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UNITED STATES NUCLEAR REGULATORY COMMISSION
BRIEFING ON PALO VERDE NUCLEAR GENERATING STATION

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TUESDAY

JULY 24, 2007

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The Commission convened at 2:00 p.m., Dale E. Klein, Chairman presiding.

NUCLEAR REGULATORY COMMISSION

DALE E. KLEIN, CHAIRMAN

EDWARD McGAFFIGAN, JR., COMMISSIONER

GREGORY B. JACZKO, COMMISSIONER

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PARTICIPANTS:

RANDALL K. EDINGTON, Senior Vice President and Chief Nuclear

Officer

WILLIAM J. POST, APS Chairman of the Board, Arizona Public

Service

JACK E. DAVIS, President and COO, Pinnacle West, and CEO,

Arizona Public Service

DWIGHT MIMS, Vice President, Regulatory Affairs and Plant

Improvement, Arizona Public Service

JOHN HESSER, Vice President, Nuclear Engineering

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CHAIRMAN KLEIN: Thank you. Now we'll move on to Palo Verde.

I'd like to thank you all for coming. I'm sure that we're going through a phase that will be challenging both for Palo Verde and for the NRC staff as you work through your programs. So we look forward to hearing your plan to get out of Column 4 and thank you again for coming. Randy, I believe you're going to start.

MR. EDINGTON: Thank you very much. We'll introduce at the table and then I have some other people supporting us in the back row that I'll introduce.

MR. POST: I'm Bill Post. I'm Chairman of the Board of APS and also Chairman of the Board of our holding company, Pinnacle West Capital Corporation.

MR. DAVIS: I'm Jack Davis, Chief Executive Officer of APS and President of our holding company, Pinnacle West Capital Corporation.

MR. EDINGTON: Randy Edington, Senior VP and Chief Nuclear Officer. A little of my background. I was in multiple plants with Entergy, various plants on recovery. The last plant being Cooper Nuclear Station. I've been with Palo Verde for six months now.

MR. MIMS: My name is Dwight Mims. I'm the Vice President of Regulatory Affairs and Plant Improvement. I've been in the industry for little over 34 years now, working at TVA, Entergy for most of the time, and then NMC for about two years. I've been at Palo Verde now for about four months.

MR. HESSER: I'm John Hesser. I'm the Vice President of Nuclear

1 Engineering. I've been in that position for about four months now. I have 27 years
2 with Arizona Public Service and Palo Verde. I've held various positions within
3 Engineering. My last eight years I've been in senior management of Work
4 Management and Emergency Services.

5 MR. EDINGTON: And behind us is Mike Perito, our Plant Manager.
6 He's been at Palo Verde for 10 years; been in the industry about 26 years; has an
7 engineering degree and his SRO license. Also, Maria Lacal. She's the Director of
8 Executive Project. She was with Florida Power & Light for 26 years; has an
9 engineering degree, SRO license and involved in training; has been at Palo Verde
10 about three months.

11 Mike Shea is the Director of IMPACT. You'll hear a lot about IMPACT
12 improvement performance and cultural transformation. That's our focus effort to
13 try to dig into and understand all the ground areas and Mr. Mims will talk quite a bit
14 about that today. He's been at Palo Verde for 18 years, mainly in RP Training.
15 He's been in his position for four months as we establish a new department for this
16 effort.

17 George Andrews is our Director of Performance Improvement; also has the
18 corrective action program. He's been at Palo Verde 17 years; engineering degree,
19 SRO certified and has also been in position for four months as we shifted a few
20 people around to focus on these changes.

21 And in the back helping us today is Scott Bauer. He's our Director of
22 Regulatory Affairs; fourteen years at Palo Verde, another 13 years at various parts

1 of the industry mainly involved in regulatory.

2 That's an example of we have a very good mix and a cross-section of
3 history and new throughout this organization. We think it's one of our advantages.
4 With that, I'll turn to Mr. Post for opening comments.

5 MR. POST: Mr. Chairman and Commissioners, good afternoon.
6 Jack, Randy, Dwight and I would like to brief you on our commitment and actions
7 to improve our performance. I would like to start our presentation by answering
8 the question, "How does a management team that was responsible for taking Palo
9 Verde to one of the highest nuclear performance levels in the country and
10 sustaining it for a decade allow it to fall into Column 4?"

11 Obviously, it's something to which we've given a lot of thought. It's also
12 something that has many facets. I know you are aware of the history of events at
13 Palo Verde and I'll not repeat them here. Instead, I would like to address our
14 assessment of the major cultural and organizational factors that contributed to our
15 decline in performance and then Jack will discuss resources and our leadership
16 changes. Please turn to page seven of the handout.

17 First, our historical performance. Our high plant performance combined
18 with high performance assessments, although positive at the time, contributed to
19 complacency and an environment that camouflaged our growing weakness in
20 personal accountability and a higher tolerance for incomplete root cause analysis;
21 encouraged an attitude of pride, reduced our focus on continuous improvement
22 and established a mind set that we were good enough to handle all issues as they

1 occurred.

2 Next, we relied too heavily on historical and lagging performance indicators.
3 We were not as attentive as we should have been to qualitative factors and non-
4 metric supported indications. These more subtle qualitative signals were not given
5 the weight we give to our numerical metrics and as with the other things I'll
6 describe today show we were too focused on the past.

7 When our workload increased, we got defensive. But our historically high
8 production over an extended period, we have become unfamiliar with high levels
9 of emergent work. As a result, our bench strength was overestimated and we did
10 not perform to our own standards.

11 We rationalized that we were too good for low performance and our
12 outages were not symptomatic of larger issues. Accountability declined in part
13 due to this rationalization.

14 And now on page eight, this was compounded by our high reliance on
15 teams. Previous assessment reports had heralded our strong team structure while
16 identifying the risks of over reliance. Encouraged by our performance, we
17 underappreciated the warning.

18 With higher workloads and declining personal accountability, dysfunctional
19 teams developed and our ability to realign them was not timely and more difficult
20 than we had expected.

21 Turnover rates in our work force have always been low. Seen as positive,
22 we did not fully appreciate the familiarity affect this had on individuals who became

1 reluctant to challenge or criticize their friends. We became overly dependent on
2 each other versus strengthening the process and when combined with group
3 oriented performance awards, individual accountability declined.

4 Also, for the first time, the attitude changes that come with thinking about
5 retirement became a factor. We had studied and built plans to deal with the
6 number of retirements, but we underappreciated the personal effects on
7 individuals who are not yet retiring, but starting to focus for the first time on their
8 future personal retirement plan instead of solely on a plant business plan and their
9 participation in it.

10 This environment also produced an internal, not an external, industry-
11 oriented perspective. People came to see us. We were the example. Industry
12 visits were rationalized to our performance instead of being used to learn from
13 others. We had not kept up with the advancements in the industry.

14 Finally, and probably the most importantly, our communication models had
15 evolved over time and did not cover the information we needed to hear. We had
16 institutionalized our communications and narrowed them to a point where we
17 spent too much time on historical performance data. This was not intentional, but
18 we let single points of communication develop which reduced our ability to see
19 many of the things I've outlined today.

20 Additionally, our oversight structure was not organized correctly and when
21 combined with our medium of communication, cultural issues were not fully
22 appreciated.

1 Obviously, these are just some of the lessons we've learned; however, they
2 are the major cultural factors which contributed to our leadership's inability to
3 identify and correct our decline in performance. We have relearned the very
4 important fact that high nuclear performance is more a function of people than
5 technology.

6 Today, we want to outline for you all the steps, cultural and others, we are
7 taking to regain our former position of excellence. Let me assure you that I am
8 fully committed to doing whatever it takes to achieve this goal.

9 I would now like to turn it over to our CEO, Jack Davis, who will explain the
10 leadership changes we've made and our strong and unequivocal commitment to
11 provide the required resources and take the necessary actions to reverse our
12 decline in performance. Jack?

13 MR. DAVIS: Thanks, Bill. Bill has given you a brief historical
14 perspective, so I'll not dwell on the past. We are aware that we have had
15 equipment problems and that latent issues still exist. We're also aware that the
16 way we have handled equipment issues has not been up to acceptable standards.
17 I recognize we were in denial and that the issues were broader than initially
18 thought and recognize there's much more work to be done.

19 I want to state up front that we are focused on Palo Verde improvement for
20 the long term and that we will fully fund whatever is needed; people, materials, or
21 equipment.

22 As you are aware Palo Verde is a plant with multiple owners that includes

1 both investor-owned utilities and municipalities. The owners of Palo Verde have
2 consistently provided the financial resources for the operation, maintenance and
3 improvement of the plant.

4 In fact, this fall we will complete a major improvement replacing steam
5 generators and core protection calculators in each of the three units. This will
6 significantly improve the safe and reliable operation of the plant.

7 Palo Verde represents a major financial investment and critical energy
8 resource for each of the owners, especially with increasing discussions and
9 concerns regarding global warming. Bill and I and recently Randy Edington
10 periodically meet with the owner CEOs to discuss Palo Verde. As you would
11 expect, we all want to make sure that Palo Verde has the financial and human
12 resources to succeed over the long term. We are all committed to this goal.

13 As Chief Executive Officer of Arizona Public Service and the Operating
14 Agent of Palo Verde, I assure you that the resources will be provided to safely and
15 efficiently operate the plant. As part of the commitment to provide the proper
16 resources, we have brought in new management team headed up by Randy. You
17 will hear from him in a couple of minutes.

18 Randy was hired in January of this year on the basis of his success in
19 improving nuclear plants that have fallen to difficult situations and for his openness
20 and accountability. Randy has a slide showing the team that he has put in place.
21 It is a mixture of the old and the new, of fleet and single-site plants. I am sure that
22 Randy will provide much more insight on each.

1 The reason I emphasize the change in management team can be gleaned
2 from Bill's historical perspective. We had become insular and distant from the
3 industry. We needed a fresh perspective.

4 Prior to Randy's hiring, we had appointed a new Chief Nuclear Officer from
5 internal management in August of 2005. It is now clear that that action was not
6 broad or deep enough to deal with the equipment and cultural issues we faced.
7 The new team has brought new culture and new life to the organization while
8 integrating effectively with the old. He has brought an emphasis on accountability
9 and a new industry perspective. He has brought new relationships and personal
10 commitment to restore Palo Verde to excellence in all aspects.

11 In fact, within the first few weeks of his arrival, Randy asked each individual
12 management to sign a commitment to these new approaches he brings, which
13 fundamentally included determination and dedication to exceed for the long term.
14 And I might add, I also signed one of those commitments along with the rest of the
15 management team at Palo Verde.

16 You will see from Randy's presentation that outside input is encouraged,
17 whether it's from APS's Board Members, operation oversight, management
18 oversight or elsewhere. Randy and I guarantee that Palo Verde will become more
19 connected and open.

20 Before I end up giving more of Randy's presentation, I should turn the
21 microphone over to him. Therefore, I will conclude my remarks and let Randy
22 explain the plan for the long-term plant improvement and the road we are mapping

1 out to return Palo Verde to the excellence we all expect.

2 MR. EDINGTON: Thank you. We are on page 10 of the slides:

3 Improving Palo Verde for the Long Term. What we'll be talking about in the next
4 40 minutes or so - I will talk the overall generic aspects and our site improvement
5 plan that is currently underway and how we meld the old improvement plan into
6 that.

