

1           MR. REYES: Some designs of engines have pressurized  
2 oil injection at the start, and others don't, so the wear at a  
3 dry start, a drive path start is more in some diesels engines  
4 than others, and EMD this particular vintage does not have the  
5 pressurized oil injection for start.

6           MR. ROSEN: Is this worthy of an information notice?

7           MR. PLISCO: In fact, it's imminent to be issued,  
8 exactly. We review the final draft.

9           MR. REYES: Is that kind of finding an issue that it  
10 gets spread throughout the NRC?

11          MR. REYES: The whole industry. We will send a  
12 notice out to the whole industry.

13          MR. LANDIS: The report was issued days afterwards  
14 which has the details in it.

15          MR. REYES: Now, the utilities are faster than we  
16 are. We draft it, we have to go to headquarters and all that.  
17 They are ready, the licensee already send this on what they  
18 call note pad through INPO, so it's already out. We're going  
19 to issue it.

20          DR. BONACA: Something equal to the question that Dr.  
21 Ransom was asking, this disturbs me somewhat over the past ten  
22 years, I mean how many troubles have been in diesel generations  
23 resulting from use of new gaskets or -- If you go back to  
24 review what happened and you look there are many diesels that  
25 these issues would potentially come across failure associated

1 with this, so that's a good point anyway that you're raising.

2 MR. ROSEN: We get common cause of failure there  
3 very, very rarely, but it has an impact. It should have an  
4 impact on a lot of people's PRAs because as they go through the  
5 update they're going to have to start thinking about the common  
6 cause of failure of diesels on the basis of these events,  
7 that's right.

8 DR. POWERS: I'm not worried about their PRAs, I just  
9 want their generators to work.

10 MR. PLISCO: Charlie is liking this, because it's  
11 eating up his time on fire detection.

12 MR. REYES: And now he's going to bring us back to  
13 schedule.

14 MR. DESAI: Good morning. I am Binoy Desai, I am the  
15 acting branch chief for Branch 1 which covers Duke Power  
16 plants, and when I'm not acting I'm the senior resident at  
17 Robinson.

18 Oconee had two white findings. Basically the first  
19 issue was failure to adequately consider design inputs to  
20 assure the design basis was translated into specifications,  
21 drawings, procedures, and instructions.

22 What happened specifically was that the high pressure  
23 injection pump could not be relied upon to operate using the  
24 spent-fuel-pool-backup-operated water supply following a  
25 Category F-3, F-4, or F-5 tornado.

1           The key here is that the spent fuel pool is the  
2 backup, it's not your first line of defense which is the water  
3 storage tank, and it's also not a tech spec system.

4           The second issue was failure to promptly correct  
5 tornado mitigation procedures to ensure the station aux service  
6 water pump could be aligned in 40 minutes following a design  
7 basis tornado.

8           And this also is a second line of defense, it is not  
9 the primary aux feed water pump that you would rely upon.

10          Both of these are non tech spec systems, two white  
11 findings. There was initially a supplemental inspection 95001.  
12 Following the second finding there was a supplemental  
13 inspection 95002, and the key thought that I want to leave you  
14 with here is that the supplemental inspection concluded that  
15 the licensee tornado mitigation strategy was deficient as  
16 opposed to just individual issues related to the two violations  
17 if you will.

18          Licensee corrective actions both planned and  
19 completed include a combination of procedural as well as  
20 hardware changes that are forthcoming.

21          MR. PLISCO: One of the unique issues about the  
22 second finding. The issue was really their corrective action  
23 program. They had identified this issue and put it in their  
24 corrective action system.

25          The technical issue had some risk significance, and

1 they did correct it. This was kind of unique because we found  
2 this in one of the problem identification and resolution  
3 inspections and their backlog of corrective action issues.

4 MR. ROSEN: I have been thinking a lot about Davis  
5 Bessie these days, and thinking about corrective actions that  
6 didn't get corrected and have been there for a long time as  
7 being things that are paid more attention now.

8 MR. LANDIS: All right. Thank you.

9 MR. MacDONALD: I am George MacDonald, the acting  
10 branch chief this week for Branch 4, the CP&L plants, and one  
11 of our sites, Harris, has had some white findings, we've had  
12 three.

13 The first one regarding the charging/safety injection  
14 pumps, they have a three-pump design, and this particular  
15 failed bearing was the swing pump and the charlie pump which  
16 can act as either the alpha or bravo pump at any one time.

17 There was concern there which was identified during  
18 oil sampling that they had a failed thrust bearing as they do  
19 recognize, and when they finally completed the risk analysis  
20 this item turned out to be white. The color did not change in  
21 the evaluation process.

22 And this was NRC-identified by the residents, and it  
23 led to a tech spec violation.

24 The second item is a fire protection finding as  
25 identified by DRS during their team inspection. Basically

1 we're talking about thermo-lag being used as a boundary wall in  
2 the bravo switch gear room separating alpha and bravo train  
3 circuits between the bravo switch gear room and the alpha cable  
4 spread room.

5           Basically the test there was supposed to indicate  
6 that this material was a three-hour barrier when it fact the  
7 test did not demonstrate the full three hours.

8           When we did the evaluation for the risk this item  
9 turned out to be white. It was a difficult evaluation, but  
10 when we did the final color the final color did not change.

11           Our most recent finding which Luis indicated we just  
12 sent out last week is an FME, or form material exclusion issue.  
13 A piece of rubber, it's about five inches by twenty inches,  
14 about 3/16 of an inch thick was identified during a maintenance  
15 activity on one of the contain sump suction valves.

16           It's hard to tell, but this is one SI-310. This  
17 represents the recirc sump suction pipe coming through two  
18 valves into this header that goes into the section of the RHR  
19 pump.

20           This is a normal line from the RWST here, this is the  
21 normal line from the loop, so this is a dead piping that never  
22 gets any flow unless you actually have to use the recirc sump.

23           They were doing body to bonnet work during the  
24 refueling outage on this valve, and when they did that they  
25 found a small tie wrap next to the valve, the mechanic looks in

1 and also finds a small piece of rubber, and further with an  
2 inspection mirror and a flashlight they find this larger piece  
3 down there by the elbow.

4 And what that wound up being, that represented a  
5 piece of rubber that 60 percent of the impeller section eye.  
6 It's a closed impeller, so we determined that it would not be  
7 chopped up, would not flow through the pump. So with 40  
8 percent of the flow available to you this thing would not  
9 function for a large break locus, and some of the medium break  
10 locus. Therefore we wound up with a white condition with this  
11 pump.

12 So basically in the RHR pump alpha only was affected;  
13 bravo did not have any material like that, and it would only be  
14 in effect during the continual recirc mode, it would not have  
15 any flow in that line under any other conditions.

16 When the licensee went back to do a root cause  
17 analysis they concluded that it was a problem with historical  
18 work practices and poor work controls and poor material  
19 exclusion, but they could not find definitively when it was put  
20 in there.

21 There were five different opportunities. Most  
22 likely 1991 they were in there doing a pump impeller  
23 replacement and pump replacement activity, and this material is  
24 used as a cushioning below when you set the impeller down on  
25 the floor, or parts on the floor, and that's when they think it

1 most likely introduced, but their root cause analysis team was  
2 never able to fully pinpoint when it went in. That is the most  
3 likely time.

4 And again this represented our second finding. The  
5 first issue has already rolled off the action matrix. The  
6 supplemental inspection for that issue on the charging pump is  
7 completed, and that's cleared the action matrix.

8 The fire protection issue supplemental inspection is  
9 ongoing now, is still open, and this issue we're doing the  
10 planning process now for this.

11 DR. POWERS: Let me ask a question, how thoroughly  
12 hey subsequently checked the lines.

13 MR. MacDONALD: We wound up looking at that with the  
14 residents at the site. They wound up running a video camera in  
15 all the piping. They very thoroughly checked that out, and  
16 it's pretty well described in the LER.

17 MR. REYES: The licensee was not allowed to start up  
18 until they did a thorough inspection.

19 MR. MacDONALD: If one piece is in there, they're  
20 like nuns they come in pairs.

21 MR. REYES: That was the assumption, if one piece is  
22 there there may be others, let's look at the whole system.

23 MR. PLISCO: They did find some other pieces here and  
24 there, smaller pieces.

25 MR. MacDONALD: Right, there were some smaller pieces

1 identified. All the RHR piping was checked all the way back to  
2 the sump, the USC was inspected as well. They found some tiny  
3 stuff in some of the spread lines, but nothing of the magnitude  
4 of this.

5 MR. PLISCO: This is the kind of thing we lose sleep  
6 over, because it's a latent condition, the surveillance would  
7 have never picked it up. It was just a catch, you know, the  
8 mechanic just looking down the pipe is the only way it was  
9 caught.

10 MR. REYES: Actually the mechanic did an outstanding  
11 job. If you see what they saw at the beginning when they  
12 opened the valve from the little tie wrap and the little other  
13 piece, and then decide to look further into the system that  
14 decision is what saved the day.

15 MR. MacDONALD: They had to get around that corner.

16 MR. REYES: So in our correspondence to the utility,  
17 even though we had a white on all that stuff we acknowledged  
18 the worker's behavior because that's the way you want it, and  
19 it actually --

20 DR. BONACA: Why didn't surveillance give an  
21 indication that it was being done --

22 MR. REYES: There's no flaw ever on this pipe unless  
23 you have an accident, and you go to recirculation.

24 MR. MacDONALD: That's right, go to recirc switchover  
25 So a very unique situation.

1 MR. REYES: So a very unique situation, but no  
2 problem.

3 MR. LEITCH: So the exposure time in this kind of a  
4 situation then goes back to 1991?

5 MR. MacDONALD: I think we used a year; right?

6 MR. PLISCO: I think we just did a year.

7 MR. MacDONALD: We just used a year, the previous  
8 operating cycle.

9 DR. BONACA: That tells you something about the  
10 standby systems, too, by the way.

11 MR. REYES: We're at a decision point. We have  
12 another section, it's 11:37, fire protection. Do we keep on  
13 going, or take lunch now and come back, whatever you prefer.

14 MR. CHRISTIANSON: I would like to introduce Charlie  
15 Payne who's the acting branch chief for the Engineering  
16 Branch 1, Division of Reactor Safety.

17 MR. ROSEN: I would like to do fifteen minutes of it,  
18 and then we'll come back to the rest of it. Let's get started  
19 at least.

20 MR. PAYNE: Good morning. As Chris said, I am the  
21 acting chief of Engineering Branch 1 which has the  
22 responsibilities for fire protection here in Region II.

23 I also happen to be the team leader for fire  
24 protection which is a new position that we have here. I have  
25 basically the upper side responsibility of day-to-day

1 operations for the fire protection inspection program here.

2 I would like to cover in this presentation what we  
3 have done so far in Region II, successes and challenges, and  
4 where we're going.

5 Our inspection teams consist of three to four  
6 inspectors. We have generally one operations/mechanical  
7 inspector, one electrical inspector, and one fire protection  
8 engineer.

9 They're now going onto two-week on-site inspections.  
10 Our first one is actually going to take place next week, we are  
11 doing our preparation this week, and will do the first week  
12 next week at Crystal River.

13 The intent of that is to -- well, our scope is going  
14 to be the same, but we're going to spend more time following up  
15 on the issues that we had and trying to resolve them on site  
16 so that we don't come away with a bunch of unresolved items  
17 that we have more difficulty trying to close out once we leave  
18 the site.

19 MR. CHRISTIANSON: The initial year, within the last  
20 two years we were doing this inspection as a one-week  
21 inspection versus two weeks, and we're just shifting now to a  
22 two-week inspection.

23 MR. PAYNE: That's correct.

24 And we do follow inspection procedure 71111.05T which  
25 is the triennial. We do six facilities a year and rotate

1 through them, and we're just finishing up our first round this  
2 year, so beginning this fall we are going to be starting to  
3 look at each site for the second time.

4 Some of our successes are that the level of knowledge  
5 has improved. Our inspectors are getting --

6 DR. BONACA: Excuse me. I assume do you mean a site?

7 MR. PAYNE: A site, yes.

8 DR. BONACA: So that you cover all sites in the year.

9 MR. PAYNE: Yes, sir. We have eighteen sites here in  
10 Region II, so we do six of them a year.

11 As I was saying, our inspectors are getting more  
12 familiar with the fire protection inspection process. Our  
13 teams are getting good. We are trying to use many of the same  
14 people on each inspection. We do rotate people around to  
15 broaden our bench strength if you will, and also to plan for  
16 the future as people come and go to make sure that we have  
17 somebody qualified to handle these inspections.

18 And that's one of the reasons for my position as team  
19 leader is to try to coordinate this better. It's an important  
20 inspection aspect.

21 We also have been coordinating our schedules with the  
22 licensees. We try and do this more in advance of our periodic  
23 meeting here in the region to discuss what inspection  
24 activities that we have.

25 We know that we're going to have to do six

1 inspections that year. We know which facilities are due to  
2 come up for that inspection, so what we want to do is plan that  
3 out up front, and then coordinate with the licensee and make  
4 sure it's compatible with their schedule and their personnel  
5 availability, and then we'll have a schedule pretty much fixed  
6 when we're ready to go see the licensee at the beginning of the  
7 next cycle and all those details are worked out.

8 MR. LEITCH: This program seems to roll along  
9 routinely in a well-established program and frequency, but my  
10 question is do you have enough flexibility to be responsive to  
11 unusual situations. I guess I'm particularly concerned about  
12 have replacements in containment have to be cut, or steam  
13 generator replacements, again sometimes necessitating  
14 containment openings.

15 I guess when a plan reverts into almost a  
16 construction kind of an activity can you augment your  
17 inspections at that time, or is that primarily the resident  
18 that does that?

19 MR. REYES: We have two engineering branches here in  
20 the region, and they're split by areas of expertise, so in the  
21 example you brought in it would be completely different group  
22 of individuals that would impact on Charlie's workload.

23 He has a certain workload to do, so let's take the  
24 example of a plant replacing a steam generator vessel pad and  
25 they have to cut the containment to do all that, we will use

1 the other engineering branch that has a metallurgical, the  
2 structural, and civil concrete, the NDE to deal with that. It  
3 would be separated under fire protection.

4 MR. LEITCH: I'm thinking about the fire protection  
5 issues associated with that. In other words, are they going to  
6 maintain the fire protection system in service? Is there going  
7 to be some kind of an augmented fire watch rounds, things that  
8 you would do at a construction site?

9 MR. REYES: Typically that would be handled by the  
10 resident in terms of fire watches and things like that. If  
11 it's complicated enough, we'll ask for help.

12 MR. PAYNE: That's right. Generally speaking what  
13 we're looking at is the big picture of the program that they  
14 have.

15 MR. ROSEN: But you have to recognize something  
16 different is going on. Construction was difficult and  
17 complicated, but there was no spent fuel; operations is  
18 difficult and complicated, but there's no cutting into the  
19 containment. This has got both. You're cutting into the  
20 containment, you've got lots of construction people on the  
21 site, and there's lots of transient combustibles, and you've  
22 got spent fuel.

23 MR. REYES: We've done it several times because as  
24 you may know a lot of steam generator replacements require  
25 that. It's a big challenge, I'm not undermining it, it's big

1 challenge. It requires a lot of resources, a lot of our  
2 resources.

3 MR. LEITCH: It's a challenge in a lot of ways, but I  
4 just wanted to be sure that somebody is thinking about the fire  
5 aspects of that challenge.

6 MR. REYES: Typically the fire headers are not out of  
7 service, because the way the equipment would be brought into  
8 containment even though you cut it it will be in the area where  
9 the regular equipment hatch is located. They just put a  
10 superstructure next to it to lift all that.

11 So you have, what you do have is you have more  
12 cutting, more welding, more transient combustibles. That  
13 typically the residents handle as part of the day-to-day  
14 because the transient combustibles and the welding you have to  
15 be there. I mean you have to be there, so the residents are  
16 more into the work permits, the hot work permits, the  
17 monitoring, the walking around, making sure, and then from the  
18 operations point of view the unit that's not running, the unit  
19 that may have this situation going on, the control room visits,  
20 the first ventral cooling, et cetera, et cetera. That's more a  
21 day-to-day kind of thing.

22 Now, if they get real heavy they ask for help and  
23 we'll supplement it.

24 MR. ROSEN: And they're doing CAD welding again, and  
25 they probably haven't done that in a long time.

1           MR. REYES: But for that we'll have somebody from the  
2 region who has --

3           MR. ROSEN: Lots of the CAD welding is done properly  
4 of course, but also the fire protection issue --

5           MR. REYES: Yes.

6           MR. LEITCH: The plants are very vulnerable to fire  
7 when those construction activities are going on, transient  
8 combustibles --

9           MR. REYES: If you look at it, most of the events  
10 happen there when you have transient combustibles and a lot hot  
11 work, a lot of welding and a lot of sparks.

12          MR. ROSEN: And a lot of new people, and contractor  
13 organizations.

14          MR. MALLETT: But you are right, with the program  
15 where we have a lot of teams planned using up a lot of  
16 resources throughout the year, we do have to we find put more  
17 time in the planning -- I think Charlie would agree with that  
18 -- up front for these big things like steam generator tube  
19 replacements, or things that we're going to -- Because  
20 otherwise you get all your people used up, and wouldn't have  
21 them free to look at those.

22          MR. REYES: That's a good point. Typically a project  
23 in an event like that, we'll call that a project, we'll put  
24 somebody in charge, we'll have a layout when all the  
25 inspections are going to occur, they overlay over the licensee

1 schedule, and we decide also how many hours we're talking about  
2 for all the specialties, because a scenario like you're talking  
3 about covers all the specialties, concrete, NDE, fire, health  
4 physics. It's an effort in itself, but we want --

5 MR. ROSEN: In an operating plant.

6 MR. REYES: And another unit running.

7 MR. ROSEN: Well, I'm not just talking about that, I'  
8 talking the spent fuel pool and --

9 MR. REYES: Yeah. Well, I guess they were counting  
10 two other spent fuel pools, two other reactors, and the program  
11 would be cut up, and in that even if there's more cross-  
12 connection -- the older units have more cross-connection, so  
13 you could, your construction activity could impact the other  
14 ones. The newer units are more islands in itself.

15 MR. ROSEN: It's a real challenge, I really think  
16 you've got a challenge on your hands to be -- the licensee  
17 obviously from a regulatory standpoint it's something new from  
18 the agency.

19 MR. MALLETT: And this team leader, I make a plug for  
20 that in Chris's division, and Charlie mentioned it, this  
21 concept we think is helping us put more attention to that plan.

22 MR. ROSEN: Have you done steam generator  
23 replacements in Region II?

24 MR. REYES: Oh, yeah.

25 MR. MALLETT: Oh, yes.

1 MR. ROSEN: Have they had to cut the containments?

2 MR. REYES: Yeah.

3 MR. ROSEN: So it's been done, you've been through  
4 this before, so it isn't quite so new.

5 MR. REYES: Yeah. Our problem is not been there done  
6 that, it's that the people who are very good at it are going to  
7 be retiring in the next two or three years, and they have done  
8 it in construction, they have done it on the first wave of  
9 steam generator replacements. We think we're going to see a  
10 second wave, and --

11 MR. ROSEN: And vessel head replacements which will  
12 constitute a whole 'nother wave.

13 MR. REYES: Correct. So our problem is in strategic  
14 workforce planning to now hire new metallurgical engineers, and  
15 new structural engineers, and all that, and then train them and  
16 have them follow with the more experienced people this activity  
17 for the next wave.

18 MR. LEITCH: Fire is a little like safety, I guess.  
19 Because you haven't had a lost-time accident doesn't mean  
20 necessarily that you have a good safety program, and I guess  
21 I'll just caution that because we've replaced steam generators  
22 and head containments and haven't had a major fire doesn't  
23 necessarily mean that you've got a good fire protection  
24 program.

25 MR. REYES: We agree. We have stopped activity at

1 the site. We have inspectors coming in, and people are  
2 welding, and there's solvents or something near by, and they  
3 have raised it to the licensee management right away, and  
4 stopped activity.

5 We agree with you, it's amazing --

6 MR. LEITCH: It's the mentality, too, sometimes of  
7 the craftsmen coming in when they're on a construction activity  
8 is different than the maintenance activity.

9 MR. REYES: Correct. They're only thinking of what  
10 they're doing, and not what the implications it may have around  
11 them.

12 It's a challenge, and I just want you to know we're  
13 sensitive to it, mostly we deal with the on-site people because  
14 you have to be there watching it, because just because you have  
15 a hot water permit, and the person has been instructed, and  
16 they gave him a blanket to hold that, that doesn't mean they're  
17 going to use them, so you have to be there.

18 MR. LEITCH: Exactly.

19 MR. PAYNE: Okay. Continuing, some additional  
20 successes I think so far in our program is that we have been  
21 involving the resident inspectors in our program.

22 There's a twofold purpose of that. One is that  
23 they're doing inspections as Luis said on a daily basis, they  
24 have their own inspection procedures that they're following as  
25 part of that, and we feel that involving them in our program

1 they learn a little bit more about what fire protection is, and  
2 then can bring it back to the site and use it on a day-to-day  
3 basis.

4 And the other thing is that it helps supplement our  
5 teams to get more operation experience, allow us a little more  
6 flexibility in scheduling our activities so that we can support  
7 the emergent activities that might be happening.

8 MR. LEITCH: Are we still holding associated circuit  
9 analysis in abeyance in these inspections?

10 MR. PAYNE: Yes, we are.

11 MR. LEITCH: Associated circuits are important.

12 MR. PAYNE: I understand we're getting close, but  
13 it's still like another year.

14 MR. LEITCH: Another year.

15 MR. PAYNE: They're helping to come out with  
16 something at the end of this year as far as a re guide, or a  
17 new reg.

