

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION
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4 COMMISSION BRIEFING
5 BRIEFING ON OFFICE OF NUCLEAR REACTOR REGULATION (NRR)
6 PROGRAMS, PERFORMANCE AND PLANS

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8 Nuclear Regulatory Commission
9 One White Flint North
10 Rockville, MD
11 Wednesday,
12 March 24, 2004

13
14 The Commission met in open session, pursuant to
15 notice, Chairman Nils J. Diaz, presiding.

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17 COMMISSIONERS PRESENT:

- 18 NILS J. DIAZ, Chairman of the Commission
19 EDWARD MCGAFFIGAN, JR., Member of the
20 Commission
21 JEFFREY MERRIFIELD, Member of the
22 Commission

1 (This transcript produced from electronic caption
2 media and audio and video media provided by the
3 Nuclear Regulatory Commission)

4 STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE:

5 Secretary

6 General Counsel

7 DR. WILLIAM TRAVERS, EDO

8 SAMUEL COLLINS, DEDO

9 JIM DYER, Director, NRR

10 DR. BRIAN SHERON, AD for Proj. Lic. & Tech Analy.

11 JAMES CALDWELL, Region III Administrator

12 JOHN CRAIG, AD for Inspection and Programs

13 STUART RICHARDS

14 SUZANNE BLACK

15 ERIC LEEDS

16 DAVID MATTHEWS

17 JAMES LYONS

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1 PROCEEDINGS

2 CHAIRMAN DIAZ: Good morning again. We are
3 pleased to be meeting this morning to hear a lot of
4 good things about Nuclear Reactor Regulation and all
5 of the small number of issues that we deal with every
6 day.

7 We are hearing some competition from NMSS
8 now. They are getting as many issues as you guys
9 have. But we realize that NRR is responsible for
10 implementing many of the Commission's key programs,
11 including the licensing and oversight of reactors,
12 license renewal, power uprates, design
13 certifications and early site permits. And I'm sure
14 there are a few more items that we do not see that
15 often that you do every day and do them well.
16 In addition, NRR has a number of important
17 initiatives and technical issues on its plate. I
18 would like to take this opportunity to acknowledge
19 one specific staff activity that they can be rightly
20 proud of, that is the extraordinary, thorough
21 oversight of Davis-Besse restart activities provided
22 by NRR for a long period of time with tremendous

1 amount of dedication by the staff in support of
2 Region III and with the tremendous amount of work
3 done by Davis-Besse Restart Oversight Panel. We
4 thank you.

5 Last year, NRR discussed the many
6 challenges that were ahead for NRR including programs
7 that affect the public and our other stakeholders.
8 This included improvements to the ROP processes,
9 review standards for power uprate, early site permits
10 and the construction inspection program.

11 It discussed many of your internal challenges to the
12 staff to improve their effectiveness and efficiency
13 such as roles and responsibilities, centralized work
14 planning, human capital, as well as many of the other
15 crosscutting issues for both external and internal
16 changes from the Davis-Besse Lessons Learned.

17 We are looking forward to hearing your progress in
18 all of these areas. We know that you have new
19 challenges that have occurred over the past year, and
20 probably you have seen some in the horizon.

21 I'm particularly interested in hearing how
22 you intend to bring key issues to closure and how you

1 are prepared to address the future.

2 Do my fellow Commissioners have any comments?

3 COMMISSIONER MERRIFIELD: Mr. Chairman, I

4 would say I would agree with the characterization you

5 made about our staff in the region and in

6 headquarters who worked on the Davis-Besse matter was

7 a significant amount of work. And I think the staff

8 very much did distinguish itself in this effort and I

9 think the Commission -- and I'm one of them --

10 believes that we are very impressed with the work

11 that has been done and certainly would want to agree

12 with the remarks that you make.

13 CHAIRMAN DIAZ: Thank you, Commissioner

14 Merrifield. And with that, Dr. Travers.

15 DR. TRAVERS: Thanks, Chairman, and good

16 morning. As you pointed out, we are here to discuss

17 with the Commission the reactor safety program and

18 you have also pointed out that NRR has the lead

19 responsibility for that.

20 I was thinking about our meeting yesterday

21 where we were talking about the second year

22 anniversary of Nuclear Security and Incident

1 Response. Well, NRR has been around for 28 plus
2 years and still kicking, and we are looking forward
3 to the presentation today.

4 They have a lot of stakeholders internal to
5 the NRC who support them and I'm sure Jim will
6 mention them. But they include just about every
7 office, certainly Research, the Regions, OGC, NSIR
8 themselves, State and Tribal Programs. But
9 basically, all the offices within the agency are, in
10 one way or another, supportive of the activities that
11 Jim has principal responsibility for.

12 With that, let me turn it over to Jim.

13 MR. DYER: Thank you, Dr. Travers. Good
14 morning, Chairman, Commissioners.
15 Today we are here to brief you on our fiscal year
16 2003 accomplishments and the initiatives in progress
17 to meet some of the challenges that we are facing now
18 in 2004. Our first challenge today is to provide you
19 with a lot of information in a very short period of
20 time.

21 To do this, we have tailored our
22 presentations to address the issues that we haven't

1 recently discussed with you such as the Davis-Besse
2 Lessons Learned Task Force action items that we
3 recently held a Commission meeting on and those items
4 that we're preparing to brief you on under as part of
5 our agency action review meeting briefings that will
6 be in the coming near future and the coming months.
7 However, we are prepared to answer any of those
8 questions you may have in those areas, as we have
9 staff strategically placed within the audience, and
10 also we have Mr. Caldwell, Jim Caldwell, from Region
11 III here to speak for the regions on the reactor
12 safety programs.

13 May I have the next slide, please, slide 2.
14 We structured the agenda today to address NRR's four
15 major areas of the reactor safety program and then
16 also some current technical issues that are
17 challenging all of these areas.

18 Mr. John Craig will present the
19 accomplishments and initiatives in the first three
20 agenda items: Reactor inspection and assessment, new
21 reactors and license renewal.

22 Then Brian Sheron will discuss the

1 accomplishments and the initiatives in the reactor
2 licensing and emerging technical issues areas.
3 Before I turn over the presentation to John, however,
4 I would like to discuss some of our NRR office wide
5 initiatives and to summarize our current fiscal year
6 '04 budget.

7 Slide 3, please.

8 These five initiatives are areas on which
9 NRR must remain focused during all of our regulatory
10 activities. The integration of safety, security and
11 emergency preparedness has become increasingly more
12 important since September 11, 2001. NSIR briefed you
13 yesterday on their extensive reactor security
14 activities. You will hear today on our reactor
15 safety activities.

16 And the security and safety programs cannot
17 become isolated from each other, but must be closely
18 coupled to be effective.

19 NRR and NSIR have been working together to provide
20 this coupling and we are now planning to establish a
21 working group to jointly review each other's
22 activities to be ensure we don't create any

1 unintended consequences for the other office during
2 the conduct of our activities.

3 Similarly, the emergency preparedness
4 provides defense-in-depth for both areas in our new nuclear
5 emergency preparedness project office, and intended
6 to integrate this important function across all NRC
7 offices and regions.

8 We must also continue to improve our
9 communications both transmission and receipt of
10 information within NRR, within the NRC and with our
11 external stakeholders.

12 Communication lapses can be identified with
13 all of our regulatory breakdowns as was recently
14 identified in the Davis-Besse Lessons Learned Task
15 Force Report.

16 In NRR, we created two -- we have
17 dedicated -- excuse me. In NRR, we are working to
18 make communications an integral part of our daily
19 work. We have created two positions dedicated to
20 improving both our internal and external
21 communications.

22 We have created a weekly office newsletter,

1 increased our inspector communications and conducted
2 specific sessions at the regulatory information
3 conference to address communication improvements and
4 recently conducted a specific management retreat to
5 focus on improving our vertical communications within
6 NRR and up through the Commission offices.
7 We are also continuing our efforts to improve our
8 safety culture. The IG 2002 survey identified
9 several areas that we are focused on, and we recently
10 conducted an informal survey of some of the staff
11 which identified that we have more work to do in
12 these areas. Bill Borchardt, my deputy, has
13 initiated actions with all the divisions to address
14 these issues.

15 One activity that we are undertaking is to
16 develop a nonconcurrency procedure to ensure that we
17 allow employees a constructive manner to raise
18 disagreements at the working level.

19 Human capital remains foremost on our minds. NRR has
20 done an outstanding job of recruiting high quality
21 staff. Sam Collins turned that over to me.
22 Our challenge is now to ensure employees become and

1 remain trained for today's needs as well as our
2 future needs. Again, Bill Borchardt, my deputy, has
3 initiated monthly human capital development meetings
4 with all the divisions to address these important
5 issues.

6 Lastly, we continue to focus on improving
7 our cost effectiveness. The NRR work planning center
8 has brought new discipline to the NRR licensing
9 processing and we are expanding it to cover all of
10 our activities.

11 Additionally, we need to get standardize
12 cost reports to all levels of our management team to
13 better address out-of-standard performance and make
14 timely corrections.

15 Slide four, please. With this final office-wide
16 initiative in mind, I would like to briefly summarize
17 our budget for fiscal year '04 and the programs being
18 discussed to date. The emerging issues that we will
19 be discussing are influencing all of these programs.
20 This slide graphically displays the fiscal year 2004
21 resources associated with NRR's major reactor safety
22 programs.

1 Specifically, the inspection and assessment
2 activities are approximately \$50 million or 39
3 percent of our budget. Reactor licensing activities
4 similarly are \$45 million dollars of our budget and
5 reflect about 35 percent of our direct activities.
6 And the new reactor activities are about \$19 million
7 or reflect about 15 percent of our activities.
8 License renewal activities are \$11 million and
9 reflect about 9 percent of our activities.

10 In addition to this, we have the overhead
11 and travel budgets which are applied evenly cross the
12 overall reactor safety program. And we have a
13 balance of activities which include homeland
14 security, decommissioning, and our international
15 activities throughout the agency.

16 Obviously, what is excluded from this is
17 the efforts that you heard yesterday from the Office
18 of Nuclear Security and Incident Response for
19 improving reactor security and also the research
20 budget which we discussed.

21 With that, let me turn this presentation
22 over now to John Craig to discuss our largest

1 budgetary issue, the reactor inspection and
2 assessment activities. John.

3 MR. CRAIG: Good morning. I get to talk
4 about several successes and some challenges with NRR
5 activities this morning. As I go through the
6 accomplishments and then into the initiatives and
7 challenges, I would not want you to get the
8 impression that by focusing on the challenges, we
9 are talking about major problems. We are looking at
10 ways to improve the programs and activity.
11 With that, I will follow up on the remarks that were
12 noted at the beginning about the oversight of
13 Davis-Besse.

14 The Davis-Besse event presented a very
15 formidable challenge to the agency. The reactor
16 oversight program was successful in helping to ensure
17 that we had an even level of inspection across the
18 rest of the fleet of plants by ensuring the defining
19 baseline inspection programs and activities that
20 needed to be accomplished.

21 There had been a number of inspections that
22 had been deferred from 2002 and 2003. We completed

1 the 2003 baseline inspection program.

2 We were able to do that as a result of a integrated
3 team effort. As inspection resources were needed in
4 Region I as a result of promotion of a number of
5 resident inspectors, an attrition of inspectors and
6 the challenges at Davis-Besse and Point Beach.
7 Regions II and IV and NRR provided approximately
8 120 staff weeks of inspection to the other regions.
9 We had an additional 40 weeks of inspection provided
10 by contractors. We hired some ex-annuitants, NRC
11 people to support that also.

12 I would note that during a ceremony to
13 recognize NRR staff participation and support, a
14 number of the inspectors, and I think all of the NRR
15 staff, made comments that they believe that being
16 able to go out and provide that inspection support
17 was particularly important to them and they thought
18 it was important for their continued professional
19 development and credibility. So there is a surge
20 capacity there that we are looking to maintain. We
21 view that as a very positive activity.

22 With respect to changes in the Inspection

1 Manual Chapter 0350, there were some questions early
2 on as we looked at Davis-Besse as to whether or not a
3 significant plant transient would be adequate to get
4 the plant moved into 0350 coverage. So we revised
5 the manual chapter. This is one of the Davis-Besse
6 Lessons Learned activities that we have accomplished.
7 Talk about the significance determination process and
8 the notebook development. It has been an area of a
9 lot of focus as a result of audits by the Office of the
10 Inspector General, a lot of effort on the part of
11 staff. Between May 2001 and September 2003, 71 SDP
12 notebooks were benchmarked against the associated
13 plants specific PRA models.

14 This was done with a team with support from
15 Brookhaven National Labs, as well as Idaho National
16 Labs, as they went to each site and benchmarked some
17 40 systems, components and operator actions. Pretty
18 significant accomplishment.

