

UNITED STATES NUCLEAR REGULATORY COMMISSION

**BRIEFING ON STATUS OF
NUCLEAR REACTOR SAFETY**

Commissioners Conference Room
One White Flint North
11555 Rockville Pike
Rockville, Maryland

Wednesday, January 17, 2001
9:30 a.m.

Commissioners

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JEFFREY MERRIFIELD
NILS DIAZ
GRETA DICUS
EDWARD McGAFFIGAN

Staff

ANNETTE L. VIETTI-COOK, Secretary
KAREN D. CYR, General Counsel

Also Present

KEN RAGLIN, Associate Director
Training and Development
Human Resources

ASHOK THADANI, Director
Office of Nuclear Regulatory Research

HUB MILLER
Region I Administrator

FRANK MIRAGLIA, Deputy
Executive Director for Operations

DR. WILLIAM TRAVERS
Executive Director for Operations

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FRANK CONGEL, Director
Incident Response Operations
P R O C E E D I N G S

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9:31 a.m.

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MR. MESERVE: The Commission meets this morning to

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hear from the staff on the Status of Programs in the Nuclear Reactor Safety

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Arena. This is the second of the briefings that the Commission has held in the

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Arena format.

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The briefing is focused on reactor issues, but we are looking not

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only at the activities in NRR but also a variety of the other entities within the

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Commission and impacting on safety of nuclear reactors. Those, of course,

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include research, training, regional activities, incident response and many others.

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This is obviously an area of prime importance to the agency.

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There's a lot that has been going on, and we very much look forward to hearing

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from you.

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Let me turn to my colleagues and see if anyone would have an

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opening statement.

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(No response)

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MR. MESERVE: If not, Dr. Travers, you may proceed.

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DR. TRAVERS: Thank you, Mr. Chairman, and good morning.

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As you've indicated, we're glad to be here today to give you a

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status report in the Reactor Safety Arena.

1 Accordingly, we're here to highlight the achievements from the
2 past fiscal year, describe current and planned initiatives, particularly those
3 involving organizational management and reactor oversight, and we also plan to
4 discuss some of the key challenges that we face in the upcoming fiscal year, and
5 as you are aware, within the Nuclear Reactor Safety Arena, there are a number
6 of activities associated with facility licensing and renewal, inspection,
7 enforcement and assessment, investigations, incident response, and safety
8 research, among others.

9 Implicitly in all of these activities is the need we all recognize for
10 timely and effective technical training of the NRC staff.

11 Today, you're going to hear from several of the key NRC staff
12 managers who are playing a vital role in our efforts to integrate and meet the
13 agency's goals and measures associated with these areas' activities.

14 A key player in this, of course, is Frank Miraglia, the Deputy
15 Executive Director for Reactor Programs, Sam Collins, the Director of the Office
16 of Nuclear Reactor Regulation, Hub Miller, our Regional Administrator, NRC
17 Region I.

18 Frank Congel is here as the Director of Incident Response
19 Operations, Ashok Thadani, Director of the Office of Nuclear Regulatory
20 Research, and, lastly, Ken Raglin, who is the Associate Director for Training and
21 Development in the Office of Human Resources.

22 With that, let me turn it over to Frank.

23 MR. MIRAGLIA: Thank you, Bill.

1 Good morning, Mr. Chairman, Commissioners. I'd like to give you
2 a broad overview of our performance for fiscal year 2000 in the Nuclear Reactor
3 Safety Arena.

4 All strategic goals and measures were met in fiscal year 2000.
5 Those goals were no reactor accidents, no deaths due to acute radiation
6 exposure, no events at the reactors resulting in significant radiation exposures,
7 no acts of radiological sabotage, no events resulting in releases of significant
8 amount of radioactive materials to the environment.

9 In addition, all performance measures were met as well, and
10 those include no more than one event identified as a significant precursor. In
11 fiscal year 2000, we had no events that -- there were no statistically significant
12 adverse trends in industry performance in the reactor area. There was no event
13 resulting in exposure that exceeded regulatory limits.

14 We had a goal of no more than three releases to the environment
15 that exceeded regulatory limits. That was the goal and performance for the year
16 2000, and it was zero. No significant breakdowns in physical security resulting in
17 weaknesses in protections against radiological sabotage.

18 We had a goal to review all our license renewal applications
19 reviews within 30 months. Our goal was two, and we performed at that level.
20 We met two.

21 In addition to the strategic goal measures and performance goal
22 measures, there are output measures, and you'll hear about the performance in
23 each of the areas in briefings to follow.