18 MR. MALLETT: When you say they, Charlie --

19 MR. PAYNE: I'm sorry. Headquarters is --

20 MR. LEITCH: Is there a task force working on that?

21 MR. PAYNE: Yes, there is, a task force, and based on  
22 the last counterpart meeting that e had which is my last point  
23 is that we had that week before last as a matter of fact when  
24 we discussed associated circuits, and they were saying that the  
25 task force plan is to have a draft guide out on the street by

1 the end of this year so it can go out for comment, then  
2 implementation next year.

3           These meetings are I think very fruitful for us. It  
4 allows us to get together quarterly with the other fire  
5 protection engineers in the other regions, and also with  
6 headquarters we do quite a bit of training, learning about  
7 associated circuits, different types of fire barriers, and the  
8 issues associated with each of those items, and discuss the  
9 problems that each of the regions have coming up so that we,  
10 one, can be aware of them and see if there's a similar type of  
11 problem in our region when we do our inspections, and also to  
12 share the lessons learned that we have.

13           MR. ROSEN: Do you plan on attending the NEI Fire  
14 Protection Forum in Seattle in March?

15           MR. PAYNE: Yes, myself and my fire protection  
16 engineer are planning to go.

17           MR. REYES: I'm glad he knew; I didn't. But I mean  
18 we try, you'll find that we are pretty active in all the  
19 things.

20           MR. ROSEN: I think in building a knowledge base and  
21 dealing with your issue of training and knowledge preservation  
22 it is an opportunity.

23           MR. REYES: In fact, we're actively looking for  
24 another fire protection engineer because Jerry Weisman who is  
25 sitting back here who's our expert is not as young as he used

1 to be, and also he's very knowledgeable, and down the road we  
2 know that we're going to need to replace him, so our strategic  
3 workforce plan has already identified that skill, and we are  
4 actively going to recruit somebody so they can come on board  
5 and spend some time.

6 DR. POWERS: I would recommend that you some time  
7 attend one of these fire protection information forums just --  
8 you know, even for a day you will find them -- just how  
9 valuable they really are as a communication device in this  
10 area. When the opportunity arises, don't hesitate to actually  
11 -- and in a day you can get a feel for what's going on at these  
12 meetings.

13 MR. ROSEN: It's a very dynamic meeting where the  
14 industry, and the staff, and insurers, all can really talk  
15 about what's going in fire protection.

16 DR. POWERS: I have just found them personally to be  
17 well worth the time.

18 MR. REYES: Good. That's good insight for us,  
19 because when we make those decisions sometimes we really don't  
20 know.

21 DR. POWERS: I mean you don't have to attend every  
22 time, but just to get a feel for what goes on. Then you get  
23 some idea of what kind of the people from the region should be  
24 attending.

25 MR. PAYNE: Okay. Next is the challenges that we

1 have, there's many of them that we are trying to address. I'm  
2 trying to highlight a few of them.

3 The first one is the licensing basis for many of  
4 these plants are difficult to understand. What we have been  
5 finding is that when we look at the SERs that have been issued  
6 in fire protection and compare that to their program they don't  
7 always match.

8 We're finding that the standard license condition  
9 that all the facilities have allows them to modify their fire  
10 plan, or their protection program, and sometimes they modify it  
11 thinking that they have that latitude when in fact they should  
12 have come to us for an SER, licensing agent's change.

13 Sometimes they have submitted changes and gone ahead  
14 and changed their program, and we never issued an SER that said  
15 it was okay, so trying to resolve that has made it difficult  
16 sometimes for us to decide where the issues are with the  
17 findings that we come across in our inspections.

18 As we mentioned, too, our knowledge base in fire  
19 protection resides in a few people. We are trying to expand  
20 that, we're training our staff to become fire protection  
21 experts. They're by no means going to be as knowledgeable as  
22 Jerry is, but we want them to be able to take on some of the  
23 role and responsibilities that he's doing on the inspections  
24 and let Jerry be resident expert if you will to help resolve  
25 the issues.

1           The SDPs are not easy to work with. I think that's  
2 pretty well known. There's a lot of debate about what is right  
3 as far as conditions, frequency, what a barrier is worth, how  
4 much credit to give to the fire brigade, and we cannot -- we're  
5 trying to come to grips with that, and I'll talk about that on  
6 a future slide about what we're coming with in the SDP.

7           Nonetheless, they're not timely right now in the fire  
8 protection area, and we need to work towards that.

9           MR. ROSEN: What did you say, they're not timely?

10          MR. PAYNE: They're not timely.

11          MR. ROSEN: The resolution of the fire protection  
12 issues is --

13          MR. REYES: In a significant determination process.

14          MR. ROSEN: Region II's experience as well as the  
15 other regions is you're not resolving these things in a timely  
16 way if that meets your standards for timely --

17          MR. REYES: It doesn't, and you get into a lot of  
18 argument with the licensee, internally first with the staff on  
19 the assumptions, and then with the licensee, and it's --

20          DR. POWERS: Well, the thing starts off with  
21 hypothesize a fire scenario, zip for guidance. What am I  
22 supposed to do here.

23          MR. REYES: And that's what happens, and there's a  
24 lot of subjectivity and a lot of views on it, and by the time  
25 you get through the whole process it's taken a long time.

1 DR. POWERS: It's an area that really deserves a lot  
2 more attention, and we've got the go-ahead to focus some  
3 attention on this. When the IPEEE insights came out and showed  
4 those risks -- I don't have to believe them, but that's what we  
5 have -- that says the research and the NRR should be putting  
6 some resources on this helping these guys out with some things  
7 other than this mish-mash that they've filed right.

8 MR. ROSEN: I think I heard that they're working on  
9 the SDP trying to address some of these issues.

10 MR. REYES: There was a meeting -- was it last week  
11 or the week before --

12 MR. PAYNE: Our first meeting was near the end of  
13 May, right after our meeting with management.

14 MR. REYES: But with the SDP itself, there was an  
15 internal meeting. Is that right, Walt?

16 MR. ROGERS: Yes, and the end of May. There's  
17 another one in July.

18 MR. MALLETT: We've got two people to attend that  
19 meeting. That's how committed we are in this region to get the  
20 better SDP.

21 MR. ROSEN: Did you say in this meeting?

22 MR. PAYNE: That wasn't -- it had nothing to do with  
23 the National Institute of Standards. They just let us use  
24 their facilities.

25 MR. REYES: It's a nice meeting room.

1 DR. POWERS: But what I'm concerned about is that  
2 we're trying to patch this thing, and we just don't have fire  
3 protection on the same kind of technical basis that we do for  
4 mitigation systems and initiating events and barriers, and yet  
5 in any kind of risk prioritization that you do you take IPE  
6 insights and you take IPEEE insights, and this is about the  
7 same. And so it just deserves more -- I mean it's not you  
8 guys's problem, you're the victims, not the problem here.  
9 You're trying the fix the problem and the other resources are  
10 being dispersed.

11 DR. LARKINS: I think first of all I was just  
12 curious, you said in some cases SEs hadn't been written where  
13 the amendment had been sent down or something. Is that because  
14 of a backlog issue, or is that --?

15 MR. PAYNE: That's one of the issues we're trying to  
16 resolve with headquarters.

17 MR. REYES: But the licensee went ahead and made the  
18 changed without the NRC giving approval.

19 DR. LARKINS: I heard that.

20 DR. POWERS: It's a big confusion in the way things  
21 were done, and what we've written to the licensee about their  
22 Appendix R programs, and the wording is just not clear, and so  
23 the licensee takes one set of assumptions, the staff takes  
24 another.

25 The big problem is nobody really knows what the

1 plant's design basis is. For the pilot programs on this  
2 triennial inspection it was costing the typical licensee a  
3 million bucks to sort out his design basis, and that's getting  
4 ready for the inspection because it's --

5 VOICE: In fire protection.

6 DR. POWERS: Yeah, fire protection design basis  
7 because it would spread all over the place, and spread over the  
8 years, and the guidance comes in file cabinets, not in reg  
9 guides.

10 MR. PAYNE: Some of the licensees have been taking  
11 inspection reports where we say something in there and then  
12 say, okay, we condone some change in their licensing basis, and  
13 it's --

14 DR. POWERS: Well, that's what's happening in the  
15 associated circuit analysis is they go back and look at the  
16 historical record, and some guy permitted something some place,  
17 and therefore you don't have to do this in the associated  
18 circuit analysis.

19 MR. ROSEN: Let me ask you, you've got a couple more  
20 slides and we'll be through them. We'll come back to fire  
21 protection if you need to after the break.

22 MR. PAYNE: So you would like to go ahead?

23 MR. ROSEN: Yes, go ahead and finish up.

24 MR. PAYNE: Okay. The fire barriers, it's your  
25 point, sir about the numbers. We don't have a good feel for

1 what some of the numbers are. They're based on old criteria  
2 for determining what's like a three-hour barrier, and the  
3 licensee doesn't necessarily install this barrier the way it  
4 was designed and tested, and so they're taking credit for it,  
5 and then later finding out that it may not last for the three  
6 hours that they're intending.

7 And then when we get into the SDP trying to decide  
8 whether they get any credit at all for this barrier, whether  
9 it's determined or not if it's three hours or not, and as a  
10 result they think they need to get some credit for that  
11 barrier, and we're saying they ain't gonna get any.

12 MR. REYES: That's a big issue with the industry,  
13 because -- it really makes no sense because when we give them  
14 no credit it basically says the material is not there, all you  
15 have is air, and they say, no, we have retardant material  
16 there. It may not be in the perfect configuration that was  
17 tested, so we cannot assure you it's three hours, but it's more  
18 than zero; it's somewhere in between.

19 DR. POWERS: And they're right, of course.

20 MR. REYES: I happen to agree them that --

21 MR. ROSEN: Your problem is how much to give them.

22 Do you give them one minute, ten minutes or --

23 DR. POWERS: Well, you go to the other problem is the  
24 regulation, when it's an Appendix R plan the regulation says  
25 three hours, it doesn't say two hours and 55 minutes, it says

1 three hours, and you get hamstrung by these things.

2 The branch technical positions I think then you can  
3 start talking about two hours and 55 minutes, but Appendix R  
4 plans it's three hours or it's nothing.

5 MR. PAYNE: And that gets to my next point which is  
6 III.G.2 and their interpretation of what's a three-hour  
7 barrier. They're mixing and matching the different  
8 requirements of III.G.2 which is the protection of the  
9 dedicated shutdown system.

10 Sometimes they don't provide the protection of  
11 suppression, but they have the one-hour barrier, the one-hour  
12 barrier and 20-foot separation, but they don't actually mix  
13 that way.

14 Also we're starting to see them start to substitute  
15 manual operator actions for some of the criteria in III.G.2.,  
16 and that's becoming more prevalent of a problem.

17 In other words, for example they determine that  
18 Kaowool isn't a three-hour fire wrap, so they take off the  
19 Kaowool and then say we're going to use operator actions as a  
20 substitute for that. That's not something that's allowed in  
21 IIII.G.2, III.G.2 doesn't talk about --

22 DR. POWERS: That's not one of options.

23 MR. PAYNE: And what they're arguing is that, well,  
24 it doesn't say we can't, it just says this is what --

25 DR. POWERS: It's pretty explicit about saying you

1 have to do one of three things.

2 MR. PAYNE: That's our position.

3 DR. POWERS: It doesn't seem like one that's subject  
4 to a lot of interpretation.

5 MR. PAYNE: Okay. Next, operator decisions to  
6 initiate the fire procedure. The licensees are taking the  
7 position that the best place to operate the plant from is the  
8 control room, and we agree with that, but when things start  
9 happening and you have a fire you start getting spurious  
10 actuations, they don't always want to implement the fire  
11 procedure because the fire procedure tells them in no uncertain  
12 terms you need to go to the remote shutdown panel and start  
13 taking action.

14 DR. POWERS: Don't we have a real reputation on that  
15 just out of the Oconee incident? You know, why did it take  
16 them so long for Oconee to shut down because the control room  
17 wouldn't operate according to what we know about fires.

18 MR. PAYNE: Well, they're pointing to their IPEEE.

19 DR. POWERS: I said Oconee, San Onofre is what I  
20 meant.

21 MR. PAYNE: Oh, okay.

22 DR. POWERS: They sat around, the guys handling the  
23 fire were saying we want to spray water on this, and the guys  
24 in the control room were saying "Oh dear, oh dear, oh dear,"  
25 and yet it's been in the innumerable information notes and

1 bulletins that say in electrical fires in nuclear power plants  
2 spray some water on it, because otherwise you can't put out a  
3 cabinet fire, it just reignites on you every time you let the  
4 air in.

5 MR. PAYNE: Also we're starting to see some issues  
6 with gaseous fire suppression systems, CO2, halon. Primarily  
7 it's not being installed the way the manufacturer designed it.

8 I mentioned the manual operator actions.

9 For the future here one of the things that we want to  
10 work on is improving our skills, including the better use of  
11 risk insights. We're not as proficient in that particular  
12 area. We rely heavily on Walt and Rudy's abilities. We want  
13 to bring that more down and at a level to our inspectors so  
14 that they can do their job.

15 DR. POWERS: One thing that has helped I think is  
16 this new reg guide that they put together on the fire  
17 protection area.

18 You know, it used to be all this stuff is spread out  
19 all over the place, and now it's all in one pretty readable  
20 document.

21 MR. ROSEN: That's 1.189?

22 DR. POWERS: Right.

23 MR. PAYNE: Also again we're assigning more  
24 inspectors to our fire protection inspections to increase our  
25 bench strength.

1           One of the things that we are going to need to  
2 address is future inspections are going to start looking at  
3 areas of less risk, which by default means that the licensee is  
4 not going to have as many significant issues with that, and why  
5 are we inspecting something that's less risk significant.

6           And as we go through eventually we need to come to  
7 grips with what are we going to do in the future when all the  
8 really high-risk areas have been inspected other than looking  
9 at modifications that have been made.

10           MR. ROSEN: Well, now, this is an important point.  
11 Just because you've looked at high-risk areas before, now  
12 you're saying we should go look at less risk significant event  
13 and then sequences and areas and not pay attention to those. I  
14 don't think that's a good idea.

15           MR. PAYNE: No, I'm not saying that, but I'm saying  
16 that the licensee is going to say, well, you have already  
17 looked at this area before, why are you looking at it again.  
18 You know, we need to be intelligent about what we're doing  
19 here, and it's possible that you may get into that mental  
20 framework.

21           MR. ROSEN: But I think what we're dealing with here  
22 is a dynamic situation. You can have it look great when you go  
23 in from a fire protection standpoint, and tomorrow it could be  
24 transient combustibles all over the place if somebody makes a  
25 mistake.

1           So I don't think we should be thinking we've got to  
2 cover all the areas. I mean you need to keep on thinking about  
3 risk.

4           MR. MALLET: I think also what Charlie -- correct me  
5 if I'm wrong -- what they're looking at is they go back the  
6 next time and maybe pick a smarter sample than you picked the  
7 first time, it doesn't have to be as broad perhaps, you can  
8 pick it smarter from what you learned before.

9           MR. ROSEN: I can give you my insight which is that  
10 what counts here is as Dana Powers was saying is the risk of  
11 fire to core damage frequency, and that's the issue. You're  
12 not looking at equipment protection for the balance of the  
13 plant so you can protect the licensee's investment, that's not  
14 your job. That's their job, and they'll do it as well as they  
15 can in that area.

16           What we've really got here is the protection of the  
17 public health and safety, reasonable assurance of adequate  
18 protection. Risk of fire core damage you can see is the issue,  
19 and it's concentrated is in those risk-significant sequences  
20 and areas. That should be your focus.

21           DR. POWERS: And it would be if I had great  
22 confidence in the risk analyses that say, okay, here are the  
23 important fire areas. I don't think I have that confidence  
24 that those are so well identified, so I have something about  
25 saying let's expand and use our understanding to decide what

1 areas we're going to inspect. So I think we still have a ways  
2 to go before I start putting all my eggs in a PRA basket in  
3 this area.

4 DR. RANSOM: Along that line when you talk about fire  
5 barriers, are they applied in a deterministic fashion or a  
6 probablistic fashion?

7 DR. POWERS: They are enormously deterministic.

8 DR. RANSOM: That seems to be a weakness.

9 DR. POWERS: Well, you've got some problems with  
10 that. But I mean you have two kinds of things. You've got  
11 barriers that have prescribed amounts of time to them, and they  
12 either work for that time or they don't.

13 And then you have virtual barriers, and the typical  
14 analyses fires do not propagate from one area to the next by  
15 fiat in risk analyses. I mean it's just the way the risk  
16 analyses is set up.

17 DR. RANSOM: I guess what I was thinking is a barrier  
18 that might be deterministic for three hours obviously probably  
19 has some faults in it, cracks and things like that that make it  
20 propagate more relative than that.

21 DR. POWERS: And probably things that are three hours  
22 will actually last longer than three hours. I mean it's -- but  
23 you don't have a wealth of data here to handle things.

24 Then you've got the problem of what is your  
25 combustible series, and in an FSAR world the combustible

1 wording is pretty well specified. That's usually not the  
2 problem, it's usually the transient combustible that changes  
3 things.

4 MR. ROSEN: It's not my favorite thing to agree with  
5 Dana Powers, but I will bow to the superior knowledge in this  
6 area in one respect, and that is that you can have a fire in a  
7 nonrisk-significant area, it can propagate to a risk-  
8 significant area under certain circumstances, and one of those  
9 circumstances, the kind of circumstances I'm thinking about are  
10 kinds of things that were revealed during the San Onofre,  
11 unexpected connections between lines or something like that.

12 And so I want to temper my earlier remarks in looking  
13 only at risk-significance sequence and risk-significant areas,  
14 you've got to go beyond that to those places that could impact  
15 the risk significance sequences in these areas should a fully-  
16 developed fire develop in those other areas.

17 MR. PAYNE: I think that's all I had to talk about on  
18 this slide.

19 MR. ROSEN: I would like to have a recess now,  
20 beginning now, and be back at 1:15, and we'll pick up with any  
21 issues anybody wants to talk about in the fire area. If not,  
22 we'll go on to security.

23 [At 12:33 p.m. the lunch recess is taken.]

AFTERNOON SESSION

1  
2 MR. ROSEN: Are there any additional questions on  
3 the fire protection area? Shall we proceed with the security  
4 issues?

5 DR. POWERS: I think I'll just reiterate that if you  
6 can identify tools that you think should be developed out of  
7 the research program -- and I think that's what Mr. Rosen is  
8 particularly interested in trying to get the research program  
9 directed to help address some of these issues, and so you guys  
10 are on the front line so you probably have some good ideas on  
11 tools that would really help, either your inspection force or  
12 about the senior reactor analysts who are going to have to get  
13 involved in this and have limited VRA capabilities in this  
14 area. Things like that, I mean at any time they can identify,  
15 and you can feed them into his -- Steve's going to prepare some  
16 recommendations for the research program in fire protection.

17 MR. ROSEN: We will have a meeting in September whose  
18 topic is entirely fire research.

19 DR. POWERS: So from that I think he had something to  
20 contribute, and it would be really useful to get that because I  
21 think there are some real practical needs right now that the  
22 research program could be addressing and helping a lot.

23 MR. ROSEN: Any suggestions along those lines you can  
24 send to Dana or me, or both, and it would be very helpful.

25 DR. POWERS: It looks like they've got some pretty

1 good people in those research programs, and so if we can give  
2 them some idea on how to true up their activities and  
3 directions are most useful to you, and I think we'll get some  
4 good results out of it.

5 MR. CHRISTIANSON: Our next topic is security issues  
6 in the region. Anne Boland is the branch chief for the plant  
7 support branch, she has the health physics inspectors, the  
8 radiation protection program, plus the security program she  
9 manages.

10 DR. POWERS: Anne, did you draw a short straw at some  
11 point?

12 MS. BOLAND: Some days I think so.

13 [Laughter.]

14 MS. BOLAND: I'm relatively new as the plant support  
15 branch chief. However, I think I can give you some  
16 perspectives on how well we've done in security, how we conduct  
17 business, and where I see some of the challenges.

18 Organizationally I'm in our security function in the  
19 Division of Reactor Safety, and as Chris indicated my branch is  
20 the plant support branch.

21 Staff-wise we have two qualified inspectors, one  
22 which is unavailable at this particular point in time. He's  
23 been called up in the reserves and is in --

24 DR. POWERS: He's working security big-time now.

25 MS. BOLAND: Yes, at Dobbins Air Force Base, and he's

1 been called up for about a year, so we're really not sure --  
2 he's been called up basically since right after September the  
3 11th.

4 We have one inspector, upward mobility inspector in  
5 training, and we recently got a contractor who was an ex-  
6 security inspector for us to come back under the dual  
7 compensation rule, so that's been a tremendous help for us.

8 DR. POWERS: What's an upward mobility inspector? md

9 MS. BOLAND: It's a person who -- Ken sitting right  
10 back there -- he came out of our HR group, and it's a  
11 developmental position basically which took a person who was a  
12 nonsecurity, noninspector type and developing him. I think  
13 you've been in the group, what, about a year and a half?

14 KEN: That's right.

15 MS. BOLAND: Yeah, about a year and a half developing  
16 additional expertise.

17 And then we have one regional inspector who's an HP  
18 inspector who's cross-training in the security area. We just  
19 started that -- we just began that within the last couple of  
20 weeks.

21 So that's kind of where we're at in staff.

22 Overall I think our mission is probably pretty self-  
23 explanatory. We inspect the nuclear power reactors for  
24 compliance with regulation in risk-significant areas on the  
25 ROP, and to determine and verify that they can protect against

1 the design basis threat.

2 And I'll go through what our baseline inspections  
3 program encompasses in a minute.

4 In case you're interested, there is also security  
5 inspectors located in the division of nuclear material safety  
6 and safeguards, or nuclear material safety.

7 They are responsible for inspecting the fuel  
8 facility, Cap 1 facilities and Cap 3 facilities. That is not  
9 within our division, that is in another division, but we  
10 coordinate with them pretty much on a regular basis on security  
11 issues.