19 Next slide. Staying on the theme of
20 significance determination process development. It
21 was clear that the timeliness of completing SDPs was
22 an area where we needed to focus some attention and

1 we have done that. With respect to improvements that
2 have been made in SDPs in addition to the notebooks,
3 a number of the tools are continuing to evolve and be
4 developed and issued.

5 SDPs for fire protection, shut down safety
6 and containment performance have been developed and
7 they are being reviewed and commented on right now.
8 New SDPs for steam generator tube integrity,
9 maintenance rule implementation and physical protection
10 are in various stages of development.

11 In December, we forwarded to the Commission
12 a list of old overdue SDPs. There were 17. Today 13
13 of those have been resolved.

14 Of the current inventory, there are 11 that
15 are open, and 6 of those are overdue. Of the six
16 that are currently overdue, four are related to fire
17 protection, one is related to the maintenance rule
18 and one is related to the pressure boundary.

19 So we have made a lot of progress in resolving SDPs,
20 completing the old ones. And with the new tools we
21 will be able to sustain that level of performance.
22 We are going to keep looking at the timeliness of

1 SDPs and working with the regions to make sure they
2 are completed in a timely manner. And if we need
3 additional improvements to the tools, we will work
4 those into the process.

5 Performance indicator improvements.

6 Performance indicator is another program that we
7 think successful. There are some areas that we have
8 been working on, and one of those has to do with the
9 timeliness of resolving frequently asked questions.

10 This is a process that involves discussions with the
11 industry to implement and better understand various
12 aspects of implementing performance indicators.

13 But, like a lot of processes, we focused on meeting
14 to discuss but we didn't really think through in the
15 beginning what happens if you can't reach a
16 resolution on one of the questions.

17 So those questions have lingered.

18 Some of them have gotten too old. And I think this
19 is one of the contributors that has resulted in some
20 questions about the PI program and where it is going
21 and what it is doing.

22 We have made some changes to the FAQ process. One of

1 those changes is that questions will get discussed at
2 a monthly meeting two times. So it will be two
3 months. And after that, a decision is made. If
4 there are still issues, then it can get elevated to a
5 senior level manager so we can make a prompt decision
6 and move on. So that will eliminate a number of the
7 FAQ's that are ongoing.

8 One particular PI that has been the subject
9 of FAQ's and 9 of the 13 currently open FAQs are
10 related to scram with loss of normal heat sink. This
11 is an interesting performance indicator. It was
12 developed to count complex scrams. And so if you
13 have a scram or you have to shut the main steam
14 isolation valves, for example, and the downstream
15 piping is there, the question is should you count the
16 scram? It depends on how complex it was and what
17 other actions need to be taken.

18 That is an example of one that has resulted
19 in a significant level of discussion and interaction
20 and some confusion. It is one we are going to work
21 on to try and better improve the definition to make
22 the implementation questions whether things count

1 more clear, more understandable and move on. What we
2 will not let it do is continue to linger for months
3 and months and months.

4 We are going to continue our effort to
5 improve the Performance Indicator Program. There is
6 a SECY that is due to the Commission, I believe, the
7 end of next week. It's the annual ROP assessment
8 SECY. You are going to see some more discussion in
9 that paper about performance indicators and some of the
10 things to go forward. I think it is a successful program.

11 We will continue to evolve it and make the
12 implementation more effective. I'm going to pause
13 and talk about another PI, potential PI that has been
14 under a pilot program for a while. This is the
15 mitigating system performance index. It was
16 developed with significant support from the Office of
17 Research. They did a great job developing a PI that
18 would be more risk-informed, that would be capable of
19 reflecting site specific PRA information. So there
20 are some benefits there.

21 We piloted that program and the pilots were
22 completed in the fall. And since the fall in

1 January, we have been doing an assessment of the
2 benefits of the PI and cost of that performance
3 indicator.

4 In addition to some technical questions
5 about the actual indicator itself, we looked at the
6 resource estimates that would be required to start up
7 over the next two years or so to conduct workshops,
8 conduct training, et cetera. The estimates are high.
9 It is an 25 to 30 FTE per year for 2 years.

10 One of the things of particular concern is
11 that the bulk of the burden to implement that PI
12 would be with the senior reactor analyst in the
13 region. It would be a very significant workload on
14 those as well as some other inspectors.

15 So while there are benefits to that PI on balance, we
16 have concluded that the costs are so high that it is
17 not appropriate to move forward and implement it at
18 this time. We are going to meet with industry this
19 afternoon as part of a monthly meeting to talk about
20 that some more.

21 Engineering inspection improvements is an
22 area that is interesting to a number of us that have

1 been involved in engineering inspections in previous
2 lives. The regions have all been looking at it in a
3 number of ways. And as a result of discussion with
4 the Commission and some direction, we are preparing a SECY
5 that is going to discuss an engineering inspection
6 program that will look at risk significant systems,
7 look at systems where there have been modifications,
8 look at components where there might be low design
9 margins and walk through in the SECY a discussion of
10 how we would approach that.

11 Traditionally, you need some pretty sharp
12 consultants, expertise to do these engineering
13 inspections and that's part of the pilot program.
14 One of the reasons to propose this program is that
15 engineering is one of those things that we assume has
16 been done correctly so that the engineering
17 adequately is reflected in as-built, as-is plant.
18 The PRAs that are done and form the basis for safety
19 evaluations and licensee decisions stem from good
20 engineering.

21 So, we have seen plants like Davis-Besse
22 and others that have been shut down for a long time

1 identify a number of engineering designs kinds of
2 issues. And we see those occasionally as part of the
3 50-72 reports.

4 We saw one last week where the drain in a
5 room was not sufficient to drain the water if the
6 fire suppression had actuated. So you would have
7 flooding of the safety-related equipment in the room.
8 You see those kind of things from time to time.

9 So the question is, is there is an issue there where
10 we need to change the level of regulatory oversight.

11 We believe the pilots are a way to help define and
12 better answer that question. And we expect that SECY
13 paper to be forwarded to the Commission in just a few
14 weeks. It is well into development right now.

15 Cross-cutting issues are another area in
16 our Inspection Manual Chapter 0305 that we been
17 looking at. And the key is to ensure consistent
18 implementation of cross-cutting issues across the
19 regions.

20 We have made some revisions to better
21 define requirements for plants that have previously
22 had substantive cross-cutting issues and a mid cycle

1 assessment. And that manual chapter has been issued
2 and it is out.

3 The operating experience task force
4 recommendations were discussed in a Commission
5 meeting in February. The lessons learned report
6 include a number of recommendations with respect to
7 operating experience. Obviously, it's an activity
8 that affects not just domestic reactors but
9 international reactors as they focus on our
10 operating experience.

11 We had a steering committee that made a
12 report public and presented it to office directors
13 and regional administrators in January. We currently
14 have a team preparing an action plan with specific
15 actions and milestones to implement that. And it's
16 going to be completed next month.

17 Next slide, please. New reactors is an
18 interesting issue because there is a lot of
19 activity and a lot of diversity. It's an area where we
20 have gotten a lot of support and continue to rely on
21 the support from the Office of Research.
22 With respect to early site permits, I believe

1 everybody knows this that fall we took that to
2 another level when we got three applications for
3 early site permits. One for North Anna, one for
4 Clinton and one for Dominion.

5 The staff has held environmental scoping
6 meetings, public meetings at each one of those sites.
7 And they have done reviews and their reviews are
8 ongoing.

9 Hearings will be held with respect to each
10 one of those applications using the new Part 2.
11 And absent the identification of an issue that would
12 be defined as a show stopper, which we have not
13 identified yet, the safety evaluation reports are
14 scheduled to be completed in June, August and October
15 of 2005 for those facilities.

16 We have also developed a review standard
17 that will provide guidance and criteria to conduct the
18 early site permit reviews. That will be forwarded
19 for Commission approval and issued later this year.
20 AP1000 design certification reviews. Westinghouse
21 submitted that application in 2002, in March. In
22 June 2003, we issued a draft SER with 174 open items.

1 As of March this year, there were 164 of those items
2 that had been addressed.

3 We had an ACRS letter of March that
4 discussed a number of the open items and some that
5 were resolved. March is an interesting month for
6 AP1000.

7 This is a target -- the end of the month is
8 a target for completing the remaining open issues.
9 If this is accomplished, and it looks like it likely
10 will be, and if Westinghouse issues the final design
11 control document by May 31st, we are on schedule for
12 an ACRS meeting in July. And in September of this
13 year, 2004, to issue the SER.

14 We are monitoring the progress here
15 carefully. We have developed some management tools
16 to track each chapter of the SER and where we are in
17 it. We are looking at it weekly.

18 Pre-application reviews. We are having
19 discussions on the Economic Simplified Boiling Water
20 Reactor, the ESBWR. GE requested pre-application
21 review in April 2002, to be done in two phases. They
22 plan to submit additional topical reports which would

1 really be a phase 3, and with an expectation that they
2 would submit a design cert application in 2005, mid
3 2005.

4 The Advanced Canadian Reactor, the ACR 700
5 design, we have been requested to do reviews and
6 focus on several key technical issues. The technical
7 issues we are focusing on are reactor pressure
8 boundary, computer codes and validation with respect
9 to thermal hydraulics and the core, and on-line
10 fueling and the confirmation of negative void
11 reactivity.

12 Pre-application review and the SER plan to
13 be completed September of this year, 2004. Design
14 certification may be received as early as the fall,
15 2004.

16 I will move to the draft construction
17 inspection program. The staff published a framework
18 document in 2003 that discusses the various designs
19 and the construction inspection program activities
20 and how we plan to evolve and develop construction
21 inspection program. It has been a while since we
22 have done construction inspections.

1 Modern design techniques, modular
2 construction, offshore vendor suppliers, components,
3 raise a number of interesting scheduling and
4 technical challenges for the staff. We are trying to
5 look in a integrated manner at the infrastructure
6 that is going to be necessary to conduct the
7 inspections to support the regulatory decisions that
8 are going to need to be taken to support licensing of
9 an advanced plant.

10 COMMISSIONER MERRIFIELD: Mr. Chairman, if
11 I may interrupt John's presentation just for a
12 moment? This is actually, I think, something that the
13 staff may want to expand on a little bit. I had an
14 opportunity to get a briefing on the construction
15 inspection programs.

16 Given the direction of our licensees, and
17 the methodology that has been adopted abroad,
18 particularly in Japan and to somewhat of a lesser
19 extent in Taiwan, the use of modular construction
20 could envision the use of shipyards here in the
21 United States or abroad where large components would
22 be manufactured and barged in or trucked in and

1 brought in to a location.

2 This could be really evolutionary and the
3 approaches that will be required for our staff and
4 our inspectors to go out, whether it is to locations in
5 the U.S. or elsewhere to inspect those sites.

6 I want to make sure the staff is credited.
7 I think they are looking at that very carefully. I
8 think they have been engaging with and will continue
9 to engage with our foreign counterparts who do have
10 some more experience in this area. But it provides a
11 lot of interesting developments for us as an agency
12 and how we deploy our resources to make sure that
13 these reactors, if they are, in fact, ordered and
14 built, are inspected in a way that we can meet our
15 health and safety mission.

16 But there is a lot going on there. And I
17 know they are trying to get through their
18 presentation quickly. But that is one I think is
19 particularly noteworthy.

20 MR. CRAIG: Thank you. There is a lot
21 going on. And it's important to note, as we
22 discussed with the industry, that as they get ready

1 to move forward, they are sensitive to the needs that
2 we are going to have with respect to fabrication of
3 components that may come very early in new
4 construction techniques as opposed to one that would
5 have taken place in the past.

6 COMMISSIONER MERRIFIELD: Mr. Chairman, we
7 have a long history of interaction with our
8 counterparts in the nuclear Navy. And the way in
9 which they have to work and inspect, particularly
10 with things such as the carriers down at Newport News
11 may be instructive of the kind of approach we are
12 going to have to think about taking where we may have
13 a lot of components all coming together in such a
14 way. We may actually borrow some of their experience
15 and others as well.

16 CHAIRMAN DIAZ: We have been borrowing from
17 them for a long time.

18 COMMISSIONER MERRIFIELD: We have, but this
19 may be -- it is a good two-way relationship and it's
20 worthy of noting that may be another one where we
21 have to do that.

22 MR. COLLINS: Commissioner Merrifield,

1 there is also a shorter term aspect of your point
2 which is a very good one. That is that many
3 components, replacement components for the existing
4 fleet are being manufactured overseas.
5 There is under consideration by the office the vendor
6 inspection program consideration. Which we used to
7 have a program in some form, at one time, very
8 robust.