1 In addition, there will be a discussion of the performance
2 evaluations and self-assessment. Performance evaluations are a higher level of
3 degree of reviews that we have committed to to measure the effectiveness of our
4 programs in the Strategic Plan.

5 Within the Strategic Plan, we have indicated that we would
6 conduct four to five major program reviews, one in each strategic arena, and one
7 in the corporate management strategy over a three-year period. This would
8 coincide with the update, the triennial update of the Strategic Plan.

9 One is a schedule in the Nuclear Reactor Safety Arena for the
10 year 2001, and that's the one with the inspection oversight process. That review
11 is scheduled for commission discussion in June of 2001, and that review will
12 assess the implementation and prioritize lessons learned and recommend
13 program adjustments, and that's a significant activity that's underway in the year
14 2000.

15 In addition, each office has some self-assessments at the office
16 level in each of these areas, and some of those will be discussed and covered in
17 the program reviews to follow.

18 In addition, there has been significant discussion in terms of
19 criticisms of our Strategic Plan in the alignment of our performance goals and
20 strategic goals and output measures in terms of not all the goals or perhaps
21 performance and outcome measures as opposed to output measures.

22 We have recognized this, in response to GAO and other internal
23 reviews, and we have a number of activities to try and improve on that process.

1 In terms of our validation and verification on the measures, we've
2 assigned an SES manager to each of the pieces of measures to assure
3 development of the appropriate data for assessing our performance. This goal is
4 to generally use existing databases, and we are developing new venues in a
5 number of areas to improve on those type of processes.

6 Next slide, please. Turning to the Key Challenges, we have a
7 number of challenges within the reactor arena. As mentioned, the oversight
8 process is a challenge, the implementation of that continues to be a challenge,
9 and I think that's progressing well.

10 We have continued progress in terms of the risk- and
11 performance-based activities that we previously briefed the Commission on in
12 two briefings in December on those programs.

13 In addition, another key challenge that we have is
14 communications. Communication covers a broad area. In terms of our ability,
15 we need to continually articulate to our staff internally and to our external
16 stakeholders the kind of changes we're making, the basis for those changes, and
17 that those bases and changes are predicated on maintaining safety performance
18 goals.

19 I think sometimes there are other goals for reducing unnecessary
20 burden, improving the effectiveness and efficiency and increased public
21 confidence are seen to be as perhaps not fully considered to maintain safety
22 goals, and it's a challenge internally as well as externally to articulate what we're
23 doing, and why we're doing it.

1 Staff has had many, many outreaches in terms of public
2 involvement and outreach to our stakeholders involving them in terms of
3 comments on rules, guidance, workshops, has significant outreach in this effort.

4 In addition to improved communications, we've developed
5 communication plans for a number of key areas which communication plan is
6 guidance internally to understand, so there's an understanding vertically within
7 our organization of what we're trying to do in each of the programs, so our staff
8 can communicate at all levels with the objectives of those programs.

9 In terms of the reactor arena, we have the communications plan
10 on the oversight process. We're developing orientation plans with regulations.
11 We are also developing plans on oversight assessment and allocations program,
12 just to mention a few.

13 In addition, the Commission heard at the EDO staff meeting last
14 week, and also at the Materials Arena Briefing, the challenge of acquiring,
15 maintaining a highly-qualified staff. That is an agency challenge, and that's a
16 challenge within the reactor arena as well in terms of our ability to recruit, train,
17 and retain staff.

18 I'm sure you'll be hearing a little bit more about the training
19 activities, and you heard about the recruitment efforts. The recruitment effort
20 has significant support in terms of the reactor arena, and in terms of some of our
21 more recent successes, and that's with the support of our regions as well as by
22 NRR, and the Commission heard some of that at the EDO briefing.

1 With that, I'd like to turn to Sam Collins to discuss the licensing
2 and the other aspects of the agreement.

3 Sam?

4 MR. COLLINS: Thank you, Frank.

5 Good morning, Mr. Chairman, Commissioners. Could I have Slide
6 5, please?

7 I'm pleased to be here this morning to represent the Nuclear
8 Reactor Regulation Office Team and the executive leadership at the operating
9 levels.

10 Our goal in the next two slides is to provide you the context of
11 performance for fiscal year 2000 as well as to delve into some future activities,
12 including self-assessment and key challenges in the go-forward sense, to talk
13 briefly about our status in those areas.

14 The next presenter will be Hub Miller, who will talk about the
15 application of the NRR Programs in the regions as a representative of regional
16 administrators.

17 Focusing on Slide 5, we're talking here about key output
18 measures, and those are articulated in the performance plan throughout this
19 initiative. Those are very specific and measurable in terms of licensing actions,
20 licensing actions being those, including amendments, exemptions and leave
21 requests. The target was 1,500, and the actual was exceeded, which was 1,574.