12 We also manage and implement the security plan with  
13 respect to the control of safeguards information. That is  
14 pretty much done totally within our group. We developed the  
15 security plan, we audited against it, and we assure material is  
16 properly controlled up here in the region and at the resident  
17 sites.

18 A significant effort these days is supporting  
19 headquarters in program development activities. As I'm sure  
20 you're aware, there's a lot of actions going on with respect to  
21 top-to-bottom reviews of the security program, regulations,  
22 order development, et cetera, and we to the extent that we can  
23 will resource standpoint. We think it's not only beneficial,  
24 but we really need to be a participant in that process with our  
25 field experience.

1           Implement post-9/11 activities. This also takes a  
2 substantial amount of time of mine and my staff's efforts, and  
3 I'll talk to this a little bit more, but there's a number of  
4 activities that are ongoing just from a daily activity  
5 standpoint on monitoring what licensees are doing, looking at  
6 potential threat and suspicious activity assessments and  
7 reports that we get from licensees.

8           And then the last one along those same lines is  
9 information assessment team participation. Chris is a member,  
10 I'm member, and we have one other member of my staff who  
11 participates on the IAT, which is the threat assessment  
12 component of the NRC. I don't know if you know of Burt Warren  
13 and that group in NSIR, but we work closely with them basically  
14 evaluating incoming information from the licensees on  
15 suspicious activities, et cetera, to determine what kind of  
16 follow-up might be required from the agency, and whether that  
17 information constitutes any kind of credible threat.

18           We look to licensees to make that initial  
19 determination, but we do also take a look at that information.

20           MR. LEITCH: We've heard some information in the  
21 public press and the media about a threat to nuclear plants  
22 around the July 4th holiday. Is there any substance to that?  
23 I mean is there such a warning that's gone out to the plants or  
24 anything like that?

25           MS. BOLAND: We did issue an advisory to our plants,

1 and basically what we indicated is that the NRC did not have  
2 any information to support those news reports.

3 MR. REYES: We actually issued an advisory to clarify  
4 all the noise that we have heard. We have no specific credible  
5 information that will say July the 4th a nuclear power plant is  
6 of concern.

7 July the 4th nationwide is of concern, but we  
8 specifically have issued an advisory because there was a lot of  
9 news media information, and the licensees really needed  
10 clarification.

11 MS. BOLAND: I think we did that in the neighborhood  
12 of about three weeks ago, three or four weeks ago.

13 The baseline inspection program, I have outlined  
14 essentially the procedures that we use under the ROP for the  
15 baseline inspection program. They include behavioral  
16 observation, escort responsibilities, detecting individuals who  
17 are having aberrant behavior, substance abuse, mental kinds of  
18 aberrant behavior issues.

19 Access control, this procedure primarily focuses on  
20 personnel search requirements, access requirements into the  
21 plant for people and biometrics, and then also vehicle  
22 searches.

23 MR. REYES: Hopefully you saw some of that yesterday  
24 at Watts Bar.

25 MR. ROSEN: Yes. It was very encouraging.

1 DR. POWERS: You know, they have an active control  
2 program, they have lots of gates and guards.

3 The issue still comes down to insiders during  
4 shutdown operations.

5 MR. REYES: The commission right now is wrestling  
6 with the policy -- I think you're talking about access during  
7 outages prior to getting your thorough background search -- I  
8 think you're going to see a change in the policy.

9 I can't predict, but I have talked to enough  
10 commissioners that I think you're going to see a significant  
11 shift on that and that policy. How it's going to be  
12 implemented I don't know. It's clearly a big change for the  
13 industry, the industry is going to have to change the way they  
14 do business, so I don't know the timing, but it's clear to me  
15 the commissioners are gearing up to make one of the changes.

16 DR. POWERS: The outages could be interesting is what  
17 you're saying.

18 MS. BOLAND: And the temporary access issue has been  
19 around a while, and I think in the near term we're going to be  
20 dealing with that.

21 DR. POWERS: You said you didn't know the timing, you  
22 said this fallout is going to be interesting. Are we talking  
23 about that kind of immanency?

24 MR. REYES: Yes, short-term.

25 MS. BOLAND: Very short term.

1 MR. REYES: Very short term.

2 MS. BOLAND: Access control searches, I mentioned  
3 that. The first two are annual inspection requirements.

4 The third procedure is response to contingencies.  
5 That's a triennial inspection procedure which basically  
6 involves assessing a licensee's strategy for actually  
7 responding to an event, looking at the target set analysis,  
8 looking at weapons demonstrations and weapons qualification  
9 training, training of the guard force, et cetera, and that's an  
10 every-three-year requirement.

11 Also we have a requirement to review all the physical  
12 security plan changes that come in to determine whether the  
13 licensees are allowed to make certain changes to their plan  
14 without coming to the commission for approval, as long as those  
15 changes don't decrease the effectiveness of the plan, kind of a  
16 5059 sort of thing. We do an evaluation of those changes to  
17 determine if in fact they decrease the effectiveness.

18 The ISFSI facilities, we have a second inspection  
19 procedure for that. If an ISFSI is located inside the  
20 protected area it's assessed consistent with the site security  
21 plan. This procedure applies only to those ISFSIs which are  
22 not located within the primary protected area.

23 Of course the OSRE inspections, and then performance  
24 indicator program, we do the verification there. We have three  
25 performance indicators in security, one related to equipment,

1 one related to fitness for duty on personnel reliability, and  
2 one related to access authorization. So we do that on an  
3 annual basis as well.

4 MR. LEITCH: One thing that I notice that's kind of  
5 uneven as you go from site to site is procedures for getting  
6 into the protected area are pretty standardized, but the  
7 procedures for getting into let's say the owner-controlled  
8 area, particularly parking lot areas and things of that nature  
9 are very, very uneven.

10 We were down into Watts Bar yesterday, and at the  
11 perimeter point the bus was searched, but yet there are other  
12 sites where it seems like it's a wave and you drive into the  
13 parking lot.

14 I guess one thing that concerns me is even though I  
15 know that the protected area perimeter is far enough out that  
16 like a truck bomb or something like that couldn't, you know,  
17 based on the present design basis could not damage vital  
18 equipment, a great deal of harm could be done to the industry  
19 from a public relations viewpoint if someone was to, you know,  
20 get some kind of an explosive device in the parking lot of a  
21 power plant.

22 Are we planning to do anything at the owner-  
23 controlled area perimeter?

24 MS. BOLAND: I can't give you for safeguard reasons  
25 the details, but the answer is yes. I think the ICMS, the

1 inner compensatory measures that were implemented or imposed on  
2 licensees via order will do some of that, and there are various  
3 stages of implementation.

4 MR. REYES: The easiest way to answer is the review  
5 on the DVT will get to the point you're making, without getting  
6 into detail will get to the point you're making.

7 MR. LEITCH: I understand.

8 DR. BONACA: These procedures are pretty much the  
9 same procedures that you had before September 11th; right?

10 MS. BOLAND: Not in the owner-controlled area.

11 MR. REYES: Not in the owner-controlled, exactly.

12 MS. BOLAND: That is correct, and I'm going to talk  
13 to you about what's coming up. But, yes, these are procedures  
14 that were in place prior to September 11.

15 MR. REYES: That's everything we always had.

16 MS. BOLAND: You're going to see -- kind of trailing  
17 in on the question there, you're going to see some variability  
18 in OCAs --

19 MR. REYES: Owner-controlled areas.

20 MS. BOLAND: -- owner-controlled areas also having to  
21 do with the configuration of the licensee's site.

22 MR. REYES: Sure, yeah.

23 MS. BOLAND: And, you know, their determinations on  
24 where they need to make certain searches and things like that,  
25 so you're going to see a little bit of that potentially.

1           But I think that we continue the reassessment and the  
2 order implementation will bring some consistency to that,  
3 hopefully some increased consistency.

4           The baseline inspection program, immediately  
5 following September the 11th it was suspended. From a security  
6 standpoint we were focusing on the post-9/11 response  
7 activities, dedicating most of our staff to that effort, and  
8 they did suspend the program until March 1st of 2002.

9           And at this point with respect to the baseline  
10 inspection program only the expectation is that we will  
11 complete 60 to 80 percent of those procedures that I just  
12 discussed by the end of the cycle.

13           And then this -- I have annotated the record over  
14 here. This last bullet is incorrect, and you may want to --  
15 basically the OSRE program certainly was in effect prior to  
16 September the 11th. It was suspended following September 11th,  
17 and the reason for that was really because of that high-threat  
18 environment, and the determination of whether it was really  
19 appropriate in that environment to be dedicating those  
20 resources to a drill activity. So if you wouldn't mind, please  
21 annotate your slide, and I apologize for that.

22           MS. WESTON: What is the increase in the resources  
23 that needs to be dedicated to this after September the 11th?

24           MS. BOLAND: We are in the process of -- well,  
25 headquarters has given us a temporary instruction, a draft, to

1 tell us what the inspection effort is, and so I don't have  
2 refinements for you on exactly how many people that's going to  
3 take to do that.

4 MR. REYES: Let's explain that a little bit.

5 Since September 11th the agency has changed its  
6 processes, and we had to dedicate our staff to that versus the  
7 routine program, and it included now we have direct reports  
8 from the licensees on suspicious activities, and they get  
9 processed all the way through Anne and to me; I get now reports  
10 that I never got before for obvious reasons.

11 The increasing workload we can't size it now because  
12 the new procedures, you were asking about the follow-up on the  
13 orders are not finished yet, so we can't tell what that  
14 workload is going to be.

15 What we had in the past was a delta, and that delta  
16 because nothing had taken off complete we have the baseline  
17 program we're going to establish again that we always did, plus  
18 the post-9/11 orders implementation review, and that still is  
19 being sized, that's still being prepared.

20 MS. BOLAND: We're still evaluating exactly what we  
21 want to look at and follow up, and exactly what resource is  
22 going to be needed to do that.

23 MR. CHRISTIANSON: Prior to September 11th our  
24 baseline program was roughly about 2 to 2 1/2 FTE.

25 MR. REYES: For this region.

1           MR. CHRISTIANSON: For the region, right. And we're  
2 still figuring that out.

3           MR. REYES: It will be more than that.

4           DR. POWERS: It's a good bet that it's going to be  
5 more than that.

6           MS. BOLAND: Yeah, it is, and we're trying to plan  
7 for that.

8           MR. REYES: We're trying to size that, and the other  
9 thing is you don't need the same skills for every inspection  
10 activity we talked about here. Access control, review of  
11 records, and all that, you don't need the same skill as you do  
12 with strategic mockup attack on the plant, et cetera, et  
13 cetera, so not only is the volume an issue, the volume FTE  
14 meaning of resources, but the skills profile of what we're  
15 going to do in the future versus now. So we don't have a good  
16 grasp of that yet.

17           MS. BOLAND: And some of that probably won't come out  
18 of the security group, there's an emergency planning component  
19 to that follow-up, and also an operational component to that  
20 follow-up, so it will be an integrated effort. We don't have  
21 the full picture yet on exactly how it's going to work.

22           I think Loren touched on a couple of these issues  
23 this morning. Just to kind of give you an idea without talking  
24 specific sites of the kinds of issues that we have identified  
25 about last year, I think the first one Loren did talk about in

1 detail this morning was a white finding having to do with OSRE  
2 performance at one of our sites, so unless you have a specific  
3 question I won't go into that any further.

4 We have identified a potential generic issue which we  
5 have discussed with headquarters and are looking at drafting  
6 generic communication on involving for-cause testing, and  
7 specifically this has to do with whether or not licensees are  
8 requiring mandatory testing of employees who are involved, have  
9 a human performance issue that results in an accident that  
10 causes a personnel injury.

11 The regulations are pretty clear in that regard, but  
12 I think we've seen some different interpretations about some  
13 our licensees, and so we have initiated the process to try and  
14 get that communicated, and I think they are factoring it into  
15 future rulemaking.

16 We have had some issues, again without going into  
17 specifics, some historical issues on intrusion detection system  
18 coverage, and in fact two of those issues recently went through  
19 our backfit process, which was an experience for me having only  
20 gone through that twice, those two times, but it was an  
21 interesting process, but both of them involved IDS and whether  
22 or not they were in compliance with their physical security  
23 plan.

24 DR. POWERS: You said your backfit procedures --

25 MS. BOLAND: The agency's backfit procedures.

1 DR. POWERS: So you do a regulatory analysis, and --

2 MS. BOLAND: Actually it went through the Region II  
3 backfit panel, we made a decision it, and it did not have to go  
4 to a regulatory analysis.

5 MR. REYES: We have internal procedures.

6 DR. POWERS: You provided staff.

7 MS. BOLAND: Yes.

8 Control of safeguards information, we have been  
9 extremely -- not that we weren't before, but extremely  
10 sensitive to this whole area post-9/11, and we have had at  
11 least an issue at one site involving control of safeguards  
12 information.

13 Personnel searches, these were issues that were  
14 actually identified pre-9/11 on having to do with the adequacy  
15 of searches of individuals coming into the protected area, and  
16 then also the last one was an inadequate compensatory measure  
17 for out-of-service equipment which was identified pre-9/11. So  
18 the majority of these issues are pre-9/11 issues.

19 DR. POWERS: Let's talk about compensatory measures.  
20 An incident at a plant, it happened not to be in this region,  
21 if I can remember correctly detection equipment at the boundary  
22 failed Saturday night. The plant manager says, oh, well, I'll  
23 post a guard there and then on Monday I'll call the guy that  
24 fixes these things and he'll come and fix it. He still gets a  
25 finding on this, puts it in one of the corners. But should he?

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He's installed a compensatory measure here, he's had an equipment failure -- a diode went out or something like that. Should that count against him since he's --

MS. BOLAND: It gets rolled into the PI.

DR. POWERS: Yeah, I know,

MS. BOLAND: Upon identification if they take adequate compensatory measures the only implication there is it's factored into the PI.

DR. POWERS: That's not an only, that's a significant, though. Should it?

MR. REYES: If their equipment is out of service for so many hours there is a significance to it. I don't know --

DR. POWERS: Yeah, but they know it went out like immediately, it just went out, so there was no time in which they were vulnerable.

MS. BOLAND: Right.

DR. POWERS: Okay. And they instituted a compensatory measure very quickly. I mean it was an obvious compensatory measure, they put a guy there to watch it instead of a camera there to watch it. Should that count against them? I mean I will admit if it had been out for five hours, no question.

The argument putting it on there is something did fail with this. It happened to not be something with

1 maintenance where one of these electronic things that just dies  
2 on you and no one actually knows why they die, they just die.  
3 But the question here is one of fairness in clicking that  
4 performance indicator.

5 MS. BOLAND: Well, I think one of the principal  
6 purpose of the performance indicator is you monitor the  
7 equipment reliability, and we look for trends on, you know, are  
8 they seeing similar kinds of failures, is there some issue here  
9 that needs to potentially be addressed.

10 So it's giving us more of a heads-up so to speak on  
11 ensuring that that equipment is being reliably maintained and  
12 functioning. I don't know if that is --

13 MR. REYES: I don't know if it's fair or not, but  
14 I'll tell you the next time on Saturday he's going to call the  
15 mechanic to fix it.

16 DR. POWERS: Yeah, as a matter of fact he's going to,  
17 but he's irritated at having to do that.

18 MR. REYES: I know, and the agency -- I'm not saying  
19 it's fair, but the agency takes that position. The agency  
20 right or wrong takes that position that this number of hours is  
21 significant, and we know there may be occasions where it's not  
22 fair.

23 DR. POWERS: It's expensive. It strikes me as this  
24 is more a financial decision than it is one of security because  
25 he had done everything. He was never vulnerable, he

1 compensated. Now at this point if he wants to make a financial  
2 decision I can pay this repair technician \$5,000 to come out  
3 Saturday night, or I can pay him \$200 to come out Monday  
4 morning, it seems like we ought to let him manage the machine  
5 that way.

6 MR. ROSEN: It's not as simple as that, though,  
7 because now the guard is tied up watching this.

8 DR. POWERS: No, brought in an extra guard. There  
9 was not a guard there.

10 MR. REYES: Yeah, because by the security plan he's  
11 responsible for it.

12 DR. POWERS: Yeah, he had to bring in an extra guard,  
13 and that he can do very quickly; it's cheap.

14 MR. REYES: They're on call, and actually they  
15 usually have more than they need.

16 DR. POWERS: Yeah.

17 MR. REYES: I don't know, we do some things that are  
18 not fair.

19 MR. ROSEN: Nobody said it was going to be fair.

20 DR. POWERS: Well, we ought to move in that  
21 direction.

22 MR. ROSEN: I agree.

23 DR. POWERS: No, I don't have an answer to this. I  
24 was just interested in how to view these sorts of things.

25 MS. BOLAND: Post-September 11th activities, I have

1 already alluded to some of this:

2           Provided 24-hour security coverage in our IRC, and we  
3 were basically there thinking -- I don't remember the exact  
4 date, but well into December on 24-hour coverage.

5           DR. POWERS: You're going to have to remind me what  
6 IRC stands for.

7           MS. BOLAND: Instance response.

8           MR. REYES: Our emergency center. If you have some  
9 time, we have a very good one here.

10           MS. BOLAND: Manned with one manager and -- well,  
11 there wasn't the increased response immediately following  
12 September 11th, but in the long term we have 24 hours a manager  
13 and one member of the security staff to handle ongoing issues.

14           Some of the things that we were doing in the center  
15 involved coordination with licensees on how they were  
16 responding to advisories, we had input to advisory development,  
17 responding to incoming information from licensees, and  
18 monitoring what they were doing as well.

19           Conducted and coordinated Phase I, II, and III  
20 audits. I think this maybe follows onto one of the questions  
21 about, well, if your baseline inspection program was exactly  
22 like what you were doing pre-9/11, one thing that has been  
23 added onto that is as the advisories came out, particularly the  
24 October 6th advisory, we did what we called audits against  
25 those advisories, and they're called Phase I, II, and III

1 audits depending upon what component of the audit we were  
2 looking at -- prompt actions or additional actions.

3 And essentially the security staff, the resident  
4 staff, or the project engineers went out and looked at how  
5 licensees were implementing the advisories, and to also  
6 identify whether we had any concerns in how they were  
7 responding to those advisories.

8 IAT event reporting and follow-up. I have already  
9 mentioned that to you. That's taking a substantial amount of  
10 effort on our part at this time because we have asked the  
11 licensees under the advisories to basically report any  
12 suspicious activity to us.

13 We are getting a wide variety of reports of, you  
14 know, public citizens seeing someone that they didn't think  
15 looked like they should be there, or taking a picture, or doing  
16 something of that nature, and we're basically getting involved  
17 in making our management aware, assessing it to see if we need  
18 to do anything in the immediate term, and making sure that the  
19 appropriate groups in NRC are informed of that.

20 MR. REYES: In addition to that we're adding to that  
21 intelligence, our intelligence such as is that also happening  
22 at conventional power plants, are you seeing people approaching  
23 and taking pictures and asking this question at a conventional  
24 power plant and we have another situation very similar at a  
25 nuclear power plant.

1           So there's a lot of more tracking of issues that's  
2 taking our time that didn't exist there before.

3           MS. BOLAND: There really is.

4           DR. POWERS: We got several reports from Watts Bar  
5 about a suspicious group in there yesterday.

6           MS. BOLAND: Yesterday?

7           DR. POWERS: You might get several.

8           MR. ROSEN: But not really threatening because  
9 they're aged.

10          DR. POWERS: And they were mechanized.

11                           [Laughter.]

12          MS. BOLAND: We're also responsible for interface of  
13 work with law enforcement. My staff who are the three guys  
14 back there, on the back row back there, do follow-up work with  
15 local law enforcement, and our office of investigations works  
16 with the FBI, so we work with them to information on things  
17 that are going on and responding to sites.

18           Again, this is just another bullet, but it has taken  
19 a substantial of regional effort is to support the headquarters  
20 programmatic initiatives.

21           I'm sure you're aware of top-to-bottom review of a  
22 program that's underway which includes a lot of components to  
23 it. You know, you're looking at regulatory changes, order  
24 development, inspection procedure development on how to inspect  
25 against the orders, et cetera, et cetera. So we devote a fair

1 amount of time to that.

2 DR. POWERS: Let me ask you a question on that. We  
3 have handled a lot of cornerstones, your being one of them.

4 MS. BOLAND: Uh-huh.

5 DR. POWERS: In all these other cornerstones -- or  
6 not all of them, but many of the other cornerstones you see  
7 this drive toward analysis, quantitative analysis,  
8 confrontational tools and whatnot.

9 This cornerstone persists in being a largely manpower  
10 subjective intuition and experiential-based analysis. What do  
11 you think about that?

12 MS. BOLAND: You're talking SDP?

13 DR. POWERS: I'm thinking about just the way they go  
14 about analyzing things. I mean twenty years ago we did fire  
15 protection all based on experience and judgment.

16 Now we actually do something called fire risk  
17 assessment, certainly fire hazards analysis, much more  
18 computational work, fire propagation modeling, and things like  
19 that.

20 Here you're still largely working based on  
21 experience, standards, intuition and whatnot. Is that a good  
22 thing, or is that a bad thing?

23 MS. BOLAND: Well, from the standpoint -- we are --  
24 we don't have models, we don't have sophisticated modeling and  
25 things of that nature, but as far as we are pulling in the

1 reactor analysts to help us in making our decisions like for  
2 what scenarios we run during an OSRE.

3 DR. POWERS: Yeah, you do your vital site five-point  
4 analysis, primary analysis.

5 MS. BOLAND: Right. So we are pulling in that kind  
6 of insights into how we are trying to evaluate the licensee's  
7 strategy.

8 As far as long-term what the plans are going to -- I  
9 think I'm interpreting your question more upon to performance  
10 evaluation as opposed to how you inspect against behavioral  
11 observation access control kind of things.

12 DR. POWERS: Even in your own observational technique  
13 you're depending on a guy looking at something and saying this  
14 is out of the norm of what I would expect from this individual,  
15 you know, something is wrong here, and that's based on judgment  
16 and whatnot, and then those are often very delicate tools to  
17 analyze things.