7 Mr. Mims will talk about the impact effort where we're independently
8 reviewing all aspects to try and understand the underlying symptoms that went into
9 that, which will later feedback into our improvement plan. I'll assure you that our
10 focus on the long term is very key and we ask our managers every day what do
11 you want to be three, five, 10 years from now, now how do we get there.

12 We are ensuring that we build a foundation that not only that we'll learn
13 from these issues and ensure that we're here for a very long time. It's also based
14 on very open communications and we'll try to show that throughout here and we
15 encourage that.

16 The next page 11 is a generic aspect. This is a drawing that I use through
17 the various experiences and its representative and it's mainly intended to be a
18 talking point. It's not a mathematically drawn area. You can change the slopes or
19 make adjustments. There's some key points, I think, in there.

20 Many plants as they go through various stages in their life and I'll start over
21 on the A Column. A plant may have high performance, but its culture and its
22 format and its programs and processes could be degrading for quite a while.

1 Eventually after enough items hit, the volume overcomes and it looks like the plant
2 collapsed, but in reality there's been a degradation for quite a while to get to this
3 point.

4 Then the plant goes into Column B which is basically a denial stage. Those
5 can vary from short times to a very long time. This is an area where you need to
6 look very hard and say I've got to make these changes and I've got to get the
7 depth and breadth right.

8 Point 4 bottoms out and you start back on a recovery slope. There are
9 plateaus along the way. As you build these foundations, you'll hit plateaus where
10 you'll flatten out for a while and as you can see by the green on the very right,
11 depending on how you worked on your foundation, your improvements and your
12 awareness, you can go for quite awhile there and you can actually lose
13 performance again.

14 I think a very important part is the green line on top up there by the Charlie
15 and Delta area. That should represent that the capacity factors may in fact
16 rebound very quickly, but the plant is still not recovered. One example for Palo
17 Verde would be if our capacity factors are very high. Next year our performance
18 and what I am focusing on is a cultural transformation, the programs, the
19 processes is a long way from being done. This takes quite a while to focus on this
20 and ensure that you focus on where you want to be in the long term.

21 The red line, if you would, is my attempt to represent where the regulatory
22 may be. The regulatory frequently will lead the licensee in recognizing the decline

1 and frequently will also lag behind on the recovery because it is obviously -- and
2 this is important for me to talk to my site, because you want to have a very
3 sustained change. It's rightfully so the regulatory process looks at that.

4 As the site is making the changes and they're hungry for a little positive
5 reinforcement, we want to emphasize we don't necessarily get that right away that
6 we have to have a sustained long-term change.

7 On page 12, generally what we talk about at the site is recognize where
8 we've been; respect the history and learn from it, but don't live in it. And more
9 importantly emphasize where we are and where we're going and how are we
10 going to get there. Where we are is a very important piece. This requires us to be
11 very self critical and create a self awareness.

12 Many sites have been going through denial. We've lost connection with the
13 industry. The insular term was used where we're not fully aware and we're
14 justifying what we do. And then focus on where we're going and lay out a clear
15 vision of where we're going and talk about how to get there.

16 The next page 13 is another way of saying that. History plus new plus
17 change equals the new Palo Verde way. And maybe more important is the slide
18 just beneath there where it says "controlled change at deliberate speed". We are
19 making sure we build a solid foundation and we're going to move controlled
20 change at a deliberate speed.

21 Sometimes that's fast; sometimes that's a little slow. Sometimes you have
22 us do your homework and your preparation as we feel like we're doing in the

1 ImPACT effort. We don't have to wait for those final areas. There are areas that
2 are very clear that we need to focus on and improve right now and we feel like we
3 have been doing that, but we want to make sure we have a very solid foundation
4 and understanding.

5 On page 14, is another theme: map and understand and then make a
6 choice; choose execution, evolution or revolution. The choice I try to tell is
7 conscious choice. Understand enough facts to make a conscious choice of where
8 you want to go. Usually at many sites that have dropped into trouble, execution -
9 the process is there, we need to understand it better and go execute it better.

10 Accountability. Frequently we've lost touch with that process. Evolution is
11 also another answer. As you connect with the industry, you build on the
12 foundation of what you get and ultimately every once in a while there's revolution,
13 you have change the whole system out.

14 Along with that is risk. You need to concentrate on what that risk is and
15 make sure you've thought about that to make those types of wholesale changes
16 and too many of them can put you in another tailspin. So map and understand
17 and make a conscious choice.

18 On the next slide, page 15, I've had the opportunity to work at many plants.
19 Many of those plants when you move in, you have an entire new management
20 team. I think at Palo Verde one of our benefits is we have a tremendously talented
21 work force that we've been able to supplement with new people to bring in a
22 different area and actually get a synergistic effect.

1 If you look at the Green block, those of the same positions we had, but new
2 people. John Hesser's position, although he's 27 years with Palo Verde, he's
3 three or four months new in the position.

4 If you look at the blue box, those are where we made a conscious choice to
5 shift our organization and evolve it. We have the Vice President of Regulatory
6 Affairs, Dwight Mims; Ms. Maria Lacal in the back who brings 26 years of Florida
7 Power & Light experience and then the Director of Communications.

8 Obviously with the site this size, the communication aspect is very critical to
9 us. We've raised that up to a higher level and we brought in Terry Young from
10 INPO.

11 And in the white blocks are people, same positions and same people from
12 the last time. We were able to mix that quite well.

13 If you move to page 16, the site's mission is "safely and efficiently generate
14 electricity for the long term". We continue to emphasize safely; capitalize,
15 underline over and over. Obviously in this game you must make sure you're
16 safely.

17 I think also important is the long term. I've mentioned it before; you'll hear it
18 throughout this. Continue to set a vision of what you want to be. In fact, I've told
19 my managers and I tell myself I did not do a good job unless five years after I
20 leave this plant is still improving. A manager I do not consider did a good job
21 unless two to three years after you leave that site, that department is still
22 improving.

1 You must understand the core business and the foundation and build on
2 that for the long term. I would not be here if I had not been convinced that Arizona
3 Public Service was focused on the long term for Palo Verde. That was certainly
4 one of the areas I focused on in my interviews.

5 Long-term focus on page 17. Developing a three to five-year improvement
6 plan which our plan is based on at this time. We're building upon the existing
7 improvement plans. There was some good actions taken. In many cases they did
8 not take us far enough. We have certainly built on those farther. We have taken
9 actions and started improving on that. We are doing this ImPACT Team;
10 Improved Performance and Cultural Transformation. Mr. Mims will talk about that.
11 That's a very thorough, independent review to try and feed this information back
12 into the existing improvement plan.

13 We are looking much broader than a 95003 inspection. I said earlier depth
14 and breadth. We are not just looking at fixing the symptoms. We're looking at
15 building a foundation for the long term.

16 And last is obtaining organizational alignment. We have 3½ hour meetings
17 every Monday with the management team; about 70 people. Technically, that's a
18 day off. We talk about why we're doing things and there's teaching sessions and
19 repetitive aspects. So every Monday we do that.

20 We're talking to the supervisors monthly so we do a horizontal cut and bring
21 those in and talk for a couple hours. We're meeting with what I call natural
22 workgroups; either a group of operators or a group of system engineers and

1 talking to them. And recently, we just kicked off meeting with every single
2 individual on site in mixed groups of about 35 people at a time for about 2½ hours
3 talking about what are we doing and why and why it's important to them and why
4 they should be focused on the future. We're trying to bring it to a personal level.
5 You move to page 18.

6 This slide represents what we'll be talking about. The green is what I will
7 talk about leading to the foundation and the pyramid on the right. The green on
8 the left is the old improvement plans where we've gone back and try to map and
9 try to make sure what we were doing and asked ourselves why was this part
10 successful and why was this not.

11 We have done upgrades to that and we have a very active improvement
12 plan ongoing right now, but it needs more texture added to it as we work through
13 the ImPACT process. I'm going to explain the current state of where we're at and
14 how it's going to be available to receive the ImPACT efforts as we finish up in
15 September.

16 If you turn to page 19, the form is very representative and again working
17 with an open communication. This is web-based. It is on the Palo Verde Web.
18 Any employee can call this up, click on it. They made it what we call "Randy-
19 friendly". You can click on it three times and get all the information. You click on
20 any block and there'll be actions underneath and I'll show you an example in just a
21 minute.

22 The top is safely and efficiently generate for the long term to continue our

1 mission and continue to focus on. Safety is always on top and always number
2 one. We have safety in the middle of those five red blocks. That's what ties
3 everything together. The five red blocks are intended to be the core foundations;
4 things that will not change, but the actions behind them will change as we evolve.

5 The green blocks are areas that we can bring out and put context or
6 specific emphasis on. An example here will be oversight, procedures,
7 engineering. These may change over the years. Each year we do an upgrade, so
8 the green blocks may fluctuate, change a little. The five red never will. What is it
9 that we want to emphasize? I'm going to explain the process for just one minute,
10 just to try and give you a feel for how this works.

11 So if you'll turn to page 20. I do apologize for the picture. There are better
12 ones. There are other managers throughout that maybe I should have picked
13 another one, but I wanted to use the oversight one. Again, this is a busy slide and
14 the only intent is for you to understand what it's trying to do.

15 You start down the left-hand side. It talks about a current state, a goal. If
16 you look at actions prior to 2007, that's a hyperlink so you can click on it and see
17 what we've done and see what building to this.

18 The middle is the most important. Reading those gives you the top actions
19 that we're going to take and there'll be tactical actions behind each of those.

20 Over on the right you have performance indicators. Again, that will be a
21 hyperlink that if there's specific indicators for this area you'll click on that and be
22 able to look at just what it is.

1 And finally, will be effectiveness reviews. The planned ones will be here
2 and the finished ones will be here, so you'll be able to pull that and sort all that
3 information out. Again, we're trying to make easy. I do want to emphasize
4 anybody can get to this at any time as long as they are on the Palo Verde web
5 page. We are currently showing people how to use it throughout the organization.

6 I will take one minute to talk since oversight is here, and it was prevalent in
7 Mr. Post's and Mr. Davis's presentation, the importance of it and how in a single
8 station, single site, multi-unit station is so important to get good oversight and have
9 that external influence. In here you'll see things like the Nuclear Oversight
10 Committee, which was revamped with new membership in 2006 and the reporting
11 relationship was changed for me directly to the Board. That is important that the
12 Board get multiple information.

13 Then we have the OSRC, the Offsite Safety Review Committee. That had
14 been fairly low in the organization. That has been regrouped as we speak. We
15 have external members. We have now assigned an external Chair. They will also
16 go to the Board once a year and provide an independent presentation that's being
17 written into their charter.

18 The management review meetings, where we go into metrics and dig very
19 deeply, those will have external members from off site. We're partnering with
20 various peoples in the STARTS group to come in and we will go to there's so that
21 we get, not just an internal look but an external challenge, similar to what fleets do.

1 And again, if you look at my members, I have a mixture of people single
2 sites or fleets. So we're looking for the advantages of fleets and keeping the
3 advantages of the single site.

4 We'll go on into QA and rotational assignments, et cetera. That's what all
5 these actions are about. If I picked on 8.3, just an example, and you clicked on
6 that, the next page would be 21. Again, it's a busy slide. I'm not intending to go
7 through the full details. The emphasis here is there will be a condition report on
8 each area and an action on each tactical action.

9 You see the "More" button at the bottom; that means there's more actions
10 behind this. You can see where each item is tracked. It has an owner and a due
11 date and a source document. As we work through the ImPACT, or the
12 Confirmatory action Letter, these will be identified here and can be extracted at
13 any time so we can monitor it. Then we go through the various progress and
14 effectiveness reviews.