22 An additional output measure is the age of licensing action
23 inventory. We have one-year and two-year goals. In those areas, the one-year

1 goal is 95 percent, the actual was 98 percent completed within one year. The
2 two-year target is a 100 percent, less than two years, and we achieved that goal
3 of a 100 percent.

4 Other licensing tasks, the target was 800 of those specific tasks to
5 be completed, and actually 1,100 were completed. We're able to over-achieve in
6 that area due to a shift in resources that was decided by the Leadership Team
7 as a result of utilizing resources freed up from the delay in fiscal year 2000 of the
8 anticipated license renewal application.

9 So, the Leadership Team took those resources and were
10 preprogrammed for license renewal and targeted those towards the backlog of
11 licensing tasks, and I think that's an example of the dynamics that are available
12 to the performance-based management and the leadership goal and their
13 willingness to meet those challenges.

14 An additional output measure are licensing exams. The target
15 here is a little softer, and it's essentially to meet the licensee's demand in that
16 area. Although we do have some assumptions, the licensees will gravitate
17 towards performing their own examinations in this area. We have mixed
18 success in there, but we did meet the actual demand of 352 initial and 292
19 general fund exams, although that was lower than the estimate of 565 and 400,
20 respectively. So, that's a planning assumption area there that we'll have to
21 improve on for the next year.

22 License renewal applications. We did meet the targets. We met
23 the milestones. We completed the reviews within 30 months. Calvert Cliffs, as

1 you know, was issued on March 23rd of 2000, and a challenge was issued in
2 May 23rd of 2000.

3 We do have challenges in those areas, and we'll discuss those in
4 the next slide. Currently, we're working on ANO 1 at Turkey Point, and those are
5 on schedule.

6 Under the Major Accomplishment Area, I'll cover some general
7 topics, and some of these cascade into future initiatives and challenges
8 themselves, particularly in the areas as we move forward with risk-informed
9 regulation to the extent that's practical within the regulatory arena.

10 We have a number of infrastructure improvements. We have a
11 number of investments in those infrastructure improvements, and we have
12 budgeted initiatives throughout the years of 2001 through 2004 to address not
13 only program areas but to address internal improvements in the Office of Nuclear
14 Reactor Regulation.

15 We've been able to do that by making some assumptions as far
16 as efficiencies within our programs, and I know one that's been discussed
17 previously, particularly with Commissioner McGaffigan, was efficiencies assumed
18 in the outgoing years with less interval.

19 The infrastructure area we're looking at there, risk-informed, as
20 we move forward in that area, Part 50, Office of Nuclear Reactor Regulation is
21 responsible for the Option 2, for coordinating with the Office of Research, who
22 has the lead on Option 3, and as you know, Option 1 is the continuation of the

1 current licensing amendment process and emergency action process for risk-
2 improved initiatives.

3 Guidance on risk-informed decision-making. Risk-informed
4 licensing amendments, as I mentioned, and exemptions. We completed 48 of
5 those this past year. Design basis information regulatory guidance. Event-
6 reporting rule, which is soon to go into force, which is the Part 72, Part 73,
7 reporting requirements.

8 The alternate source term regulatory guidance, and the
9 maintenance rule, which is the revised rule, effective November 28th of 2000.

10 Under the Organizational Effectiveness Accomplishments, I'd like
11 to acknowledge that we continue with the focus-based management scheme.
12 We're into the quality management system arena now, using performance
13 management modeling, including multiple tools within the organization.

14 We have basic work in oversight that's being done, based on the
15 clear set of expectations, measures, and indicators, and some of those have
16 continued to be under development.

17 We're identifying goals for the three levels in the organization,
18 including the executive, the leadership and the operating role, and we're focusing
19 on discipline in the planning and oversight area.

20 I believe as far as 6, I'd like to move the discussion into specific
21 areas, including self-assessment activities. As Frank mentioned, NRC is to
22 conduct program evaluations, one in each strategic arena, and one in the

1 corporate management strategy area, over the next three-year period, to
2 coincide with the triennial update of the Strategic Plan.

3 For fiscal year 2000 through 2003, one evaluation is planned in
4 the Nuclear Reactor Safety Arena, and that's an advisory oversight process.
5 That also continues to be one of our future challenges in that area.

6 Process improvements include the 2.206 petition process for
7 fiscal year 2001, and that's one that's well known to the Commission, and it
8 involves stakeholders in addition to public involvement in those areas.