18 On the other hand, it's very subjective, and maybe  
19 someone's performance is actually just as aberrant, but he's  
20 real careful not to do it in front of anybody that's watching  
21 him.

22 MR. REYES: And that's why my answer is we wish we  
23 had a model that would tell us, but if you taken up security  
24 what you're protecting against you're protecting against  
25 aberrant behavior, abnormal behavior, whether it's an insider

1 or an outsider. None of the scenarios we dream up a normal  
2 human being will do, so you're now working with abnormal,  
3 you're protecting against abnormal behavior from an individual  
4 or group of individuals with a choice of weapons and explosives  
5 and all that, and I'm not sophisticated enough to come up with  
6 some ideas on how to model that, and I think that's the problem  
7 it comes into, and I think how you really do it is by defining  
8 the design basis threat and saying the most likely you're going  
9 to have is --

10 DR. POWERS: The problem I have with -- I mean my  
11 main reaction to this design basis threat since we're  
12 reexamining design basis threats now is I say, gee, design  
13 basis has been so wonderful for us in the reactor safety arena  
14 by all means we should continue it here.

15 I mean TMI was a positive demonstration that design  
16 basis accidents really are a very, very restrictive sort of  
17 view on the world, and what you try to do is -- I mean once you  
18 have design basis threat you're really good at protecting  
19 against that threat which you will never see, because there  
20 will never be a design basis attack on you, an exactly design  
21 basis attack on a facility.

22 And your vulnerability when you focus on a design  
23 basis threat of course is you have no capacity to respond to  
24 the small deviations from that, or even large deviations from  
25 it.

1           So maybe the whole concept of design basis threat  
2 needs to be abandoned in the security area just as we've had to  
3 essentially abandon it in the reactor safety area.

4           I mean it seems to me that we were thinking about it  
5 before we got hold of something that did not serve us very well  
6 in the reactor safety.

7           MS. BOLAND: I don't know what form we're going to  
8 end up with, whether it's characteristics, whether it's --

9           DR. POWERS: Whether they use their ideas to pursue.  
10 One of the things I do know is that when we analyze Air Force  
11 facilities for integrate attach, which is much like your OSRE  
12 exercises we don't have design basis attacks, and we do do  
13 quantitative analysis of it.

14          MS. BOLAND: While I can't really get into the design  
15 basis of even the current one as to what it includes, but --

16          MR. REYES: We've got a briefing on that.

17          MS. BOLAND: Okay. Clearly licensees have  
18 complained int past with the OSREs on the variability and  
19 expectations, and I think it's fair to say you have to define  
20 what the parameters are, whatever form that takes, and then  
21 ensure that the licensees can adequately protect that.

22          Now, what form that takes and how you do that but,  
23 you know, licensees call it OSRE creep, they believe we weren't  
24 holding them to a consistent standard. The standard has got to  
25 be the right standard.

1           MR. LEITCH: There's also a dividing line I think  
2 which the agency is still trying to grapple with, a dividing  
3 line between what's the responsibility of the licensee and  
4 what's the responsibility of the agency.

5           MS. BOLAND: You may have a design base threat, and  
6 that may not --

7           MR. LEITCH: And that's where it's really happening.

8           DR. POWERS: That's made well above my pay grade,  
9 I'll tell you that. That's a political decision. That's why  
10 we pay the commissioners big bucks to decide that.

11           I mean the challenge in the OSREs it seems to me are  
12 twofold. One is is the evaluation subjective, and then since  
13 it's a high rate of failure the guy makes some amendments  
14 whether those modifications and changes have in fact addressed  
15 the problem and made it so that he would succeed if reran the  
16 exercise is also subjective.

17           It's a highly-subjective area, and the question is  
18 should it continue to be a highly-subjective area, and I don't  
19 know the answer to that.

20           I think I'm like you, I haven't got a clue how to do  
21 it any other way. But I think it's worth asking the question.

22           MS. BOLAND: The second to last bullet here, one of  
23 the ongoing things is we're monitoring licensees' deployment of  
24 resources on a weekly basis.

25           DR. LARKINS: Is there a limit on the number of hours

1 security people can be on shift? because I've heard that  
2 they're working 72/6 since 9/11, and it seems like that would  
3 have a potential impact on their ability to perform.

4 MS. BOLAND: Right now there's no regulatory  
5 requirements that cover security with respect to overtime.  
6 They're not typically -- and I'll say typically because every  
7 tech spec is different -- but typically they are not covered by  
8 the technical specification on overtime.

9 I know that there are some initiatives --

10 MR. REYES: In Region II I can tell you, I won't say  
11 all, but most licensees have recruited additional guards  
12 because they realize that what appeared to be a temporary  
13 situation is going to become a permanent situation, and it  
14 takes a while to train these individuals, and I won't come up  
15 with a number, but there is a number I can share with you in  
16 private about how many guards have been added to each station,  
17 and it's substantial, because of the long hours and  
18 compensatory time.

19 DR. POWERS: We got some numbers from Watts Bar.

20 MR. REYES: Okay. You got that. Okay. In Region II  
21 almost every plant has added about that number in addition to  
22 what they had before because of that issue.

23 DR. LARKINS: It seems like it ought to be something  
24 that's looked at in terms of reliability or --

25 MR. ROSEN: Absolutely. We have to think about what

1 we're expecting these people to do.

2 MR. REYES: It's in the plate.

3 MS. BOLAND: And we have our residents have their  
4 eyes and ears open for any issues along those lines that arise  
5 that they see, and they get back to us.

6 MR. REYES: We had some feedback after September 11,  
7 not immediately, it wasn't long those issues did surface.

8 MS. BOLAND: And I think our licensees are actively  
9 trying to --

10 DR. POWERS: Figure out how they can afford all this.

11 MR. LEITCH: My impression is that there's -- as we  
12 speak there's almost immediate relief. In other words, some of  
13 the people that were hired are just beginning to come out of  
14 the training pipeline now, and I was talking to a licensee last  
15 week who by July 1st really expects some significant relief to  
16 this problem, which admittedly has been a difficult issue for  
17 several months, but it should be coming to an end.

18 MS. BOLAND: Several of our licensees I know in our  
19 routine interactions with them I've heard June, July, you know,  
20 making changes, having additional people. I've heard the same  
21 thing from a couple of folks.

22 Lastly, and I may not have characterized that exactly  
23 right, I said rise in allegations. I would say a rise in  
24 issues raised by public citizens relating to security. Some of  
25 them don't meet the definition of an allegation, but we still

1 answer that person, respond to that person, but we have post  
2 9/11 -- I think it's kind of tailing off a little bit now -- we  
3 had a marked increase in people calling in with various things,  
4 some more generic in nature that we would send up to  
5 headquarters to have them incorporate into their review, some  
6 that were very site-specific.

7 And it's a challenge -- Excuse me.

8 MR. ROSEN: Of course without telling us anything you  
9 can't tell us, to me that set of words means something about  
10 the plant staff itself saying that there's something wrong.

11 And you used some words that led me to believe we're  
12 dealing with external, these are outside the plant, not  
13 internal. I'd like you to clarify that.

14 MS. BOLAND: Yeah. We saw the -- I would say we saw  
15 a rise in things coming from members of the public. We have a  
16 fairly consistent workload in the security arena anyway in the  
17 allegations area.

18 But we did get some concerns, you know, without  
19 getting into the specifics of the sites and everything from  
20 members of the plant staff asking many of the same questions  
21 that members of the public were asking, or -- and we saw a  
22 little bit of this post order -- because of the order being  
23 safeguards and the provisions of the order people didn't quite  
24 understand totally what's going on, so they'll say "Oh, I saw  
25 this change, and it doesn't make sense to me," or "Am I sure

1 that it's, is it okay." They don't understand what all is  
2 going on and why. But we still follow up on that.

3 And it's limited in the answer we can give them. All  
4 we can say is --

5 MR. REYES: We have the same problem, we can't give  
6 them the specific answer.

7 MS. BOLAND: Right.

8 MR. REYES: But we will say this is in compliance  
9 with the NRC order, it is a change that is endorsed and  
10 required by the NRC.

11 MR. ROSEN: And you tell them that while we want to  
12 answer your question we can't give you the full details.

13 MS. BOLAND: And we try to explain that to them.

14 MR. ROSEN: Yeah.

15 MR. REYES: Most of them understand.

16 MR. ROSEN: Most of them understand that.

17 MS. BOLAND: So it's a mess.

18 DR. POWERS: I would say that generally a member of  
19 the public thinks more things should be secret than what really  
20 are. I mean I think they think more things are classified than  
21 what are really classified, as a general rule.

22 MS. BOLAND: Future challenges. I think we've pretty  
23 much touched on some of these.

24 Inspection follow-up on orders. We're still working  
25 on that trying to also determine what resources it's going to

1 take to do that in total, how we need to do it.

2 Participation in the agency policy decision-making.  
3 Vulnerability assessments. A lot of this has not been  
4 finalized, but we have been discussing with the industry, going  
5 out and doing table-top exercises force on force, the kinds of  
6 drills in the long term --

7 DR. POWERS: Let me ask you about table-top  
8 exercises. There has been criticism of table-top exercises in  
9 just about every place that they're used.

10 MS. BOLAND: Right.

11 DR. POWERS: What do we have for a quantitative  
12 demonstration that table-top exercises are in fact a useful  
13 exercise, yield meaningful results.

14 MS. BOLAND: Quantitative?

15 DR. POWERS: Yeah.

16 MS. BOLAND: I don't have that answer, if there is  
17 one.

18 You know, it's a tool that we utilize in the  
19 inspection process.

20 DR. POWERS: And when we do that, and we do it in a  
21 lot of areas. I mean it's not just in the security area.  
22 Table-top exercises are used for emergency planning and things  
23 like that.

24 But the question is since it has been heavily  
25 criticized, not only individual table-top exercises but

1 globally the whole strategy, what theoretical or experimental  
2 foundation do we have for thinking that it's any useful tool?

3 MR. REYES: Let me give you my view from observing  
4 them.

5 DR. POWERS: Okay.

6 MR. REYES: And I don't know if this is a sufficient  
7 good answer, but in my view what they do is they actually  
8 engage the security workforce and the licensee, because it  
9 includes the operations department and all that stuff, when you  
10 sit down across the table and you have a mockup of the  
11 facility, and you simulate, and you say you have so many  
12 intruders this way, and so many intruders that way, how would  
13 you strategize to stop this particular attack, it makes you  
14 think through what you will do in that particular situation, so  
15 if you ever encountered that at least you would have been  
16 walked through and thought through.

17 Where I think licensees have the problem with is when  
18 we end up grading them, or saying, oh, we added three more  
19 ninjas over here, you know, and I understand that there's  
20 subjectivity in the lack of perhaps defined rules of  
21 engagement, but the exercise in itself I think it has a  
22 positive effect in that you have thought through this, and at  
23 least the ones that I observed my view was a success. I'm not  
24 sure the licensee would agree with that, but it was a success  
25 from the point of view that you have now security and

1 operations working through the mental process of if you are in  
2 this situation how will you terminate or minimize the impact on  
3 the station.

4 That particular exercise to me has a value. Whether  
5 it's worth all the --

6 DR. POWERS: It's like I was sent off to management  
7 training school they said, eh, the class itself is not as  
8 terribly important that you have time to think about something  
9 about this job of management, or this job of security, or this  
10 job of emergency preparedness, whatever it happens to be is  
11 where the real value is coming, and that's what you're saying.

12 MR. REYES: Yeah.

13 DR. POWERS: It gives everybody a chance to think  
14 about it.

15 MS. BOLAND: And they're fairly -- I mean they get  
16 down to times, seconds. You know, it allows you to get a big  
17 picture view of their strategy.

18 And then many times during our OSRE programs we use  
19 the information we gathered from the table-tops to look at the  
20 actual response in the demonstration.

21 MR. REYES: We basically say show me.

22 MS. BOLAND: Yeah.

23 MR. REYES: And we actually execute it.

24 DR. POWERS: This is an interesting one to put in our  
25 research pallet to prove what the value of these things are.

1 MR. ROSEN: Not a fire protection.

2 DR. POWERS: Lots of things aren't fire protection,  
3 Steve.

4 MR. ROSEN: I know, but those are the things we're  
5 here to talk about.

6 DR. POWERS: No, it's not, not exclusively.

7 MR. REYES: I have to apologize. I have a call that  
8 I cannot skip, and I'll be right back.

9 MR. ROSEN: All right. We're going to take a break  
10 anyway whenever you're done.

11 MS. BOLAND: I'm really done. The last one was  
12 developing, retaining, and obtaining staff, and that's really a  
13 function -- we've had some losses in our group. You have the  
14 reserves, retirement, go into the utility --

15 DR. POWERS: If you weren't to mean to them --

16 MS. BOLAND: Yeah. That was before I came.

17 [Laughter.]

18 MR. LEITCH: I have a question about the authority of  
19 the guard force, and I guess I'm under the impression, I don't  
20 know if it's correct or incorrect, but there's variability from  
21 state to state as to what the authority of the guards -- Well,  
22 let me explain by example.

23 Suppose you're at the protected area boundary and  
24 someone shows up ready to smuggle in a hand grenade or  
25 something, and you detect that. Do you just send the person

1 away and say I'm sorry, you're not allowed in with your hand  
2 grenade, and in the meantime call the local police and hope  
3 they get there in time, or can you physically restrain that  
4 person, and does that action vary from state to state, and  
5 should it? Is there some federal action required in that area?

6 MS. BOLAND: I think the issue is the use of deadly  
7 force varies from state to state, whether they can use deadly  
8 force to protect the property.

9 Certainly if their being is being threatened they can  
10 use -- if that's the real question, that varies from state to  
11 state is the use of deadly force. And I know that that's on  
12 the table with headquarters and they're looking at trying to  
13 have regulatory action to try to --

14 DR. POWERS: It's a Senate bill.

15 MS. BOLAND: Yeah, and I know NER is developing a  
16 white paper, I heard that a couple of weeks ago, on their  
17 position on it, but it's going to take federal legislation.

18 MR. LEITCH: Okay. I just wasn't sure, and it just  
19 recently came to my attention, and I'm glad other folks are  
20 aware of it.

21 MR. ROSEN: How does your response answer this  
22 question? You answered on deadly force.

23 MS. BOLAND: Yeah.

24 MR. ROSEN: Would it take deadly force? I don't  
25 think so. It could, but it wouldn't necessarily. Essentially

1 the guard needs to say please sit down here, and emphasize the  
2 word please, and --

3 MR. LEITCH: And if the guy with the hand grenade  
4 says I'm out of here --

5 MS. BOLAND: I think as far as their constraints it  
6 only is the use of deadly force constraints, to my knowledge.

7 MR. ROSEN: So you can do anything except shoot the  
8 guy.

9 MR. CHRISTIANSON: Unless he's protecting himself.

10 MR. ROSEN: Unless he's protecting himself.

11 MS. BOLAND: Yeah. If he's protecting himself he can  
12 use deadly force.

13 MR. ROSEN: You can handcuff the guy, for example.

14 MS. BOLAND: I believe so.

15 MR. CHRISTIANSON: I'm not sure that that's the case  
16 in every state.

17 MS. BOLAND: I believe so. I don't know. I can try  
18 to get you an answer there. I don't believe that there are --  
19 you know, when you start talking about the owner-controlled  
20 area versus challenging the PA there may be some issues there  
21 as well as to what they could really do like out at the edge of  
22 the owner-controlled area, then the threat to the plant is not  
23 as increased.

24 But certainly they have the capability to respond. I  
25 can get you an answer.

1           MR. LEITCH:  You've answered me enough that I know  
2 that the issue is on the table --

3           MS. BOLAND:  It is on the table.

4           MR. LEITCH:  -- and that further action is under  
5 consideration.

6           DR. BONACA:  Right now they carry a weapon.

7           MS. BOLAND:  Yes.

8           DR. BONACA:  So they must have procedures of the  
9 conditions under which they can use the weapon.  Is it only in  
10 self defense?

11          MS. BOLAND:  Their ability to use deadly force -- and  
12 I want to stick to what I can really answer -- has variability  
13 from state to state.  But they do have response weapons that  
14 can be used.

15          DR. BONACA:  Sure.

16          MR. LEITCH:  Once you're inside the protected area,  
17 but the --

18          MS. BOLAND:  The real issue is outside.

19          MR. LEITCH:  The real issue is to repel them, you're  
20 rejected from the protected area.

21          MS. BOLAND:  And we do talk to the security staff  
22 about the use of deadly force when we do our inspections.

23                 I can get you a further answer on that if you need  
24 it.  But it is on the table.

25                 Anything else?

1 DR. LARKINS: In your last bullet there, are you  
2 looking for journeymen security experts, or do you bring in  
3 younger folks and train them in this area?

4 MS. BOLAND: We most recently brought in a contractor  
5 who clearly is experienced, came out of the Air Force, and then  
6 multiple years with the NRC.

7 But at this point any hiring I would be looking for  
8 would be an experienced security person, because we're already  
9 looking at cross-training someone else from another discipline,  
10 so I would be looking toward security experience.

11 DR. LARKINS: The reason I was asking is I was  
12 recruiting for the agency, and several of the universities have  
13 programs with people in security enforcement.

14 MS. BOLAND: Really the area that I see as being the  
15 greatest area of need is someone who has experience with  
16 strategy, vulnerability assessment, you know, somebody who's  
17 done that for a living.

18 Do you know anybody? Just kidding.

19 MR. CHRISTIANSON: That concludes the security  
20 issues.

21 On our schedule we're scheduled for a 15-minute  
22 break.

23 MR. ROSEN: I wanted to ask about that. Do any of  
24 the members feel they want to have one right now? If not, I'm  
25 fine to go on. You can take them one at a time if you want to.



1 branch chief, and he's here as a senior resident for this  
2 discussion;

3 Chuck Ogle is a branch chief, he's also the acting  
4 deputy division director of the DRS right now;

5 Bob Schin is a senior inspector in DRS;

6 Scott Freeman is a resident inspector; and

7 Rudy Bernhard is a senior reactor analyst.

8 Do you want to go first, Bob.

9 MR. SCHIN: Good afternoon. As I was introduced, I'm  
10 Bob Schin, I'm a senior reactor inspector, division of reactor  
11 safety.

12 I have been a regional inspector with the NRC out of  
13 the Atlanta office for fifteen years, and my experience is  
14 primarily inspecting operations, engineering, and occasionally  
15 other types of inspections.

16 Currently I'm primarily doing SSDI and fire  
17 protection inspections, and occasionally half a dozen other  
18 types thrown in. So that's basically what my experience is.

19 I want to give you a little disclaimer in that  
20 preparing for this the way the ROP works is that my inspection  
21 schedule is made out like a year in advance, and it's one  
22 inspection right after another, so I had very little time to  
23 prepare for this, and so that's why I spent very little time.

24 I didn't go check with all the other inspectors and  
25 see what they thought; I didn't check with these other guys at

1 all to see what they were going to say. It will be a surprise  
2 to me today what they say.

3 MR. ROSEN: You're doing exactly what we wanted.

4 MR. SCHIN: I'm glad that's what you wanted.

5 DR. POWERS: Your off-the-top-of-the-head comments  
6 are probably the most valuable to us.

7 MR. SCHIN: Okay. Good.

8 MR. PLISCO: What's scary is you had the least time,  
9 but you have the most slides.

10 MR. SCHIN: That's right.

11 [Laughter.]

12 MR. SCHIN: Anyway, first off I wanted to start out  
13 with the new program, and I'm just going to explain it as seen  
14 from my perspective as an inspector, not the overview numbers  
15 or what anybody else is looking at, but as a traveling  
16 inspector out of the region I see some benefits to the ROP.

17 First, it can improve public safety by allowing  
18 findings for issues that might be very important to safety, but  
19 not clearly required by a licensing basis. In other words, we  
20 can have findings without violations. We're not limited to  
21 show me the requirement as before.

22 MR. ROSEN: You just have to be making common sense.

23 MR. SCHIN: Right, and you have to show that there's  
24 safety importance.

25 In other words, the regulations that we have and the

1 licensing basis are not perfect at these sites, there's holes  
2 in them, and this allows us to get at those holes. Where  
3 there's a public safety issue we can address it.

4 The second thing is that it encourages inspectors to  
5 focus on more safety-significant issues by providing a  
6 rationale and a method for just walking away from issues that  
7 are not so important, that have minor safety significance. So  
8 I think that's important.

9 Next I have some challenges, and of course the list  
10 of challenges is more than what I said I saw for benefits, but  
11 let me put it in perspective.

12 Whenever you start a new program, a big program it's  
13 not going to be smooth. There will be bumps in the road, and  
14 there will be glitches, and we had some, and we still have some  
15 out there.

16 So some things I think were done reasonably well with  
17 this program. We had a trial period, we got most of the big  
18 bumps out of the way, but we didn't get them all out of the  
19 way, and there are still some out there, and I would like to  
20 focus on those.

21 First I noticed that the ROP creates a backlog of  
22 unresolved items that get untimely resolution. We have -- when  
23 we come up with an issue it can be unresolved now for both  
24 licensing basis issues which we had before, and additionally  
25 for safety significance questions, which is new. So we have

1 twice as many reasons to have something become unresolved, and  
2 sometimes particularly with safety significance since we  
3 haven't ironed out exactly how to handle that well. It takes a  
4 long time sometimes to resolve some of these issues. So that's  
5 a problem. We're working on it. Maybe over time it will get  
6 better, hopefully.

7 Another thing is that I notice that findings can  
8 present a potential negative impact on inspectors. There is a  
9 lack of guidance and time allowance for resolution of issues  
10 once you have an issue.