15 Again, just one awareness is if you look at the first four items there,
16 although they are due in September, we're well ahead on those. We expect to
17 finish here in the next month or so. We've already done benchmarking. We've
18 already assigned an external Chair. We've already identified the external
19 members for the Board. We need to put that formally in place with the paperwork
20 and the processes and charters behind it.

21 If I move back to 22, we're back on the pyramid again. What I'd like to do is
22 just take a few minutes to talk very lightly about the five major core blocks just to

1 give you a sample of what we're doing and what else we have to do. Again, I
2 won't get into the specific details. If the Web was here, you could call it and look
3 and see exactly what actions are behind it.

4 Let's go first to plant equipment. If you look at the major equipment at this
5 site, unlike many sites I've been to, the major equipment is in good shape; the
6 steam generators and core protection calculators. In fact, the most major
7 component that I'm looking at now is the cooling tower.

8 We do have small equipment issues and a number of them. They've been
9 allowed to degrade for a while. We're focusing on those. The top-10 equipment
10 technical process is intended to surface those. We go to every department. We
11 have them identify their issues. We have them prioritize their issues when they roll
12 up. Again, this will be on the web page or is on the web page and is very visible
13 for everybody. You have a chance to surface those issues and we're putting
14 dedicated resources to attack the small equipment issues.

15 We have a Plant Health Committee that was established last year, but has
16 been revamped and continue to upgrade this year. It's very important and we've
17 taken that from other plants. We are currently reviewing our engineering
18 equipment programs and those are in various stages of evaluation and various
19 focus assessments at this time.

20 And last, we have a component design basis review under way. This is to
21 focus on the latent issues. We made an initial attempt. We've adjusted it since
22 then, and based on the reviews, the ImPACT will continue to upgrade that. This

1 becomes important because this will be something that's been going on for two or
2 three or maybe four years and deep dives into the equipment to understand the
3 latent aspect.

4 If you move to the next slide, a set of actions I've put our hiring model here.
5 Let's talk about people. I'm on page 24. This is our hiring model for our future.
6 This is a very important model because we're focusing on living this. There are
7 similar aspects to what the NRC is doing. We have senior demographics and
8 we're focusing on hiring for our future. We will not hire somebody if we don't say,
9 "What value will they bring." And they're going to own this plant in ten or 15 years.
10 So it's very, very important that the people we bring into this organization are really
11 dedicated and focused on that.

12 We've raised the bar and the standards for all our initial hires. We have
13 actively pursued operations and have a very strong pipeline reestablished, but we
14 do have Operator pipeline issues.

15 If you look at the overall methods, our initial hires, our development and
16 promotions, we expect 68% of the organization to come up through the
17 organization, but we actively pursue up to 20% of the people coming in on side
18 streams. That's an area that Palo Verde -- we had a lot of experienced people,
19 but we weren't bringing in enough external people to keep that mix going. That's
20 now part of our strategies.

21 We've gone into things like the legacy program and how we've hired them.
22 We do a two-year training program. The maintenance group - we bring in people,

1 we partnered with local colleges to get an Associate Degree for our maintenance
2 people. Also for the RP organization; we've partnered in developing Associate
3 Degrees for them. It's very important that we focus on our people for the future.

4 Next I'll go to safety. Safety clearly, again, holds all of this together. We
5 have every department talk plant status and safety at their beginning meetings, no
6 matter if they're human resources, licensing or the power plant people themselves.
7 What is the plant status and what is the safety aspects associated with that?
8 We're training them a lot more to do that.

9 Improving risk models, knowledge and structure. Importance of that is
10 obviously very clear. We've taken our organization and started reporting at a
11 higher level. We're adding resources to it and we're bringing more training and
12 trying to drive that out to the organization more.

13 We're focusing on the behaviors of industrial safety. We have restructured;
14 moved that into the Vice President of Operations and we're reorganizing that
15 group. Ultimately, the last is we'll have the Independent Safety Culture
16 Assessment, which Mr. Mims will talk about. Those items are being factored into
17 our improvement plans.

18 If you take Corrective Action Program, on the next page 26, clearly mapping
19 and understanding the Corrective Action Program is important. This is an area
20 that we think we are making gains, but we do feel like we have quite a bit more
21 gains to do. The process was cumbersome. It's being mapped. It's being made
22 more efficient. The metrics along the way are being focused on and we're

1 improving those.

2 More importantly, we're providing additional dedicated resources and
3 restructured that. CAP is core business. CAP will be here for quite a while and
4 we will focus on that to make sure everybody is focused on it. We are establishing
5 CAP as our core business.

6 Last block I will talk about is knowledge and training. The words
7 "knowledge" and "training" is written there on purpose. Training is a formal aspect.
8 An operator on shift has the opportunity to learn something hundreds of times
9 during a 12-hour shift, focusing on the knowledge and ensuring we're driving that
10 knowledge in all aspects of our organization is key.

11 Again, we consider this core business. We are teaching the site. We have
12 commitments to teach anybody who comes in the plant a three to four week
13 course on Palo Verde, no matter what organization you're in. We feel like the
14 more you know about the plant, the more engaged you are with the plant. This is
15 obviously a long-term effort. By the time we do the back log training that will take
16 three to four years to take people who have been there and retrain them back on
17 the Palo Verde basics. I'll move on to page 28.

18 Again, I want to emphasize this is a representation of our business plan. It
19 is made available to everybody and it is designed to receive the ImPACT
20 information that will come in later and in some cases it's starting to flow and
21 update on our action plans.

22 With that, I would like to go to page 29 and get ready to turn it over to

1 Mr. Mims. Again, I talked about the green and the triangles and the importance of
2 that. This is current. Its history is current and it's active today. The ImPACT effort
3 is evaluating today, working through the issues and we'll be feeding into this as we
4 speak. With that, I'd like to turn it over to Mr. Mims.

5 MR. MIMS: Good afternoon. Starting on slide 30, I'll repeat a couple
6 things that Mr. Edington has already said. The efforts that we're putting in
7 associated with the ImPACT are broader than the 95003 inspection module. I
8 think you'll be able to see it as I go through that and we're looking at the three to
9 five-year horizon. We're asking ourselves and asking the people that we work with
10 constantly where do you want to be in three, five years, ten years and what do we
11 need to do to drive in that direction? Move to slide 31.

12 This is the same slide that Mr. Edington just had up and I'm going to be
13 talking primarily about the blue lower left-hand portion of that slide. I'm about to
14 expand that block and talk about several elements that are internal to that block.

15 We're thoroughly assessing our performance through the ImPACT process.
16 This is the most in depth performance assessment that's ever been conducted at
17 Palo Verde. We have about 40 to 60 people involved in that on a routine basis.
18 That's been going for about three months now and we're still working.

19 In addition to Palo Verde personnel, we have a number of external people.
20 We have people from plants that have gone through similar issues as Palo Verde
21 is going through now. We have people that are retired regulators. We have
22 personal from plants that perform well and all these people work with our folks to

1 give us a balanced perspective and different perspectives on issues then perhaps
2 we've seen from an internal view in the past. It keeps us objective and we're not
3 just evaluating ourselves. Going to slide 32 now.

4 You can see now that the blue block has been expanded out to several
5 blocks and I'll be talking about most of these blocks, but let me make a couple
6 points on these because this is a little bit complicated, so it's good to get a feel for
7 it before I start into it.

8 As Mr. Edington has said, this is the ImPACT process and we have teams
9 working on these blocks. If I look at one block, historical data review which is in
10 the center of the page, I'll talk specifically about them. You can see it feeds
11 several other blocks, three blocks below that plus feeds a collective evaluation
12 process. We'll talk about that some.

13 If you look at the lower block, that's the safety culture assessment.
14 Normally, I would talk about that first; however, I've reserved that to the end
15 because that's the one that furthest along and I can share more information about
16 the outcomes of that. So, I'll do that last today.

17 If you roll up and you look – there's a little red diamond in there. That's
18 where the CAL was issued and we're working through the issues associated with
19 the CAL when it was issued as well as numerous other issues that we're focusing
20 on from an ImPACT standpoint.

21 If you roll on up to the collective evaluation and root cause evaluation, I'll be
22 talking about that in just a few minutes. That's where we're starting to bring all this

1 information together for the first time from all these different assessments and
2 processes and determining what the common themes are and which areas need
3 to have root causes or some other assessment technique performed on them.

4 If we look at the one up there that says RES and K-1 Relay, those are
5 issues because it's a recirculation actuation signal in the K-1 Relay which was the
6 diesel issue which both lead to us to having a yellow and a white finding
7 respectively. So we went and did a re-look at those issues as well.

8 All those issues feed into the integrated action plan development, which as
9 Mr. Edington has described, is where everything comes back together again. Just
10 out to the right of that are some NRC activities having primarily to do with the
11 95003 inspection activities. We put those on there for our own awareness. We
12 recognize we don't have any control and scheduling of those or anything. We just
13 want to make you aware those were there.

14 With that, I'll move on to the first block, which is slide 33, Historical Data
15 Review. This was a substantial effort for us. Our objective was to review
16 approximately six years of selected historical plant records to characterize our past
17 performance and then feed that into the various elements of the ImPACT process.

18
19 Six years included recent station performance at the plateau level that
20 included performance when we were performing at a high level and it also
21 included recent levels of performance. If we had an issue that warranted pulling
22 the string back past six years, we didn't just arbitrarily stop at six years. So we'd

1 pull the string back past six years if we needed to.

2 We'll talk about a couple of self assessments here, focused self
3 assessments, here in a few minutes. Both of those went back past six years; one
4 substantially back past six years.

5 Key documents that we looked at through this were corrective action
6 program documents, training program reviews, NRC correspondence, Institute of
7 Nuclear Power Operations correspondence, unplanned down powers, oversight
8 and self assessment reports and other documents.

9 If you go to slide - I'm sorry, stay on that same slide now, but in addition to
10 serving as the input to several other activities as we've already discussed as you
11 can see from the arrows, we've already done some sorting and analyzing the
12 information that we gathered in the database when looking at the historical
13 information. That drove additional assessments right away in areas like oversight
14 and activities that Mr. Edington has already talked about some, training and work
15 management. Now, if you'll go to slide 34.

16 This issue that we're working on here has to do with identifying, assessing
17 and correcting performance deficiency review. What we are doing right there is
18 we are taking a look at ourselves for the programs that we have for identifying,
19 assessing and correcting performance deficiencies to see if what we're doing is
20 adequate to support strong performance of the plant. We're looking at our own
21 self identification process.

22 We looked at root cause, we looked at audit assessments and we looked at

1 use of industry information, these are some examples of places that we examined.
2 Due to gaps that we identified in this, we immediately kicked off assessments of
3 the Offsite Safety Review Committee and we went to a plant that has a well
4 functioning Corrective Action Program to do a benchmark as a result of these
5 efforts.

6 Moving now to page 35, we'll talk about attribute review. We selected two
7 safety systems to do an attribute review. This is where we looked and I'll describe
8 what the attributes are that we were using in just a minute. We selected the safety
9 injection and emergency diesel generator systems to review. We did that based
10 on risk significant and known performance deficiencies in those areas.

11 We're essentially using diesel generator and safety injection as a window
12 on safety system performance with the objective of learning lessons and then
13 feeding those lessons into subsequent reviews that we do on other safety
14 systems, whether they be related to component design basis review or other
15 design type reviews that we may be doing.