9 The recent example of that, of course,
10 would be Palo Verde steam generator tube defect which
11 was a construction and a shipping type of
12 consideration. So there is a shorter term aspect
13 even if the longer term deserves more attention.

14 COMMISSIONER MERRIFIELD: For those in the
15 audience who may not realize we can't make steam
16 generators in the United States anymore, along with
17 some other major components. So Sam makes a very
18 good point.

19 CHAIRMAN DIAZ: Painfully aware of it.

20 MR. CRAIG: I will follow-up with two other
21 comments. Some of the inspectors that were, in fact,
22 in the vendor inspection program branch have been

1 actively involved in this effort. They are visiting
2 Canada as well as countries in Europe to look at the
3 standards that are used to fabricate and qualify
4 equipment. Which I think will be important to
5 support the decisions that we are going to make.
6 With respect to modular construction, the Japanese
7 tried small modules and large modules at several
8 recent sites. And they have informed us that as a
9 result of their experience, they are going to move to
10 have large modules assembled at the site which
11 provides them a lot of efficiencies and the expertise
12 in one spot to put them together, a lot of expertise
13 to do things like receipt inspection, testing. And
14 then, they have a very large crane that picks up a
15 very large module and puts it in the plant.

16 One of the things that they told us was
17 that we can make one large thing in the United
18 States. It's a crane that was made in Detroit which
19 they thought was interesting, recognizing that they
20 were building the new plants.

21 Next slide, please. Some of the ongoing
22 initiatives, the combined licensing preparation -- Part 52

1 is a rule that as well as others. And as you read
2 the rule, there are parts that reference other parts
3 of the regulations. And as we looked at the
4 rulemaking and a final rule that was going to the
5 Commission, it became clear that we needed to pause
6 and do a little more thorough look and identify the
7 other parts of the regulations that need to be
8 revised. So that as one part of the regulations
9 point to another part, they are consistent.
10 We are working closely with OGC to do that. And a
11 final rule is tentatively scheduled to be forwarded
12 to the Commission in August, 2004. So that's what we
13 are working to today.

14 It's more one of clarifications. And it is
15 going to include Part 50, 52, 100, et cetra.
16 We are working with NEI on a number of issues where
17 clarification has been requested. And we are working
18 to develop a guide that will discuss items such as
19 format and contents, combined operating license
20 applications. That work is moving along well. And I
21 think that kind of infrastructure will be important
22 reflecting on what we did in license renewal to help

1 external stakeholders understand what is expected and
2 what it will take to submit a good application.

3 I will note that DOE has a solicitation out
4 for applicants for combined operating license and
5 part of that information that is required is a
6 selection of a design.

7 We are optimistic that the design selection
8 will give us insights into the kind of designs that
9 we need to be further along on as we try to work
10 various design certifications to support future
11 applications.

12 We talked a little bit about the construction
13 inspection program. And I think that we covered it.
14 So I am not going to add anything there. The intent
15 here for the initiatives was to talk about the
16 challenges and how we are going to meet those
17 challenges. And I think we are doing that.

18 There is some uncertainty with respect to
19 transitioning from pre-application to a design cert
20 application and when licensees would submit the design
21 cert applications. Dealing with that uncertainty and
22 scheduling resources and reviews is something we are

1 very sensitive to.

2 Both the ESBWR and ACR 700, as I said
3 before, are planning to come in for design cert, and
4 based on the experience from the AP1000 and the
5 novelty, the differences with these designs, it is
6 likely they are going to require significantly more
7 resources for the staff reviews. So we are going to
8 look at those very carefully and we are sensitive to
9 that.

10 I will note the current estimates for
11 design cert for these plants is between four and five
12 years. There are six other designs, additional
13 pre-application reviews. And I will run through
14 these. This is another area where we are getting a
15 lot of support from Research.

16 The Simplified Water Reactor 1000, it is a
17 German boiling water reactor, Framatome is the
18 sponsor of that. They have not announced whether or
19 not to pursue a decision for pre-applications
20 interactions with the staff yet.

21 The Gaseous Turbine Modular High
22 Temperature Reactor is a General Atomics effort.

1 There is virtually no activity ongoing with that
2 right now. Pebble Bed Modular Design requested
3 pre-application activities beginning late this year.
4 The International Reactor Innovative and Secure
5 Design, the Westinghouse design, has expressed
6 some interest in pre-application activities and we
7 anticipate a formal request following completion of
8 the AP1000.

9 I will note that there have been some
10 discussions. And it appears that one desire of this
11 new design would be potential reductions of the
12 emergency planning zone. So I have a lot of interest
13 in review.

14 Small Liquid Metal Reactor. That has been
15 discussed. That is a Toshiba design. There have
16 been some discussions about putting one of those in
17 remote parts of Alaska.

18 And then there is the very High Temperature
19 Gas Reactor that is the next generation concept. And
20 DOE has discussed the potential for constructing one
21 of these in Idaho to demonstrate the hydrogen and
22 electrical generation.

1 Next slide, please. License renewal
2 continues to be a success story for the agency. I
3 will note that of the 28 units that have announced
4 license renewal application dates between 2004 and
5 2009, combined with the ones in-house or completed,
6 it accounts for about 70 of the units in the United
7 States will have sought. And it looks like absent
8 technical issues that cannot get resolved, it is
9 likely that 70 of them will get renewed.

10 We are piloting a new review process. And
11 the new review process involves going out to the site
12 early on to look at aging management programs.
13 In the past, we get the application, read it and send
14 a request for additional information. Preparing the
15 RAI, sending it out, having phone conversations,
16 understand what the question is the staff thought
17 it was asking -- a lot of the communication
18 challenges are overcome by face-to-face discussion
19 and looking at the maintenance program, looking at
20 the aging management programs in place at the plant.

21 We have three pilot plants that we have
22 gone out and done these site audits with, Farley,

1 ANO-2 and Cook. Those reviews are ongoing. But it
2 appears that up front we are cutting two months out
3 of the 22-month schedule for each one of those
4 plants. So we are optimistic about that continued
5 savings, and we think that will give us some
6 flexibility to deal with license renewal issues as we
7 move forward.

8 We have updated -- we are updating a number
9 of guidance documents. It has been three years since
10 we issued the guidance documents. We are continuing
11 to work to update the generic aging lessons learned
12 and standard review plan. And we are working with
13 industry toward endorsing NEI 9510 Rev. 4 as part of
14 the continued evolution of license renewal guidance
15 documents.

16 And one of the things that we heard within
17 the last week or so was that the industry is
18 interested in further revision of the generic aging
19 lessons learned. It identifies those aging
20 management programs that we found acceptable. They
21 want to review it to make sure that all the ones that
22 we found acceptable for individual plants would be

1 included there and would be a more concise, easier to
2 use tool.

3 The bullet for the application submittal
4 schedule, I covered that briefly with the indication
5 between now and 2009 we will have 70. They are
6 currently in-house 11 reviews underway.

7 We have received letters from the ACRS for
8 two over the last two weeks, and they are positive letters. And as
9 I -- before I turn it over to Brian, I will note it
10 continues to be a very successful program. Thank
11 you. Brian.

12 DR. SHERON: Slide 11, please.
13 I am going to talk quickly about the reactors
14 licensing program, our key accomplishments. We
15 completed 1,774 licensing actions last year in
16 FY '03, 500 of the licensing actions. And we met our
17 timeliness goal. Our inventory was above our goal of
18 1,000. But we basically met all the high priority
19 needs of our licensees. So this was not any kind of
20 a problem.

21 With regard to the access authorization
22 order close out, as of January 7th of this year, all

1 licensee responses have been reviewed, found
2 acceptable and we have closed these out.
3 We issued a review standard for extended
4 power uprates, RS-001. Our review standard is a
5 relatively new document. What it does is
6 incorporates the relevant standard review plan
7 sections that apply to uprates and extended power
8 uprate. It also contains additional review guidance
9 that is unique to uprates that reviewers need to
10 consider that may not be included in the current SRP.
11 What this does is it provides very clear guidance not
12 only for the staff but also for licensees on what our
13 requirements are and what the expectations are for
14 their submittals. And this provides for a much more
15 efficient review process and much more predictable
16 one.

17 Next slide, please.
18 Key initiatives. We have a security plan review team
19 established. As NSIR described yesterday, I'm not
20 going into detail about that, but I want to point out
21 that we have provided eight dedicated staff to
22 support this, five technical reviewers, two licensing

1 assistants and one administrative assistant. They
2 will be working full time starting in, I believe,
3 towards the end of April to complete these. And that
4 we are taking our responsibility for assuring the
5 safety, security interface very seriously on this.
6 With regard to MOX licensing activities, as you know,
7 Catawba is proposing to put four lead test
8 assemblies into the -- Duke is preparing to put four
9 lead test assemblies into the Catawba reactor. We
10 are planning to have our safety evaluation issued by
11 the end of March. We have scheduled ACRS briefings
12 on this and we plan to issue our amendment by
13 September.

14 The standard review plant update. This is
15 a very major effort since there are over 260
16 sections, individual sections within the SRP. And I
17 want to point out this has been an area that we have
18 been concerned about because we have had to defer
19 these updates in the past for higher priority work
20 every year. We would budget it and then it would not
21 get funded sufficiently.

22 We do have an SRM from the Commission to look at what

1 it would take to update the SRP. We are planning
2 to provide that to the Commission by May 3rd and we
3 are developing right now the resource estimates and
4 what we think we can accomplish.

5 Topical report reviews. The inventory right now
6 stands at about 100 topicals that are in-house for
7 review. We have tried to implement or we are
8 implementing new process and improved process in this
9 fiscal year.

10 What this does is it increases the
11 acceptance review time to 45 days. But in that
12 45-day period, what we do is we establish mutually
13 agreeable schedules with the submitter with regard to
14 when the staff is expected to issue RAI's, when we
15 would expect the submitter to respond to those RAI's.
16 We also do a proprietary review to make sure that if
17 the information is claimed to be proprietary, it
18 meets the criteria. And importantly also is a fee
19 waiver review.

20 We have had situations in the past where
21 there has been mis-communication and some submitters
22 have believed that the topical should have been fee

1 waived and we did not agree. And we had already
2 started review.

3 So now, we are going to resolve that issue and make
4 sure that both parties understand whether or not the
5 topical is fee waived before we start the review.

6 The rulemaking process improvements. We have
7 implemented the recommendations from the rulemaking
8 improvement task force which includes standardizing our
9 budgeting for rulemaking, standardizing management
10 and tracking process for that. And our challenge is
11 going to be to continue these initiatives and to
12 implement these process improvements as we move
13 forward with the rulemakings.

14 Next slide, please. I'm going to talk now
15 quickly about some current technical issues that the
16 staff is working on.

17 Grid reliability. We have established an
18 internal task force to look at lessons learned from
19 the August 14th blackout event on the east coast.
20 The plan is to review our regulations, our rules, to
21 decide if any changes need to be made as a result of
22 what we learned from the August 14th event,

1 particularly, like, for example, station blackout
2 rule or any other requirements.

3 We have also had information exchange
4 meetings recently with both FERC, Federal Energy
5 Regulatory Commission and NERC, the Northeast
6 Reliability Council, to exchange information in terms
7 of what we do and what their roles are. And it's
8 basically, we are looking now to determine if any
9 regulatory action is needed to assure the plants will
10 be able to meet their responsibilities to operate
11 safely over the summer months when the grid is
12 probably strained the most.

13 Power uprate issues. We are seeing
14 component structural degradation in some plants,
15 particularly the boiling water reactors. We believe
16 this is a result of increased steam flows associated
17 with power uprates.

18 This degradation has been in the form of
19 cracking of steam drier components in the welds,
20 cracking of feed water probes that are in the flow
21 path and the feed water lines and also some valve
22 sub-components due to vibration.

1 The industry through the boiling water
2 reactor owners group has charged the BWRVIP, which is
3 the BWR vessel internals program group, to address
4 this issue. This include their developing inspection
5 and evaluation guidelines. We have had several
6 meetings with them.

7 We believe right now that they are taking
8 this seriously and they are moving forward in a
9 pro-active fashion. So at this time, we are just
10 monitoring their work and also evaluating operating
11 experience to see if any of the regulatory actions
12 are needed at this time.

13 We are also looking at whether any specific
14 regulatory action is needed at plants that have
15 repeatedly experienced this degradation and
16 particularly the Quad Cities units. So that is an
17 ongoing effort.

18 On containment -- I'm sorry, I don't want
19 to get off the material degradation. We are also
20 working on pressurizer heater sleeve cracking, which
21 was -- this is something that axial cracks have been
22 discovered at CE plants for sometime. This is not

1 new information.