11 We tend to make these inspections schedules a year in  
12 advance, and we're scheduled for one inspection after another,  
13 and that timing works out fine if there's no findings. But if  
14 you have a finding that times comes out of your hide, you've  
15 got to address it, and it's hard, particularly if there's a  
16 finding that could be potentially more than green, or that's a  
17 contentious issue, and you now have more reasons to have  
18 contentious issues with the safety significance as well as for  
19 the licensing basis, the criteria.

20 So that's one problem. Sometimes you can feel as an  
21 inspector like, gee, I've got so many issues on my plate, such  
22 a backlog, and people are nagging me about what are you going  
23 to do about this one, and why is this one getting overdue, and  
24 in the meanwhile you're out on inspections, and you kind of  
25 think, gee, I can't afford to have any more findings.

1 MR. ROSEN: It's a very, very bad thing.

2 DR. LARKINS: The URI is the same as your open I  
3 inspection in the past?

4 MR. SCHIN: Right.

5 MR. LEITCH: And so now you just categorize it as  
6 different.

7 MR. CHRISTIANSON: In the past unresolved items were,  
8 they were unresolved because we had to determine what the  
9 enforcement requirements of the issue were, or we had other  
10 issues that we had to get additional information to make a  
11 regulatory determination.

12 These can be unresolved, aside from being an  
13 enforcement issue can be unresolved based on what the  
14 significance of the issue is. They're basically the same.

15 MR. SCHIN: Any other questions on that?

16 Okay. I notice that the ROP is more difficult for  
17 inspectors. You get challenged from the licensee first on  
18 what's the requirement, and then second what's the safety  
19 significance, and the safety significance part is something  
20 new, and people don't have enough training or understanding of  
21 it. We need probably better guidance training, examples, and  
22 encouragement in that area.

23 And then underneath that there's a lack of sharing of  
24 good findings, inspection report writeups and SDP analysis.

25 One problem is when you get into a new program

1 generally to have things -- it's always going to be bumpy, but  
2 to have things run as smoothly as you can you need a lot more  
3 communication back and forth, up and down the chain, and we're  
4 lacking in some of that.

5 We don't see out in the field good examples of  
6 inspection report writeups on findings of how the SDP Phase 2  
7 was worked through, and all of that stuff.

8 DR. POWERS: One of the suggestions to address that,  
9 you know, what's the experience -- what's the good experience  
10 that other people had if we had an inspectors convention in  
11 which inspectors from the regions would all get together,  
12 various regions would get together for three or four days maybe  
13 in which they would essentially share what they thought were  
14 good findings, and difficulties, and challenges, and things  
15 like that.

16 DR. LARKINS: They used to do that semiannually,  
17 something like that, and it would go from region to region, and  
18 all the resident inspectors and seniors would get together and  
19 share experiences. Is that not --

20 MR. PLISCO: We still do that, we do it twice a year.

21 DR. POWERS: But that's within the region?

22 MR. PLISCO: Within the region. There's only ever  
23 been one nationwide meeting.

24 DR. POWERS: Yeah, this would be a nationwide thing.  
25 I mean it would be everybody because the problem is it's a

1 small sample problem that you've got within any one region.

2 MR. SCHIN: One thing that we don't have that we  
3 could have is if there are good findings and writeups and  
4 inspection reports where you have to basically explain how you  
5 went through the SDP Phase 2, Phase 3, everything related to it  
6 now with this new manual Chapter 0612, you know, somebody could  
7 review those, there are findings out there, and pick some good  
8 ones and send them out to everybody and say here are some  
9 examples of some good ones and types of things. We don't do  
10 that.

11 One thing that's notable is in our manual Chapter  
12 0610, 0610\*, and 0612 there are no examples, no inspection  
13 report writeups. I mean every inspector when you give him  
14 something new to do the first thing he says is show me an  
15 example. We haven't done that, we don't do that.

16 DR. POWERS: It's the same way with everybody on  
17 something new.

18 DR. LARKINS: Let me ask another question. then.

19 There used to be a group called the TAG, training  
20 advisory group for training for residents, and base inspectors,  
21 and requalification. Is that still happening? because that was  
22 the group that would take comments from regions about modifying  
23 the courses, making the courses more friendly, inspector-  
24 friendly, and also consistent with the needs.

25 MR. CHRISTIANSON: The training advisory committee

1 has been suspended. What we just implemented in the last month  
2 or two months is that you have a brand new inspection training  
3 program, 1245, and that program has a built-in process to  
4 provide feedback to routinely evaluate the program, update it,  
5 and we just implemented that program basically in the middle of  
6 April.

7 And so we're in the first phases of that new program,  
8 which is hopefully going to address some of these issues.

9 DR. LARKINS: I used to be on the TAC, that's why I'm  
10 --

11 MR. SCHIN: Another thing I noticed was I went  
12 through the advanced PRA training, the training courses that  
13 all the senior reactor analysts go through during the last  
14 couple of years, and I noticed that it's not inspector  
15 friendly.

16 The first course is P102, probability and statistics  
17 for PR, and that one is notorious I guess, and my comment is --

18 DR. POWERS: It's not ACRS friendly either.

19 [Laughter.]

20 MR. SCHIN: You went to it?

21 DR. POWERS: I went to the syllabus on the thing.

22 [Laughter.]

23 MR. SCHIN: I commented to the instructors there, you  
24 know, this is terribly disorganized, you have different terms  
25 of different places, it's taught by guys who are good in math

1 and they get lost in the middle of a big equation on the board,  
2 and so -- and it's not all, it doesn't follow the formula of --  
3 the TTC does a good job of organizing training, and they have a  
4 certain format, but this is totally opposite, different from  
5 that.

6 So I asked them what -- you know, and the instructors  
7 acknowledged that, yeah, this is not good, so I said "Well, why  
8 don't you fix it?" and they said "Well, we need to get money  
9 from the NRC before we can fix it," so I guess there's a holdup  
10 there.

11 One thing that they've done is made it instead of  
12 being a one-week course they've extended into a two-week  
13 course, but still the training materials are the same.

14 MS. WESTON: Is this a contractor-taught course?

15 MR. SCHIN: Yes.

16 MS. WESTON: Okay, because we have one in-house also.

17 MR. ROSEN: If the utility tried to do what you've  
18 described in their training program the National Academy for  
19 Nuclear Training could lift their certification.

20 MR. SCHIN: I'm sure you got feedback from people up  
21 at headquarters that go to the course, or I don't know if any  
22 of you have sat in on it, but it's a good example of a bad  
23 course.

24 And one problem is that it's the first course, you  
25 have to take that before all the rest, it's a prerequisite, and

1 it kind of inhibits people, discourages people.

2 DR. POWERS: Well, on top of that I mean the problem  
3 is one of motivation, that you take this chaos and probability  
4 of statistics, there isn't a clue what you're going to do with  
5 it later, so you don't know what parts are important.

6 MR. SCHIN: Right.

7 DR. POWERS: Then you take the other part, but you  
8 were so confused on the other thing you can't figure out what  
9 in the world they're doing with the numbers here.

10 I mean it should appear as, okay, we've done some of  
11 the simple things now, we're going to do more complicated  
12 things, and in order to do more complicated things we've got to  
13 understand probability and statistics in more detail, and tie  
14 it more to where it's going to be used, because otherwise I  
15 mean it really was somebody trying to synopsise one of the  
16 classic texts on probability and statistics rather than  
17 thinking about what it was actually going to be used for.

18 MR. SCHIN: Right. You could probably take half the  
19 stuff in that course, throw it out, focus on the other what's  
20 important, and lay it out in an organized manner --

21 DR. POWERS: No more than half.

22 MR. SCHIN: -- make it easier. You take a somewhat  
23 difficult subject for some people and we just made it ten times  
24 as difficult with that course. It doesn't need to be that way.

25 And I think the way we're headed we're planning to

1 use that course a lot more, you know, send a lot more people  
2 through it.

3 The next item is that I noticed that inspectors don't  
4 seem to get feedback on ROP self-assessments. There is  
5 something described in the manual chapter that there are  
6 periodic self-assessments, and we don't get much feedback on  
7 what's going on with the program, what improvements are being  
8 made, that type of thing on a routine basis.

9 DR. POWERS: They produced a pretty nice report on  
10 that.

11 MR. SCHIN: Is that on a Web site or something?

12 DR. POWERS: Executive paper. It's actually a pretty  
13 nice report. It's not half bad. We should just mention to  
14 them to get out to the inspectors, they would like to see it.

15 And there's another one coming out. So I mean that's  
16 why we're here, we're gearing up for our input.

17 Just giving everyone the report doesn't sound like an  
18 enormous chore to me.

19 MR. PLISCO: It's about this thick [indicating].

20 DR. POWERS: Yeah, but there's an executive summary  
21 on it that's five pages long that's pretty good.

22 MR. PLISCO: Bruce is listening, he's taking notes  
23 back there.

24 MR. SCHIN: The next bullet I have is that I notice  
25 that licensee PRAs lack standards and quality. They contain

1 more errors than the FSARs.

2 On some of these SSDI inspections I picked out -- you  
3 know, we'd go on an inspection and we'd look at PRA as well as  
4 the FSAR, tech specs, design basis documents, et cetera, and I  
5 actually found a number of errors in the PRAs, and that's not  
6 surprising considering the lack of requirements and the lack of  
7 review that they've had.

8 But we seem to be basing more and more on these PRAs,  
9 and I notice that our inspection program does not include  
10 inspector review of PRAs for accuracy, and this is some  
11 opportunities to improve the PRAs.

12 In other words, if we included it as one bullet in  
13 the SSDI inspection procedure to check the PRA and is it  
14 consistent with the plant design, and does it have errors in  
15 it, the licensee -- my original feedback from the licensee  
16 where I looked at their PRA, they were a little upset, why am I  
17 looking at this, there's no requirements to have it, you know,  
18 and I said, well, if I find an error it won't be a violation  
19 then. So I give you that information for whatever you want.

20 MR. ROSEN: You told the licensee here's the error,  
21 and you pointed it out to their person who was responsible.  
22 And what did that person say other than why are you looking at  
23 this?

24 MR. SCHIN: No, no, they gave me feedback on it, they  
25 handled it very well. They wrote a form, their own type of

1 corrective action form. It doesn't go in the official  
2 corrective action program because there's no requirement to  
3 have it, so it's not a condition adverse to quality. But they  
4 have their separate program and forms for the PRA and for  
5 errors that are found.

6 MR. ROSEN: Conditions not adverse to quality go in  
7 some corrective action program.

8 MR. SCHIN: Right, but --

9 MR. ROSEN: It didn't go in there?

10 MR. SCHIN: No, the plant did put them in their  
11 regular corrective action program.

12 MR. ROSEN: Putting things in your corrective action  
13 system that are found by whatever source that are not up to  
14 your standards is the way to improve your circumstance, and the  
15 best plants do that.

16 Yes, Dana.

17 DR. POWERS: I'm just going to remind you here  
18 there's quality, and then thee's PRA.

19 [Laughter.]

20 MR. ROSEN: For the record since we're off the record  
21 I'm going to say that most PRAs have all the documents, and the  
22 ones that are not as good as the others are being peer  
23 reviewed, and the peer review process is quite robust, and that  
24 process is improving PRAs around the country.

25 So even though Dr. Powers is joking about it, I don't

1 think he means the exact phrase he used.

2 DR. POWERS: Well, what Dr. Powers is definitely is  
3 suspicious of is that the peer review process does not address  
4 the issue raised here, which is how does the peer review  
5 ascertain that the document called a PRA in fact reflects the  
6 plant as built and as operated. It's just not happening.

7 MR. ROSEN: I would not agree with that judgment.

8 Let's go on to the next one.

9 DR. BONACA: One thing that comes back to me is from  
10 the previous slide, inspectors get no feedback from ROP self-  
11 assessment. We need to wonder how can we have the ROP self-  
12 assessment without interest from --

13 DR. POWERS: It seems to me the self-assessment has  
14 got to come from these guys from now on.

15 DR. BONACA: That really strikes me as something that  
16 we have to be careful. I mean your feedback here is critical  
17 of self-assessment. These are important observations, and some  
18 are struck by the fact that there is this --

19 DR. POWERS: Well, I mean the senior reactor analysts  
20 and the inspectors are the guys that are going to be able to  
21 give the best assessment.

22 DR. BONACA: Right.

23 DR. POWERS: Maybe not this first time around. You  
24 know, I grant this first time around, the first assessment they  
25 had to do it within the community that had been working on it

1 and things like that, but in the future --

2 DR. BONACA: You already have two.

3 DR. POWERS: Yeah, but after this the future one -- I  
4 mean the guys at headquarters that put together the ROP  
5 shouldn't be involved in the assessment any more, it's the guys  
6 that live and die on the thing it seems to me.

7 MR. PLISCO: A couple points too I want to make. A  
8 lot of the data comes from the region, we provide it.

9 DR. POWERS: Sure. Of course.

10 MR. PLISCO: We collect it, our inspectors collect it  
11 and we provide it. The branches do a quarterly collection of  
12 the data, and we send it. So a lot of the data they use to  
13 analyze we give them.

14 And as I said, we did have a meeting last year. Mike  
15 Johnson who was the current at the time came and gave a two-  
16 hour presentation on where they were on the self-assessment,  
17 and what the results were at that point, because it is a moving  
18 target.

19 DR. POWERS: Well, I think that's all appropriate,  
20 but we're getting to the point where we've gone through a lot  
21 of development effort. Now we're heading for a steady state,  
22 and I think this small cadre doing the self-assessment is not  
23 the right way to go any more. The guys that have to live with  
24 it should be doing the self-assessment.

25 MR. CHRISTIANSON: In the inspection process the

1 procedures themselves are often providing feedback on the  
2 specific procedures, and they get fed into the process, and the  
3 procedure will get changed or modified based on what those  
4 issues are, and we have seen that happen. Those things come  
5 back responsive to it.

6 DR. POWERS: This is a subject we should definitely  
7 should bring up with the commission on this, you know, as part  
8 of our reporting to them. And, you know, this is important  
9 stuff, and the way we go about it --

10 MR. MALLET: I would add to that, though, that the  
11 division of reactor projects along with the Chris  
12 Christianson's division of reactor safety, they hold meetings  
13 you bring in your senior residents and resident inspectors --  
14 Is it twice a year?

15 MR. CHRISTIANSON: Twice a year.

16 MR. MALLET: -- to not the routine resident  
17 inspector meeting, but a special meeting to talk about what are  
18 the lessons learned from the oversight process, what do we need  
19 to fix, and how do we do that.

20 I thin, Bob, you all submitted that one time so far,  
21 and I don't know what your plans are for doing it again.

22 So there are other self-assessments besides this  
23 overall self-assessment. I wanted to make sure you have an  
24 understanding of that.

25 MR. SCHIN: But one thing is, you know, in any week

1 half the inspectors aren't here, so when we have a meeting a  
2 lot of people miss it. It's good to have something like on a  
3 Web site where you could take a look at it.

4 What we do when we have the monthly regional  
5 administrator meetings, put out information, then we put a  
6 summary on the Web site.

7 MR. MALLET: Bob is right, we are sending that  
8 feedback back to the inspectors.

9 MR. ROSEN: Go on.

10 MR. SCHIN: Okay. Let me continue. One thing that I  
11 noticed early in this inspection program, the ROP -- this is  
12 back in 2000 and 2001 -- is that when I was leading different  
13 inspection teams licensees were coming to me, and obviously  
14 they didn't understand what we were doing different, and they  
15 were concerned about what are we doing, what's this ROP, what's  
16 going on here, we don't know, and so I put together a little  
17 presentation that I gave at some of the sites to try to fill in  
18 the communication gap.

19 We also were trying to promote better communication  
20 with licensees, with the public, et cetera, so I thought okay  
21 maybe this will help, and I drew some simple thing up and  
22 reviewed it with my branch chief and division director, and  
23 then I presented this at some of the sites, and was surprised  
24 at how much interest that I got. I mean I got a room full of  
25 people that were interested in listening to this. Even a site

1 vice president came to one of them. They were just really  
2 wanting information on what in the world are we doing.

3 But basically I said, okay, on these engineering-type  
4 inspections, the SSBI, and fire protection inspections, first  
5 we look at the design of the plant in the office, we prepare  
6 for at least a week in the office and we're looking at risk,  
7 and the PRA, the IPEEE. In fact, we're looking more at risk  
8 than what we used to as far as selecting what we're looking at,  
9 how we're going to look at it. We look at the FAS, our tech  
10 spec design basis documents, SERs, fire hazards analysis, et  
11 cetera, all these things in the office.

12 Then the second week we go to the site, and when we  
13 get at the site we look at actual conditions that we can find  
14 there, the installations in the plant, walk it down, look at  
15 drawings, calculations, test completed surveillance,  
16 maintenance history, corrective actions, all these type of  
17 things.

18 One feedback that I got from this one site vice  
19 president, he says, you know, you guys come here to the site to  
20 see everything you're looking at it and it looks exactly as  
21 before, I don't see anything different. This is what you used  
22 to look at before. And that was true, that part is true. I  
23 said yeah, you're right, we look at risk more on the front end  
24 and you don't see that because that's before we get here.

25 And then on the back end as we come up with potential

1 issues or differences between the FSAR, or the SERs and what we  
2 see in the plant, the calculations, and the drawings, et  
3 cetera, then we have to evaluate that, and this is where risk  
4 comes in.

5 MR. ROSEN: You're two slides back. You jumped  
6 ahead.

7 MR. SCHIN: There it is. Okay.

8 This is where risk comes in again, and we look at to  
9 see if there's performance issues based on risk, or  
10 noncompliances based on requirements. Now, the noncompliances  
11 are the same as what we did before, but the risk part is  
12 relatively new, and then we said, well, what's a performance  
13 issue. They were very interested in that.

14 So we made up a definition. This was, you know, like  
15 a year and a half ago, and in fact the NRC had no official  
16 definition until a few months ago when we came out with that  
17 Chapter 0612.

18 MR. ROSEN: Does it look anything like the one you've  
19 got there?

20 MR. SCHIN: Actually it does, it's not much  
21 different. The words are a little different, but the meaning  
22 is about the same.

23 MR. ROSEN: That's not a bad definition.

24 MR. SCHIN: Well, what we said was a performance  
25 issue is where the licensee did something that they should not

1 have done, or that they failed to do something that they should  
2 have done that resulted in an increase in risk, that that was a  
3 CDF.

4 MR. ROSEN: Or it doesn't work.

5 MR. SCHIN: Right, or it doesn't work.

6 But in other words clearly if there wasn't a  
7 requirement, there was some basis for determining that they  
8 should have done something, they got an operating experience, a  
9 feedback that they should have responded to, or there's some  
10 industry standards that they should have adhered to, that they  
11 should have known better type of thing.

12 MR. ROSEN: The only thing I would add to that  
13 definition that if the licensee did something that they  
14 shouldn't have done, or failed to do something that they should  
15 have done that resulted in an increase in risk delta CDF alert,  
16 or increased an uncertainty.

17 VOICE: Yeah, that's a good point.

18 MR. ROSEN: And made where they are in Bruce's place  
19 less certain by failing to do something, but that's another  
20 dimension you might want to think about.

21 VOICE: We haven't got there yet. We have a hard  
22 time handling a change in the CDFs.

23 MR. SCHIN: At this point we might have a hard time  
24 discussing that with the licensees without something, some kind  
25 of guidance that we can show them.

1 DR. POWERS: There you've got no help at all to give  
2 the licensees who typically do an uncertainty analysis as part  
3 of their PRA, and certainly none of the other documents that  
4 you're looking at today really address the issues of  
5 uncertainty.

6 MR. SCHIN: Right. So that's all I have.

7 MR. ROSEN: Bob, I think that's great stuff, Bob, I  
8 really congratulate you on doing that. I'm sure your manager  
9 is listening.

10 DR. POWERS: He would have overwhelmed us if we had  
11 given him a week to think about this, wouldn't he.

12 MR. CHRISTIANSON: Scott.

13 MR. FREEMAN: I'm Scott Freeman, and I'm as he said a  
14 resident inspector. I'm at the Oconee site which I guess you  
15 all talked a little bit about this morning.

16 I have three different screens listed up there. I  
17 want to start with the second one, the inspector procedures  
18 allow good planning time. What I see as the program is set up  
19 to do is go through the modules, and it gives you a chance to  
20 prepare for each individual inspection as you go through.

21 And by that I mean you can pick out the items you  
22 want to look at by going to the daily meetings, reading the  
23 corrective action documents, touring the plant.

24 It's also said to give you a chance to review  
25 procedures and drawings to be able to compare, and so when

1 you're out there looking you know what you're looking at. That  
2 part I like.

3 Also I like the quarterly reports. They free up a  
4 lot of time to be allowed to inspect, whereas when we were  
5 doing the six-week inspection period before we spent a large  
6 chunk of the inspection period writing the report from the  
7 previous one, so I think this quarterly report is a good thing.

8 Also the top bullet there, the process is geared for  
9 looking at items that are important to your coordinators. Bob  
10 talked a little bit about that. Okay.

11 The challenges I want to talk about were related to  
12 the planning part. A of things can interrupt the planning  
13 time, takes you away from research into the drawings and  
14 procedures and all, and what happens when that goes on is that  
15 I think the inspections aren't as thorough, because you still  
16 have to get a certain number of samples done. What happens is  
17 you either have to look at a corrective action document and  
18 follow it, something that happened at the plant and follow up  
19 on it, and there can be some value added there if you look at  
20 something different than what the licensee had, like if the  
21 licensee responds to a problem and the inspector doesn't agree  
22 with it he can get some value there.

23 But what's missing from that is it's taking away from  
24 the concept of looking where they don't. When you can look  
25 ahead and plan by reviewing procedures and drawings you can

1 actually look at things the licensee doesn't want you to look  
2 at. I think there's a lot of value in that.

3 And the other thing that can happen is you get up  
4 against a crunch where you still have to get the samples done,  
5 and you haven't had enough time to really compare, you just  
6 kind of go out and look at something that you picked up from  
7 the morning meeting almost just to get it done. I don't know  
8 if there's a lot of value in that, so that's a concern I had on  
9 challenges.