16 The methodology as we selected documents to review for technical
17 accuracy and adequacy. We looked at changes that were made to the plant and
18 we looked to see if they were translated throughout the whole process, whether
19 that be programs, drawings, procedures, work instructions or licensing documents.
20 We conducted some plant walk-downs on these systems to verify as-built
21 configuration is consistent with design.

22 As I've already mentioned, we used the output and knowledge we gained

1 from this into part of the input to the re-examination of our component design basis
2 reviews that we're doing right now.

3 In addition to feeding into the collective evaluation based on this review, we
4 identified performance issues in areas such as design control, engineering product
5 quality. And in walk-downs, we identified housekeeping problems as well. We got
6 some information related to identification of latent issues and engineering
7 programs. Those are some example areas where we provided input into
8 additional areas where we need to do further looks.

9 Moving to slide 36: Focused Assessments. In this particular case, we
10 wanted to perform an assessment of selected performance deficiencies and
11 associated organizational issues. So, I'll move immediately. That one shows you
12 the block that we're focusing on. I'll move immediately to slide 37 and that gives
13 you the initial scope that we focused on.

14 Those bullets are the initial scope that we focused on for the focus
15 assessment. As I mentioned, a couple of those go back further than six years.
16 You can see the re-engineering '93-'94 and the 1989 diagnostic inspection. We
17 used those to see if they gave us insights into the current performance or what we
18 may learn from that.

19 We started with this initial scope and those are essentially done. Those are
20 being rolled up into the collective evaluation process right now. Another point that
21 I need to make you aware of here is that this is a dynamic process. As we work
22 through this and the other assessment activities that we have, any of those can

1 spawn another assessment activity as we identify problems.

2 As a matter of fact, these assessments that you see up there, we either
3 expanded or crated new assessments in 10 different areas at this point.

4 Next slide is 38 and this is root cause and collective evaluation. This is
5 where we are right now. Data from historical reviews and assessment activities
6 have been sorted and analyzed to determine which need root cause evaluations or
7 some other method of evaluation, like a self-assessment. That's what we're trying
8 to determine right now. We're working through that piece of it.

9 We want to identify the areas that are primarily driving performance
10 deficiencies at Palo Verde and our sincere attempt in this area is to try and gain a
11 better understanding of the underlying causes of performance issues. If you go to
12 the next slide, 39.

13 These are the broad based issues that roll up from the ImPACT process so
14 far. They're still in the process in that they're feeding into the root cause
15 evaluation step and there has to be a good bit of background to fully define some
16 of these generic statements that you see here. I'm not trying to get into the details
17 of each one of those and what each one means.

18 However, I can tell you from our review that it's interesting to note that if you
19 take this list and you compare it with some of the elements of the confirmatory
20 action letter, there's a good overlap. I can also tell you that if you take this list and
21 you overlay it with what our independent safety culture performance evaluation
22 team has identified, which I'll be talking about in a few minutes, there's a pretty

1 good overlap.

2 We're continuing to pursue the examination of all of this information to make
3 sure that we thoroughly mine all the data that we have to understand if there's
4 anything else. Right now, in general what we're seeing is that these are similar
5 issues to what we've found in the past.

6 I guess what I want you to understand for that process is we're sincerely
7 reviewing this information to gain a more in-depth understanding of what the
8 underlying causes are for performance deficiencies at Palo Verde, whether that's
9 latent issues, whether it's organizational issues or whether it's equipment issues.
10 This is the intent of the ImPACT process overall.

11 Next slide is Safety Culture Assessment. That's slide 40. I'll go directly
12 from slide 40 as you see where that occurs in the diagram over to slide 41. I want
13 to talk about two different aspects of safety culture assessment.

14 As you're well aware, we're the first plant to go through the 95003 process
15 with the new inspection procedure which substantially expands the safety culture
16 assessment area. We thought it was important to us to understand this, so as
17 Mr. Edington has used the term several times, we matrixed, we mapped the
18 process to understand what all was there.

19 Initially, we started out with SYNERGY Consulting Services after we
20 mapped and understood the process. We thought it was important to expand
21 beyond what we had with the SYNERGY Consulting Services to what -- we used
22 the term "independent safety culture performance evaluation team".

1 What this did for us is in addition, it complements the SYNERGY process
2 and it helps us evaluate performance from what I'd like to say as sort of an "in the
3 field" perspective. It's a snapshot of current performance by a group of
4 knowledgeable individuals that are recognized industry experts in their area and
5 are very capable people in their field.

6 We had about 11 people on site off and on for a period of about six weeks
7 and their backgrounds vary from CEOs to Vice Presidents of Operations, to Vice
8 President of Oversight. We had two Senior Reactor Operators. We had an
9 Employee Concerns Program Coordinator. We had people with backgrounds in
10 maintenance and in radiation protection and we had people with experience in
11 safety culture issues, both from an enforcement perspective as well as an ex-
12 investigative person from the regulatory perspective. So we had a broad range of
13 backgrounds and we feel like we've got some good information.

14 They focused primarily on reviewing programs, procedures, policies, written
15 communications. They also reviewed prior assessments and inspections,
16 corrective action data and allegations. They observed meetings and work
17 activities and had some targeted interviews.

18 As I said, that complements the SYNERGY process where the SYNERGY
19 is more of a comprehensive cultural survey that gives insights into attitudes,
20 perceptions and behaviors. It has questions that makes room for write-in
21 comments, documentation reviews, individual personnel interviews and selective
22 behavioral observations. I'll be talking about each one of these a little bit more in

1 the next few slides.

2 I've described two processes. I just want to make that clear. There's the
3 ISCPET and the SYNERGY. Now, I'd like to move back on slide 42 to the ISCPET
4 and give you some general information that came out of each one of these
5 assessment processes that we did.

6 First of all, some general observations that are pretty positive from the
7 ISCPET. Some key ones to us is that the majority of the work force will actively
8 identify nuclear safety issues. I'll give you some more about that when we get to
9 the SYNERGY survey that I think will reinforce that.

10 The second one is very important to us is the alternate means for raising
11 concerns, primarily ECP areas, generally functions well and is trusted by the work
12 force. They made a comment that was challenging to us, though, as well. They
13 said getting things done at Palo Verde is hard. We hear that as we go about our
14 interviews and as we work and what we know about that, and we have more to
15 learn about that, is that the processes have become very cumbersome over the
16 years and we've got work to do in that area to achieve improvement in that regard.

17 Slide 43 are action areas that the ISCPET identified for us and for the sake
18 of time I'm not going to go through each one, but I'll highlight a couple. They
19 indicated we have some work to do in these areas and I'll talk about alignment.

20 They told us that from -- and again, their's is a snapshot that was done at a
21 particular point time in the May/early June time frame. What they told us was that
22 the message regarding our current level of performance has not been driven to the

1 lowest level of our organization. At the time they did the survey, as Mr. Edington
2 talked about, we were having weekly meetings with the site leadership team at the
3 senior and middle manager level.

4 A lot of this information is being shared and internalized by those people at
5 that time about this type of an issue. Those meetings continue at this point, but
6 we've also added additional meetings where we were talking about similar things with
7 supervisors, with mixed small work group meetings and as Mr. Edington just talked
8 about we're starting a process where we're talking about those types of issues with
9 every person in small groups of 30 to 35 in the work force at Palo Verde.

10 We believe there's a change. It's a rapidly changing environment and we
11 believe there is a change now from what was observed by that team and we still
12 have a ways to go. From a safety conscious work environment standpoint, what
13 they told us in that area is that while the work force will raise concerns, we're not
14 always as efficient and effective as we can be in addressing those concerns. We
15 need to improve in that regard from the standpoint of how we respond to those
16 issues.

17 They also told us that we need to communicate about the employee
18 concerns program more aggressively regarding its primary role of being nuclear
19 safety and the importance of getting all technical issues captured in the Corrective
20 Action Program.

21 Next slide, I'll go back to the SYNERGY survey and talk a little bit about
22 that. The survey participation expectation is about 60% to 70%. As you can see

1 on the bottom bullet, we have 79%. The industry average is 78%. Palo Verde in
2 2005 had 86%. We had about 2,000 people take the survey is what that comes
3 down to. There are about 195 questions on the survey, so it took a good bit of
4 time; about two hours of time for each person to take the survey. I'll talk a little bit
5 more about that next, so let's go ahead to 45.

6 Preliminary results. Overall nuclear safety culture rating since 2005. We
7 did a safety culture assessment at Palo Verde in 2005 with the same organization
8 so we're able to look at that and see how we compare. It has declined by about
9 6.5% overall since 2005. We just completed the interview process. You do the
10 survey and then you have interviews. We've just completed the interview process,
11 so that information is being rolled into what the survey told us this time by
12 SYNERGY because it's an independent survey and they'll come explain to us what
13 that means. We don't have all the "whys" yet and we may need to do more work
14 to get to understand all the "whys", but we're at that phase right now.

15 While I can't tell you exactly what the "whys" are, what I can tell you is I'm
16 really pleased that we had a decline in the safety culture survey from one point
17 because to me that reflects ownership of our current level of performance. If we
18 have the same safety culture rating and we have a declining performance the way
19 we do at the present time, then we should expect that people -- if we're not in
20 denial and we're owning that level performance, then we should have a degraded
21 level of safety culture performance information.

22 If I go to next bullet, nine organizations were identified as outliers. As I

1 said, the interviews are further characterizing that. That's based on trends both
2 with respect to us and with respect to industry norms.

3 Valuable insights was provided by write-in comments. We had more write-
4 in comments than anyone. This is one of the points I think that will reinforce that
5 people are willing to identify problems because it takes time to do write-in
6 comments. We have 248 pages of write-in comments, so that's a good source of
7 information and some good insight and will certainly improve our understanding of
8 the issues that we need to deal with.

9 The other one says trend questions to assess current momentum in overall
10 nuclear safety culture indicate recent improvement. There are questions that are
11 tailored in the SYNERGY survey to give you an idea of change in momentum
12 relative to nuclear safety culture. Someone that knows surveys better will have to
13 provide you with additional explanation. I can't tell you that because I don't know
14 the survey that well.

15 What that's telling us is if you look at that survey indicator since the first of
16 the year, there's a more optimistic view relative to improvements that are going on
17 at Palo Verde and that the plant staff recognizes that things are changing. That's
18 the way we're interpreting that; the way we understand it right now.

19 So that completes my discussion of ImPACT and ImPACT-related issues
20 and the safety culture survey which is part of ImPACT. I'd like to turn over at this
21 point to Mr. Edington to discuss how our ImPACT efforts are different from
22 previous improvement efforts at Palo Verde.

1 MR. EDINGTON: And we'll be wrapping up here in the next few
2 slides and turning it back over you. Pretty close on time, it looks like. I noticed it's
3 green up here.

4 I would like to say we've covered a lot of material at a very high level very
5 quickly and we want to emphasize the volume and the effort that is going
6 underway on site is nowhere near as smooth and as efficient as what we're talking
7 about today. There's a lot of angst. There's a lot challenges. There's a lot of
8 group and rechecks as we go. It is not easy and the intent to focus on the depth
9 and breadth and a true understanding of what's going on.

10 Why would we be different and sustainable compared to previous plants?
11 I'm on page 47. Again, the focus on the long term. This is site and company
12 focus. We took an organization and we made a dedicated team of facilities to
13 protect them to make sure that they don't get distracted that we can go after that
14 and we brought in external expertise.

15 So while doing outages, while doing other efforts, we've been able to probe
16 and push this, and unlike previous efforts where we were pulled off or intermittent
17 starts, we've made a dedicated effort. Dwight mentioned 40 to 60 people. That's
18 the full-time effort. That's not including all the part-time people at places -- we
19 have interfaces throughout.