9 For the fiscal year 2000 self-assessment area, as a result of the
10 Executive Leadership Review activities, we are reviewing the utilization of the
11 Reactor Licensing Improvements, including the best assessment. I mentioned
12 the previous 30 percent efficiency assumption in that area. Rulemaking and
13 general administration.

14 We provided for the unique lessons learned process, including an
15 independent review by the Office of Research, and also the internal review
16 conducted by the Office of Nuclear Reactor Regulation, and those have been
17 published.

18 They're reviewing contractors, particularly in light of the challenge
19 that we have with conflict of interest with some of our contractors. Finding the
20 right type of technical resources and timely expertise. These are emerging
21 issues in the area of contract resources.

22 We're getting to the area of Key Challenges. I mentioned
23 achieving the process efficiencies and license renewal. We have an expected

1 increase in applications, five, later this year, in fiscal year '01, four in fiscal year
2 '02, three -- excuse me -- six in fiscal year '03. That's down from the assumption
3 of two and up and identified as emerging.

4 Continuing in outgoing years, the number approaches eight,
5 although not all of those have been identified as of yet.

6 Risk-informing, the fiscal protection requirements, and as you
7 know, there's a number of cross-cutting areas with the Part 73.55, including
8 those areas that fan out into the NMSS arena. Those include identification of
9 harley sets, getting into the definition of adversary characteristics, the application
10 of the program towards indices, the fuel storage areas as well as approvals, and
11 a number of those will be emerging as commission policy issues as we move
12 forward in the application of improvements in those areas.

13 Frank mentioned workforce planning is a significant challenge for
14 us in the corporate management strategies area. 42 percent of the NRR
15 technical staff are eligible for some type of retirement, either early option. 77
16 percent of the Senior Executive Service is eligible for some type of retirement in
17 the Office of Nuclear Reactor Regulation.

18 Our leadership level, which is composed of division directors, has
19 performed an internal analysis of recruiting and retention. We have that
20 document under advisement.

21 There was a meeting on-going this morning between the
22 Executive Leadership Level of NRR in coordination with the Human Resources

1 area to provide for additional initiatives in the recruitment and retention area. I
2 can talk about those, if you like.

3 Aligning activities to outcomes, we have a number of
4 infrastructure issues that we're dealing with. Cost center initiatives have
5 increased for fiscal year '01. IT initiatives, which tends to be areas that are
6 focused around application of the technical support, including items of
7 electronics, those areas are also eligible for cost center initiatives, which is an
8 increasing accountability for the program offices for the application of IT.

9 We have increased resources for their public confidence
10 initiatives, increased inspection and assessment declined due to the maturity, I
11 would say, of the development of the oversight process after the first of the year.

12 Licensure and resources increased. Preparatory improvements
13 increased in the area of licensing actions and licensing tasks due to the
14 elimination of the backlog, and resources in those areas declined.

15 Maintaining safety is paramount in the four performance goals.
16 Hub Miller, representing the regional administrators, will talk to that area. We do
17 not budget for emergent resources in those areas. In other words, we do not
18 budget for that response. We budget for programmatic reviews.

19 So, the application of the programs by the regions in coordination
20 with the other offices to ensure that they can maintain the safety has a large
21 influence on the office's ability to not only continue to define our programs but
22 also to continue to move forward in our missions.

1 In the revised oversight process, in looking at any statistically-
2 significant adverse trends, right now, those trends are positive. When you look
3 at the input in the Office of Research and those trends that are being tracked by
4 the Office of Nuclear Reactor Regulation, the industry is doing a good job of
5 maintaining safety and actually improving on the number of indicators that we
6 historically track, recognizing that there's a wide scope of the things that are
7 tracked.

8 Under the New Initiative areas, as we move the organization
9 forward, we will have challenges in the area of the potential for advanced
10 reactors. In the technical reviews in the Office of Research, we show that this is
11 on-going, and we have the lead in the technical provisions, also in any aspects of
12 advanced siting, and we also have under current review, as you know, Phase II,
13 the AP-1000 reactor time.

14 I mentioned the safeguards. Steam generator regulatory
15 improvements, potential policy issue for the Commission that's emerging. In the
16 fuels area, we have Tritium loss in HEU applications. Right now, in the area,
17 Marsdon probably has the lead in this area. We're looking at the potential for the
18 McGuire Station to have four test assemblies, depending on the DoD fabrication
19 and the submittal of the DoE license amendment, and that's projected for 2001.
20 We may have radiation taking place around 2003 or so.

21 Deregulation and industry consolidation. We have submitted a
22 paper in December, which deals with some of the aspects and influences of
23 deregulation and industry consolidation, and there's a broad outline there to

1 cover, which are not only technical areas and program areas but also into the
2 corporate arena of the structure of the offices in that consolidation and the focus
3 of resources to support those initiatives.