10 Things that affect the planning time, I've got six up  
11 there, but it's really two blocks. It's travel and then all  
12 the other things.

13 Now, the travel has increased because staff  
14 reductions are going on. Less mean means more travel because  
15 the inspectors still have to support the other yearly  
16 inspections like the SSDIs that Bob mentioned and those kind of  
17 things.

18 Travel is often needed to help inspectors develop and  
19 maintain objectivity. What that does is it takes time away  
20 from research and inspection planning, because even when you  
21 get back you have you have administrative-type things you have  
22 to do to get back in the flow of it. So that was one comment.

23 The other items there, these yearly inspections,  
24 allegations, Phase III SOP support data, and supporting the  
25 risk analysis takes a lot of time, especially if you get into a

1 complex issue.

2 Assessments, management visits. Now, those things  
3 are all necessary, and I understand that they do have an impact  
4 on our planning.

5 So that was my challenge there.

6 DR. POWERS: There's a fundamental rule that no  
7 problem is so bad that it can't be made worse by a little  
8 management attention.

9 [Laughter.]

10 MR. FREEMAN: This one up here, maintenance rule  
11 inspections are a little different to me than the others  
12 because they are geared at looking at failures and trying to  
13 find out how the licensee categorizes them, and from my  
14 experience there's a long time lag in between there, so it  
15 requires keeping track of them as they happen so that you can  
16 come back and look at them later. That's what that means.  
17 That's a planning challenge.

18 That's all I had to present.

19 MR. ROSEN: Okay.

20 MR. MALLETT: I did want to add on the management  
21 visits, not as a defense but just to let you know, we embarked  
22 on this program to make sure that the managers -- we have  
23 always had branch chiefs go out on the site visit, and we have  
24 also embarked on senior managers going to the site, and that is  
25 an impact, something we have to review, but we believe that

1 putting more emphasis on going to the exit meetings for this  
2 new program to make sure we have direct insight as to what the  
3 issues are. That's paid off for us a lot.

4 We don't have as much interaction as we used to have  
5 before the SOP program. One of the things it did was give us  
6 interaction with the licensee managers and residents, so now  
7 this is a way of forcing us to have those interactions.

8 It's an impact, but I think it was a necessary one.

9 MR. FREEMAN: They're beneficial, but they are an  
10 impact, a balancing act we maintain.

11 DR. LARKINS: Are there any issues that have come up  
12 in implementing the maintenance rule, or is it now things like  
13 configuration assessment maybe more than a particular piece of  
14 equipment out at a time. There's a section in the -- I don't  
15 recall exactly, but in a maintenance report that --

16 VOICE: A-4.

17 DR. LARKINS: Yeah, A-4.

18 MR. DESAI: If I may, there is something called the  
19 risk meter that I think a lot of licensees have gone to that  
20 manages on a day-to-day basis based on -- you know, they have  
21 plan for Train A, Train B, this week it's Train A, and the risk  
22 is managed by planning it out such that all attempts are made  
23 to not take out equipment simultaneously.

24 MR. ROSEN: That's based on the PRA model.

25 MR. DESAI: Based on the PRA model. And then if you

1 have things that come up that were not planned then put into  
2 that risk meter and the risk meter chart is recalculated and  
3 visibly posted at least at the site that I'm at, and also I'm  
4 finding out at Duke sites that that is discussed quite  
5 frequently. So that is part of the planning process.

6 MR. CAHILL: There's also a contrarian view, I mean  
7 there's a wide spectrum.

8 It really depends on the licensee's I guess buy into  
9 the concept of this. We have some licensees that were like  
10 that before A-4 even came into effect and was a requirement  
11 they were doing this essentially anyway because it was just  
12 good management practice to do it.

13 And we have other licensees that have never liked the  
14 maintenance rule from day one, don't believe in it, and have  
15 been reluctant to implement any parts of it, waiting until the  
16 last possible minute.

17 And we have licensees that, you know, that lay out a  
18 schedule for the week, but it's very rudimentary, and when  
19 things change or they change the times or something they don't  
20 really robustly go back and look at it and, you know, they  
21 don't let the operators mess with it. They say it's a  
22 distraction, the operator says we'll allow some other group to  
23 do it which is not real time.

24 So there's a still wide spectrum of how licensees  
25 handle that.

1 DR. BONACA: There is an explanation. There's a  
2 requirement that you take more than a certain member of the  
3 point of the service there are risks associated with that.

4 And also looking at the risk of not managing the  
5 risk, especially for the reason to further criterion about how  
6 much you can allow your CDF to up, but certainly many utilities  
7 have been using certain criteria self-imposed to assure that  
8 there is some rule that they follow. You're telling me that  
9 this is not really truly accepted?

10 MR. CAHILL: Yes. There are certain licensees that  
11 made an investment in good tools for their people that can do  
12 this online real-time and the right people -- when I say the  
13 right people the operators because they're the ones that take  
14 the equipment in and out of service -- have access to it.

15 There's other licensees that don't have this  
16 computerized, they still rely on a matrix.

17 There's other licensees that are not really doing  
18 this real-time, they lay out a schedule for the risk report and  
19 they evaluate that like three weeks ahead of time, and then  
20 they don't really --

21 VOICE: Isn't there a requirement in 5065A-4 to  
22 assess the management program maintenance --

23 MR. CAHILL: We have had numerous findings in the  
24 area, but they very often screen out as minor because there's  
25 no consequence to them. I mean very often the licensee does

1 not factor in that this pump broke on Tuesday when they weren't  
2 planning that, and they don't evaluate that, but when you look  
3 into it usually the significance is if it breaks --

4 MR. ROSEN: There will be a time when it's just the  
5 wrong combination when you'll be able to --

6 MR. CAHILL: Many of us have been giving licensees  
7 the message that you got away with this one this time, you  
8 know, there was no consequence --

9 MR. ROSEN: The boss that didn't hit you.

10 MR. CAHILL: -- but the framework you've set up could  
11 allow a big one to violate A-4, and then --

12 DR. BONACA: That notification am I to assume was  
13 something very specifically placed in as an expectation, and  
14 maintenance rule particularly on the fact that, you know,  
15 they're fooling around with --

16 MR. CAHILL: It's like any rule you have, there's  
17 certain degrees of compliance. You can have minimal  
18 compliance, you can have full embracement of it, up and beyond.  
19 That's what I'm trying to point out.

20 MR. ROSEN: Can you give me a characterization in  
21 Region II of whether you think half of the plants have fully  
22 embraced the modern techniques, or a third, or 10 percent, or  
23 what's it like?

24 MR. CAHILL: I would guess the majority. As I said,  
25 there's --

1           MR. ROSEN:  When I asked that question at Watts Bar  
2 yesterday I didn't get a particularly enthusiastic response I  
3 thought.

4           MR. CAHILL:  I used to be a resident inspector at  
5 Watts Bar.

6           MR. ROSEN:  Can I get an answer to my question?  I  
7 asked the question about what do you think characterized the  
8 region in terms of are half of them or more doing modern risk  
9 model?

10          MR. CAHILL:  I would say greater than half.

11          MR. MALLETT:  It would be greater than half just  
12 based on my perceptions.  One of the problems we have with the  
13 TVA facilities is the risk model they use to develop their IPE  
14 is not real conducive to doing ten-minute evaluations as far as  
15 -- you know, south Texas has the same kind of model, but they  
16 ran 10,000 iterations to come up with a solution, whereas TVA  
17 can run it in three days, so they don't embrace it to the  
18 extent that another utility who has a model that's easier to  
19 use embraces it, and they are more the exception in Region II.

20                 The TVA facilities in their initial iteration were  
21 using the risk matrix as opposed to using any sort of  
22 calculation tool.

23           DR. BONACA:  The issue to me is very important  
24 because it is truly certainly significant because they're  
25 changing the configuration of the plant.  You are taking the

1 liberty to do it, you know, at will just because they have a  
2 need for pulling out equipment which really was not supposed to  
3 be through that. Those plants were not designed to do on-line  
4 maintenance.

5 And this is really important, this is an issue that  
6 has potential for having true problems because of the way  
7 they're pulling out equipment without understanding what  
8 they're doing.

9 And so I still worry about, you know, compliance and  
10 your opinion with A-4 in emergency planning, and I'm not saying  
11 it's not important, but it's more like, you know, do you do  
12 what you said you will do. You are not getting there on a risk  
13 significance, and I think that really troubles me.

14 You know, I have an insight a little bit from past  
15 experience, I thought Region II had some examples of this is  
16 place, and you're telling me that they haven't.

17 MR. ROSEN: No, they do. Some of the plants are  
18 doing well.

19 MR. MALLETT: We have a whole gamut of plants and  
20 using risk to take equipment out of service for maintenance or  
21 whatever, and some of them are very good, the latest model, and  
22 some of them are still down in this manual mode I guess we're  
23 considering them, but they all have some tool.

24 I don't want to leave you with the impression that we  
25 have plants that don't have a tool. They all have some tool

1 for considering risk.

2 MR. ROSEN: Well, they have to meet A-4, but the  
3 question is what are your standards for not writing a finding  
4 against A-4, and you need to look in the mirror and decide  
5 whether you might not have high enough standards.

6 I say that collectively for the whole Region II.

7 MR. PLISCO: And the tools in it too, we have plans  
8 that have elected to not even go into A-4. You know, the  
9 exception about you don't have to do the analysis if you want  
10 to take out one train, they have decided we're never going to  
11 do that, we're not going to even go there. It's a simplistic  
12 approach, but it's conservative. Some have elected to do that.

13

14 MR. ROSEN: If they can stay open doing that, more  
15 power to them.

16 MR. MALLETT: We raise it with them. It's just a  
17 question of whether you should raise it as a finding.

18 DR. BONACA: You mean within the meanings of tech  
19 specs?

20 MR. PLISCO: Yeah, there's a statement in A-4, I  
21 forget what the words are, sort of when you get to go do the  
22 analysis if you only take one train it's with in the AOT, you  
23 don't need to -- and some have elected that that's as far as  
24 we're ever going to go, we're not going to -- you know, unless  
25 something -- I mean sometimes things break, but as far as for

1 planning purposes --

2 MR. ROSEN: What do they do then when they've taken  
3 one thing out and another train, the same train, then they're  
4 in 303. Right? I mean they have to shut down possibly,  
5 depending on the tech spec, and they have no argument for, you  
6 know, coming in and saying they haven't changed their tech  
7 specs with an allowed outage time because they don't know  
8 anything about risk, they haven't come and asked the NRR to  
9 change, give them a new set of tech specs that will recognize  
10 this risk.

11 So they're sitting there with two things out of  
12 service. The only conclusion is get that thing back within  
13 whatever is allowed by the tech spec, they're prepared to go to  
14 mode 3 or whatever the tech spec requires.

15 MR. DESAI: See, a lot of times it doesn't have to be  
16 the redundant component that's raised causes the risk go up.  
17 It could be something that you really didn't even think of.

18 MR. MALLETT: Also I don't want to leave the ACRS  
19 with the impression that we're not addressing this issue with  
20 these licensees. We do, it's just that the leverage we use may  
21 not be an enforcement letter or noncomply. We do address it  
22 with them, and hopefully they'll take the message and go back  
23 to management and in some cases they'll keep delivering that  
24 message to them.

25 MR. ROSEN: You said greater than half?

1           MR. MALLET: From my perspective greater than half.  
2 I mean I have the outliers in there for the most part.

3           DR. POWERS: I used to be maintenance branch chief  
4 for the baseline inspection programs, and it's probably  
5 adequate to say that more than half of the sites here in Region  
6 II comply with the intent of the maintenance rule in the sense  
7 they integrated their maintenance rule into the regular design  
8 change process for the maintenance processes, whereas the ones  
9 we have -- so these people are later, and that's okay, legally  
10 okay.

11           Those people have not gotten the bang for their buck,  
12 probably haven't gotten the value out of it, but it's legal to  
13 do it that way, and that's a big thing I think with the  
14 maintenance rule today because the performance RA. Like Steve  
15 mentioned you can have an evaluation that is not very good, but  
16 it doesn't cause something from an enforcement space, our  
17 space, and there's very little we can do. So right now the  
18 main control itself because it's performance based they can  
19 have these procedures, we may not follow their procedures, but  
20 it doesn't violate the rule itself. There's very little we can  
21 do except talking about it, so today the maintenance rule  
22 itself is not the easiest rule to enforce on those sites that  
23 won't take the intent of it, they need to let it alone, the  
24 intent is very difficult to get those people to meet the  
25 intent.

1 MR. MALLET: I would add that all of what is in  
2 Region II based on our inspections comply with the maintenance  
3 rule. We just believe they're walking a fine line in doing it.  
4 That would be my experience.

5 And you're right, we do need to keep our eyes on the  
6 ones that are walking that fine line.

7 MR. CHRISTIANSON: Binoy Desai is the next senior  
8 resident to talk about his perspective of the ROP.

9 MR. DESAI: I guess I want to just take that part of  
10 managing risk a little bit forward.

11 My resident asked me one day if they should, or  
12 rather we should be inspecting a risk like we inspect ALARA,  
13 which is as low as reasonably achievable, and I don't know the  
14 answer to that. Anyway, I don't know whether we're going there  
15 some day or not.

16 With regard to risk, I guess something --

17 DR. POWERS: I raise an interesting question. That  
18 is an issue, are we going as low as reasonably achievable in  
19 risk basis as a direction.

20 MR. ROSEN: Is that a question for me?

21 DR. POWERS: You understand these risk things, you  
22 understand Risk 102.

23 MR. ROSEN: I think the answer to your question is  
24 that management has to manage many things, including ALARA, but  
25 it also has to manage risk, and so it finds a level of risk

1 that's comfortable.

2 And there's two kinds, at least two kinds of risk.  
3 One is financial and the other is nuclear safety, safety risk  
4 to the public health and safety as well as to its own safety.  
5 In many cases those are the same people, the people who work at  
6 the plant are the same people who live around the plant.

7 So management finds a level of risk that it is  
8 comfortable with, and manages to that level, and I think that's  
9 sometimes is -- it's not exactly in the ALARA concept, it's a  
10 level of risk that management is willing to accept.

11 It's clearly way below what's required, what's  
12 allowed by the tech specs, much lower than that.

13 DR. POWERS: Recognizing that it's lower, it's  
14 reasonably achievable. ALARA is achievable.

15 MR. ROSEN: I don't think the concepts are exactly  
16 analogous.

17 MR. DESAI: You see, the way we look at risk is it's  
18 not just planning, but even if their high risk item is planned  
19 or a combination, there are certain precautions that go with  
20 working on that particular pump that the maintenance crew has  
21 to have a certain brief, make sure have double verification  
22 before they touch that fuse, or that, you know, whatever it may  
23 be. And that's what managing risk is to me, not just planning  
24 that you don't take these two components out, but if you have  
25 to the planning associated with the job has to be much more

1 robust and so forth.

2           The other impression I get, and it's a little bit  
3 hard, is sometimes I feel that it's more risk-based as opposed  
4 to risk-informed. In other words, we find ourselves in a box  
5 most of the time, especially in processing SDPs or resolving  
6 issues that it's really not risk-informed, there is no  
7 management or any reliance on your visceral feelings about an  
8 issue because this is what the risk computer is giving us, and  
9 this is what we have to live by. So it's more risk-based as  
10 opposed to risk-informed.

11           I think I have similar thoughts that my colleagues  
12 have shared here. The ROP forces inspectors to focus on  
13 safety, so it gives us a little more credibility.

14           Findings are safety-emphasized over compliance.

15           It has allowed or enabled inspectors to get involved  
16 in areas that we potentially could not have looked in the past,  
17 such as flooding.

18           There was an issue of manholes at Brunswick, and  
19 there was some safety-related cables within the manholes that  
20 were found to be damaged, and it required substantial  
21 corrective actions on the part of the licensee.

22           MR. ROSEN: Why you wouldn't have been able to get  
23 into that before? damage to safety-related equipment.

24           MR. DESAI: This is more in terms of the ROP. The  
25 attachment or the inspection procedures specifically asks us to

1 do that.

2           The PI program has, you know, it obligates the  
3 licensee to report quarterly, I think has shifted some load  
4 from the inspector to the licensee, so I think that subtle  
5 aspect as well in terms of our time.

6           Provision for filtering out minor violations, they're  
7 not documented, no licensee response required, so I think it  
8 has worked well for us as well as the licensee.

9           On the negative side the same things, issues higher  
10 than green taking excessive time to resolve, or for that matter  
11 issues that were thought to be higher than green which may turn  
12 out to be green later on are also taking in fact more time to  
13 resolve.

14           Time limits on inspection hours that are charged  
15 associated with an attachment, but there does not appear to be  
16 any time limit on a post-identification. You know, once your  
17 inspection is done you've got tons and tons of hours to ad  
18 nauseam dissect the issue, but you only have this much time to  
19 inspect the issue.

20           I think Bob Schin mentioned the nonstandard PSA, you  
21 know, Ocone versus Robinson. You know, we may not be counting  
22 similarly.

23           And then the preliminary SDP that the inspectors do  
24 may not be the best way to handle it, and I don't know if any  
25 of you have gone through the manual Phase 2 SDP evaluation that

1 the inspectors are required to do, so if you haven't it may be  
2 just for humor's sake maybe worthwhile to do it.

3 I don't know what it would take for us to have a  
4 simple program that we could use.

5 DR. LARKINS: I thought we heard earlier today that  
6 this preliminary screening, that the inspection was to help  
7 separate out the wheat from the chaff early on and provide some  
8 prioritization of those things to focus on. So you're saying  
9 that this is not a worthwhile effort?

10 MR. DESAI: No, it is a worthwhile effort. The  
11 outcome is worthwhile, but the process that we go through is  
12 cumbersome I guess is what I'm saying.

13 MR. ROSEN: If you can't push this thing through that  
14 number two screen, you try a couple of times here, try here,  
15 and here, turn it sideways and try to push it through and it  
16 won't go through, and you just say that's too hard, put it over  
17 there, and then go the SRA. I think that was really the  
18 intent, wasn't it?

19 MR. MALLETT: That's not the way it works.

20 DR. LARKINS: The SRA is overloaded with stuff. He  
21 won't accept something unless he has it on a piece of paper.

22 MR. DESAI: There's a way around it which is through  
23 hook or crook make the issue yellow, and they will jump to it  
24 right away and --

25 [Laughter.]

1 DR. POWERS: This is called safety culture; there's a  
2 way things are supposed to be done, and then there's the way  
3 you get business done.

4 DR. BONACA: I have a question. What happens -- it  
5 looks at each issue as an SOL event, so for example you may  
6 have an issue that is significant, but assume that it is the  
7 third or fourth time that the same kind of condition happens,  
8 the corrective action problem of the plant that identified it  
9 as very significant would cause evaluation from the stand why  
10 does the failure progress that continual issue. But the  
11 significant identification process would say you should, you  
12 know, we don't melt the plant, we're not killing anyone, and so  
13 it's nothing. How do you feel about that? I mean how do you  
14 deal with it? I mean you clearly have a way to -- how do you  
15 feel about that?

16 MR. DESAI: Well, let me take a shot at it. What  
17 that would perhaps imply, and this is what inspectors do, is  
18 that we're no longer dealing with that issue now, we're looking  
19 at licensees' overall corrective action process, and that does  
20 not give us a lot of faith in licensees' corrective action  
21 robustness to solve a real issue that may come up. That's how  
22 -- that's one approach to handling that, and perhaps having  
23 some leverage over the licensee.

24 MR. SCHIN: Let me try to also -- there's a lot of  
25 situations where there may be repetitive issues or multiple

1 issues that all could affect the same mitigation strategy or  
2 event or something.

3 And the truth is we don't, the process doesn't tie  
4 all those together, we don't -- if we have multiple issues that  
5 rise to more than green, however the action matrix does tie  
6 them together -- I mean it counts multiple whites as if it were  
7 an entire level, so that's one place where they do get tied  
8 together anyway.

9 But the answer is, and even if we have an issue  
10 that's repetitive we look at, we tend to look at -- my  
11 understanding is we look at the safety significance of the  
12 issue separate from that they failed to correct it, and you can  
13 run that through the SDP.

14 The significance, the lack of corrective action  
15 doesn't -- at least in the past didn't go through the SDP.  
16 That was one of those noncolor findings, and they struggled  
17 with that.

18 DR. BONACA: But for example assume that that they  
19 are the bottom of the line, and they go through the process of  
20 you find that there's no safety significance, but another  
21 misalignments, if you have a number of events like that then  
22 one of them will be most significant, it keep your CPF very  
23 high, or look very high. See, that's not any more are we  
24 talking about a corrective action program, something about the  
25 fact that there was misalignment can be in fact very

1 significant, and if you have a facility that repeatedly falls  
2 into that kind of situation we see some of it because our  
3 procedural issues, alternative issues are suddenly you've got -  
4 - you know, that's the problem there about the fact that we're  
5 not capturing that.

6 And the last question I have is if you have your  
7 choice would you put that personal direction in significant  
8 process or not, or would you handle it outside of that?

9 MR. SCHIN: You're right. Right now if we have ten  
10 valve misalignments and none of them is significant it doesn't  
11 become a significant issue.

12 MR. REYES: Let me add to that. We have a plant just  
13 like that. That's where I get involved because it becomes a  
14 management issue.

15 We have a vice president here telling me about how  
16 the trend is going, the root cause analysis, what are the  
17 contributing factors, and all that, so in this country you know  
18 not like other countries we do not have rules on management  
19 like the United Kingdom has, the French, and others, but that's  
20 what happens that it becomes -- I agree with you, it becomes  
21 beyond the risk examples, it becomes a high-level issue for  
22 management.

23 DR. POWERS: Luis, you recognize that when you have  
24 the vice president in here for coffee and you talk about  
25 positioning that has an impact.

