the

1 survey just based on other ability.

2 So, if I kind of group it, we have a very open environment. That
3 piece was very positive and was good to reinforce. Of course, you want to
4 constantly stay on top of that.

5 The others when you sit down and really lay them out it comes
6 back to your action plan of we need to get these systems and programs
7 working right where people have confidence in what they're doing and that
8 when they put something in the corrective action program or something
9 like that it, in fact, will be addressed in a very quick time.

10 COMMISSIONER JACZKO: Just a brief comment then to
11 close my remarks. That is, one of the issues that I know you had raised at
12 the previous meeting was the importance of having a good solid operator
13 training pipeline. I know you touched on that a little bit on the training
14 activities and the work you're doing there to improve that. I thought I
15 would follow up with the things we've done based on that suggestion.

16 We did take a look at that as a potential metric or something we
17 could track. What the staff came back with -- and they only went back to
18 2004 - was that we didn't see anything certainly industry-wide that would
19 indicate that there's any correlation between necessarily where you are
20 and what the status of your operating training pipeline is and any
21 correlation with performance degradation.

22 So, I still think it's an important piece of information and it may be

1 something that is site specific and there's not necessarily a trend or we
2 just can't pull it out of the data.

3 I think it was a good insight and one that I certainly continue to look
4 at the other's facilities as a way to try and gage what potential problems
5 might be coming in the future. Thank you.

6 CHAIRMAN KLEIN: Well, thanks for the update. Obviously,
7 you were the first plant that went into Column IV under my term on the
8 Commission. So, I've been very engaged in watching your performance. I
9 think you've got a good plan.

10 I think what we'll be watching for as always is that sustained
11 performance and make sure that you keep on that positive slope and it
12 looks like you're on a good pattern. I think probably both you and the NRC
13 is anxious for you to move out of Column IV, but more importantly to keep
14 on the positive slope. So, I appreciate the update. Thanks.

15 Okay we'll now change out and have our third panel. This is almost
16 like a rotating activity for today. We have obviously a lot of issues to
17 discuss.

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PANEL 3

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CHAIRMAN KLEIN: Good morning. Obviously, you've participated or observed a lot of the questions and discussions already. So, just the fact that you're the third panel doesn't mean it's any less significant. We had to structure it in a certain way. So, look forward to hearing the update on NFS. Dwight, do you want to begin?

MR. FERGUSON: Thank you. We'd certainly like to extend you an invitation for you to come down to our facility, Commissioner Svinicki. We think it would be a real interesting trip for you and one we would enjoy hosting.

COMMISSIONER SVINICKI: Thank you, I'm sure it would be most informative.

MR. FERGUSON: Last year we were here, of course, in some respects you don't want to come back, but on the other hand it is a chance to get all of you folks together and update you on where we've been.

I would like to again reiterate our appreciation for the alternative dispute process. We felt like that has been very beneficial to the facility and our ongoing process. I know there are a lot of things in that report that we got from our SCABA or Safety Culture Advisory Board, but one of the things we ask for it was excellence. Mr. Lindstrom, who will address

1 our performance since last year has set a goal that he wants us to be a
2 facility of excellence in everything we do within four years. That is the way
3 that that report was put together.

4 In fact, you'll note on here that one of the items that we have is --
5 you'll see that Mr. Nagy is not with us. He, unfortunately, was not able to
6 come, but previously when we were here last year he was Marie Moore's
7 assistant. Today, he is the Chief Nuclear Officer, which is a vice
8 presidential level position. So, there's an indication of just in a title of
9 someone that has been here that indicates part of the changes that we've
10 made.

11 At this time, I would like to turn the program over to our Executive
12 Vice President and General Manager, Tim Lindstrom, who will bring you
13 up-to-date on where we have been since last year. And keep in mind we
14 didn't wait for the board of advisers to issue their report.

15 We've been working and have been working for two years on
16 improving the facility. We've gotten a lot out of this report which is helping
17 us fine-tune the direction that we've been going in. And I might add that
18 Tim and his staff have been in continuous contact with that Oversight
19 Committee and implementing things as we've gone along in
20 communication with them. We just haven't waited for the report to come
21 out.