2 However, recently, at the Palo Verde plant,
3 they found a circumferential component. Fortunately,
4 it was behind the weld, basically, in a non-pressure
5 boundary portion of the sleeve and didn't pose any
6 challenge. But certainly raised the question about
7 whether circumferential cracking in the pressure
8 boundary portion was feasible.

9 The industry has an initiative. They
10 issued a letter to all their licensees, I believe, to
11 do examinations of these components. And the staff
12 is in the process right now of preparing a bulletin
13 to go out to the licensees requesting information on
14 their inspection plans.

15 With regard to the vessel head order that
16 was issued about a year ago, we recently issued a
17 revision to that order. This was EA 03-009. This
18 incorporated some alternatives to the original order.
19 They were primarily -- we were basically putting in
20 place items that we had previously approved -- you
21 know, alternatives that the licensees had come in and
22 asked for. And these basically were more areas that

1 helped them with their inspections. They did not
2 reduce the amount of inspection that was done or
3 anything that would relate to safety. But it does
4 make the inspections a little more, I would say,
5 easier for them to perform.

6 On Bulletin 2003-02, if you recall that was
7 a bulletin we issued on lower head vessel
8 penetrations, and it was issued in response to the
9 leakage that was found at the South Texas plant. We
10 have received the responses to those bulletins.
11 The industry has taken initiative to have all
12 licensees' pressurized water reactors with lower head
13 penetrations to do bare metal visual inspections on
14 their lower heads. To date, none of these
15 inspections have shown any other leakage from other
16 plants.

17 And at this time, we don't see any further
18 regulatory action is needed above and beyond what the
19 industry is doing. However, we will continue to
20 monitor this.

21 On containment sump issues. We continued
22 to plan to issue a generic letter in August of this

1 year. I was just told that the draft generic letter
2 will go out for public comment that's been sent over
3 to the administrative office of Administration for
4 processing to put out in the Federal Register. So
5 that should go out within days, I would hope.
6 We continue to work with the industry. There is a
7 meeting going on right now as we speak with the
8 industry to work through the evaluation guidelines
9 necessary to evaluate the sumps when the generic
10 letter goes out.

11 Our overall plan right now is that the
12 industry will complete these evaluations based on the
13 requests of the generic letter by the spring of 2005.
14 And at that time they will either tell us whether
15 their sumps remain operable or whether they have to
16 make any modifications and what schedule they will
17 propose to do those modifications on.

18 In the area of fire protection. NFPA 805,
19 this should be to the Commission shortly.
20 Implementation guidance is on track for June of this
21 year. An inspection guidance will be prepared and
22 available right after the implementation guidance is

1 completed.

2 On the manual action rulemaking, the staff
3 is proposing changes to Appendix R to allow manual
4 actions, if justified, in lieu of fire barriers that
5 had been removed. On November 26, 2003, the staff
6 published draft criteria for determining the
7 effectiveness of manual actions to achieve post fire
8 safe shutdown.

9 We did receive a large number of comments.
10 We are also working with NSIR on the security
11 interface with this rule. And our plan is to
12 complete the rule probably by FY '05.

13 Regarding associated circuits. This is a
14 good area or good example of where we have had, I
15 think, good interaction with the industry. We did
16 have a disagreement with the industry regarding the
17 associated circuit issue. This has to do with
18 fire-induced shorts in circuits.

19 To resolve the issue, the industry took the
20 initiative. They performed some tests and provided
21 us information on their assessment.

22 We are using these test results to draft the RIS on

1 inspector guidance that will focus on what inspectors
2 are going to be inspecting. In other words, for the
3 most likely spurious actions.

4 Licensees will be expected to prepare and
5 self-evaluate their programs. And then, we plan to
6 resume our inspections, probably, by the end of the
7 year on the associated circuits. So this is moving
8 towards resolution.

9 In the area of risk information -- I want
10 to make sure I'm on the right slide. I'm on slide
11 13. On risk-informed regulation, a number of
12 activities going on there. We are working on the SRM
13 with regard to the stabilization of quality
14 expectations. We have an inner office working group
15 primarily, NRR and Research. But we have also
16 invited the regions and NMSS to participate on this.
17 And the plan is that we would get a plan to have to
18 move forward on the stabilization process by July of
19 this year.

20 Risk-informed special treatment requirements. This
21 is 10 CFR 50.69. We had the proposed rulemaking go
22 out on May 16, 2003. We received 26 sets of

1 comments, hundreds of individual comments were
2 imbedded within those 26 sets. So there are a fair
3 number of comments that we need to work through.
4 We are currently working through them, reviewing
5 them, deciding if any changes are needed. But we
6 expect to issue the final rule before the end of the
7 year.

8 On Option 3, the risk informing of the
9 technical requirements, the staff has been working on
10 risk-informing 10 CFR 50.46. On March 3rd, we issued
11 SECY-04-0037 requesting Commission direction and
12 guidance on some of the key policy issues. And right
13 now we are awaiting guidance on that.

14 The last item I wanted to talk about was
15 risk-management technical specifications. And the
16 only thing I wanted to say is that this is an
17 initiative we have with the industry.

18 We are continuing to develop risk-informed
19 improvements to the current system of tech specs.
20 And right now there are eight initiatives that we are
21 working on with the industry. They are in various
22 stages of development but they are all progressing

1 well. With that, I think I will turn it back over to
2 Jim.

3 MR. DYER: Thank you, Brian.

4 I just note on the 50.46 effort, we are waiting the
5 Commission direction but we are continuing to work.
6 I know Research is putting together their large
7 break LOCA frequency paper and we have been working
8 with them on preparing that for the Commission.
9 Chairman, Commissioners, I guess I warned you up
10 front in my opening remarks that we were going to try
11 to cover a lot of information in a short period of
12 time. I think I stayed true to form there. We went
13 through a lot of information in a very short time.
14 I hope you heard that we are working to enhance
15 reactor safety in a manner that ensures realistic
16 conservatism. In other words, do what's right.
17 We will continue to work with our internal and
18 external stakeholders to improve our program
19 effectiveness. And my target is through
20 infrastructure development. Essentially, we can't
21 work harder. We have to work smarter. I view that
22 as the way to ensure our success.

1 As one of the things I hope you also heard
2 throughout our presentation is reactor safety,
3 achieving reactor safety is certainly a team effort.
4 And you heard it is not only the NRR program here but
5 we have a lead in a number of areas but are supported
6 and we have an active interface by the regions and by
7 the Office of Research and certainly, our
8 coordination with the Office of Nuclear Security and
9 Incident Response.

10 As well as I hope you heard also the heavy
11 reliance and the working relationship we have with
12 our external stakeholders, in particular a lot of
13 the industry groups where the industry has taken the
14 lead for resolving the current technical issues. And
15 we are looking to keep them out ahead of us where we can
16 endorse their standards and their activities and do
17 our own independent review.

18 In this manner, we hope to continue by
19 improving our infrastructure and improve the
20 continuous improvement of our processes and
21 development of our human capital assets within the
22 office of NRR.

1 And with that, that concludes my presentation. I
2 will turn the presentation back.

3 DR. TRAVERS: Thanks, Jim.

4 In closing, Chairman, I will just make mention of one
5 quick thing. One way we typically get some insight
6 into our performance is what our external
7 stakeholders think of it. I recently had the
8 opportunity to represent you and the Commission
9 before a Subcommittee of the Senate, including
10 Senators Alexander, Domenici, Craig, and Landrieu.
11 And their particular interest at this hearing was in
12 our programs related to license renewal, power
13 uprates, preparations for the possibility of new
14 power plant licensing activity and on the Browns
15 Ferry recovery activities.

16 And I was struck by the very positive
17 comments that we received as a function of the views
18 that were expressed by the Senators on both their
19 view that our focus on safety is appropriate and
20 their view that we have over the recent years
21 particularly made advances in our effectiveness and
22 efficiency in processing important licensing

1 activities within the Commission.

2 So overall, it was a good indication, I thought, if
3 just one of some of the views that important
4 stakeholders on the Hill have of our recent
5 performance. Thank you.

6 CHAIRMAN DIAZ: Thank you Mr. Travers, Jim,
7 John, Sam and Brian. Jim, you were really quiet.

8 MR. DYER: He gets to answer all the
9 questions.

10 CHAIRMAN DIAZ: You have a referral system.
11 I appreciate the briefing. I agree that we made some
12 significant progress in the past few years. And I
13 believe Commissioner Merrifield is going to go first.

14 COMMISSIONER MERRIFIELD: Thank you,
15 Mr. Chairman. I would concur with your
16 characterization that we made a lot of progress. I
17 think that is absolutely the case.

18 I have got a number of areas that I want to
19 try to cover this morning in my questions. It may
20 well be, Mr. Chairman, that as Mr. McGaffigan has
21 asked every once in a while, I may want to think
22 about perhaps taking my first whack. And then

1 depending on what the two of you ask, maybe take a
2 few more at the end.

3 In the materials that you provided to the
4 Commission that were not part of the public slides,
5 it noted in some detail the fact that we put 163
6 weeks of inspection support to Region I and Region II
7 in order to meet baseline -- I'm sorry -- I and III
8 in order to meet the baseline inspection program in
9 2003. And that was obviously as a result of a lot of
10 assistance from headquarters and from other regions.

11 That was as a result of ongoing issues that
12 those regions were dealing with and something I think
13 none of us would like to see again in the future.
14 My understanding is that we have taken an initiative
15 to hire additional inspectors to help us bridge some
16 of these gaps, particularly looking forward to the
17 years 2004 and 2006. Right now, we are halfway
18 through 2004. And I wanted to get some sense of how
19 are we in our effort to bring on additional
20 inspectors and help us bridge and make sure we have
21 the right resources to accomplish our baseline
22 program for this year and beyond?

1 MR. DYER: I will start off from an overview and turn
2 it over to Jim Caldwell to talk about any of the
3 regional specifics. But I think working with the
4 Office of Human Resources, the headquarters staff as
5 well as the regional staffs, have done just a superb
6 job of recruiting and putting people through a
7 training program to get inspectors out.

8 I think John had some statistics as to
9 where we are right now on the site coverage activity
10 from the inspectors. But it is improving from where
11 we have been in the past.

12 So we are working on improving our
13 inspector assets. The concept that changed recently
14 that I think is important is when we increased our
15 FTE by 13 to cover this additional inspection, was
16 with the recognition that deployed the FTE to all
17 four regions with an understanding that they are
18 going to be tasked to support wherever the emerging
19 issue is.

20 And so, in the past we would try to target
21 and follow which regions is going to have the
22 problem. And we would allocate the resources. But

1 by the time the resources got allocated and trained
2 and hired, the issue may have shifted to a different
3 region. So we were continually chasing the issue.
4 John, do you have the specifics?

5 MR. CRAIG: I think that coupled with if
6 you know that a resident is going to leave the site,
7 you can deploy an inspector there 12 months ahead of
8 time. A senior resident, you would deploy the
9 replacement six months ahead of time, which provides
10 a greater overlap.

11 We did a quick pulse of the regions and I
12 can say that every site has a basic complement of
13 inspectors that have completed basic quals.
14 So it is in a good place today and I think it is
15 getting better.

16 MR. COLLINS: Commissioner, I think we have
17 in a programmatic sense at the deputy EDO and EDO
18 level, the expectation is that we will share
19 resources as a team to accomplish the agency's
20 mission. Clearly, your point is that we don't want
21 to have to deal with an acute situation. And
22 historically, we have had to do that.

1 The budgeting in the go forward sense provides for
2 the pool of resources. And to the extent that we
3 acknowledge that, there is an addition to the
4 regional administrator's performance plans, which
5 acknowledge that we will share resources as a team to
6 ensure that the agency's goals are met.

7 That breaks down the barriers region to
8 region and office to office to ensure that on a
9 priority sense, knowing that we have to add/shed
10 activities, we will go to the most important
11 priority, share resources, to accomplish that goal.

12 COMMISSIONER MERRIFIELD: But the bottom
13 line of my question is that you were on the
14 trajectory we expect to be on in terms of hiring and
15 that in addition to other management changes, we will
16 be able to do what we need to do with our baseline
17 inspection program?

18 MR. CRAIG: Yes, sir.

19 COMMISSIONER MERRIFIELD: Okay. On slide
20 six in terms of talking about key initiatives, one of
21 the issues you outlined was performance indicator
22 improvements program. This is, obviously, a key

1 facet of our reactor oversight process. I'm getting
2 some sense -- and it may have been in the background
3 slides -- that there may be some additional
4 assessment of these that the staff may be
5 considering.

6 I was wondering if you could outline for me
7 a little bit where this is going and what the
8 rationale is for it? What resources might be
9 associated with it if you are going down that line?