1 MR. REYES: It's not for coffee.

2 DR. POWERS: It has an impact. It's regulation.

3 MR. REYES: And that's exactly how you have to deal  
4 with it when it comes to this consistent --

5 DR. BONACA: But even from a peeristic [?]  
6 perspective there much more frequency event, you know, what  
7 happens of misalignments they would be effectively in the  
8 peeristic assessment if you have a higher CDF.

9 So if you look at it as an outside event the PRA is  
10 telling you it's not significant. If you look at it as a  
11 frequently-repeated event you could model that in PRA and say,  
12 ah, because it is in fact something that this facility happens  
13 on a high frequency there is a CFF frequency is higher. Right  
14 now the significance, of course it doesn't do that, it doesn't  
15 take into account that.

16 MR. REYES: We are being questioned by the commission  
17 what does the sea of green mean, and it gets to your point that  
18 if you have a lot of green findings is that, what is that  
19 telling us, and that question is on the table right now. I  
20 can't tell you what the answer is going to be from the program  
21 point, but it has been raised how do we deal with a sea of  
22 green, how do we deal with a lot of --

23 DR. POWERS: Can you live with success, or is it  
24 fooling you and it's not really success? In the area of  
25 findings green is not synonymous with good.

1 MR. REYES: That's right.

2 DR. POWERS: In the translation, and it's something  
3 that gets forgotten all the time, and when you're colorblind  
4 you really hate colors, because green is no good in the area of  
5 findings.

6 MR. CAHILL: One aspect of the ROP to go back to your  
7 original question, if you get individual findings that are  
8 greater than green level you could basically aggregate those to  
9 a cross-cutting issue. It's not the most effective mechanism  
10 because it doesn't have much teeth with it, but if you had the  
11 example you talked about, and we've had similar ones and  
12 started down that path, the misalignments for example if it's a  
13 human performance root cause for each one of those that's not  
14 being addressed that is one of the predetermined cross-cutting  
15 issues that could affect multiple cornerstones, and if you have  
16 individual findings of greater than green then you can take  
17 those at assessment time and roll them together and develop a  
18 cross-cutting issue to more facilitate what Luis was getting at  
19 to tackle that head-on and manage it.

20 It doesn't address, it doesn't put it back into the  
21 SDP and calculate a change in numbers, but -- I'm sorry.

22 MR. BERNARD: There is an inspection we perform also  
23 where we take a look at how well the utility has handled the  
24 corrective action on all the green findings, so we go into the  
25 problem identification resolution, it gives us an opportunity

1 to identify the things we're talking about also.

2 DR. BONACA: When you do the evaluation you do an  
3 analysis of the facility --

4 MR. BERNARD: When we're looking at findings, we have  
5 the opportunity to bring up things like the performance when  
6 we're evaluating the findings, we put that in the report, and  
7 than at assessment time those get looked at like we talked  
8 about.

9 MR. CAHILL: And another point, though, the way the  
10 ROP deals with that it has prevented a lot of abuses because  
11 having been an inspector in both processes I know in the old  
12 days when we had things that repeated inspectors were very,  
13 very prone to roll those up and bump them up to a much higher  
14 level, so we had stuff that truly even if you could do the risk  
15 numbers like you would like to do still would not be risk  
16 significance if they happened every day at the plant, but we  
17 could make a mountain out of that molehill, and so the current  
18 threshold doesn't really address that, it has reduced the  
19 abuses.

20 DR. BONACA: Now, the licensees today that take those  
21 events and put them into the corrective action program, do you  
22 track for example what they recognize repeat events? Do you  
23 look at that corrective action and how they're dealing with  
24 that, and their closing these issues? It's not easy for you  
25 to --

1           MR. CAHILL:  If there is a license, an LER, a  
2 licensee report, or if it was related to a finding that we had,  
3 or even if it was a license finding those would be in our  
4 system, and in the inspection that Rudy alluded to we would  
5 look at how they addressed all these, we would roll it up then  
6 and see.

7           MR. ROSEN:  A place where your resident could go find  
8 out what's going on in repetitive stuff is to go to what they  
9 call in some places a management review committee, or it's  
10 called a condition review group where three or four of five key  
11 department managers sit there and look at today's condition  
12 reports, the ones that came in, and get a sense of what they  
13 are worried about in that corrective action program.

14           I mean that's right at the heart of the beast.  If  
15 you go in there and the resident spends some time at those  
16 meetings I think that would be very productive.

17           MR. MALLETT:  Our resident inspectors do that.  In  
18 fact, they also will have through some system a way of saving  
19 some of those issues for the problem identification resolution  
20 inspection to be looked at, to follow up on.

21           MR. ROSEN:  You don't want to remind them of that  
22 corrective action system, but you do need to  --

23           MR. MALLETT:  That's a way of polling the system.

24           MR. ROSEN:  -- -- to be monitoring, that's your job,  
25 and that's a good place to be, get the big bang for your

1 inspection hour buck.

2 MR. FREEMAN: That was my point earlier about  
3 planning. You need to be, the resident needs to be there every  
4 morning looking at the corrective action documents. We could  
5 have an independent look at them and going to the meeting, and  
6 if you don't do those in a routine manner then you can track  
7 these things and --

8 MR. ROSEN: Keep your finger on the pulse, and you  
9 start seeing the same things they're seeing.

10 MR. FREEMAN: That's what I was saying planning is  
11 important.

12 MR. CHRISTIANSON: I would like to have Rudy Bernhard  
13 talk about the SRA's perspective.

14 MR. REYES: You've told us you want to go to four  
15 o'clock, so we have 45 minutes for two topics, so at your  
16 pleasure we can go ahead.

17 MR. ROSEN: Forty minutes for Rudy, and five minutes  
18 for you.

19 [Laughter.]

20 MR. REYES: I have been talking all day long.

21 MR. ROSEN: Why don't we go ahead and move on, and  
22 then we'll come back and ask for comments.

23 MR. BERNARD: I passed out a little comedy relief.  
24 It's interesting, I only had to insert one word in this. I  
25 just put the word "risk" in front of informed. Everything else

1 was already the same way. But there's a lot of wisdom here.

2           Once again, this topic is my perceptions. I'm one of  
3 the original SRAs that the agency made, and there was a comment  
4 earlier that let's get some comments back from the regional  
5 guys because they weren't part of putting together the program,  
6 but I was up with Dr. Mallett helping to structure the original  
7 ROP, so I do have some idea of from whence it came.

8           And to me risk informed really is meaning that risk  
9 is another input into the management process and the decisions  
10 that are made, and it should be a tool that's used to make sure  
11 correct decisions are made in a consistent manner, but it is  
12 just a tool.

13           Inconsistencies and a lack of trust in the tool can  
14 result from misapplication of the tools. I have already heard  
15 some talk earlier today addressing some of my pet peeves with  
16 tools, so we'll get to those in a few minutes.

17           Right now we've got a tool that's shown itself to  
18 work fairly well on internal event models where the deficiency  
19 results from the loss of function for a well-defined period.  
20 You've got a pump that's out there that's broke for fourteen  
21 days and six hours; we can do that risk analysis provided you  
22 want to know what the effect is on internal CDF.

23           If you want to start looking at the external models  
24 then you've got some problems because there's inconsistencies  
25 in how it was developed from site to site.

1           But fortunately about 80 percent of the SDPs we look  
2 at -- and it's not the ones that are out there for a year  
3 waiting to get solved -- 80 percent of the ones we looked at  
4 were franking out in maybe four hours or five hours, sometimes  
5 fifteen or twenty minutes if we could just use a simple risk  
6 achievement in order to get the answer.

7           But it's not that 80 percent that gets solved while  
8 we're on the phone that get the attention, it's the ones that  
9 get extended over a year. So from a positive side the way  
10 we're doing SDP works pretty well 80 percent of the time.

11           It doesn't work as well for some of the other cases  
12 with less well-defined boundary conditions, and those are the  
13 cases where, gee, was the diesel really functional or non-  
14 functional.

15           We have indications that, you know, the bearing might  
16 be going bad and they didn't take the right action, and then in  
17 hindsight it did go bad later, but what is the real performance  
18 deficiency that we're analyzing, is there actually a guarantee  
19 that this thing is going to go to failure, or is there a just a  
20 likelihood this thing is going to go to failure, and if there's  
21 a likelihood what percentage do you want to assign to it.

22           I used -- fire comes to mind as an example. We pump  
23 all kinds of assumptions into our fire analyses, to assign a  
24 probability to the initiating event frequency of a fire, what's  
25 the likelihood of getting a hot short, gee, I've got an

1 analysis that says if you get a hot short within three to  
2 fourteen minutes it's going to go hard ground.

3 Well, that's a change of condition, it might have  
4 made the valve go closed, and maybe when the ground valve goes  
5 back open you've got all these changes of states you're looking  
6 at.

7 What percent of the room is involved in the fire?  
8 How effective is the fire brigade? What circuits are involved?  
9 I've got some analyses I've done where we have to assume that  
10 the fire is engulfed in flame to the extent that they have to  
11 go remotely and turn on fire sprinklers, but the next  
12 assumption is this circuit over here doesn't get burned up,  
13 because what I want to do is I want to get to a point where I  
14 damaged that in another way because that was a performance  
15 deficiency. It wasn't a fire, it was something as a result of  
16 the actions of fighting the fire.

17 Another thing that drives me nuts is what human  
18 actions do you assign to the human error probabilities in a  
19 fire brigade. I mean you've got HRA stuff with the guy in the  
20 control room running the procedure. What's gonna happen when  
21 this guy is out in a room that's getting testy and there's  
22 smoke everywhere, how likely is he to follow all those actions.  
23 We don't have any guidance on that at all.

24 So really what you've got is you don't have any of  
25 these things very well defined with respect to calculation of

1 actual risk.

2           What we have is we've got a lot of fire studies that  
3 have put bounty values on these, or best guesstimates on these  
4 things, but when you're trying to determine with conservative  
5 being as close to reality as you can get as far as risk space,  
6 not assuming the worst -- you know, conservative and PRA  
7 spaces, how close to reality can you get, and I've got to go  
8 ahead and take a base case and subtract that from some  
9 deficient condition I come up with this delta, and I've got  
10 these huge uncertainties frequently what I'm doing is I'm  
11 coming up with point estimates where the uncertainty band is up  
12 to two orders of magnitude higher than the number I'm  
13 delivering to management for them to make a decision on. Okay.

14

15           And this is the nature of the process we have. So  
16 these are kind of some of the things that are -- well, when you  
17 start going and trying to find those assumptions that's where  
18 the time comes in. You're going to spend a good while trying  
19 to get all the state of the art data out on what these numbers  
20 are and try to apply them in models. And that's where, you  
21 know, whether we're looking at what the likelihood of a  
22 nonseismic pipe breaking in a seismic event at the plant that  
23 was never designed to, and we have some output from it, those  
24 numbers aren't readily available. So we spend a good bit of  
25 time trying to research that, and we end up developing backlogs

1 on things that are approaching state of the art in the  
2 calculations.

3 And that's where we're running into problems. 80  
4 percent of the time we're knocking these things out in good  
5 time. The rest of the time it's tough.

6 And then once again the other point, we're only  
7 passing point estimates, we are not doing the uncertainty  
8 analyses associated with them.

9 And so one way to do that would be instead of telling  
10 everybody to calculate the uncertainty the other way to look at  
11 it would be to say, gee, if I have a CDF number and I subtract  
12 it from another CDF number, and then I go ahead and I drive  
13 that through to come up with a LERF process the uncertainties  
14 associated with LERF are going to be higher than the CDF. When  
15 I subtract the two my agency goals are on the order of  
16 magnitude less than they were for CDF, I'm dealing with either  
17 the minus 6 threshold on CDF, my work was either the minus 7, I  
18 know my uncertainties are going to be even higher, so I'm  
19 dealing with -- I'm looking for 1 either to the minus 7 and  
20 I've got a plus or minus either to the minus 4 on my  
21 uncertainty terms, and Engineering 101 tells me you should not  
22 be using that number to base decisions on.

23 So if you combine that with the thoughts we had  
24 earlier on the model tendencies, the uncertainty associated  
25 with the different models and the assumptions that the utility

1 uses for their models with 1200 to 3500 basic events, or the  
2 internal NRC models with 650 basic events with the SDP with 35  
3 basic events, and you end up finding the uncertainties can  
4 frequently drive the answer, and the assumption can drive the  
5 answer.

6           There is also a perception that has come up recently  
7 where the Phase 2 SDP sheets, people are expecting those things  
8 to come up with the real answer, and back when this system was  
9 put together those were supposed to be a screening tool to  
10 eliminate a whole bunch of stuff coming to the SRAs because you  
11 can't look at every deficiency.

12           MR. ROSEN: We really don't know the answer is plus  
13 or minus a factor of 10,000. It may be 10,000.

14           MR. BERNARD: What we were trying to do was just use  
15 that as a screening tool, but now there's people that seem to  
16 want to use that to come up with --

17           MR. ROSEN: You're asking too much of the Phase 2  
18 sheets.

19           MR. BERNARD: Once again, look at the limitations of  
20 the tools, and if the tool is not precise enough to give you a  
21 numerical answer we can still come up with some great insights.

22           You know, you look at the fire analyses, they've  
23 still got some good insights that tell you where to go tighten  
24 up, where to go look at stuff. If you want to go look for  
25 LERC, we can come up with insights that tell you certain

1 components are real important, and if you go out you ought to  
2 be concerned.

3 But if you're not appropriately using the tool and  
4 looking at the limitations of the tool when you set your  
5 criteria and thresholds I think there's danger.

6 So let me sum up real quickly. I think I've really  
7 basically said it that if the air bands are too high use risk  
8 insight, not the risk numbers, and depend on other input into  
9 the management process.

10 And the other word of warning is I heard something  
11 earlier that indicated steady state in the process, and my  
12 thought there is that small incremental changes are a lot  
13 better than step changes, and then a period of stagnation until  
14 another step change is required.

15 So the caution would be is that we should not be  
16 looking for steady stake, we should be looking for a process of  
17 continuing improvement on this, and its tools are developed  
18 that have lower uncertainties, and you can find application for  
19 them go ahead and incorporate the use, don't be afraid to make  
20 changes.

21 That's all I have to say.

22 MR. ROSEN: I think this panel has been very, very  
23 useful. I'm just delighted to hear what you guys are thinking.

24 MR. REYES: I'm not sure we're done yet.

25 MR. ROSEN: Luis, you're up, or your --

1           MR. REYES: We have a little bit of management view  
2 of this.

3           MR. ROSEN: We'll get the rebuttal.

4                           [Laughter.]

5           MR. REYES: I think you're going to find that I agree  
6 with them.

7           MR. OGLE: I'm Chuck Ogle, I'm a branch chief in DRS,  
8 and Steve Cahill who's the branch chief and Warren are going to  
9 add some comments, too.

10                   But I think you will find that management generally  
11 has, or shares some of the same feelings that inspectors do.

12                   If you'll look at the slides on the positive we have  
13 talked a lot about risk significance, looking at the right  
14 things.

15                   To build on something Binoy says, it's better as a  
16 manager to be in a position, it increases your credibility with  
17 the licensee, with the public and the inspectors if you're  
18 arguing that, hey, we're looking at something that's important.

19                   One of the other products that I've seen come out of  
20 the ROP, and Scott did a good job talking about this, is  
21 planning. We're doing a lot better job planning for  
22 inspections, we're doing the up-front work. It was a conscious  
23 decision as part of the ROP. As part of the roll-out of the  
24 ROP we expect the inspectors to do a lot better job planning,  
25 and I think it leads to better inspections.

1           I don't think we're where we want to be yet, we still  
2 have a lot of distractions, but I think it's good. We know, or  
3 the inspectors should know that they're being held accountable  
4 to accomplish what's in the monthly inspection procedures, and  
5 they have to plan that, plan ahead to get these things done.

6           One of the things that has not been discussed by the  
7 inspectors is that there's now an emphasis that is different  
8 than before on sticking to the inspection procedure.

9           On the ROP, part of the roll-out for that was, hey,  
10 we expect the inspectors to accomplish what's in the inspection  
11 procedure.

12           Before what we had in the old inspection procedure,  
13 or the old inspection process I think was a lot looser in terms  
14 of what inspectors did and what they were charged to do.

15           Now there's more, they need to do these various  
16 inspection procedures, they need to do a sample size of three  
17 of these, and six of these, and four of these, whereas before  
18 when I was an inspector you went out and you looked at  
19 something and you sort of figured out, well, what was the  
20 closest thing that you could charge your time to.

21           And I think that gives management some comfort that  
22 at least to some degree that there is some consistency in the  
23 inspection program as it's applied across the different  
24 utilities in the region.

25           You know, there are obviously different capabilities

1 in inspectors, different interests, different curiosity levels,  
2 but I think now knowing that we have at least some baseline and  
3 that we're sticking to the procedures that we feel better that  
4 the things that we think are getting done are getting done.

5 MR. PLISCO: We used to say we met the intent of the  
6 procedure, and that could mean a lot of things. And now  
7 there's a lot more rigor to it.

8 MR. ROSEN: Any utility that told you that, you would  
9 have a lot of questions for them.

10 MR. PLISCO: Yes.

11 MR. OGLE: And the final point I would like to cover  
12 on the positive is dealing with the findings, and the  
13 inspectors talked about that, and I think that the NRC always  
14 has done a good job, at least this region has done a good job  
15 on the big deal.

16 If a big deal comes along we had a process, you know,  
17 we knew how to proceed from A to B to C, and we did a real good  
18 job of it.

19 I always when I was an inspector felt very  
20 uncomfortable with the things that were not a big deal, and I  
21 think the ROP, one of the major strengths of the ROP is that it  
22 gives you a method to look at it, any item that comes up, or  
23 most items that come up, and say okay, this is why it's not  
24 important, or this is why we should proceed this way.

25 So I think it should for inspectors give them a

1 little more comfort that, hey, there's some process that they  
2 decided not to follow up on, and a year from now, or a year and  
3 a half from now they're not going to get a big inquisition as  
4 to why they didn't make a big deal out of it. So I think  
5 that's a real strength.

6 MR. CAHILL: It makes it easier for us as a branch  
7 chief dealing with inspectors that there's a clear criteria.  
8 Before it was find something that was a violation of some  
9 requirement, but the message you're really trying to send was  
10 somewhere else. You got the violation to hang your hat on, but  
11 you can go with some other aspect.

12 Now it's you've got to look at the regulatory aspect,  
13 you've got to look at the risk aspect, they are two well-  
14 defined arenas, and if you can't force somebody to do that then  
15 we drop it. It makes it a lot easier for those things that,  
16 you know, was the inspector's pet peeve in the past that he  
17 could make some regulatory tie to it, but there was obviously  
18 no risk whatsoever.

19 Now we can say it, there is no risk, that this is  
20 minor, we're not going to pursue it. It makes it a lot easier  
21 for the management/inspector interface to come to a final  
22 conclusion that everybody agrees with.

23 MR. ROSEN: Just getting through the day.

24 MR. OGLE: Okay. On the concerns of the areas that  
25 are not so rosy, we talked about this -- Rudy warmed up to this

1 -- all the SDP tools were not ready and still aren't, and I'll  
2 say no more than the fire protection SDP was not. I've had  
3 personal involvement in that, that's more than enough.

4           The feedback process. part of the ROP was a feedback  
5 process. Hey, inspectors, you go out, you do these inspection  
6 procedures, you see something that doesn't look right, write up  
7 this form, send it in, and we'll put it in the process and  
8 we'll make things better.

9           Well, inspectors are very good. If we tell  
10 inspectors to bring us a rock they will bring us a rock,  
11 they're very good at that. And if we want a blue rock they're  
12 very good at blue rocks.

13           And they went out, and they brought --

14           DR. POWERS: If you can define it that way.

15           MR. OGLE: Well, that's management's problem.

16           But they wrote a lot of feedback forms, and they went  
17 into the process, and they didn't come out right away, and I  
18 think we lost some credibility with the inspector. You know,  
19 we promised something the we didn't deliver.

20           You know, there's a lot of other things that were  
21 going on at the time, but I think we lost a lot of credibility  
22 with the inspectors writing these things up, and I think they  
23 became somewhat cynical and said, hey, you know, why bother  
24 trying to get these things changed, it's not happening. But  
25 we're starting to see that moving through the process a little

1 better.

2 I have had the distinct advantage of being both I'm  
3 projects and DRS here in the region during the ROP, and my  
4 observation is that the inspectors in DRS are not as well  
5 prepared, or were not as well prepared as the DRT inspectors  
6 were for the implementation of the ROP, and I don't know why.  
7 I don't know if it's the amount of inspections, I don't know if  
8 it was the focus, I don't know who was involved, but I think  
9 we're catching up, I think we're doing more in DRS to do a  
10 better job, but I think there's definitely a dichotomy that  
11 exists.

12 Another concern I have is processing -- Rudy again  
13 talked about this, and it was talked a little bit about during  
14 the fire protection thing -- are these models correct when  
15 we're making these decisions. Is it green, it is white, is it  
16 yellow, is it 10 to the minus 7, is it 10 to the minus 5th.

17 You know, there's assumptions, we've not verified  
18 these things, there's large uncertainties and, you know, we get  
19 in these discussions about powers of 10 and it's like what's  
20 the foundation for all this, do we know that it's true. And  
21 it's somewhat discomfoting at times.

22 We talked a few minutes ago about what about things  
23 that don't fit into the risk management, things that happen  
24 over again. Every inspector that's sitting in this room can  
25 tell you about things they have seen that don't look right, and

1 that bother them, but if you try to put them in the ROP they  
2 may not fit. What do we do with those? Right now we don't do  
3 a whole heck of a lot with them unless they rise to some level  
4 that we're really concerned about.

5 I talked about the benefits of sticking to the  
6 inspection procedure. One of the downsides of sticking to the  
7 inspection procedure is inspector initiative.

8 It used to be that it was a very prominent of the  
9 inspection program to go out and follow your nose. If  
10 something didn't look right, you went out and you looked at it.