22 It's been an ongoing effort and at this point I'd like to turn it over to

1 Tim.

2 MR. LINDSTROM: Thank you, Dwight and Commissioner
3 Klein and other Commissioners. Last year I was here and said I wasn't
4 happy to be here. This year, I am happy to be here although I would say
5 the bottom line message is the same.

6 We're not satisfied with our safety performance and we're
7 committed to not only improve the specific things that we found, the
8 findings of our independent safety culture assessment, but we're
9 committed to excellence. We're committed to be in the industry best in
10 safety culture in four years.

11 I feel last year I was here with \$5 and a promise. I think a more
12 relevant analogy today might be that would buy us a gallon of gas. But
13 this year I think I can at least show significant progress and
14 implementation of those plans that we laid out last year. If I could have
15 the second slide.

16 I would like to talk to our safety performance a bit. Mr. McCree
17 talked about the licensee performance reviews and in our most recent
18 performance. If you look more broadly, I think you will see significant
19 improvement from the 2005, 2006 timeframe. We found that we did
20 plateau in safety performance, not only in NRC identified violations, but
21 also our own safety metrics in 2007.

22 We achieved a significant improvement and over the last few

1 measurements cycles, we have maintained a relatively flat performance.
2 We find that very disturbing and we are looking at elements of our
3 strategic plan that will identify that, particularly the kind of the nagging
4 procedural compliance issues.

5 Although I would say that if you look at some of our management
6 metrics, which we believe will become leading performance indicators, we
7 have shown improvement.

8 Many of these we haven't been measuring long enough to really
9 define a trend, but things like management presence on the floor,
10 employee identified safety items, and corrective action program feedback
11 are all showing improvement.

12 Perhaps I should talk to some of the subjective measurements of
13 safety performance. Last year, when we were here we were returning our
14 hourly work force from a prolonged strike. I think both the NRC staff and
15 NFS management were very concerned about how that would play into
16 our improvements in safety culture.

17 I've been very pleased with attitudes and the willingness of our
18 hourly work force to participate in providing feedback on safety
19 deficiencies and participating in human performance activities and
20 implementation plans. I think that has been a very positive note.

21 Also, on a positive note, is some of our change management
22 results. We had a spill of HEU in March of 2006 that was a direct result of

1 change management and configuration management. We started up a
2 building in February 2008 that was a new delivery system for LEU and that
3 startup was remarkably trouble-free. We did not go through any kind of a
4 prolonged period of debugging or what not. We had very few events
5 associated with that startup.

6 If you contrast that with our BPF facility, although certainly a bigger
7 scope, we think that's a very, very positive indication.

8 If we can go to slide three, I'd like to talk a little bit about our safety
9 culture strategic plan. When I was here last year I said that we were going
10 to develop that. In fact, we developed and initiated it in September
11 of 2007. Again, the goal there is not just to get off the agency action
12 review criteria list, but it's to achieve excellence.

13 We have embedded that strategic plan in our overall corporate
14 business plan. So, it is not a separate entity, but something that we
15 review and work by.

16 Also, once we completed the independent safety culture
17 assessment by our independent team, we implemented into our strategic
18 plan all of the priority recommendations of that group. Although I would
19 say because of the close working relationship that we had during that
20 assessment, we found that it wasn't necessary to modify the plan greatly.
21 We had self identified most of the key items. If we can go to the next
22 slide.

1 I'll just talk to the magnitude of that independent safety culture
2 assessment. There were over 200 individual items identified. Mr. McCree
3 talked to the 41 findings, but as they worked down into specific
4 recommendations, we identified over 200 items that we've incorporated
5 into our planning process.

6 We actually assigned an individual to track all of those 200 and our
7 current focus in 2008 and early 2009 is to complete those high priority
8 items. We'll finish out remaining items through 2009 and 2010 and into
9 2011. Of course, the NRC staff will be kept updated as to progress.

10 And then if we could go to the final slide, I'll talk to really what our
11 major initiative areas are, our near-term focus. Obviously, configuration
12 management is very important. We have submitted the license
13 amendment that incorporates an industry standard in configuration
14 management. We've acquired and implemented an electronic
15 configuration management system.