20 It's a very rigorous and broad systematic approach and it is still underway
21 as we've been through the collective aspects of it. I'll try to make sure we get to
22 the root causes.

1 On page 48, the ownership, the alignment and engagement. We set off to
2 ensure that our employees stay as engaged and involved as we can by making it
3 very visible, by bringing them in to the evaluations and next into the action plans.
4 As we finish our evaluations and our issues, it's very important that the actions are
5 owned throughout the organizations. We have a good mix of people throughout.

6 We communicated frequently the alignment and the aspect of industry
7 awareness; where we really stand. Not comparing ourselves to ourselves, but
8 comparing ourselves to the industry. It's been eye opening.

9 On the next page, incorporation into the Site Integrated Improvement Plan.
10 We try to use a very visible tool that's very user-friendly that people can recognize.
11 The owners and the due dates are prominently displayed. We have routine
12 oversight that's been established and then we have a stronger review and closure
13 process that is being implemented on the rigor and quality of the efforts that are
14 focused on what we're doing.

15 And last, I'll end it with a common theme of fixing the plant equipment, but
16 it's a lot more than that. If you go back to the foundation in the pyramid, its people
17 focused on equipment for the long term. What is the core business and the
18 foundation and all those aspects that are underneath it. And certainly, the
19 resources necessary to focus on this and ensure that we drive this for long-term
20 success.

21 With that, I'd like to turn it over to Mr. Post for final closing.

22 MR. POST: Mr. Chairman and Commissioners, I would like to end

1 with the theme that you've seen throughout this presentation which is that our
2 Board, our leadership and all of the individuals before you are fully committed to
3 the theme that you see on page 50 and that is to "safely and efficiently generate
4 electricity for the long term". That ends our presentation and we would be happy
5 to take any and all of your questions.

6 CHAIRMAN KLEIN: Thank you very much for that good presentation.
7 As you might know, the NRC is procedurally based and so we rotate which victim
8 starts with questions. And so, I'm the first victim today.

9 I think I probably had the advantage of having been out to your plant shortly
10 after moving into the Column 4. And I guess, Randy, on page 11 you showed me
11 your curve and you had done a survey which I thought was interesting. When you
12 asked your people where they thought they were on that curve. Where do they
13 think they are today?

14 MR. EDINGTON: That's a good question. I've actually evaluated
15 and adjusted that slightly since then. You can look at that curve again if you take it
16 from a cultural viewpoint. If I look at it specifically from attitudes or out of denial,
17 we feel that, and point four being the majority of the people are out of denial and
18 focused on improvements, it's our job to get them aligned to what those
19 improvements are, I believe with that in mind, we're a little past four, heading
20 toward five. If you go back - and I've had time to think about this and as the
21 ImPACT process - if I go back to how well I fully understand the real root causes
22 and the aspects behind it, then I'm probably approaching four. As the ImPACT

1 team for that piece of it because we think we do know a lot of our issues.

2 We have a lot of actions underway right now, but we are still evaluating a
3 few and making sure we probe and push that. So that curve, since it is my curve,
4 I've been able to adjust it a little bit.

5 So the intent of the people and where they're at, I think we are through the
6 denial stage and focusing on alignment and going forward. I think we have a little
7 bit more work to make sure we absolutely understand the issues so we can focus
8 on those.

9 CHAIRMAN KLEIN: One of the things, Bill, I know you've been very
10 active in INPO and a lot of activities. I guess I was surprised that you hadn't been
11 more visible looking at other plants prior to sort of going down this slope. I
12 assume now you're fairly active and going out and looking at others. Can you talk
13 a little bit about what you're doing now?

14 MR. POST: You bet, Mr. Chairman. We are very focused on other
15 plants and although we had some activities to look at other plants, it was just as
16 much the mind set of the process that we went through as looking at other plants
17 as it was actually visiting. So as I mentioned in my comments, it wasn't that we
18 hadn't attended or focused or participated in industry processes.

19 It was the rationalization process we were going through where instead of
20 being open-minded and learning from that process, we were more benchmarking
21 ourselves against it. It really takes two things: one is the openness to participate
22 in the industry in a very positive way and then second the participation itself.

1 And so I believe we're making headway on both of those paths. We
2 certainly have opened up significantly, as Mr. Mims mentioned in terms of
3 benchmarking the CAP Program as one example. It's critical that we do so and it's
4 critical that we do so with the right attitude.

5 CHAIRMAN KLEIN: I think if you look at the infamous Randy curve
6 on page 11, that decline period is sort of that infamous frog that's in that pot of
7 water and if you gradually turn the heat up it doesn't realize it until it's sort of too
8 late; whereas if it jumps in and it's hot, it sees it right away.

9 What have you learned in this process that would tell another plant earlier
10 that they are going down that slippery slope? And I guess that's both for Randy
11 first and then Bill second.

12 MR. EDINGTON: Actually, I've said some time, not only in previous
13 plants, but here trying to connect those dots and trying to make sure I understood.
14 Frequently, if you have a site performance from a capacity factor and the other
15 numbers that are high for a very long time, it's the cultural aspects and the
16 programs and processes underneath it. You can do something and it could start a
17 degradation.

18 If I look here at Palo Verde we actually, in some of the re-engineering
19 efforts, took away some of the control functions that allowed initially a gain of
20 productivity over the empowerment, but over time as you changed people out,
21 those control functions became more and more important. So they start degrading
22 on us..

1 We have what we call a "sub-optimization" where groups were working in
2 silos and they were optimizing their piece, but the overall piece was starting to fall
3 apart. Once the volume hit and the emergent issues as Bill mentioned earlier,
4 then you're into those connections need to be there and as you start down this
5 downward path, especially if you don't have that control function in there, an
6 example is control functions on your procedures, and again, people will put in
7 more fixes in the individual silos, which actually will make it worse initially. The site
8 isolation, I guess any time -- isolation may be the wrong term; insular. You
9 actually go out, but you don't see. You can get very comfortable with your
10 performance and as a nuclear industry we must constantly be very self critical, and
11 constantly ask those questions.

12 I believe there were signals. I believe the Nuclear Regulatory Commission
13 was seeing things. I believe INPO was seeing the same things. I believe others
14 were seeing it. It's just a matter of a self internalization and being aware of it and
15 really focusing on it.

16 So I think anytime you can go and see sites starting to work in silos or
17 different groups and not getting focused on the overall results, that becomes a
18 very key piece. The metrics themselves, monitoring; although if they are not self
19 critical enough and if you're putting your numbers out to where you're using those
20 numbers to justify the issues underneath them. It's a constant effort to go through.
21 The biggest thing is to create a strong self assessment program. Create a strong
22 evaluation and never get comfortable.

1 CHAIRMAN KLEIN: What do you think Bill? Are you able to take any
2 lessons learned and go back to INPO and look at predictors?

3 MR. POST: Yes, sir. I agree with everything Randy said and if I
4 could just add a couple things to that. One is communication. One of the things
5 with hindsight as we go back and look at it, we had developed single points of
6 contact in terms of communications. And probably one of the most significant
7 things, particularly with a single site, is to develop parallel communication paths,
8 both vertically and horizontally, to ensure that you get all the information you need.

9 That's not to say someone is trying to hide information. We have no one
10 that I can even think of that had any intent of doing that. That wasn't the issue.
11 The issue was just habit. If you do this year in and year out, the habit becomes
12 embedded in both the individual and the process of communication.

13 I recall a meeting I had with Dr. Mallett in November of 2005. Frankly, one
14 of the most significant meetings I've had in my entire career where he was very
15 open with us, very clear about particular issues and I heard things for the first time
16 in meeting with him that I had heard about before, but were explained in a different
17 manner. So from my standpoint, it's critical that you focus on communication and
18 you ensure that you have multiple lines of communication, both vertically and
19 horizontally.

20 Another lesson learned, which we mentioned is the alignment of the
21 Nuclear Oversight Committee. We've had a Nuclear Oversight Committee for over
22 a decade, but it reported to the site. Again, there wasn't anyone trying to mis-

1 communicate on any subject. It was the way things were communicated, the tone
2 in which they were communicated and the emphasis placed on individual issues.

3 We've realigned that Nuclear Oversight Committee and I can tell you
4 already I'm seeing a different perspective in terms of the types of things that are
5 communicated and the way we communicate.

6 And then finally on the Nuclear Oversight Committee, and frankly, in terms
7 of communication with the leadership at the site as well, we separate the time
8 between as Randy mentioned the metrics, where we focus on metrics, and then at
9 the end of that process to put it in a different category then just talk about how you
10 feel about it.

11 It's one thing to talk about the metrics and the very clear, precise messages
12 they produce, but often those metrics don't get to those qualitative factors. So one
13 of the things we consciously added to the Nuclear Oversight Committee is at the
14 end of the process we just say, "Okay, in a different category, how do you feel
15 about where we are and where we're going?"

16 And so we do consciously have qualitative discussions about the feelings of
17 the people in the process. I would say those are three areas that I think are very
18 important and that I have already communicated to the INPO CEOs.

19 MR. EDINGTON: I'd like to expand on that communications one
20 second. Bill talked about the Nuclear Oversight Committee reporting directly to
21 the Board, which personally is what I would expect and I fully support. Also, the
22 Offsite Review Committee as I said earlier that reports to me initially, they must

1 provide an independent report to the Board.

2 The other thing that we're putting in the charter for Nuclear Oversight is
3 Board members will come out and tour the plant a couple times a year, just
4 individuals, not the whole Board but aspects, and we're writing in there that they
5 need to visit with employees, not just management.

6 So if they hear something different than what the Nuclear Oversight
7 Committee, they can challenge their own Nuclear Oversight. We're trying to give
8 them multiple views of information so that if they hear something, it gives them a
9 better trigger point. We'll put them in front of employees and that is being
10 formalized and put into the charter to ensure longer-term, sustained rigorous
11 communication.

12 MR. POST: Mr. Chairman, if I can just add one thing to that. You
13 asked me how I communicated that to INPO. I have communicated that to the
14 INPO CEOs. As you know because you were there, I've also communicated it to
15 the director classes that they had for the Board of Directors that are now attending
16 INPO classes and I gave them basically the same perspective that I gave to the
17 CEOs.

18 I think it's important to communicate with the CEOs and I think it's also
19 important to communicate to the Board of Directors.

20 CHAIRMAN KLEIN: Thanks. Commissioner McGaffigan?

21 COMMISSIONER McGAFFIGAN: Thank you, Mr. Chairman. When I
22 first came here, which is fall of -- August of '96, we were in a crisis over Millstone.

1 That was the big deal. We had lots of other plants that were on watch lists at that
2 time and we had a pretty bunch of broken processes.

3 I wish I could remember the man's name. He was from your company. He
4 sat me down, probably in the spring of '97 and said, "Commissioner, your problem
5 isn't Millstone. Your problem is ComEd. You'll remember who he is, but he was
6 very involved in INPO. I'm pretty sure he was one of the prime movers on that
7 extraordinary letter sent to the ComEd Board in 1998, I believe, that resulted in the
8 huge transformation of ComEd ultimately. It's the atom bomb of INPO.

9 They try to talk to you guys quietly, but if it ain't getting through, you get this
10 letter to your Board of Directors over the top of you. The fellow who is the chair of
11 ComEd was gone. I always appreciated that. He was right. Your predecessor,
12 which ever one of you he was, he was exactly right. Our problem was ComEd.