10 MR. DYER: I would defer that to John.

11 MR. CRAIG: Every year we do an annual
12 assessment of the oversight program, looking into
13 PIs, looking at the findings as part of that SECY.
14 And every year, we go from a top to a bottom to look
15 at what the experiences have been, what have we
16 learned, what changes should we consider.

17 And that's what we are doing as part of the
18 annual review. The two PIs that I talked about are
19 the ones of focus. I think that those are pretty
20 much old news. We have known about those for a
21 while. So, the thrust is the normal review and it
22 gets discussed in greater detail in the SECY you are

1 going to get next week. We are not conducting
2 anything out of the ordinary or routine associated
3 with PIs in general.

4 COMMISSIONER MERRIFIELD: That's good to
5 hear. I was not certain what I was reading from the
6 slides. I just wanted to make sure I got that
7 understanding.

8 I think from my own standpoint that
9 performance indicators is -- you know, that program
10 we have had in line, in one form or another, going on
11 five years from now. I think it is a tool in our
12 program that has worked for us well.

13 Now, is it a panacea? And I think no one
14 even entering into this would have said that. Or at
15 least, no one should have taken the indication that
16 performance indicators are in any way a panacea.
17 I have used the analogy before, my family coming from
18 a hardware background. You have a tool box filled with
19 different tools. Each of them serves a purpose. And
20 not one tool is the basis for all that you do. I know there
21 may be a few folks out there who perhaps don't like
22 the performance indicators as much. But I think that

1 they have been very effective in helping us achieve
2 some elements of our program. Obviously, there are
3 others. We are looking at engineering inspections.
4 We are looking at how we do inspections online. And
5 there is a whole variety of things we need to do and
6 continue to do to make sure that we are appropriately
7 supervising and analyzing our licensees.
8 But I just wanted to make sure that we were all on
9 the same wavelength on that one.

10 I had an opportunity during my presentation
11 at the RIC to talk about fire protection. And one of
12 the slides that I put up was the notion that in the
13 year 2000, I had noted that we really needed to come
14 to conclusion in terms of wrapping up where we were
15 going on fire protection.

16 I put up the very same slide at this RIC,
17 noting that we still need to wrap up where we are in
18 fire protection, four years hence.

19 Now, obviously, we need to do the right
20 thing. Speed is not our only criteria. We need to
21 make sure we are doing something that is right. But
22 at the same time, many of our stakeholders, be they

1 the regulated industries or individuals who watch
2 what we do, be they on Capitol Hill or in the other
3 stakeholder communities, I think everyone is at a
4 point now where can we come to a resolution on fire
5 protection.

6 And it certainly would be my hope that we can do
7 that. And perhaps you can go into a little greater
8 detail about how we are going to get that and where
9 we are.

10 MR. DYER: I will pass that baton to Brian.
11 But just let me say, Commissioner, my hope, too, as a
12 former regional administrator, is trying to deal with
13 a lot of the open fire protection significance
14 determination process issues and some of the effort
15 that has to go into it and prolonged activities.
16 It's an area that I'm interested in going to closure
17 on, certainly.

18 One of the areas that we have talked about
19 and it has somewhat slowed our views is, of course,
20 the integration of security and safety. We
21 originally had a game plan for fire protection that
22 was just based on safety.

1 Now, we are considering, particularly with the
2 rapidly evolving issues in the security area, many
3 that you talked about yesterday in the closed meeting
4 as well as alluded to in the open meeting, is
5 making sure -- this is one where we make sure we
6 don't do something in the safety arena that is going
7 to later, with respect to safety and security
8 interface, that we will have to reconsider.
9 So we are taking a pause to make sure we are going to
10 have an integrated approach on that. But Brian can
11 give you much more.

12 DR. SHERON: I'm not sure I can give much
13 more but, we have -- obviously, I been concerned and
14 I think Susie Black has been concerned also about
15 trying to reach some sort of closure on the fire
16 protection issues.

17 I am going to be as candid as I can based
18 on my experience working in this area now for a
19 number of years is that there could be new issues
20 that are going to arise. And I think it is just a
21 little bit the nature of the beast. Plants that were
22 designed a long time ago when Appendix R was

1 promulgated, there was a lot of improvements that had
2 to be made. What we found out is inspectors go out
3 is that they may not see something the first time and
4 they catch it several times, maybe a couple of
5 inspections later. The licensee says, well, you
6 approved this because you were out here, and
7 inspected this and I got a good inspection report or
8 something.

9 We have to deal with those. Sometimes on a
10 case-by-case basis, other times they have become more
11 generic. And we try to deal with them on a generic
12 basis.

13 We hope that the number of these issues is
14 starting to narrow down and the like. I think in my
15 presentation I tried to touch on the main ones. And
16 I hope I left you with the impression that these are
17 all on a success path as far as I can tell. We are
18 hoping NFPA 805 which provides a risk-informed
19 alternative, licensees will adopt this. And
20 hopefully, that will get us out of some of these
21 difficult situations with, you know, what's the real
22 licensing basis and so forth, and what does the

1 regulation mean and the like.

2 With manual actions, that was one that --

3 MR. COLLINS: Why don't we have Susie talk
4 about the closure process. I think that's the real
5 thrust of the question, rather than the specific
6 technical issues.

7 DR. SHERON: Okay.

8 MS. BLACK: Thank you. I think what Brian
9 was saying is that -- I have a little pollen issue
10 today. The closure plan is really to continue these
11 rulemaking processes and get them on the books so
12 that licensees can pick up 805 or through the manual
13 action rulemaking, resolve their issues with the
14 outstanding inspection findings we have in that area
15 as well as the circuit analysis.

16 Circuit analysis, we have recently issued
17 a RIS. It provides guidance for not only licensees
18 but for our inspectors to understand what are the
19 most risk significant and most likely circuit
20 problems that will be identified and fix those.

21 COMMISSIONER MERRIFIELD: Timing?

22 MS. BLACK: Timing. The 805. That rule will be

1 up to the Commission by a month from now at the latest.

2 CHAIRMAN DIAZ: Closure of this issue was
3 first addressed by me, I think, six years ago. I was
4 a young man then.

5 MS. BLACK: Yes, I was a young person as
6 well, six years ago.

7 CHAIRMAN DIAZ: I believe what Commissioner
8 Merrifield and I are saying, and I'm sure
9 Commissioner McGaffigan could add his own views, but
10 I'm sure they are not different; is that we need to
11 take this to the point that we can say this is
12 closed. And it goes from the inspections. It goes
13 to the rulemaking.

14 But, really, this is an area that has been
15 lingering in here. I know it is difficult. I don't
16 want to make it simpler. I would like just to see
17 it closed. And I think it is getting to that point
18 in which we need to put whatever resources and tell the
19 industry that this area has to be closed. That we
20 cannot be going back and forth, back and forth.

21 MS. BLACK: We have been working very well
22 with the industry. We have a working group where we

1 meet triannually. And when the identified issues
2 come up, we work together to determine what are the
3 most important and what is the proper closure plan
4 for each issue.

5 I think with the completion of the first
6 round of the triannuals, I think we have found most
7 of the issues that were out there. And we have paths
8 for closure for all of those issues currently.

9 CHAIRMAN DIAZ: Just do it. Thank you.

10 COMMISSIONER MERRIFIELD: Next question is
11 grid reliability. You mentioned a little bit --
12 obviously, there has been an ongoing issue associated
13 with the Chairman's involvement in the task force,
14 Secretary Abraham's task force in the phase one and
15 two recommendations. That is an effort.
16 We have our own internal look that we need to do on
17 looking at grid issues. Our staff has made some --
18 there is some discussion, I know in the staff, of
19 different things we need to take a look at.
20 Today is I think is March 24th. We know that there
21 is a key summertime period that we have to be
22 concerned with.

1 What is the timing and what kind of specific action
2 do you think we may have that will be coming to the
3 Commission so that we can act in ways, if we need to
4 act, prior to a summertime period, we will be in a
5 position to do so?

6 DR. SHERON: The plan right now is that we
7 intend to issue a RIS, regulatory information
8 summarily, to the industry. This will basically set
9 forth what our expectations are with regard to their
10 responsibilities for a sure and safe plant operation
11 during the summer, which could include, you know,
12 monitoring the grid and so forth.

13 We are also now looking at, once we get the
14 RIS out -- which we hope will be shortly. And I am
15 guessing maybe within a month or so, but before the
16 summer months.

17 The next step is that staff has been
18 instructed to look whether we need to gather any
19 further information from the industry through, for
20 example, a 50.54(f) request. That is being evaluated.
21 And they are supposed to come back to our management
22 team with a recommendation on whether we need to

1 gather more information.

2 In which case, then probably later in the
3 year, a 50.54(f) request might go out to the industry.
4 We also, in addition to the RIS. are preparing a TI,
5 temporary instruction. And we will have our
6 inspectors go out and follow-up with the licensees
7 with regard to their preparations and so forth for
8 operating reliably over the summer.

9 MR. DYER: We have, I think, a Commission
10 meeting scheduled for May to provide the Commission a
11 detailed briefing on the grid reliability issues.

12 But as Brian said, we were focused on what was our
13 immediate action to support this summer. And we were
14 debating do we needed to go out with some sort of a
15 bulletin or request information back before the
16 summer or do we believe that the current situation is
17 adequately covered.

18 And where the staff came out was that our
19 current regulations, in particularly the maintenance
20 rule, A4 Rule, requires that licensees take the
21 appropriate -- that manage the risk when they are
22 taking systems out of service for maintenance.

1 The information notice is going to reiterate that
2 point, that grid reliability, the condition of the
3 grid and monitoring it is a key factor that you have
4 to consider in these activities.

5 I believe that should be a -- most licensees do that
6 but we are concerned about taking diesels out for a
7 extended period of time with the grid situation.

8 The issue on the bulletin from my perspective is one
9 of can we accurately monitor the grid? What are the
10 mechanisms for monitoring the grid? And we recently
11 had an event, I think at the Calloway Station, where
12 they were monitoring the grid but the grid was
13 unstable and they could not tell because of the
14 current situation.

15 So that is an area that technology is
16 evolving. As we said, we are meeting with NERC and
17 many of the transmission organizations, and as part
18 of the TI is looking at it to understand what is the
19 optimal way or what's the best way of monitoring the
20 grid so that you have a good understanding of your
21 grid around the plant. And that is sort of a
22 differentiation between the two steps that we are

1 talking about.

2 COMMISSIONER MERRIFIELD: Given the timing
3 of this -- and I think we should go ahead and have
4 the meeting in May. It may well be that in the
5 interim, rather than holding off with some of the
6 information, at least from my perspective -- I know
7 the Chairman has been very involved in this and there
8 is interest with all of us, there may be a need
9 either through our TAs or directly to give us some
10 interim information so we can maintain, at least from
11 my sense, maintain an understanding of what is going
12 on. And not necessarily wait until the May time
13 period to give all of that to us.

14 MR. COLLINS: Commissioner Merrifield, there will be a
15 driver for that and that is the national report and
16 including the Canadian portion, which makes it an
17 international report, on the August 14th event is
18 scheduled to be issued this coming Monday. Of
19 course, the Chairman plays a major role in that as
20 working group co-chairman. There are a number of --

21 COMMISSIONER MERRIFIELD: That's a partial
22 driver. But we have to do what we have to do as a

1 regulatory agency. That is an important effort that
2 you and the Chairman have been very involved with.
3 We have got to take our own internalized assessment.
4 I would note that as well.

5 MR. COLLINS: That's true. In fact, that will come to
6 closure as a part of the report. The report has a
7 number of recommendations which are going to rely on
8 NRC involvement and the interfaces between FERC and
9 NERC and DOE and others. And there is a proposal to
10 continue that interface in the next year which would
11 include our role and bringing to the table our
12 concerns in order to address those interfaces.

13 It turns out there is discussion in this
14 report about the role of large base load plants,
15 particularly some large base load nuclear power plants which
16 are in critical grid sectors which although are
17 operating safely and shut down safely would have a
18 tendency to drive the performance of the grid were
19 they were to be on line or off line in some of these
20 places.

21 CHAIRMAN DIAZ: I believe we have both efforts
22 going on in parallel. And both

1 are coming to the point that we need to be able to
2 put them together. I think we are getting there.
3 That's my impression from my discussions.

4 COMMISSIONER MERRIFIELD: Mr. Chairman, I
5 may well have a couple of additional questions at the
6 end.

7 CHAIRMAN DIAZ: Sure. We are talking about
8 grid reliability. Of course, that is of interest
9 not only to us, but it seems like the issue of grid
10 reliability and the importance of what is called
11 extreme events, whether it be a heat wave or a major
12 storm is now coming around as not only a national
13 issue but an international issue.