16 We have conducted training on that system. We have put 100% of
17 our configuration management drawings into the system. We're in the
18 process of populating the equipment data that is resident on each
19 identified component on those drawings into the system.

20 We're committed to the NRC to have our commercial down
21 blending facility fully populated by September of '08 and we're on track to
22 meet that. Our naval fuel facility will follow in 2009.

1 Human performance is another major initiative. We have
2 benchmarked and have been developing a human performance program
3 over the last 12 months. We are at the point of operator training in a pilot
4 area. We have trained our supervisors and we've developed the tools and
5 the handbook materials to give to those operators. We expect to roll that
6 out and actually began human performance tool use in our pilot area this
7 month.

8 Regarding management practices, we've implemented we think the
9 management practices that are necessary to sustain performance in
10 safety culture improvement. We have an accountability process. Our
11 strategic plan and the associated metrics and objectives and action plans
12 are reviewed on a monthly basis with individual managers held
13 accountable for performance.

14 We have initiated a self assessment program at department level
15 so that our individual managers are required to report to both me and our
16 CEO on a quarterly basis their assessment of their program and actions
17 that they're taking to improve. And we continue to improve our corrective
18 action program.

19 We previously mentioned communications at the other panel. We
20 think that's a key element in making the cultural changes that are
21 important in improving our performance. We've made several
22 communications improvements. We've given our hourly employees

1 access to e-mail and can e-mail them safety messages and important
2 plant information.

3 We've improved the quantity and quality of our newsletter inputs.

4 We have increased the management while walking around in our
5 supervisor observation and feedback. We continue to have challenges in
6 communication. We think it's an important area that we will have to
7 continue to work on, but we do plan on continuing that focus.

8 And finally, I'll talk to infrastructure and equipment improvements.

9 We, too, have a significant backlog of material and infrastructure
10 improvements. We've made major capital investments in 2008 and 2009.

11 We've developed a plan, a long-term plan to address all of our
12 infrastructure and major capital improvements and have resourced that
13 plan not only in the capital budget but also in the human resources
14 necessary to implement that capital funding.

15 Just a couple of things that I think are important to mention. We
16 were here last year and we talked a lot about our association with INPO.
17 We have become a supplier participant in INPO. We've derived a lot of
18 benefit out of that.

19 As a means of improving our frame of reference I've sent my Vice
20 President for Fuel Manufacturing to the five week INPO senior nuclear
21 manager's course and he's coming back very enthused and very charged
22 with a lot of enthusiasm and initiatives that he plans on instituting within

1 the company.

2 I'll finish up by reiterating Dwight's invitation to certainly all the
3 Commissioners, but I don't think Chairman Klein has been to our facility
4 and Commissioner Svinicki. We would love to take you down into the
5 plant and show you the improvements and have you talk to the operators
6 and maintenance mechanics to get their view of how we've improved our
7 safety culture.

8 CHAIRMAN KLEIN: Thanks for the update. I, along with
9 Commissioner Svinicki, would certainly like to see the plant. It's just a
10 matter of one of those when can you get it scheduled to make it happen.
11 So, thanks for that invitation. We'll bring our questioning with
12 Commissioner Jaczko.

13 COMMISSIONER JACZKO: Thanks. I appreciate that. I'm
14 glad you touched on the INPO involvement because that certainly was
15 one of the issues we talked about the last time. It's good to see, I think, if
16 there's anything -- certainly I've seen personally in this industry is to
17 communicate well. I touched on it earlier. Communication is important, in
18 particular communicating among peers.

19 Most of my questions will probably be focused on the safety culture,
20 the independent board of advisers. Again, the SCABA Team. I just want
21 to go through and read one of the comments and this is from their
22 conclusion. I think it's a fairly strong statement and perhaps give you an

1 opportunity to talk a little bit about how you see addressing these things.

2 In the conclusions of the report they indicated that "over the past
3 few years rather than consistently focusing on improving it's safety culture
4 and it's safety related performance, NFS has diverted its scarce resources
5 to address situational challenges. For example, the workforce strike and
6 the operational problems at the Blue Processing Facility or to pursue new
7 business opportunities. As a result, initiative to move beyond a minimally
8 compliant safety culture have been slow, deferred or abandoned.
9 Resource constraints have contributed to a culture tolerant of degraded
10 conditions and low accountability. The current NFS leadership team
11 desires to achieve excellence in safety culture and safety related
12 performance within the next four years. The SCABA Team acknowledges
13 movement toward that end; however, it is essential that a set of key
14 improvement initiatives be undertaken and completed in a timely manner
15 to demonstrate success and set the stage for additional improvement
16 initiatives."