13 The Millstone issues were going to take care of themselves. By that time
14 they had brought in some very good people to get them straightened out. They
15 made the decision to close, to not try and bring back Unit One. But it's sort of sad,
16 that you, of all plants, the straightest shooter that I had in 1997 advising me a
17 decade ago from the industry, I thought the most honest advice I got at that time
18 came from you and you were at the top. It's just a commentary. You're talking at
19 the end here with the Chairman about corporate governance and the importance
20 of the safety committee reporting to the Board, not to the plant.

21 Have you looked hard at whether there are any other corporate governance
22 issues that you have to be thinking about? You have multiple owners and that's

1 sometimes a problem. In my experience, you have a dominant owner, so maybe
2 that isn't a problem. Tell me about corporate governance.

3 MR. POST: Yes, Commissioner, we have. Let me make some
4 comments about it and maybe Randy can as well. You mentioned the issue of
5 participants. That's a part of corporate governance as well. Part of it is looking at
6 the resource commitment they make, which I will reinforce what Jack said, is that
7 they've never wavered in terms of their commitment to Palo Verde even through
8 very difficult times. For example, with one participant who went through
9 bankruptcy and even through that process with the participation agreements we
10 had, they've been very committed to Palo Verde and its performance.

11 If I recall, the bankruptcy judge dealt with Palo Verde first to make sure that
12 Palo Verde was protected in that process. We've never had any participants
13 waiver. One of the things that we do, as Jack mentioned, is every couple of
14 months Jack and I with plant leadership visit with every one of those CEOs and
15 goes through a process of discussions of where we are, not unlike today; a
16 process of where we've been, what we're doing and where we're going. That I
17 believe adds to the governance process and its something that I think is helpful in
18 terms of putting us on the right track.

19 As far as other components of governance, we have looked at it from the
20 standpoint of participation of the composition of the Nuclear Oversight Committee
21 as well. We've added two new people on the Nuclear Oversight Committee; one
22 with current operating experience, the other one very experienced in terms of

1 INPO.

2 And so we've looked not only at the organizational structure, if you will, of
3 nuclear oversight and governance, but also the composition of the people in that
4 process because as I mentioned, as we look at many of these cultural issues and
5 as the Chairman pointed out in terms of the boiled frog syndrome, the Nuclear
6 Oversight Committee was a part of this process as well.

7 As we went through that process because of many of the things I
8 mentioned, we were not able to identify and focus on these cultural issues. We
9 specifically had looked at that in terms of its composition. So I think those are
10 three different areas of governance.

11 We have basically looked anew at the entire process. One of the other
12 things that we're cognizant of and with Randy's experience and certainly from my
13 understanding of this issue through my participation with INPO, is that you want to
14 make sure you don't go too far with Nuclear Oversight Committees as well. So
15 you have to be very clear and very crisp over the accountability and the line
16 responsibility for this process.

17 So it's very important to have oversight committees. It's very important that
18 they be oversight committees. We have looked at that as well to ensure that we
19 don't let the pendulum go too far the other direction.

20 COMMISSIONER McGAFFIGAN: Too far in the other direction
21 means they start thinking they're the managers of the plant.

22 MR. POST: Yes, sir. It starts to also impact the clarity and the focus

1 that you have in terms of your goals.

2 COMMISSIONER McGAFFIGAN: What sort of discussions have you
3 had with your INPO colleagues about how complacency set in? You've given us
4 your view today as to how - but it's just so extraordinary. In some sense,
5 Davis-Besse and First Energy, they were also being treated as good guys for a
6 while there by everybody. Everybody assumed they were good and that was part
7 of our problem. There was complacency on their part. There was complacency
8 on INPO's part. There was complacency on the NRC's part.

9 But this issue of avoiding complacency especially in a very successful
10 industry that is continuing to set records in various performance indicators as a
11 group, we can't afford any complacency in that industry. Is that coming home to
12 your colleagues?

13 MR. POST: Yes, sir. I believe it is. In November of last year, I gave
14 a very similar presentation to the one that I gave to you today, but instead of taking
15 five minutes to do it, I took 30 minutes to do it. And basically went through these
16 and many other issues with all of the CEOs at the CEO conference in November.

17 As you know, that's an annual meeting; one that's attended by all of the
18 licensees throughout the country as well as international participants. I went in
19 depth and explained the specifics about this to ensure that everyone really
20 understood that these kinds of things can happen and as you go through the
21 process of change, it's one thing to look back on it now and do an assessment of
22 these issues, it's something else as you deal with them and go forward to identify

1 things like don't listen for what you want to hear; keep talking until you hear bad
2 news; push on issues until you hear things that you don't want to know about;
3 push on things until you hear bad news; do not end any conversation with your
4 leadership at a plant without pushing it to the point where you hear things that are
5 not going well, things that you need to improve. So from my standpoint, it's
6 something that's critical.

7 One of the things that I mentioned in the Director's Session is that Directors
8 need to build a personal relationship with their nuclear leadership. It goes beyond
9 the other areas that we manage in the electric utility business. I think it's important
10 for a Director to have a personal relationship, not just a business one, but a
11 personal relationship, with somebody high in their nuclear organization so they get
12 a sense on an ongoing basis of actually the feeling that's existing at the plant and
13 the processes.

14 So I've done what I can to communicate. I also have communicated with
15 the INPO Board in every single board meeting on the subject. I think it's a part of
16 my responsibility to do so. Certainly, as you've heard today, we are absolutely
17 committed to turning this situation around, but it's also a part of our responsibility
18 to make sure we communicate it fully to the industry so no one else gets in the
19 situation.

20 COMMISSIONER McGAFFIGAN: Mr. Chairman, my time has gone,
21 but I'm just going to make a statement. I think it was Mr. Edington who pegged us
22 as a lagging cheerleader. We'd lag behind in recognizing improvements and that

1 is just our culture and I'm glad you recognize it, but we're not going to be patting
2 you on the back.

3 The Chairman is from Missouri, the Show Me State. You're going to have
4 to show us several times probably, but you have us pegged right. That's our
5 culture.

6 CHAIRMAN KLEIN: Sustained performance.

7 MR. EDINGTON: I'm not in disagreement with it. I'm trying to make
8 sure my people understand that when they feel they're improving, we've got a lot
9 more to prove. So we understand that and support that.

10 CHAIRMAN KLEIN: Commissioner Jaczko?

11 COMMISSIONER JACZKO: I have a couple of questions I wanted to
12 ask, but I want to make a couple comments first. First of all, it's certainly seems
13 like you have a very comprehensive program and I appreciate your candor on a lot
14 of these issues. I think one of the things that is a little bit troubling to me from the
15 side of the regulator is the ability for us to be effective and identifying these
16 problems early.

17 I think, Randy, we've talked about this before, the idea of making that curve
18 bottom out a little bit sooner. I think that would be the goal that we have on this
19 side of the table to do everything we can to ensure that that happens. There's a
20 lot of things that I think from what you said that seem to indicate that that's going
21 to be difficult for us to do.

22 I think, Mr. Post, you talked about the fact that there are a lot of lagging

1 indicators that didn't even let you know there were problem performance early on
2 and certainly that was similar for us.

3 The other point that you made, too, is an important one that a lot of these
4 issues I think you said – and I tried to write down the quote exactly -- was that "this
5 is more people than technology". As a regulator, we're very good with technology.
6 We're not so good with people. That gets into a lot of areas where it's much more
7 challenging for us to be effective as a regulator.

8 I think it's certainly – I think there's a lot of work that you still have to do,
9 obviously, but it looks like you have a good plan in place. I would certainly be
10 more interested on focusing on how we can use this as an opportunity to take the
11 plants that are out there right now that have indicators that look good, but are
12 suffering from similar kinds of problems that Palo Verde was several years ago.

13 I would just note to some extent that we're not even talking at this point
14 about the entire site being in Column 4. It is only Unit Three that is in Column 4.
15 So even with the current indicators that we have, two of your units are performing
16 better than the third unit and that, of course, raises some questions in my mind
17 about how effectively our indicators are really tracking the performance because
18 clearly, I think a lot of these issues are site-wide, their people issues, their cultural
19 issues.

20 So I think we still have a little ways to go in terms of even our indicators
21 reflecting that fully because as I said right now, Units One and Two are in a
22 different place than Unit Three, being in the degraded cornerstone column.

1 There wasn't really a question in there. It's more, I think -- perhaps if you
2 have thoughts and I know the Chairman asked a similar kind of question about
3 how can we address other plants that may be having similar problems. I know
4 you've talked about some things you've done, but if anybody else might want to
5 add some things on that particular point, I would be interested in your thoughts.

6 I know that we had a discussion about the elusive Holy Grail of Leading
7 Indicators and it seems that that's going to be a very elusive goal and one that we
8 may never achieve. But given that, how can we be effective as a regulator if what
9 we're dealing with is late information and how do we begin to identify these trends
10 better and sooner?

11 MR. EDINGTON: First off, I want to emphasize that we consider the
12 whole site in Column 4 and we're acting that way.

13 COMMISSIONER JACZKO: I certainly didn't want to indicate that
14 you weren't and I think that certainly is appropriate. Again, recognizing that that's
15 not what our licensing system says right now.

16 MR. EDINGTON: We did have a discussion about the distances
17 plants were years ago versus where they are now. I think the process has
18 improved and does get to us quicker. The question is how do we even improve on
19 that. I've done some work with INPO and others and we are getting into some
20 areas that are not directly measurable.

21 I can give you some of my insight, such as if a site is replacing largest
22 pieces of equipment, are they still pushing \$3 million to \$5 million into their small

1 equipment. If you're doing a steam generator replacement, that's \$100 million, but
2 are you still putting \$3 to \$5 million in your small equipment? If you wait three or
3 four years and not focus on that, then ultimately that can catch up with you.

4 Your operator pipeline is another good example. Are you hiring for your
5 future and allowing for that type of transition? I actually use the training and
6 knowledge. Are you training – basically, do you have a passion for training? Are
7 you driving that knowledge throughout the organization or have you cut back so
8 much on it that it's become a checkmark type area?

9 When you talk safety, safety in my opinion will degraded today if you don't
10 overtly do something with it. You've got to make that personal. You've got to
11 connect. It's not just getting a check mark. It's talking a common sense and that's
12 what we try to do with the plant status of safety. We tried to take safety and say
13 here's the plant condition today. How does that affect nuclear safety, industrial
14 safety, radiological safety and safety culture?

15 The safety culture is one we just recently added and it's fairly - having that
16 discussion, open discussion, is a little awkward at first until you really get into it
17 and start probing and pushing and it becomes more natural for us to ask those
18 questions.

19 Are you hiring? If you look at our hiring model that we're doing - are you
20 bringing in some side stream hiring? If you've only got the organization you had
21 for long time and you're not bringing a few people in like we've done to stimulate.
22 So it's not that you don't have good people, but they get used to thinking a certain

1 way.

2 I think a key piece is looking at the organization and then lastly I think we've
3 discussed heavily the communications for multiple groups. I'm interested in what
4 this plant looks like five years after I leave. Bill asked me about nuclear oversight
5 when I first got here. I said if you didn't have it reporting that way, we'd invent it.
6 We'd need to do it. In fact, we then added OSRC and others.

7 You must have that multiple questioning levels of communication. You
8 can't just get it through one source. How you codify that, that's a little different.
9 I'm just giving you some of my personal insights. So some of the things that we're
10 into now is trying to get into what is it that's really core that keeps a plant running
11 for the long term.