11

12 And now we have a more prescriptive process. We have  
13 a safety culture here, we believe in it, you know, we emphasize  
14 it with our inspectors, but I have a question in my mind what  
15 do we give up when we have a very prescriptive process that  
16 says give me three of these and six of these, and what does  
17 that do for individual inspector initiative.

18 We've shifted from a mode of go out and inspect, and  
19 bring us back issues, and tell us what's going on to, okay,  
20 accomplish this and then bring us back issues. So there's a  
21 subtlety there that I'm not sure what we're getting for.

22 And we have already talked a little bit about the --  
23 Bob did a good job talking about the documentation guides. We  
24 have procedures on how to run inspection reports, but if  
25 somebody wants to go copy what's it supposed to look like.

1 It's frustrating.

2 Do you guys have anything else you wanted to add?

3 MR. CAHILL: Just two things I wanted to add.

4 One is a point I didn't make clear when I was talking  
5 about Farley before, but one of the successes of the ROP is it  
6 allows us to engage on the docket as the regulator in areas  
7 that we really couldn't before based on the licensee's  
8 performance.

9 Remember the first three points I talked about with  
10 Farley were all performance indicators, they all got those  
11 white performance indicators based on their own performance,  
12 and it allowed us to engage them on the docket, have public  
13 meetings, and I think effect some valuable changes at that  
14 site.

15 And I didn't make clear in my presentation before,  
16 but one of the common themes that linked all of those  
17 performance indicators was Farley's philosophy on maintenance  
18 rule implementation and system engineers.

19 System engineers is the simple point to talk about.  
20 Their previous vice president did not believe in system  
21 engineers, he thought they were a waste of overhead, that  
22 design work should be done by design guys, and operators were  
23 the system engineers.

24 Consequently, there was not anybody that owned the  
25 systems like a traditional system engineering role, and nobody

1 was on top of these things. Hence the cooling tower collapse  
2 problems. There was nobody that was really on top of those  
3 things waving the flag that these things are really in bad  
4 shape, we need to do something.

5 And those other issues were all, that thread was  
6 through all of those. Now Farley has system engineers for  
7 virtually all their systems, they actually hired a lot of new  
8 folks, and I guess didn't readily admit it, but saw the mistake  
9 that they had made in the past.

10 But that was an issue we had known for years before  
11 the ROP. We knew that Farley didn't like system engineers, and  
12 they would assign people as system engineers basically paying  
13 lip service to it, but not really meeting the intent of it.

14 So this allowed us to actually take something we knew  
15 was not quite right, but really could never do anything in  
16 regulatory specs with it before, now we got to do something  
17 about it.

18 MR. ROSEN: It was revealed through performance  
19 issues, their performance.

20 MR. CAHILL: Yes, got them right there. I mean they  
21 dumped it in our lap.

22 One negative thing that I see with the ROP, and we  
23 touched on it a little bit before talking with Dr. Bonaca, it  
24 has taken away the ability to take a broad programmatic look at  
25 things, you know, looking at these repetitive issues, or you

1 get a lot of different data points, and it more alludes to what  
2 Chuck was talking to before about inspector initiative.

3 You know something is not quite right, you've got a  
4 lot of different data points and it spreads across the board,  
5 but you don't have something that's truly risk significant.

6 In the past we used to lump those together and make  
7 something out of those, and sometimes that was warranted, but  
8 we don't really have that ability -- we sort of do now if  
9 things rise to a certain threshold as we mentioned before about  
10 cross-cutting issues, but we don't really have that ability to  
11 take that broad swath and put things together until they rise  
12 to a certain threshold.

13 But on the flip side like I mentioned before that was  
14 also pretty abused in the past.

15 MR. ROSEN: Yeah, I think it might have been, but I  
16 think you do have that ability, but you haven't seen it yet  
17 because it's too early in the implementation for the region,  
18 for the whole country.

19 But I think at some point when you get six, eight,  
20 ten quarters then if something smells like a duck, looks like a  
21 duck, waddles, you can go in to Luis and say this is a duck,  
22 and here's why, and he has the ability to put things together  
23 on a management level even though no two things hook together  
24 just exactly right.

25 In other words, I'm saying built into this process

1 over time, longer time scales than they're talking about here,  
2 you will begin to develop an ability to make those kinds of  
3 connections and take actions with them. I hope.

4 MR. CAHILL: In the past you could do it more out in  
5 the open on the docket. That goes on quite frequently, and we  
6 do exercise that now, but it's a difference in the way it was  
7 done.

8 MR. ROSEN: I take your point.

9 MR. PLISCO: The only comment I wanted to add is it  
10 helped our communications process with the public and with the  
11 licensees, because I think our communications are clear because  
12 of the risk focus. It's easier for us to describe why we're  
13 involved in an issue, why it's important to us and our  
14 documentation. I think that's helped us in communicating the  
15 issues.

16 One side benefit we've seen, and a lot of this I got  
17 from feedback from the resident inspectors, is when we changed  
18 the documentation threshold of what's in the report and then  
19 the filters that we have now for issues that get raised up in  
20 our inspection reports one of the things we didn't anticipate  
21 was a lot of licensees now are much more receptive of the  
22 lower-level issues and the feedback they get from the resident  
23 inspectors because they now no longer have to fight about  
24 whether it's going to be in the report or not, or what the  
25 agency is going to do with it.

1           Now that we have this well-defined threshold many of  
2 the resident inspectors have told me that when they go to the  
3 licensee and there's a lower-level issue, something we call  
4 minor that's not in the report, the utilities are actually more  
5 receptive with those issues and put them in their corrective  
6 action programs and address them because they don't have to  
7 deal with all the peripheral stuff that used to happen in the  
8 process.

9           MR. ROSEN: And they don't have to deal with  
10 licensing implications. They've just got another solid input  
11 about something they can correct in their plan. That's a good  
12 thing.

13           MR. PLISCO: But that was something we didn't  
14 anticipate, but that's been a side benefit.

15           MR. ROSEN: I would say more than a side benefit, a  
16 singular benefit.

17           Anything else anybody else wants to say? No?

18           Luis.

19           MR. REYES: I just want to close here on schedule. I  
20 hope that the presentation by the staff was to your  
21 satisfaction. We made sure that none of these individuals are  
22 shy, and they bring to you a unique perspective.

23           Let me just give you a perspective. I've been doing  
24 inspections for the NRC for the last 25 years, so I can give a  
25 view.

1           The revised oversight program is the best inspection  
2 program that I have been involved with. It's not perfect, and  
3 we still have some challenges. We talked this morning or  
4 through the day of the significance determination process.  
5 Especially we have put a lot of work in security that seems to  
6 be much improved. Fire is still a challenge we need to work  
7 out.

8           I think the staff presented to you some issues that  
9 still need to be addressed. Some if it is tool limitation.  
10 Some of the tools we have right now the technology is not there  
11 yet, but in terms of overall I think this is the best  
12 inspection program I have worked with going back 25 years. It  
13 has allowed us to do some certain things that we just couldn't  
14 do before.

15           Now, I think it's working this well because the  
16 performance of the facilities also in those 25 years I have  
17 seen a big change in the performance of the facilities, and I  
18 just don't think we could have had this process twenty years  
19 ago.

20           But the timing is right, I think the performance is  
21 there, the tools are there. I think our sophistication of  
22 dealing with issues has improved.

23           We do have some room to grow, we're still sending  
24 people to school, and sometimes we have difficulty talking with  
25 Rudy and getting every word of it, but it is going in the right

1 direction and overall is a very good program.

2 Now, you heard today all the room for improvement we  
3 have, and we will continue to do that.

4 I guess in terms of closing I hope the meeting was  
5 informative and your visit yesterday. I want to invite you  
6 again. I would like you to visit some of the other plants, or  
7 come here to the region. We like the exchange. We actually  
8 took back some feedback from you. We have quite a few things  
9 that were very beneficial; it was very beneficial to us that  
10 you came here to visit.

11 For those of you who would like to see our emergency  
12 center afterwards if you have time, we will be glad to show you  
13 that facility. We use it on occasion; we used it a lot after  
14 September 11th. We do use it a lot during the summer season of  
15 because hurricanes, we have a lot of coastal facilities, so we  
16 spend a lot of week ends there monitoring the situation, but we  
17 would like to invite you to see that.

18 MR. ROSEN: Luis, could I ask some questions? not  
19 just for you, but for the whole staff, overview kinds of things  
20 about the ROP.

21 The first one is do you think that it will continue  
22 to improve performance of the fleet of plants in the region?  
23 Could you address that in terms of the best plants, and maybe  
24 the not-so-best plants.

25 MR. REYES: I think overall it will for a couple of

1 reasons, and I'll speak for the Region II plants. These  
2 comments are based on my one-on-one interface with the  
3 utilities we deal with; I can't tell you nationwide.

4 But the utilities we deal with are in this business  
5 for the long term, and they understand that their actions,  
6 decisions, implications are for the long term.

7 I think a good example is that most of the plants  
8 that have licenses renewed or are in the license renewal  
9 process are in this region. I think that speaks for itself.

10 The ROP I think is a perfect program for plants that  
11 are performing very well and the licensees are willing to look  
12 at things for the long term, and what it allows us to do is not  
13 only do the routine program, but for those issues that we  
14 talked about where management has to get involved, when I have  
15 to get involved, it's much, much easier for me to convey the  
16 regulator's concern, our perspective on the issues, and I think  
17 the answer to your question is I believe yes, that the plants  
18 will continue to improve, and this program allows us to do  
19 that.

20 A couple of things that happened early on in the  
21 program, and it was a plus to the licensee and to us to some  
22 extent, but we have had white findings on issues that are not  
23 covered by the regulations, and the licensees have taken action  
24 to improve their situation at the plant on a white finding that  
25 we couldn't issue a violation on because you couldn't have a

1 nexus through to the violation, so it was a situation where we  
2 have identified risk-significant issues that resulted in  
3 hardware identification or changes in the processes at the  
4 plant that under the regular traditional process we couldn't  
5 even touch them.

6 MR. ROSEN: You couldn't connect it to compliance.

7 MR. REYES: Correct.

8 So based on those experiences I think this will  
9 continue to help us improve.

10 MR. ROSEN: Do you think that goes for the best  
11 plants and the not-so-best plants?

12 MR. REYES: I think so because what turns out to be  
13 is that quickly you find out when the plants that are not  
14 performing as high start getting white findings, performance  
15 indicators that are white and it's very visible, very visible  
16 not only to the public, to the financial community, to the  
17 company executives, and it gives a prominence that was not  
18 there before, and it forces individuals who become outliers to  
19 move further.

20 Now, you have to have a company that is in business  
21 for the long term and has that kind of vision to get that drive  
22 through, and for the Region II plants I will say that that's  
23 been our experience that we have quickly seen plants that we  
24 showed to you through the day who have had white findings and  
25 white performance indicators rather aggressively move into

1 resolve the risk issue and resolve the performance.

2 We have had a positive experience here. I don't know  
3 what all my colleagues will tel you about that, but for this  
4 subset of plants, about a third of the plants in the United  
5 States, I think it will be very positive.

6 MR. LEITCH: Luis, let me add one thing. I think  
7 also a key we talked about at times today, and the key is to  
8 not be stagnant but to always review are we doing the right  
9 thing, and that's a key thing we're doing in this ROP that we  
10 were not always doing in the old program, we're evaluating  
11 continuously are we looking at the right thing, what do we need  
12 to change. You have to keep that in the process to deal with  
13 the changing environment.

14 MR. REYES: A good point. And we get a lot of  
15 feedback from the staff, you heard some of it today, and we  
16 take it back and try to address those areas that need fine  
17 tuning. No question with such a massive program, a change  
18 it's not going to be perfect out of the starting block, and we  
19 still have some issues to work with.

20 But I think the staff has been very good in giving us  
21 feedback where we need to change, and the program office for  
22 that matter, I think most every place we have engaged them they  
23 have been responsive. We would all like to have it done  
24 tomorrow, but the reality is that you can only work on so many  
25 things, but we have had a positive response from them on our

1 suggestions. We have seen some changes in the program from the  
2 beginning.

3 We are working on some pilots to make more changes in  
4 the program. We didn't have time today to talk about the  
5 consolidated radiation protection inspection, but felt that  
6 that was an area where we made the switch we were still making  
7 too many inspections for radiation protection, they were not  
8 well coordinated, et cetera, et cetera. We have devised -- as  
9 permission from NRR to try to do something else. We have put a  
10 program together, a pilot in about six plants, and we're  
11 getting ready to provide our results to the program office to  
12 consider some changes in that direction, so think Bruce has a  
13 good point that we always need to continue to work in making  
14 this better.

15 MR. ROSEN: Could I ask one last question. This is  
16 really the last, and it's the hardest.

17 You know we all are struggling with the Davis Bessie  
18 situation, and we don't have the full facts in yet, and there's  
19 a number of staff efforts and other efforts to look into what  
20 really went on there.

21 The worry we have, or I have is that it will  
22 continue, the ROP and other processes will in fact continue to  
23 improve performance in general across the board, and I think  
24 that was your answer to my question.

25 We worry that it's not suited for identifying really

1 declining performance in every case. Somehow this Davis Bessie  
2 situation alarms us that something is wrong with the ROP.  
3 Something happened up there, but we don't know what it is, that  
4 all the indicators didn't go red or yellow long before this  
5 happened, and there wasn't an effort to head it off, and so we  
6 got into a situation we don't ever want to repeat.

7           So I know this is not a fair question because you  
8 don't have all the information, so how can address -- can you  
9 even try to address -- and I'll accept an answer, I'll take  
10 your answer that you don't know yet and we'll come back to  
11 that, but I'm really worried that the ROP is not the place to  
12 identify really declining performance where a plant for some  
13 reason gets off into the ditch and doesn't even know it.

14           MR. REYES: We have always through the years, through  
15 the 25 years I've been doing this worried about that, and in  
16 fact through history we have had some oversights, and I don't  
17 know -- there's five or six different reviews ongoing by  
18 different groups on Davis Bessie from Congress to our own  
19 processes, so I think we need to wait to learn a little bit  
20 about that.

21           But I'm not quick to condemn the ROP. I think there  
22 are some elements in the Davis Bessie situation that how we  
23 implemented it, and I'm talking to you from 23 years ago I was  
24 a resident inspector at Davis Bessie, the first one ever, so I  
25 have seen this vessel head in its early stages of operation

1 when it was brand new.

2 But I think we need to take a hard look at how we  
3 implemented it. I'll give you a good example of something that  
4 it dawned on me there's a change, and I'm not sure we have  
5 conveyed that to the staff real well.

6 For example, the performance -- and this is one of  
7 those unintended consequences -- the performance of the plants  
8 have improved so much, and I'll speak for the plants in this  
9 region, we have plants in this region that either load fuel for  
10 18 months or 24 months, and they actually breaker to breaker,  
11 and we have no access to a lot of components, a lot of parts of  
12 the plant, and then they go down for three weeks and they come  
13 back up, and again run for a year and a half or two years.

14 MR. ROSEN: This is good.

15 MR. REYES: Yeah, this is good, and that's an  
16 unintended consequence. It's one of those things that we need  
17 to reflect on, we need to reflect on this for the three weeks  
18 in question do we give enough direction and access to the staff  
19 to concentrate on those components that will not be available  
20 for the next two years for example.

21 So I think they're going to have a lot of lessons  
22 learned out of Davis Bessie, but I wouldn't throw the program  
23 away because through the years I have been through things like  
24 that where we needed to strengthen or reinforce how we execute  
25 the program.

1           But I think the program has a lot of good, a lot of  
2 good, and those things that need reinforcing I think we need to  
3 work on.

4           But the example I just gave you on only two or three  
5 weeks for the staff to go and get to places they couldn't go,  
6 if we don't allow that, if we don't make the program do that  
7 there's something there you could miss.

8           DR. BONACA: One thing we discussed this morning was  
9 V.C. Summer, and then we talked about Oconee. The way I see it  
10 is for 25 years we've focused on active components, it has been  
11 the heart and soul because we have the failures there, we have  
12 the misalignments, we have learned in the past 25 years, 30  
13 years, and now we begin to see a different kind of stuff coming  
14 up, you know, and Davis Bessie is another one, and that's  
15 really more tied to the quality of the inspection, and the fact  
16 is these plants are getting older. And so I think the question  
17 that Steve is asking is very important in the sense that I  
18 think the program as we have it is valid. The question is is  
19 there some element missing there that should focus also on  
20 something new that is happening in the industry now because the  
21 plants are getting older, and should there be some PIs that are  
22 focusing on long-lived passive components that we are now  
23 certifying to operate for 60 years on license renewal.

24           MR. REYES: You just reminded me of something. In  
25 the Summer case the actual thru-leak, the best analysis is that

1 it started very early on in the cycle. It was not there when  
2 they started up officially. The flaw obviously had progressed  
3 to at least two and a quarter inches, but it happened early on  
4 in the outage and it was not until the next refueling outage  
5 when they could visually inspect it. So I agree with you, and  
6 I think the program is real good, and we need to take a hard  
7 look at things such as Davis Bessie and aging materials, short  
8 windows of time for access to components by the inspectors,  
9 things like that where we can strengthen the program and --

10 DR. BONACA: I understand. What we have to remember  
11 now, Davis Bessie came close to be a nuclear accident, it was  
12 for us an awaking call on active components, a valve stuck  
13 open. The fact was the equipment was behaving so predictably  
14 in every fifty actuation on that PRB had one stuck open. Boy,  
15 can you be more precise than that.

16 And we woke up and we did something, and now Davis  
17 Bessie could have been a new type of accident that we did not  
18 expect was coming.

19 MR. REYES: I think that the program has a lot of  
20 good attributes, and we just need to fix little things that  
21 perhaps we're not strong at.

22 MR. ROSEN: I would like to thank you all very much  
23 for your hospitality and for the very valuable and useful  
24 presentations.

25 MS. WESTON: Steve, I have a question before you shut

1 down for the day.

2 Luis, you indicated that the color findings had a  
3 prominence that had a positive impact. What are your thoughts  
4 about the possibility of the elimination of the red and yellow  
5 colors in the performance indicators because the thresholds are  
6 so high that you would take regulatory action before you got to  
7 those.

8 MR. REYES: If you go back to the formation of the  
9 program early on in the stages we didn't have a red, but we had  
10 very strong feedback from public interest groups that they felt  
11 that was necessary that we show them. We may never use them,  
12 but that we had, that the program show that at a given point in  
13 time the regulator will take such action as shutting down the  
14 plant, and we said yeah. I mean we understand, we know we can  
15 take the action, we have taken it, I know I have authority in  
16 things like that that we could issue the orders and do that,  
17 but from the public interest groups' point of view they wanted  
18 unacceptable region I guess you want to call it in the reds,  
19 and very strong feedback, and that's how we got into it,  
20 basically stakeholders.

21 But I don't feel I need it to take action because  
22 I'll take action way before the red, but that's not the  
23 perception on the outside of the agency, and therefore I think  
24 it's needed if only for that feedback.

25 MS. WESTON: Even if you kept the red and yellow in

1 the SDPs and on the action matrix and eliminated the  
2 performance indicators --

3 MR. REYES: I think you need to keep them.

4 MR. CHRISTIANSON: A point on that. Regardless of  
5 whether you have one color, three colors, four colors, you're  
6 always going to evaluate as we talked about earlier today this  
7 prioritization of the risk. You're always going to have that  
8 in your mind of how significant is this, regardless of whether  
9 you have a color to match it up with. So you still would have  
10 that in your bailiwick to go forward and decide what action and  
11 how soon you should take that action.

12 MR. REYES: Public interest groups are very  
13 interested in this right-hand side of the yellow and the red to  
14 be there visibly, and we can understand that.

15 MR. ROSEN: Okay. Any further questions, comments?

16 DR. POWERS: One question, Luis. First of all, this  
17 has been tremendous, far beyond my wildest dreams.

18 Second of all, I think maybe in the future we would  
19 like to come back. Up to now we've been picking the plants  
20 based on our understanding. If we were to come back, would it  
21 be fair to call you up and say what plant do you think we  
22 should visit?

23 MR. REYES: I'll be glad, and then I'll ask you what  
24 specifically you want to see. Do you want to see a particular  
25 area well executed, a particular area not so well executed? and

1 I'll be glad to give you my insights on that.

2 DR. POWERS: I think we would want to see the plant  
3 that you would want us to see, and to see the things that you  
4 want us to see so that we can have this kind of more collegial  
5 discussion in the future rather than just stock presentations,  
6 because this is unbelievable.

7 MR. REYES: Okay. It was our intent for you to get  
8 the unedited version of the staff perception, and I hope you  
9 got that impression. I didn't even see the viewgraphs, to be  
10 honest with you. This was intended to have that open and  
11 honest exchange, and I'm always -- just give me a call, I'm  
12 glad to do that.

13 DR. POWERS: See, up until now we have been picking  
14 the plants based on a strategy, and we've executed that  
15 strategy. Now we would like to have you help us on the  
16 strategy. Give you a little extra work, see. You've got too  
17 much time going down walking, walking down plants.

18 MR. REYES: Thank you.

19 MR. ROSEN: All right. Thank you gentlemen, Luis.

20 [At 4:00 p.m., Wednesday, June 19, 2002 the meeting  
21 was concluded.]

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CERTIFICATE

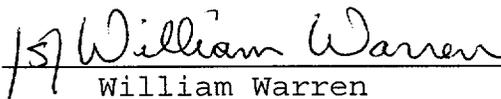
This is to certify that the attached proceedings before the United States Nuclear Regulatory Commission in the matter of:

Name of Proceeding: Joint Meeting Plant  
Operations and Fire  
Protection

Docket Number: N/A

Location: Atlanta, Georgia

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission taken by me and, thereafter reduced to typewriting by me or under the direction of the court reporting company, and that the transcript is a true and accurate record of the foregoing proceedings.

  
\_\_\_\_\_  
William Warren  
Official Reporter  
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