17 Now, that I think is a very -- and as I was going through this -- it
18 was a fairly strong statement of significant challenges ahead. One of the
19 points that I think that was indicated in this report as well was that they did
20 see some significant progress in responding to the December 2007 event
21 and the decision that was made there to shut down production to deal with
22 a potential safety situation.

1 Maybe you can comment. Again, I would just leave it as kind of an
2 open question to maybe talk about some of those specific statements that
3 were made and how you see addressing some of those things specifically
4 going forward. And what you see as the time line to being able to
5 institutionalize a lot of those changes.

6 MR. LINDSTROM: I think it's important to recognize that the
7 independent assessment was conducted over a one-year period and they
8 did not report at what is our condition at the end of that period, but rather
9 they took a backward look and looked at where we had been over the last
10 perhaps three or four years.

11 I think that's a very fair characterization of our safety culture
12 performance. We lacked management focus and management priority on
13 nuclear safety.

14 We think that -- we really believe that through our development of
15 the safety culture strategic plan we're able to focus on the priority items
16 necessary to get what Chairman Klein would call that sustained
17 performance, the configuration management, the engineering excellence
18 that we need that is fundamental to good operation, the human
19 performance that brings in the human element that is fundamental to that
20 sustained performance.

21 As I mentioned, the communications, the management practices
22 that have to become integrated with all our business operations, but

1 importantly safety operations so that we are holding our supervisors, our
2 managers accountable for achieving safety performance.

3 We think we've put into place the elements to do that. Through the
4 strategic planning and execution, we think we have the elements to
5 measure and sustain that. Because it is not a separate program, it's not a
6 safety culture plan, it's a company business plan, we think that that will
7 allow us to sustain that progress and institutionalize it as we move
8 forward.

9 COMMISSIONER JACZKO: You talked about some
10 metrics. Do you intend to go back to this team to have them reevaluate at
11 a certain time? As I recall under the order this was a finite period of time
12 for which some of the requirements were in place. How do you intend to
13 go back?

14 MR. LINDSTROM: The order does call for another
15 assessment in two years from the end of the initial assessment. So,
16 whether we bring this team back or a different team or a mix of folks
17 remains to be determined.

18 We do intend to do another independent assessment in a couple of
19 years; however, internally we intend to do a similar safety culture
20 assessment on an annual basis using the same attributes that the
21 independent group used using some of our same developed metrics.

22 Of course, we'll stay collaborative with the NRC staff as they look to

1 develop fuel cycle facility indicators and metrics and I think that we can
2 work together to come up with things that truly begin to get predictive.

3 COMMISSIONER JACZKO: I appreciate that. As I said, this
4 is, I think, really a landmark use of the alternative dispute resolution
5 program. I think the kinds of requirements that we put into that order
6 really do give us an opportunity to really correct the underlying problems
7 and not just deal with symptoms or the effects of those underlying
8 problems.

9 I think it will be one that people will watch closely and
10 demonstrating progress is going to be extremely important in being able to
11 do that. And I think based on this report, it certainly indicates to me there
12 are significant challenges and addressing those will be very important.

13 MR. LINDSTROM: Absolutely, and we recognize that.

14 CHAIRMAN KLEIN: Commissioner Lyons?

15 COMMISSIONER LYONS: I do appreciate the focus that
16 you have described on performance improvement and your recognition for
17 the need for those improvements.

18 I'd be curious if you have devised any, let's say, interim measures --
19 interim measurements of how as you're bringing these various initiatives
20 into play the extent to which they are beginning to be effective.

21 MR. LINDSTROM: We have. In fact I would point out again
22 John Nagy's role as our Chief Nuclear Safety Officer his charge is to

1 oversee our safety performance and to measure that safety performance.
2 Also, to look industry-wide at benchmarking our performance against other
3 organizations.