12 I'll be doing more work on it with others and trying to clarify it more in my
13 head. That's the best insight that I can give you at this time.

14 MR. DAVIS: Commissioner, if I could add something. Obviously,
15 from my perspective, I get all kinds of indicators each and every month whether it's
16 on nuclear, fossil, customer service, transmission, all kinds of things. You look at
17 them and they may be all green or they may all be in a good area. The search for
18 the ultimate predictor is very difficult, but one thing that is always predictable is
19 unfiltered information.

20 And so my style is not necessarily to go through the chain of command. In
21 retrospect, I think Bill certainly spoke for me on that behalf that in the Palo Verde
22 area we probably did too much of that.

1 Just a qualitative assessment of talking to people in a vertical and
2 horizontal way unfiltered, not in the presence of management or anything else, can
3 give you pretty successful information of what the temperature of the organization
4 is. I don't have any recommendation of how NRC staff would do that, but
5 unfiltered, unmeasured information in my estimation is very, very important.

6 COMMISSIONER JACZKO: I appreciate that and I think that's
7 certainly one of the strengths of our resident inspectors is their ability to do that.
8 But, of course, they are also somewhat removed from the Commission and from
9 certainly headquarters staff a little bit. I think that is perhaps one area – I think it's
10 a useful suggestion where perhaps we can improve on making sure that the
11 information is not being filtered in here. I don't necessarily get the indication that it
12 is. I have some other questions if you suspect we'll do another round.

13 CHAIRMAN KLEIN: On your comments on the unfiltered information,
14 Commissioner McGaffigan does that in the lunchroom and the elevator all the time
15 and Commissioner Lyons does that in the athletic area.

16 COMMISSIONER McGAFFIGAN: I've been doing it for 11 years and
17 it scares the hell out of every EDO.

18 CHAIRMAN KLEIN: Commissioner Lyons?

19 COMMISSIONER LYONS: By now there's already been a very good
20 discussion, so I'm not sure I'll have my full time to take for questions. I do very
21 much appreciate that all of you are here and joined us in this discussion. It greatly
22 helped my understanding of the level of challenge that you have. I appreciate that

1 you recognize that challenge and it helped me understand the path that you intend
2 to follow to get back to where you want to be.

3 I also very much appreciate the openness and the candor that
4 Commissioner Jaczko just referenced. That also is very important to me.

5 I had planned in my questioning to focus initially on the role of INPO, but
6 Bill, between your responses and questions from our Chairman and from
7 Commissioner McGaffigan involving INPO, I'm guessing that we've pretty well
8 covered the role or the ways in which INPO can help in your overall recovery.

9 Unless you have more to add to that, I would just note that I, too, am very
10 interested in the role that INPO can play and I know of your heavy involvement
11 with INPO and that's certainly another resource at your disposal as you bring the
12 plant back to where you want it.

13 A question, maybe, for Jack. I don't know if this is a completely fair
14 question, but you can tell me. I appreciate it very much that you emphasized in
15 your comments that the financial resources will be there to accomplish this
16 recovery and I very, very much appreciate that. There have been, though, over
17 the last year or so, occasions when I know different ones of you have been invited
18 to sessions with your Public Utility Commission and thinking back to some of the
19 issues involving the vibrations, the concerns associated with those, the loss of
20 revenue, and I certainly don't know and I don't think it ever got to the point of the
21 PUC suggesting there would be any compromise in safety as you worked through
22 those vibration issues, but it does occur to me that along with your commitment of

1 the necessary financial resources, there may be an impact on the overall operation
2 of the site and that will involve your PUC.

3 I was just curious if you have shared with the PUC given that I believe their
4 very active involvement in Arizona, if you shared with them the process on which
5 you're embarking, the challenges, and frankly, the possible impacts that may come
6 out of it?

7 MR. DAVIS: Commissioner, I'll be glad to do that. In fact, on two
8 occasions, Randy and I have been summoned before the State Commission in an
9 open meeting to discuss those issues as you described them. What's the impact
10 of Column 4 for Unit 3? What's the estimate of the time to get things done?
11 What's the complexity of getting things done?

12 Both in an open forum and when Bill and I meet with Commissioners
13 one-on-one in that forum, we explained to them the issue. The reason I can make
14 the statement I made earlier about the funding to improve Palo Verde being there,
15 to me being an engineer is just a pretty simple analysis.

16 If Palo Verde isn't there, the financial impact to my company is greater than
17 any expense I can think of is there. I recognize by focusing on the safety aspects
18 of Palo Verde. In other words, by focusing on the safety of Palo Verde, the
19 operation stuff will come naturally.

20 I think our State Commission also understands that it's important that we
21 make sure, we as management of the plant as the operating agent and I know the
22 other participants believe this also, that we must provide the funds required

1 necessary to make sure that Palo Verde again regains the status it was at and
2 operates safely and efficiently in the long term. Quite frankly, that's the only way --
3 that's the right thing to do. Any other path would be detrimental to all the
4 participants.

5 COMMISSIONER LYONS: True. At best it would be a Band-Aid and
6 not a lasting solution. I very much appreciate your response. That's a very good
7 response.

8 MR. POST: Commissioner, can I add just a couple things to that?
9 One is our State Commissioners have attended each of the quarterly public
10 meetings that have been held so far. That has been very positive and I think that
11 process is very helpful in being able to communicate not only the plan from the
12 standpoint of the company, but from the standpoint of the NRC what your issues
13 and concerns are through those public meetings. I would just reinforce that
14 process as being a very positive one with the Commission.

15 The other thing that you did, actually Dr. Mallett did, is he was willing to
16 come to our Commission twice and testify or provide comments I should say, to
17 our Commission. That was also very helpful. I know that may even be unique. I
18 know it's rare. It was very nice of him to do that, but I believe both of those forums
19 have been very helpful in communicating to the Commission their perspective and
20 provide them a perspective on safety at Palo Verde.

21 COMMISSIONER LYONS: I appreciate those comments. And
22 maybe one short question for Dwight on the safety culture survey.

1 In one of your charts, it showed a decrease in the participation in the
2 survey, admittedly from a very high number to still a very high number, 86 to 79.
3 They're still very impressive numbers. I was a little surprise that given the current
4 focus that it moved in that direction.

5 Does that lead to any concerns on your part or do you still feel good that it's
6 high enough that you're getting a very accurate picture of the culture at the site?

7 MR. MIMS: From the standpoint of getting an accurate picture of the
8 culture of the site, I think we're definitely in the range of what would be considered
9 a good response for characterizing site performance. Obviously, we're not happy
10 about the movement in that direction and I can't give you much of the why right
11 now because I haven't seen the why information at this point. We are still
12 developing that why information.

13 I think the people who did participate, two hours of their time. Of course,
14 we made that available to them and encouraged them to go in the phase where
15 we're building up to a refueling outage which could have had some impact on that,
16 but we certainly had good participation overall and with the survey response -- I'm
17 sorry, with the write-in response. We certainly felt like we got a really good insight
18 into how people view things.

19 MR. EDINGTON: Also, the logistics of how to administer the survey
20 has changed. We used to bring people in and give them that time and now you
21 have to do it very independently. You've got to be – you've got to kind of hand it
22 and walk away. It's a little different administration. It could affect it a few

1 percentage points, the logistics of getting it through a site that size, especially at
2 the volume we were doing. These are still very good numbers for that and we had
3 good participation in all groups. I think there was maybe one group that we - and
4 that was more the count mechanism we used. In general, we had very good
5 participation, good write-ins.

6 COMMISSIONER LYONS: I certainly agree that even the second or
7 the most recent somewhat lower numbers are still very impressive. The number of
8 write-ins is also very impressive and I would guess that some of your most useful
9 information comes from carefully thought through write-ins. I will just look forward
10 over many months to come of watching and helping you measure the progress.

11 MR. EDINGTON: I do understand that support. It is a journey. We
12 expect to have some challenges along the way and it's not something that's done
13 easily. We will continue to stay after it very aggressively.

14 CHAIRMAN KLEIN: I have a clarification and since I see Bruce over
15 there, I'll let him clarify it. Commissioner Jaczko brought up a point that it was only
16 one unit of three that's in the Column 4. It's my understanding that it's the reason
17 of your calculation system that drove it. In other words, the events at that plant
18 and the calculations there. Is that correct?

19 MR. MALLETT: Yes, you are correct. In fact, in our Confirmatory
20 Action Letter we just issued June 21 we indicated to them and we've indicated
21 verbally to Palo Verde that the underlying problems for their performance are site-
22 wide. We would expect them to address those issues site-wide. Did that answer

1 your question?

2 CHAIRMAN KLEIN: I remember the discussion leading up to
3 whether it was Column 3 or Column 4. The pendulum is swinging depending on
4 which calculator you were using it seemed at the time for the frequency that drove
5 it to that column.

6 MR. MALLET: That is correct. It just happened to be Unit Three in
7 equipment issues. But as far as underlying problems, it was site-wide. I think they
8 recognize that.

9 CHAIRMAN KLEIN: Thanks. Just one final question. Bill brought up
10 an interesting observation and so this is a Randy question. One of the difficulties
11 was that people are looking at retirement rather than long term. What have you
12 done to turn that around?

13 MR. EDINGTON: Actually, quite a bit. I've already talked about the
14 group meetings, but now we have embarked on talking to every single employee
15 on-site. We're bringing them in in groups of 35. Again, this message has been
16 throughout the various areas. Now we're going down to a personal contact.

17 We open that meeting talking about what is in it for you. What is the
18 importance of this. You get into everything from the individual pride of doing a job
19 well done, to the peers and the owners and the communities. And ultimately, that
20 you do have a vested interest in the success of that plant for the long term
21 because pension funds and all that do play into overall economic aspects.

22 I think it's important to do this because we talk to employees and say we

1 understand that some of you are concerned or angry at times. Somebody got us
2 here. So then we talk about that. We talk about let's funnel our energy to what's
3 really important. How we got here is important from a history and to learn. What's
4 more important is where we're at and where we're going from here and how we
5 focus that energy.

6 Again, that's going to take quite a while to do those meetings. They're 2 ½
7 hours; only 35 a time. We chose to keep it small and we'll keep pushing through
8 that and make that personal contact throughout the organization. I have talked to
9 the managers and the supervisors and that word is being passed this way, but
10 now we're trying to take that personal message and give everybody a chance to
11 express their anger, if you would, and then answer questions and let's get on with
12 making this a long term plant for the long term. That's exactly how we're doing it.
13 Very personal and very up close.

14 CHAIRMAN KLEIN: Thanks. Commissioner McGaffigan?

15 COMMISSIONER McGAFFIGAN: I had written down the same line
16 of questioning, slightly different. We have at NRC and have had for several years
17 the tsunami curve that describes our age demographics and it cascades
18 downward as you get into the late 50's, early 60's. We've had in the Federal
19 system -- in 1994 I guess it was, we had a change from the Civil Service
20 Retirement System to the Federal Employee Retirement System which is a much
21 more mobile system.

22 Can you describe your demographics and whether there's been any

1 instability in benefits for retirees that would incentivize people to go one way or the
2 other in terms of the end of their career sticking with you or going out the door?

3 MR. EDINGTON: As far as changes in benefits, I'll let Bill and Jack.
4 I'm familiar with the current ones we have, but not changes.