14 So I think capturing what we need to do in
15 the summer early has some significance for the United
16 States and for the North American grid. But it is
17 also an issue that our international colleagues have
18 serious concerns about it and what kind of actions do
19 we take. So it is really deserves our attention.
20 Let me go to some of the issues. John, you were
21 talking about some of the construction. I notice
22 that on the slide 7, the draft construction

1 inspection program is listed as an accomplishment.
2 And then on the slide 8, you name it as a key
3 initiative.

4 So, I know the difference between draft and
5 final and that was repeated. Could you tell me how
6 final is the draft or how drafty is the final?

7 MR. CRAIG: The framework document that had
8 the overall plan and laid out was issued, as I said,
9 in May of 2003 for comment. And we are revising
10 those comments. And it will be issued in final.

11 But the thrust of the initiative was more along the
12 lines of what are the challenges we have. We don't
13 have a construction inspection program that we could
14 implement today as a result of the challenges.

15 As we look at what's going on around the country and
16 how plants are being constructed, we look at where
17 components are being fabricated, the inspection
18 program that's in place today, that's being
19 implemented would need to be revised to address new
20 construction and vendor inspections as well as, as
21 Sam mentioned, the vendor branch. They used to do
22 architect engineer NSSS inspections also.

1 There is a lot of questions to be asked and answered
2 as we overlay potential construction schedule with
3 procurement business decisions and regulatory
4 decisions. So I didn't want to leave you with the
5 impression that we didn't have significant challenges
6 ahead of us.

7 CHAIRMAN DIAZ: I know that Commissioner
8 Merrifield already went into this, but,
9 fundamentally, there is some significance differences
10 now. And I think what we want to make sure is that
11 the staff is putting the right amount of efforts and
12 resources in resolving those issues ahead of time.
13 They all come together, like Sam mentioned, where
14 there is the procurement of large items whether they
15 be steam generators or pumps, they all now have to be
16 put as a program that has significant ties between
17 one and the other. And it will end up -- supposedly,
18 in the future, we might have to actually conduct a
19 construction program.

20 Although, I would say that I don't know
21 whether -- the Browns Ferry unit is giving us some
22 opportunities to actually look at the way that the

1 old programs were done versus the new programs. It
2 does afford us an opportunity to train, at least,
3 some people.

4 MR. CRAIG: We are taking advantage of
5 Browns Ferry and the activities that have been going
6 on down there. That's been ongoing. We have been
7 having as well as NRR staff, regional staff go and
8 visit this site, look at what's going on and reflect
9 on what it means to our inspection program.

10 There are a number of international
11 activities that are ongoing. We had a number of the
12 vendor inspectors, previous vendor inspectors in
13 Canada looking at the international process to
14 qualify vendors. The nuclear utility procurement
15 initiative group, is the acronym, for NUPIG.
16 So we are trying to build on international experience
17 at the same time as well as build on some of the
18 experiences that has proven to be so effective at
19 shipyards.

20 CHAIRMAN DIAZ: Okay. So the answer is
21 that, yes, you do have the appropriate program to
22 move forward to be able to address these issues?

1 MR. CRAIG: And it is a work in progress.

2 CHAIRMAN DIAZ: The mitigating system
3 performance index, which is something that I think is
4 becoming or has become a little contentious. Could
5 you dwell on it a little bit more?

6 What are the key issues or differences or problems or
7 what is the path forward?

8 MR. CRAIG: I will talk about it a little
9 bit. And I will ask Stu Richards -- he has been on
10 point for us -- to go up to the mike and talk about
11 it.

12 The performance indicator itself has some
13 technical aspects related to the PRA and utilization
14 that Stu can talk about. It would have taken the
15 findings -- that indicator out of the significance
16 determination process, so, if you will there, would
17 create a parallel to findings in the SDP.
18 And I will ask Stu to talk about it in some more
19 detail.

20 MR. RICHARDS: Chairman, I can give you a
21 short version of what has transpired over two years?
22 I'm not sure how much detail you want to go into. So

1 I will start talking and you can cut me off.

2 CHAIRMAN DIAZ: A couple of minutes will be
3 fine.

4 MR. RICHARDS: Well, we have been working
5 on this for about two years. It was intended to be a
6 potential replacement for the safety system
7 unavailability PI which is presently in place. It
8 would cover the core safety systems of the plant. So
9 it makes it very important that we do this right.
10 RHR, low pressure, high pressure injection, the
11 diesels, the service water systems that cover those
12 components.

13 A couple of years ago, we formed a working
14 group with the industry. We have had a major role.
15 I think John already mentioned the major role was
16 played by Research. We also had OE involvement,
17 DSSA, and the four regions have been very heavily
18 involved in this.

19 We have had about 33 public meetings, two
20 workshops over the two-year period. A number of
21 these public meetings has been four to six hours
22 long. Not just short meetings. So a lot of dialogue

1 on it. We conducted a pilot program, nine sites with
2 20 units. We wrapped that up in 2003.

3 When that by pilot was done, we spent
4 several months considering what we learned from the
5 pilot, trying to work through the issues, again
6 through these public meetings with our stakeholders
7 and with a lot of involvement by both regions and
8 Research.

9 This fall, the industry took the position
10 that we had enough information to make a decision.
11 We agreed with that. We thought it was time to take
12 what we had and decide what to do. In December, we
13 had an internal stakeholder meeting where the various
14 participants and the NRC came together, and we spent
15 a day discussing the pros and cons and the various
16 viewpoints that we had on that.

17 And we also asked for written input from
18 the various offices that were involved. So we got
19 input from the four regions, from Research, DSSA and
20 NRR and from the Office of Enforcement.
21 The four regional administrators came out against
22 MSPI. Research recommended going forward. OE and

1 DSSA had caveats about how to go forward with it.
2 We analyzed the inputs and we came to a conclusion.
3 I would say that the pros for MSPI are is that it is
4 -- it counts both unavailability and unreliability
5 which the present PI does not. It uses site specific
6 PRA information, which the present PI does not. And
7 it provides a separate indicator for the cooling
8 support systems, which is not the present case.
9 The cons on the downside are that based on inputs
10 we got from the regional offices and then their
11 experience dealing with the pilot program, we think
12 that the resources to implement MSPI would be very
13 significant, perhaps as high as 50 FTE over a
14 two-year period of time, with about \$3 million worth
15 of contract money to upgrade spar models.
16 We think that the ongoing FTE investment
17 would be significant in the neighborhood of about 3.4
18 FTE. This is driven in part by the fact that as a
19 performance indicator MSPI is very complex. We have
20 learned from the existing indicators that the things
21 that are not black and white, like scrams, you either
22 scram or you don't. You can't argue about that too

1 much. But when you start getting into areas of gray,
2 if you will, we can spend a lot of time discussing
3 those points. It is a voluntary program. But we
4 tend to try and work with the industry to reach a
5 consensus, if at all possible, on issues around PIs.
6 I think we would end up spending a lot of time
7 talking about MSPI and how it is implemented.

8 I might mention that it monitors in each
9 system about 30 to 50 components per system. Which
10 components it monitors depends on the specific
11 plant, looking at the specific PRA.
12 So you can get a feel for the amount of effort it
13 takes to just set this performance indicator up.

14 CHAIRMAN DIAZ: So it is the complexity of
15 it that you believe makes it difficult to implement
16 and then to continue it. You are not questioning the
17 value of it but the complexity of actually putting it
18 in place?

19 MR. RICHARDS: The complexity drives the
20 resources which is a major consideration. There are
21 technical issues, quite frankly, that were not
22 resolved. But when we sat down to make a decision,

1 rather than trying to deal with those individual
2 technical issues -- and I can provide you some of
3 those -- our decision was driven at a higher level by
4 the resources that it would take and the fact that it
5 would treat the components under MSPI, this being the
6 core safety is also in the plant, would treat those
7 components differently under the ROP than any other
8 part of the plant.

9 Part of the going in assumption that the
10 industry wanted to insist on this was that if we
11 implemented MSPI, we don't do significance
12 determination process reviews for those components
13 when they fail.

14 Now, there is exception to those. But by
15 and large, those most important systems in the plant
16 would now be subsumed into the MSPI and would no
17 longer be part of the SDP process, which is how we
18 treat the rest of the plant.

19 So, we had a lot of discussions about how
20 it is treated through SDP. And I think that was one
21 of the driving considerations for the regions, that
22 and the resources. That we would have no SDPs for a

1 lot of these failures and two ways of treating
2 components.

3 CHAIRMAN DIAZ: And there was no creative
4 process that actually either reduced the number of
5 variables to be able to arrive at a level that was
6 simpler but still was representative of what you were
7 trying to arrive at, which is an indicator of the
8 mitigating system? There was no simplifying approach
9 that came out of all of this discussion? It was just
10 either a complex indicator or index or back to the
11 old one. No --

12 MR. RICHARDS: When we ask for comments
13 internally, and quite frankly, our goal was to look
14 for a way that MSPI could be implemented within a
15 reasonable resources serve our inspection program.
16 That's what we were trying to do.

17 When we went out for written comments from
18 the various involved parties, we asked: Are there
19 ways we can gain efficiencies? What can we do?
20 Think outside the box, be creative. Quite frankly,
21 the responses back were somewhat black and white.
22 There were ideas to go in parallel, keep the SDP in

1 place for several years. Some people suggested that.
2 And run MSPI along with it. But that does not
3 address the resource issue. And in, my mind, it only
4 prolongs the decision for another two or three-year
5 period.

6 By its nature when it first started out,
7 MSPI is a complicated indicator. By making it
8 risk-informed, you have go into the individual plant
9 PRA, look at the risk values for the various
10 components, define the boundaries around these
11 systems that are going to be included in this.
12 You have to consider what are we going to do when
13 they want to change the PRAs, which licensees
14 appropriately do. How are we going to keep up with
15 that.

16 I sat down with the lead staff member in
17 Research to try and get a personal feel for how
18 complex this would be. And after spending two hours
19 on a system I was familiar with having been an
20 inspector, I came away with the feeling that we are
21 going to have a lot of questions about implementation
22 that will take up a lot of our time.

1 CHAIRMAN DIAZ: All right. I think we will
2 continue to look at it.

3 MR. COLLINS: Chairman, in the interest of
4 raising potential policy issues, there are two
5 considerations that are at a different level. One
6 is there is a potential benefit to the industry -- Stu,
7 you can keep me accurate here -- of consolidating
8 data gathering in the reliability and availability
9 area.

10 Right now, there is multiple systems that
11 drive licensees to keep various types of information.
12 This PI as was originally proposed would help
13 consolidate that.

14 The second issue is the drive towards PRA
15 quality, which we have Commission direction on, and
16 the eventual approach, which is not an immediate
17 issue, but it is a future issue of do we want to rely
18 on licensee PRAs once the quality is established and
19 not keep the two models. Not keep the NRC SPAR
20 models as opposed to the licensee's PRA instructed
21 developed interface tool for the licensee's PRA
22 model.

1 And the MSPI would have us go into a different
2 direction potentially from that long term-goal.

3 MR. RICHARDS: If I could just add to that,
4 that the industry does have an initiative to have a
5 consolidated data entry process where they track a
6 number of different indicators through WANO and
7 through us. And they would like to consolidate that
8 so instead of tracking three things three different
9 ways, track one thing one way. And then they want to
10 do it all through INPO, I believe, as an efficiency.
11 I think one of the things we will do is take what we
12 learned from MSPI and try and see if we can apply it
13 to the existing SSU in some manner and there are some
14 ideas that we have that we would like to share with
15 industry that we can take those lessons learned,
16 apply it and maybe we can do things in the existing
17 PIs to make the data collection easier and use some
18 of the concepts that they put forward.

19 CHAIRMAN DIAZ: It appears it is an area
20 that is ripe for additional creative solutions. All
21 right.

22 MR. COLLINS: Stu, does the

1 MSPI align with -- I'm not clear -- with the
2 licensee's PRA or with the SPAR?

3 MR. RICHARDS: Well, we compared SPAR
4 models to licensee PRAs only for the systems that we
5 looked. And again, we only looked at two of the five
6 systems.

7 In a number of cases, generally speaking,
8 the SPAR models had to be updated to come in line
9 with licensee's PRA. But that was not always the
10 case.

11 I might note that there were discrepancies
12 between the two, the SPAR models and the PRAs, where
13 there was no agreement on how to resolve it. And
14 because it is a voluntary program there is no driving
15 force to come to some kind of an agreement.
16 One of the issues with MSPI and PIs in general is it
17 is a voluntary program. So if the industry and the
18 NRC disagree on the aspects of it, it makes it
19 difficult to come to some kind of conclusion.

20 CHAIRMAN DIAZ: Okay. Thank you.

21 Brian, I know you guys have been doing a lot of
22 license amendments. Is that because you put more

1 resources into it or you guys are getting so good at
2 it or both?