4 We have developed indicators, indices relative to safety
5 performance that include employee communication; that include nuclear
6 criticality safety events violation or degradation in an Item Relied on for
7 Safety or an IROF; other events that might relate to nuclear criticality
8 safety; accident statistics, the OSHA recordable injuries and what not.

9 On an integrated basis we have seen that metric which we were
10 able to -- while recently developed, we were able to kind of back plot it and
11 we have seen improvements. We don't know that that's -- while its
12 improvement and its statistically significant based on that indicator, we
13 don't know that the indicator is a particularly robust one. We're still
14 working with that and trying to understand that.

15 In all of our areas, we have developed metrics, some that measure
16 true performance, safety performance, and some that measure what we
17 think are predictable performance.

18 For example, in the area of communication, we try to measure
19 employee satisfaction with our communication through surveys, but we
20 also measure management opportunity on the floor. We think that
21 management opportunity translates to employee communication.

22 MR. FERGUSON: Let me elaborate on that a little bit more,

1 too. We've established objectives, actions, strategies throughout the
2 organization that we're meeting on a monthly basis reinforced by having
3 an outside consultant that incorporates a lot of these metrics.

4 They're also being incorporated into our performance appraisals.
5 All of these are electronic systems that are very easy to use and I think
6 over time that's going to really enhance the communication as well as the
7 alignment throughout the organization as everybody pulls together and is
8 focused on the same thing.

9 COMMISSIONER LYONS: I appreciate those comments. I
10 think to the extent that you can identify metrics and track them during this
11 process that's certainly very important. Thank you. I'll stop there.

12 CHAIRMAN KLEIN: Commissioner Svinicki?

13 COMMISSIONER SVINICKI: Thank you. I appreciate your
14 responses to the questions of my fellow Commissioners. They've been
15 very thorough. I might ask you, though, just to address something very
16 fundamental.

17 As I understand it in the latest staff evaluation it was pointed out
18 that additional improvement is needed in management oversight to ensure
19 adherence to operational radiological protection and engineering
20 procedures.

21 This being the nuclear industry day-to-day conduct of operation and
22 adherence to procedures is so important.

1 Could you talk specifically -- you did mention training which I
2 identify as a way to get at that and management walking the spaces a bit
3 more frequently which would be another observation point. Could you talk
4 about that more specifically?

5 MR. LINDSTROM: Yes. I think in the long term we really
6 look to the human performance program to solve that challenge for us.
7 Historically, we have not had a human performance program at Nuclear
8 Fuel Services.

9 We recognized a year ago that that was a significant program that
10 needed to be developed and implemented correctly. We benchmarked it
11 significantly both within INPO fuel cycle facilities and power utilities and
12 developed a program.

13 We are just now at the point of putting that program into practice in
14 a pilot area. So, we haven't had the benefit of that.

15 We have also done some work with Aubrey Daniels Institute and
16 brought them in to look specifically at this issue and do some ABC
17 analysis or Antecedent Behavior Consequence Analysis for us. Again,
18 that was very recent and kind of in response to what we saw was that
19 plateauing of improvement in procedural compliance.

20 We directed supervision to be more attentive to that area and I
21 think significantly as Dwight pointed out we added into our performance
22 evaluation system an attribute specifically to look at a supervisor's ability

1 to produce procedural compliance in his shift or his work unit.

2 We've taken some short-term action, but we really think the long
3 term action is that robust human performance program with supervisory
4 observation and feedback, with peer checking, self checking, embedded in
5 the critical steps of our procedures.

6 COMMISSIONER SVINICKI: Okay. I appreciate your
7 additional explanation on that. Hearing that, I would second what
8 Commissioner Jaczko had talked about in working with INPO. As
9 Commissioner Lyons pointed out the benefit of some external
10 benchmarking for you I think will be helpful in this process. Thank you.

11 CHAIRMAN KLEIN: Well, obviously the material with which
12 you deal, safety culture is very important. And so, it's one of those -- the
13 risk factor is high and so it's really important that you have a good safety
14 culture. So, good to hear the progress you made on that.

15 I was encouraged to hear your comment about the attitude of the
16 people. After a strike ends sometimes there's some hard feelings. Could
17 you comment a little bit? Is that approval across the board in terms of
18 people having a positive attitude?