5 MR. POST: We do not have and haven't had for five years or six any
6 kind of an early retirement program to deal with that, but we do have the same
7 tsunami curve you have. In fact, one of the challenges I think with that curve is
8 certainly the slope on the right side in terms of the age and the number of people
9 that can leave. There's also a gap in that curve. We've been able to attract
10 younger people in bulk in terms of the older ages, but there's a gap in the middle
11 which produces a significant management challenge as you go forward.

12 Given the fact that there's not continuity there in all the age groups, as you
13 go through the process of moving from one level of management to another level
14 of management, there's going to be a scarcity of people in that 35 to 45 range that
15 we need to deal with, both from a training standpoint and a supply standpoint. So
16 we have exactly the same curve.

17 COMMISSIONER McGAFFIGAN: Our average age is about 49 and
18 stays there. The peak is between 50 and 55 and the second largest group is
19 between 55 and 60, which sets you up.

20 MR. POST: Our curve would be identical or similar. The numbers
21 would be different, but the curve would be exactly the same.

22 COMMISSIONER McGAFFIGAN: I'm not trying to get you to make

1 an announcement, but are you working on license renewal? That tends to give
2 people a longer time horizon. Are you --?

3 MR. EDINGTON: Yes, sir. We're in the STARS Group and we
4 actually just finished one group and starting on the Palo Verde one as we speak;
5 starting through the process.

6 COMMISSIONER McGAFFIGAN: That's announced? That's on our
7 web page somewhere?

8 MR. EDINGTON: I believe it has. I think everything is formal. I know
9 we talk about it.

10 COMMISSIONER McGAFFIGAN: The EDO is shaking his head, but
11 sometime in the first part of the next decade you're probably going to come in for
12 license renewal?

13 MR. EDINGTON: I think it's listed as a STARS, not a specific name.
14 I believe there's a STARS slot that has it.

15 CHAIRMAN KLEIN: You're an unnamed STAR.

16 MR. EDINGTON: I believe so. Now I may be named. I'll probably
17 hear about this.

18 COMMISSIONER McGAFFIGAN: It strikes me that seeing dynamics
19 at other plants that is a good thing for your employees to know that their careers
20 are potentially much longer and for young people to know as they're joining your
21 firm, your utility, your operating company, that they understand that this is not
22 something that's going to be taken away from them. So if I made news, I'm sorry.

1 You mentioned, and I've heard it before, Randy, the operator pipeline is an
2 indicator that you're not unique in using. Apparently you now have some problems
3 at Palo Verde. That's an interesting indicator. People who overstaff operators
4 never regret it. People who under staff operators - maybe they get into some pay
5 scale, but the people who under staff operators in the operator pipeline seem to
6 get themselves in a little bit more trouble.

7 MR. EDINGTON: Absolutely. Again, I've never been to a plant that's
8 had a challenge scenario like this and I've been to numerous of them that didn't
9 have an operator pipeline issue. That could be looked at as a potential early
10 indicator and that when you see that -- it's one that each site that we've talked
11 about for quite a while, but it just seems to repeat over and over everywhere you
12 go.

13 COMMISSIONER McGAFFIGAN: Thank you, Mr. Chairman.

14 CHAIRMAN KLEIN: Commissioner Jaczko?

15 COMMISSIONER JACZKO: I guess I should just end things on that
16 note, but just a couple of questions. This is for Mr. Mims. You talked about the
17 ImPACT report and some of the identified issues. You went through a list of them
18 and I think you said that you had previous other root cause analysis and other
19 things where you had seen some of these.

20 I'm wondering if specifically these correlate to issues that were identified in
21 the first two - the first 95002 that was done and then in the supplemental. I'm not
22 sure if you're aware of the answer to that. If you are -

1 MR. MIMS: I think I can answer that at least in part. The issues that
2 are there are there are very similar to what we identified and that's our issue that I
3 think we're dealing with right now. We haven't been effective at identifying those
4 issues that were identified in the first 95002. They're not letter for letter. There's
5 elements of each one.

6 COMMISSIONER JACZKO: But they seem comparable. I guess my
7 question ultimately then is one, what's going to be different about this program
8 now that will fix those and if there is something different, why wasn't it just done
9 earlier in response to the NRC identifying those?

10 MR. MIMS: I think we went through a list that Mr. Edington went
11 through at the end that tried to point out some of those differences. The type of
12 things that I see are very consistent with what we covered in that list. We're
13 looking for a better understanding of what caused the issues. We've got dedicated
14 teams that are working on these and we're not interrupting those teams.

15 We're pulling people from the outside to work on those things so that we're
16 not just examining ourselves and having our own opinions about what our
17 problems are and get some objectivity into the process. We are spending a great
18 deal of effort going back and looking at, for lack of a better word, a lot of old data
19 and fairly current data that should help us do two things.

20 One, convince us that we really do have all our problems understood and
21 then in addition to that we believe that by analyzing those that we're going to get
22 better understanding as to what some of the drivers are relative to maybe a depth

1 that we haven't gotten to before. All those things are things that make it different.

2 I'll throw in just one or two others. We're making a substantial effort to not
3 just involve the people that are doing this work in defining what's going on. When
4 it comes to action plan development, when it comes to collective evaluation, we've
5 gotten our plant managers, maintenance managers, radiation protection managers
6 and we have them participating with us directly on those things so that there's
7 better ownership broadly across the organization.

8 We're making a substantial effort to communicate that to a broader cross
9 section across the organization. Mr. Shea spent a portion of this past weekend in
10 the control room talking to shift managers. It's hard to connect with shift
11 managers. They need to know what we're doing and we need to get their input.
12 We're making a substantial effort to cover all those bases. Those are things that
13 make me believe that it's different.

14 MR. EDINGTON: Again, to make it personal and get down to the
15 core aspects. Recognizing that there were stages of denial and at times we were
16 working on the symptoms and not the core piece of it. You've got to get past that
17 and get into an acceptance state that we have to change the way we're doing
18 business. It takes a mixture of the industry awareness, not just going and seeing,
19 but going an actually seeing, I guess, is a better way; mixing in.

20 We have a tremendous talented work force that now has some different
21 people. They're willing to change. They're looking. I think it's a combination of
22 things, but I do think frankly, that we were in stages of denial and at times we were

1 working on the symptom and not the behavior underneath it.

2 I do want to emphasize that a couple of these are crosscutting issues in
3 corrective action. Those don't clear in the next three months. They take awhile to
4 work through it. Then when I'm satisfied, we already know you will lag a little bit
5 behind me. Maybe quite a bit.

6 COMMISSIONER JACZKO: Ultimately, my interest again is trying to
7 get back to what we do as a regulator. I guess it frustrates me to some extent
8 when part of the reason you're in Column 4 is because of a yellow finding that
9 happened in 2004 and that has remained yellow for 2 ½ years, three years
10 because of some of these crosscutting issues, because some of these issues that
11 were identified by our staff, were identified by inspectors, were identified by the
12 good people we have out in the field. I guess the frustration comes from the
13 inability to get those things corrected.

14 Again, I go back - this may come down to an issue of us needing to look at
15 our process and our regulatory program to make sure that it's addressing those
16 effectively to begin with. In this circumstance, we had first in 95002 that inspection
17 that really wasn't good; the outcome wasn't good. We came back and did a
18 supplemental. At that point and clearly at that time I think you were unprepared for
19 us to come back, even though there were some indications for us to come back.

20 Again, it just comes down to how can we be more effective in getting these
21 changes that we have identified, implemented and they're changes that we think
22 would improve safety. Again, I think some frustration I have and again it comes

1 down to while I recognize that the CAL applied site-wide, it was only that we got
2 that additional white finding for Unit 3 that we were able to go in and get into a
3 95003 for all the units.

4 Today, unless I'm incorrect, the other two units are still in Column 3 and not
5 in Column 4. So again, our indicators there are not reflective of what we believe
6 the site performance is because we believe the site performance is more of a
7 Column 4 performance, but our indicators aren't really telling us that.

8 It's having to go in and do some things, I think, Mr. Davis, you talked about
9 it, it's getting a sense and getting a feel, that's not necessarily built-in right now into
10 our process, into our ROP because as I said it's not reflected right now in two of
11 the plants. They are by all our indicators they are in Column 3.

12 COMMISSIONER McGAFFIGAN: I would say just in defense of the
13 reactor oversight process, we've always said it's an emerging thing, an evolving
14 thing. We are trying our best at getting safety culture in. If we had had safety
15 culture modules a year or two ago, maybe we would have –

16 COMMISSIONER JACZKO: They're crosscutting, but the real safety
17 culture things only happen when we get into a Column 4 in the 95003. That's
18 where we really go in. I think it imposed the survey, if that's correct. Again, I'm not
19 trying to be critical of the ROP, I'm just saying there's an opportunity for us to
20 improve and to look at some things and there is a disconnect there, I think, with
21 what we believe the performance is. I think the staff took the right approach and
22 the right steps to make this a site-wide issue, but I think certainly there's a

1 disconnect there in what some of the indicators are saying. Certainly, I think the
2 safety culture would be one area to help improve that.

3 MR. DAVIS: Commissioner, if I could just make a comment there.
4 Maybe this might show my naiveté. I'll admit that sometimes. When we go
5 through the process of reading the letters and so forth, from day one I thought it
6 was site-wide. I was surprised to find out at the end, and I know Bill and I had this
7 conversation, it was only Unit Three. Randy had to tell me that because I'm talking
8 to Randy and I'm going what's been identified for us is not really other than the
9 specific calculations required under the ROP, but what had been identified for me
10 was really a site-wide issue. It wasn't isolated in one unit.

11 Even when Bill and I met with Mr. Mallett in November of '05, he didn't talk
12 to us from the standpoint that this is a unit issue. He talked to us from the
13 standpoint that this is a site-wide issue. I go back to my comment I made earlier,
14 you can have all these indicators, but the discussions I had with Mr. Mallett back in
15 November and the correspondence, all along I've been thinking this is a site-wide
16 issue and only after the fact that I come to find out that in terms of the indicator, it's
17 only Unit Three. That's what I think Randy is appropriately talking about. We're
18 treating this site-wide.

19 COMMISSIONER JACZKO: I certainly would want to reinforce that is
20 the appropriate – I'll reflect my naiveté, too, that it was only yesterday when I was
21 reading through some of the briefing materials that I learned that it was actually
22 only Unit Three that was in Column 4 as well.

1 Again, I've always viewed these things as site-wide, and it just reinforced in
2 my mind that there may be some things we want to look at to reflect that better in
3 some of our indicators in a way that does capture that better.

4 MR. EDINGTON: I do understand where you're coming from.
5 Technically, we have one unit, but we treat it and of course work with the Nuclear
6 Regulatory Commission we also treat it as a site. In fact, as we're doing this
7 evaluation process and since the yellow finding was more behavior based than all
8 those of those other areas which take longer to change, as we surface issues, we
9 could put one of the other units by ourselves by identifying an issue that becomes
10 a media area more than a practical area, but it is something that I was trying to
11 make sure everybody was aware.

12 Technically only one unit. We treat it the same and we may, by our work,
13 surface something that would put it in there over the next six to nine months.

14 COMMISSIONER JACZKO: Thank you.

15 CHAIRMAN KLEIN: Commissioner Lyons?

16 COMMISSIONER LYONS: I do not have further questions. It's been
17 a very, very useful briefing.

18 CHAIRMAN KLEIN: Thank you very much for this helpful
19 presentation. Thank you all for coming in and explaining your plan. I think the
20 challenge you all have now is implementing the plan and then as you noted earlier
21 that we will be watching for the sustained characteristic so we may lag you for a
22 while. Thank you very much. Meeting is adjourned.