3 DR. SHERON: Well, I would like to say we
4 are getting good at it. But actually, we stayed
5 within budget with regard to the resources. It has
6 to do with the nature of the licensing action.
7 There were a number of orders. Orders, the closeout
8 of orders are counted as licensing actions. The
9 labor rate necessary to close out an order is a lot
10 less than a routine licensing action.

11 CHAIRMAN DIAZ: So nothing is being
12 shortchanged because you have so many license
13 amendments to close out?

14 DR. SHERON: No.

15 MR. DYER: They are getting older, Mr. Chairman. We
16 received a briefing just before we came down here as
17 to what is the impact of the security review team
18 effort in that and on fiscal year 2004. As John and
19 Brian talked about, with our dedicated review is
20 going for the security plan in that. And the
21 inventory and age of our actions are increasing. And
22 those are going to be a challenge for the rest of

1 this fiscal year. And we may not meet our operating
2 plan goals that we have. We are still looking right
3 now at our compensatory measures.

4 CHAIRMAN DIAZ: Thank you. I know we are
5 running out of time but I do believe that the
6 material degradation program is an extremely
7 important program. And I know that sometimes we look at an
8 issue in itself. But I do believe like in many other
9 things, there is a point in which we need to look at
10 materials degradation as a wholesome issue. What is
11 it that is happening in different parts of the plants
12 so we can be assured that the appropriate protection
13 of the reactor cooler pressure boundary, whatever is
14 the issue.

15 I know you guys are doing it. But I just
16 want to insist that this is an area that cuts across
17 the different issues and it deserves our special
18 attention.

19 And again, the sump issue, I think, you
20 have heard from the Commission, and I am pretty sure
21 that Commissioner McGaffigan will re-emphasize that this
22 is something we want to do well, we want to do it as soon as it

1 can be done well. It is not something we want to
2 linger on. This is one of those cases in which the
3 enemy of the good is not only the better but the
4 enemy of the better is the best. We want to get it
5 done early. I think I have used most of my time.
6 Commissioner McGaffigan.

7 COMMISSIONER MCGAFFIGAN: Thank you,
8 Mr. Chairman. On the mitigating system performance
9 indicator -- I obviously have not followed this in
10 the detail that Stu Richards has and attended all
11 those six-hour meetings. But it does strike me that
12 some of the -- if we are going to be a risk-informed
13 agency, it would be nice to be able to make this a
14 success.

15 We have to figure out how to use licensees'
16 PRA's, three million of the dollars there were for
17 SPAR models and SPAR model updates to try to resolve
18 differences. Maybe we should just be using, as Sam
19 suggested, the licensee PRAs.

20 We originally did SPAR models, as I
21 understand it, because we wanted to have a simplified
22 tool that might even be public. And then 9-11

1 happened, and SPAR models are never going to be
2 public. So, if we can -- I think you all have to
3 think through whether there is, as the Chairman says,
4 some creative way to make this work.
5 I know SRAs are going to get tied up. Maybe we need more
6 SRAs. Again, if we are going to be a risk-informed
7 agency, maybe we need to have greater bench strength
8 in dealing with these complex issues.

9 So, you know, I don't know what the answer is. But
10 there was a significant amount of effort that went
11 in.

12 The one question that I would ask, whoever can
13 answer it, maybe it is Stu, the industry wanted stuff
14 that is in the MSPI indicator not to be in the SDP.
15 Was that because if they are going to get a color
16 anyway in the indicator if something goes wrong and
17 they didn't want to get double colored?

18 Has an SDP which was typically for an
19 inspection type finding, this is self-revealing -- we
20 have some data, they got the indicator, something
21 goes bad and they go from green to -- or is the
22 thresholds one of problems that you guys were saying

1 is something that you would color white or yellow
2 today in SDP space could still be merrily green in
3 the indicator, even though an important system had a
4 safety system unavailability?

5 MR. RICHARDS: Commissioner, first, I would
6 like to say I can't speak for why NEI wants to do
7 what they want to do.

8 COMMISSIONER MCGAFFIGAN: I assume they
9 don't want to get double hit.

10 MR. RICHARDS: Let me start by saying that
11 the SDP looks at discreet events. Nothing happens in
12 the plant that rises to a threshold of a performance
13 deficiency and a finding. You apply the --

14 COMMISSIONER MCGAFFIGAN: I understand
15 that. So we have a safety system is unavailable
16 for a period of time and we would color that white.
17 Does the indicator -- does that get -- because it is
18 averaged and it's a bunch of things does that get --
19 that could still be green over in indicator space?

20 MR. RICHARD: It could go either way. It
21 looks at a 12 quarter period of time. So you can
22 imagine -- it depends on where you start out.

1 COMMISSIONER MCGAFFIGAN: The indicator
2 could go bad even though you never had an event? And
3 you could have an events and the indicator could
4 still be green?

5 MR. RICHARD: You said that too fast for me.
6 The indicator -- first off, it is designed so that it
7 can't cross a green/white threshold with one event.
8 That is called the front stop.

9 There are people that disagree with that
10 because under SDP if you have a component that is
11 risk significant and its failure would be judged to be
12 significant enough to be a white finding, then it
13 should be a white finding.

14 COMMISSIONER MCGAFFIGAN: So it's a front
15 stop. You have convinced me enough. There is
16 complexity there. I don't want to spend the entire
17 time on this.

18 You are going to have a meeting this
19 afternoon. I'm just expressing some disappointment
20 that we couldn't make this thing work because there
21 was significant interest, I know, from Research, from
22 ACRS, from elsewhere. And if it is a matter of SRA

1 type resources, in all honesty, going forward -- I
2 mean I have this vision that is not necessarily
3 shared widely that we would someday be able to look
4 at licensee PRAs and judge them as to their quality and
5 all that. But that is if we are going to be a
6 risk-informed agency, we need more people who are
7 comfortable with these tools, who work with these
8 tools every day. And the fact that we might need 25
9 FTE more of such people, you know, it is a budget
10 issue but it is not the end of the world as far as I
11 am concerned.

12 MR. RICHARDS: Could I make one comment on
13 that, Commissioner? The SDP process that this would
14 replace is a risk-informed process that uses PRA and
15 it has the inspectors who are involved in the
16 finding -- it has people in the region. It is using
17 PRA.

18 The MSPI would stop all of that for those
19 findings. So where we would have been using the SDP
20 process to use PRA to gain better understanding in a
21 specific case, the MSPI would say until the PI
22 changes threshold, you know, we don't need to think

1 about any of that.

2 And once it changes threshold until it goes
3 again, no matter how many findings you have, once it
4 goes white, you don't need to do that discovery
5 process.

6 I would argue that what we have probably causes
7 people to be more involved in doing that discovery
8 and using PRA than once we get MSPI implemented.

9 COMMISSIONER MCGAFFIGAN: But the MSPI
10 would be everywhere and you chase events. I mean
11 what the PRA -- the SRA gets involved in is things
12 that he has to apply in an SDP to, which is not at
13 every plant.

14 MR. RICHARDS: Once the MSPI is in place, I
15 think the idea is it is a PI that covers those safety
16 systems. If an event is covered by MSPI, the staff
17 has no action until we cross a threshold.

18 COMMISSIONER MCGAFFIGAN: Part of the
19 Chairman's creative thinking is if -- I forget what
20 you called the bump, the first one does not count --
21 the front stop. The front stop is something you guys
22 can talk about. It may be front stop is a

1 non-negotiable thing for NEI.

2 You have convinced me of the complexity.

3 You haven't convinced me yet that there isn't, as the

4 Chairman says, a creative way forward. But I will

5 turn it over to you guys this afternoon.

6 MR. CALDWELL: Just one comment from the

7 region, because all four regions disagreed with the

8 implementation. Although they found a number of

9 attractive aspects of the MSPI, but there is a number

10 of technical issues that would need to be resolved,

11 some of which could be done not that hard. Just like

12 the Chairman said, there are things that you could

13 do.

14 But our concern was primarily -- and it is

15 associated with this front stop -- but our concern

16 was primarily that we would have a risk-significant

17 issue occur and the MSPI would not allow us to

18 interact with the licensee over that issue. We would

19 know it was there. If we had used the SDP, it would

20 have been a risk-significant finding, and we would

21 have engaged the licensee with our action matrix.

22 There was a concern not knowing everything that we

1 need to know. The pilot wasn't, I don't believe,
2 enough of a test of the program to be able to tell
3 whether or not we would miss risk-significant issues.
4 In fact, even in the pilot they found a couple of
5 issues that would have been white via SDP that were
6 not via the MSPI.

7 COMMISSIONER MCGAFFIGAN: That's the heart
8 of it.

9 Let me go on to other issues. The 87
10 percent completion rate at the moment on less than
11 one year completion rate on licensing actions that's
12 driven primarily by the security stuff. You know,
13 you are about three times your goal. You want to
14 have only four percent more than a year old. And at
15 the moment, according to the latest data you gave us,
16 and which we gave Congress, we are at 13 percent.
17 That is a reflection of the security situation that
18 we are just being driven -- you are trying to manage
19 it and trying to get the most important ones done in
20 less than a year.

21 But we are going do have some that are
22 going to be more than the four percent goal, is that

1 right? In the expectation that Jim Dyer was trying
2 to give us is that this may continue, that this may
3 not get any better.

4 MR. DYER: With the additional security
5 effort that we are putting in for the rest of this
6 fiscal year, yes, sir.

7 COMMISSIONER MCGAFFIGAN: You want to add
8 anything to that?

9 MR. LEEDS: Basically that's it. Because of
10 all the work we are doing to support the orders and
11 to support all the security plan changes --

12 COMMISSIONER MCGAFFIGAN: That's fine.

13 MR. LEEDS: We are not going to make our 96
14 percent.

15 COMMISSIONER MCGAFFIGAN: You are not going
16 to make the 96 percent this year.

17 MR. LEEDS: Yes, sir.

18 COMMISSIONER MCGAFFIGAN: This Commissioner
19 is okay with that. I mean, we set these goals. They
20 are aggressive goals. You are going to have to
21 manage and try do the best you can to get most
22 important ones done, the ones that most affect, let's

1 say, an outage or something like that. But you are not
2 going to be able to make 96 percent this year.

3 MR. LEEDS: Yes, sir. And that's what
4 we have done. We have gone through what the criteria
5 would be for the ones that we wouldn't be able to get
6 done within the year time frame.

7 COMMISSIONER MERRIFIELD: Can I just ask
8 one question? What have we done -- have we
9 communicated with our licensees so that they
10 understand where we are going with that?

11 MR. LEEDS: Yes, Sir, we have plans to.
12 We are just at the beginning. We are starting to
13 identify which licensing actions, which specific
14 licensing actions we will not be able to get done.
15 The first thing we are going to do is talk with the
16 licensees and say these are the ones, these are the
17 reasons why. And let them come back to us and say,
18 hey. We do need that. That supports whatever it
19 supports.

20 If we have something that is going to
21 affect the start up, of course, we are going to try
22 to get that done. So we are going through it in a

1 systematic way.

2 MR. SHERON: The idea is to pick licensing
3 actions that don't have major impact.

4 COMMISSIONER MCGAFFIGAN: I understand.
5 And I think this is -- part of the communication plan
6 was to tell us that today so that the word would go
7 out. I'm sure "Inside NRC", where ever they are, will
8 report this.

9 And GSI 189. It was not mentioned today
10 but I am always anxious to see that the other edge of
11 the sword that Shirley Jackson used to talk about.
12 So I'm anxious to hear when we can expect some
13 progress on this rulemaking for the ice condensers
14 and the BWR Mark 3, the additional power source for
15 the ignitors.

16 MR. SHERON: We are working with the
17 industry right now in terms of formulating the
18 structure of a rule. There are some issues that we
19 are trying to work through, the cost benefit.
20 Whether or not, for example, existing equipment could
21 be used in lieu of bringing in new equipment or the
22 like. I am going to ask Susie if she can could

1 say something about the schedule.

2 MS. BLACK: As you know, the cost benefit
3 was very close. So our goal is to work with the
4 industry over the next couple of months and come up with
5 a performance-based approach so that the costs stay
6 in line with the benefits.

7 COMMISSIONER MCGAFFIGAN: I'm for keeping
8 the costs in line with the benefits. The cost benefit
9 was close because we were using a median benefit.
10 There was a very large uncertainty, as ACRS pointed
11 out, with regard to this benefit because it is a very
12 complex calculation. The benefits could exceed cost
13 by a large margin, depending on this uncertainty.

14 MS. BLACK: That's true. Also the cost
15 could get out of control --

16 COMMISSIONER MCGAFFIGAN: One staffer once
17 told me it was a Honda generator on a pickup truck.
18 But I guess it has gotten more complicated than that.
19 And all thing do go around here.