19 MR. LINDSTROM: Of course, it's not 100% and I don't think
20 it ever will be. I would say it has been fairly uniform in all areas and at all
21 levels. I've been very encouraged, for example, our human performance
22 implementation team is a very good vertical and horizontal slice of the

1 company.

2 We have operators from several different areas. We have
3 supervisors, managers, vice presidents all working together to develop a
4 good cogent set of tools and procedures and materials we can give folks.

5 We've had a positive response from the union leadership. I think
6 our union president wrote a very positive article regarding human
7 performance for our newsletter and that's unprecedented in our
8 experience.

9 We still have some areas where I think we have to work on
10 communication and understanding and developing trust between
11 individual managers and individual work units, but I think as a whole we
12 have come a long way.

13 It's important to recognize that I think that's fragile; that if we don't
14 sustain some of the things that we've begun, if we don't provide some of
15 the promised improvements in infrastructure, in procedural use and what
16 not, then I think we might lose some of that trust that we have gained. We
17 recognize that, that we have to sustain the improvements that we've made
18 to keep that trust.

19 CHAIRMAN KLEIN: Thanks for that update. I just have one
20 other question. On your slide five, you're major initiative areas. Those are
21 pretty big and pretty broad.

22 One of the questions that we always say is "if everything is a high

1 priority, nothing is a high priority". And so, are you falling in the trap that
2 everything is high priority? Do you think you have a handle on it?

3 MR. LINDSTROM: That's something we have debated at
4 senior management levels quite a bit. And the answer is I wouldn't put
5 them down here if I didn't think we had a handle on them. Is it a
6 challenge? Yes. Is it too much? I don't think so right now.

7 We continue to evaluate that. We've tried to very carefully look at
8 individual work groups and individual managers and what we have placed
9 on their plate.

10 We think we can accomplish what we've said we're going to
11 accomplish here. We feel it's very important that what we do we do well
12 and then move on. And that's really why our vision isn't to be excellent in
13 2009 or even 2010. We recognize its going to take some time.

14 But we are committed to moving forward in all of these areas. We
15 think it's important. We don't think we can sustain improvement without
16 the improved management practices. We don't think we are developing
17 good, robust systems without the configuration of management
18 improvement.

19 We don't think the operators are going to be able to become less
20 error likely if we don't sustain human performance improvement. I think
21 the communications improvement has to go along with everything we do.

22 And then I think if we don't this sustain the infrastructure and

1 equipment improvements we begin to lose the employee trust. I really feel
2 that we can't drop anything on this list and focus on a few of them because
3 they are somewhat coherent as they move forward.

4 MR. FERGUSON: I'll make a few comments on it and then
5 I'll go back to the ADR that we had several years ago and Mr. McCree
6 warned us don't take on too much too quickly. I think we've taken that to
7 heart. We are very sensitive to it.

8 It's not a matter of getting NFS to change right now. It's almost how
9 do we control the change. We have developed matrixes that show who's
10 affected by various programs.

11 We had a meeting several weeks ago where there were about 20%
12 of the items that we had intended to put in this year that have been moved
13 out. So, that was a significant reduction, but I think we share your concern
14 as well as our board that it's not going to behoove us regardless of what
15 our good intentions are if we're not effective in what we're doing. So,
16 controlling change management is something we have to watch very
17 carefully.

18 CHAIRMAN KLEIN: Thanks. I think it's just that classic
19 thing that sustain performance and not becoming complacent on all those
20 activities.

21 Well, I'd like to thank all of our panels today. Certainly, the staff for
22 their overview of activities and Palo Verde for their participation and NFS.

1 Obviously the AARM, Agency Action Review Process is really important
2 for us, certainly the Commission because it does elevate to the highest
3 levels of the management of this agency on what we look for and how we
4 can do better.

5 We always look for those indicators that tell us things earlier. I
6 think we will always continue to look for those indicators that get us there,
7 but it's really, I think, important for everyone to understand that this is a
8 part of our continuous involvement everyday to make sure we protect the
9 public health and safety and the security of the American people.

10 So, thanks for all the participation. Meeting is adjourned.

11 (Whereupon, meeting was adjourned.)