20 MS. BLACK: Right. We are working through
21 the cost benefit through these meetings with the
22 industry to put out the performance measures for

1 what this backup power source would have to be and
2 whether they can use existing sources.
3 So it will go to the rulemaking board later this
4 summer.

5 COMMISSIONER MCGAFFIGAN: I sure hope we can
6 make progress here because we don't have a lot of
7 examples of the other end of the sword, I don't
8 think, in our practice.

9 MS. BLACK: I absolutely agree. And, in
10 fact, the public has made comment on that as well.

11 COMMISSIONER MERRIFIELD: Setting aside the
12 comments about the double edge of the sword -- and I
13 agree with that. We have gone -- on many of these,
14 we said there are going to be pluses and minuses. But I would
15 say you always have to be concerned about any single
16 data point where someone says it is going to be fast
17 and cheap.

18 I always used to use the thing if somebody
19 tells me that something is going to be fast and
20 cheap, the first thing I do is grab my wallet. One
21 data point does not an analysis make.

22 COMMISSIONER MCGAFFIGAN: I'm going to come

1 back to this just briefly. I'm going to try to run
2 through a couple of things. The DOE has out a
3 solicitation for interest in a combined operating
4 license. Are you following that? And if we actually
5 have some folks who respond to that DOE solicitation
6 with a particular design in mind for other
7 application. The DOE program is, I guess, to
8 subsidize people to come in with a combined operating
9 license application, subsidize the up front costs.
10 Do you have plans to adjust your program to whatever
11 designs are chosen? And what would be the first
12 tangible interest from the industry of actually doing
13 a call?

14 MR. CRAIG: I will ask Jim Lyons to stand
15 up. He is following that very closely.

16 The short answer is yes. We
17 are monitoring that closely. Nobody has made an
18 announcement yet.

19 COMMISSIONER MCGAFFIGAN: What is the due
20 date for the DOE solicitation?

21 MR. LYONS: DOE solicitation is open through
22 this December. But as DOE has told us, that as they

1 get proposals, they are going to review those
2 proposals and act on them as they get them. So we
3 been following with them.

4 COMMISSIONER MCGAFFIGAN: But they have
5 none at this moment.

6 MR. LYONS: As far as I know, they have
7 none at this moment. We have periodic meetings with
8 them to see where they are and what's going on. In
9 fact, we have one this afternoon to meet out at DOE
10 with them. Our plan is always -- my program
11 especially can follow their money.

12 COMMISSIONER MCGAFFIGAN: Let me try to get
13 in two last, hopefully, short questions.
14 "Inside NRC" this week reviewed the annual or the
15 quarterly data that we put out on plant performance.
16 And they, as seen in an earlier summary that they had
17 done, thought they saw some trend in problem
18 identification and resolution problems at the plants.
19 So, probably on behalf of them, I ask you, do you agree that
20 there's a trend in the industry in problem
21 identification resolution as sort of an underlying
22 concern?

1 MR. DYER: Yes, sir. I tried to address
2 that, I believe, briefly at the Lessons Learned Task
3 Force meeting. One of the outcomes as we focused the
4 implementation of Davis-Besse Lessons Learned is our
5 focus on the PINR, as we revised the inspection module.
6 And as a result, I think we had 17 crosscutting
7 issues and 14 were in the problem identification
8 resolution area.

9 As part of our annual assessment, we are looking at
10 whether that is cause and effect of some of the
11 changes we have made to the problem identification
12 resolution or whether or not we have consistency
13 among regions.

14 I know Sam and I have talked about that.
15 Do we need to, as part of this, look into whether or
16 not we are going to need to, in fact, become even
17 more specific and structured in the -- in our
18 definition and what our expectations are during
19 the -- with the regions end of cycle reviews. I
20 know Sam is planning to discuss this issue as part of
21 our pre-agency action review meeting the deputy EDO.

22 COMMISSIONER MCGAFFIGAN: I should make

1 clear, I'm not on retainer to "Inside NRC" in asking
2 these questions. The last question is and it is
3 probably the one I wanted to ask first but I saved
4 for last. You mentioned at the very outset,
5 Mr. Dyer, this notion that you have a working group
6 that is going to look at, with NSIR, look at safety
7 security interfaces. And I think it is very
8 important, personally. And one of the questions I
9 would give to that group is: how do you decide when
10 these 1,300, 1,500 licensing actions a year come in,
11 which one of them have security implications?

12 It is probably a very, very small subset
13 that need to be brought over to NSIR and ask for
14 her input. But it could be that somebody is changing
15 a -- proposing a change in the system that is part of
16 a target set. And the safety folks probably don't
17 know what the target sets are at the plant, although
18 they may have a pretty good idea. And the change
19 could actually have adverse implications to security.
20 So I think you need a process for figuring out how to
21 do that. And, obviously, the security folks need a
22 process when they are doing something to make sure

1 that there are not safety implications to something
2 that they are going to be doing in security space.

3 So I urge you to try to think that through.

4 This, again, is consistent with yesterday's meeting.

5 Once we have this process in place, it may be
6 relatively invisible to the public. Because we are
7 not going to help folks, say, well, gosh, we focused
8 on this license amendment because this is a critical
9 element of the target set at the plant.

10 We can't tell that in public. But I
11 suspect it is a very small number of licensing
12 actions where you need to be looking. I also suggest
13 the task force look at the issue of whether 50.59(c)
14 needs to be amended to add an additional provision.
15 This is the provision for the members of the public
16 that lists when you can make a change under the
17 plant's own authority without coming in for a license
18 amendment. It is a long list. We did it a few years
19 ago. But there is no mention of security in
20 50.59(c).

21 So it is conceivable that a licensee,
22 again, in doing a 50.59 evaluation under the current

1 guidance might stumble into doing something adverse
2 to security, making a target set more easy to attack
3 or whatever unwittingly. So I urge to you think
4 about whether 50.59(c) might possibly need an amendment to
5 add an extra criterion.

6 MR. MATTHEWS: That is a specific item included
7 in a partition for rulemaking that the staff has
8 under review right now. And we made a preliminary
9 determination, sent it to the Office of Administration
10 and will be preparing a Commission paper to address
11 that.

12 COMMISSIONER MCGAFFIGAN: I didn't know
13 that. Thank you.

14 MR. DYER: And, Commissioner, this working
15 group that we are planning is just in its infancy
16 right now. We don't have a charter developed. But
17 it is a commitment from both Roy Zimmerman and myself
18 as well as at the division level and that within both
19 offices that this is something we need to do.

20 We have been doing it informally. We need
21 a more structured approach.

22 MR. COLLINS: Commissioner, I would say on GSI

1 189 -- I was thinking Reg Guide 1174 in the same context of 50.59
2 -- you mentioned that the staff moving forward into thresholds for
3 decision making. The context of the double-edged
4 sword is that if it is the right thing to do, whether
5 it passes the backfit or not, and if there is a way
6 to be implemented, either by rulemaking with a
7 backfit analysis or by licensee initiatives on a
8 different scale, then the information should stand on
9 its own and should be accomplished.

10 So clearly in some manner, the backfit
11 analysis and the rulemaking is a structured
12 regulatory initiative that is at one threshold and
13 probably at one level of effort. At a different
14 level of effort, though, if the risk insights for the
15 plants, and there is a limited amount of plants is still
16 appropriate, then, we would encourage a licensee to
17 take whatever action is cost effective to still
18 mitigate that consequence of a severe accident type
19 of event.

20 COMMISSIONER MCGAFFIGAN: The ACRS has
21 recommended a rulemaking. The approach has been
22 rulemaking. I guess all the licensees could jump

1 ahead and do what we wanted them to do. And that,
2 might make the rulemaking moot. But we would have to
3 somehow find a way to document that that happened.
4 And I believe one licensee may have done that. One
5 licensee caught up in a SDP, I think, told me at one
6 point -- I never verified whether they did it -- that
7 they were going to go and add that additional power
8 source for the ignitors at their particular facility
9 because they just didn't want to go through that
10 again. Okay. Thank you.

11 CHAIRMAN DIAZ: Okay. Thank you,
12 Commissioner, McGaffigan.
13 Commissioner Merrifield, you say you have a couple
14 of --

15 COMMISSIONER MERRIFIELD: Yes. One of them
16 has already been asked. So I can shorten this very
17 quick. I guess the question I had -- you talked
18 briefly in slide 8 on the new reactors regarding
19 transition from pre-application design certification.
20 One of these in which I think it gets particularly
21 sensitive in the timing, I think is associated with
22 the CANDU ACR 700.

1 There has been an increasing amount of
2 attention in Canada of the notion of perhaps Ontario
3 Power looking at building some of those on their side
4 of the border. I think there has been some increased
5 attention on this side of the border and interest in
6 that design. I'm wondering are there any issues that
7 the Commission needs to be aware of at this point
8 either in terms of resources or other policy issues
9 that may be involved with our ability to effectively
10 and efficiently process through that process and
11 prepare you guys to do that design certification?

12 MR. DYER: Commissioner, let me have Jim
13 Lyons go to the microphone on that one for a detailed
14 review. I was in Canada two weeks ago. We are
15 keeping our channels open with the Canadian Nuclear
16 Safety Commission to make sure that we are
17 dealing constructively and on the same schedule for
18 our reviews in that. So we have opened the channels
19 of communication.

20 I know that Jim's folks as well as Research
21 have been spending a lot of time with the Canadian
22 Nuclear Safety Commission as well as them coming down

1 and spending time with us in that.

2 MR. LYONS: We have been trying to align
3 our schedules and align our work. And one of the
4 things that is going to cause us in the long run is
5 when they actually -- we are going through the
6 pre-application phase to try to identify if there are
7 any key issues that are going to cause us real
8 problems.

9 That's going to help define what it is
10 going to take for us to do the design certification
11 review. And we see that as a fairly significant
12 effort. And as John pointed out earlier, more than
13 what we are spending currently on the AP 1000.
14 So that's one of the areas where we are trying to
15 make sure that we have got resources budgeted for
16 that. In the next year, we have kind of shifted
17 resources around to make sure that we fully funded
18 our early site permit efforts because those are
19 actions that are in-house and that we are working on
20 to move forward on.

21 And so as we get the application in and we
22 see the extent that we need to do it, that's when we

1 are going to develop our schedules and work forward.
2 The real question is whether or not in the big scheme
3 of things that we are going to be able to meet
4 everybody's expectations on the time it will take us
5 to do those design certification reviews.

6 COMMISSIONER MERRIFIELD: I think in light
7 of the activities, lately, there is a fair degree of
8 interest in that design. I think we should be
9 preparing -- my own personal view is we should be
10 preparing ourselves to understand what we would need
11 to do, and if necessary, align our resources in such
12 a way as to accommodate user need.

13 That having been said, during the
14 presentation, there was ticked off a large number of
15 potential projects out there. We have a limited
16 number of staff who are key folks in these areas. We
17 have finite resources.

18 And I think it may well be that you are
19 going to need to have additional Commission
20 engagement in terms of prioritization or assisting
21 you with prioritization rather than just sort of
22 what's first in the door, because there may be some

1 people who have some reactor designs they would like
2 to have reviewed. But if there is nobody out there
3 that has any interest in looking at those designs for
4 the purpose of building one, I think we really
5 have to have that color how we are going to
6 align our resources.

7 But again, I would suggest that the staff
8 keep the Commission closely informed about that
9 progress so that we can provide the appropriate
10 policy recommendations to you in terms of helping to
11 align those resources the right way.

12 Thank you, Mr. Chairman.

13 CHAIRMAN DIAZ: Thank you, Commissioner
14 Merrifield. And I wanted to thank the staff again,
15 not only for the briefing but for the preparation for
16 the briefing. I think one of the most important
17 aspects of this briefing is that the staff needs to
18 get all the things in order so they can try to
19 organize their thoughts for the Commission. We
20 appreciate that.

21 We understand there is a tremendous amount
22 of work that goes into preparing these briefings. I

1 am sure that they serve to align your thoughts and
2 look at processes so we can get our thoughts in line.
3 I look forward to continue hearing on all those
4 critical issues. I think there are always something
5 that is challenged, as Sam normally says.
6 And I think sometimes there are problems and there
7 are solutions. And I think many, many
8 times it is important to look at a problem and reduce
9 it to practice by making the problem a little
10 simpler. And then you can always make it complicated
11 because we are very good at complicating things. I
12 think sometimes we need to make problems simpler for
13 us.

14 Technique for graduate school 101, reduce
15 the number of independent variables. That's a
16 fundamental issue. I really thought we had a great
17 meeting today, I appreciate it.

18 My fellow Commissioners have any additional
19 comments? We are adjourned.

20 (Thereupon, the briefing was adjourned)

21

22