4 Finally, I'd like to mention the decommissioning rulemaking and
5 the transfer of licenses which has a tendency to evolve with the sophistication of
6 the industry, and there are new challenges that are emerging in those areas, not
7 only with decommissioning funds with the -- in the context of the structure and
8 the financial aspects of license renewals.

9 So, with that broad overview, I'd like to move next to Hub Miller,
10 who represents the regions, and I'd be glad to respond to questions after the
11 presentations.

12 Thank you.

13 MR. MILLER: Thank you, Sam, Mr. Chairman, Commissioners.

14 I'm going to speak this morning about several separate but related
15 areas, inspection assessment, enforcement and investigations, and before I talk
16 about specific output measures, let me start by talking briefly about and broadly
17 about two major accomplishments, the initial implementation of the Reactor
18 Oversight Program and Policy in the enforcement area.

19 Obviously because we are just entering Phase II in this first year
20 of assessing the implementation of the oversight program, it's premature to talk
21 about final outcomes, but I think it's fair to say at this point that the specific
22 things that we have done to ready ourselves and to begin implementation of the
23 oversight program have been a significant accomplishment.

1 On the programmatic side, within our own Reactor Inspection
2 Branch taking the lead with a lot of support from the regions, we have the basic
3 framework of the program established, the detailed guidance, the inspection
4 procedures were issued.

5 There have been countless meetings with stakeholders, both
6 internal to the agency and externally, meetings to explain the program and to get
7 feedback. An example is the meetings that were held at all clients across the
8 country before the program was fully implemented.

9 These are meetings to in plain words describe the program, what
10 we're attempting to do in this program and get feedback on the initiative.

11 Each week, again coordinating with NRR, we have held meetings
12 with the licensees and other stakeholders in each region on a regional basis
13 twice during this process, first before we started the process and then after
14 implementation.

15 Training has been completed. Formal training has been provided
16 for all regional people and, of course, the people involved in implementing the
17 program.

18 Speaking of actual implementation, I have to say this has been
19 challenging. We expected this scheduling and completing the inspections that
20 were called for, the baseline and the supplemental inspections, those called for
21 by the action makers, has been a significant undertaking.

1 A great deal of coordination has to occur among the many
2 branches in the regions and the agents, and I have to say among regions, in
3 many cases, to make that happen.

4 Most challenging aspect of it, I think, is the performance of the
5 numerous team inspections that are a part of the program.

6 I think, also, we expected kind of the sweeping changes that are
7 involved in this program to at least start on issues that arise, questions of
8 interpretation. The people for the first time have met the new inspection
9 procedures, exercised the significance determination process, the action
10 makers, and those have arisen, and I think I can say personally that at the times
11 I've been at the Commission, I've never seen the level of coordination that has
12 taken place between regions and the Headquarters as has occurred here
13 appropriately.

14 I think that has been a significant part of our program getting off to
15 a good start. On top of this, I have to say, and Sam mentioned it, we are still
16 responsible for responding to events in each region, and we've had an
17 opportunity to do that.

18 We've had special situations, like the start-up of the EC
19 Compliance and Issue 1, and events that you point to have been challenging, but
20 we have kept up with that. Again, this is resource-sharing. We have a major
21 inspection going on as we speak. A team leader is a staff person from Region 4,
22 and there are members of the other regions, and I think it goes to the -- to how

1 we -- our objectives and goals and to make adjustments as needed to meet the
2 goals.

3 In the enforcement area, two things have come up. We have
4 eliminated the concept of aggregating items of lesser significance to escalate
5 enforcement and to eliminate the regulatory significance concept and to focus
6 more on risk.

7 The second thing is in April of 2000, we modified the enforcement
8 policy to conform to the Reactor Oversight Program. In the reactor arena, we no
9 longer talk in terms of enforcement severity levels or the significance of the
10 termination process, and I think we can say at this point, there's a lot of
11 consistency between the inspection and enforcement -- inspection assessment
12 and enforcement arenas.

13 Next slide. Speaking to output measures, first inspections. The
14 measure here really is a measure of how it relates to performance of inspections
15 that are called for, and as I mentioned at this point, we've been performing all
16 our inspections for baseline and supplemental.

17 Output measure in the area of assessment is the performance of
18 the mid-cycle reviews, the mid-cycle reviews of all reactors, making sure they're
19 being done in a timely way. Also, cases where the action meters are called for,
20 for quarterly updates of those on time.

21 Allegations is a big part of inspection and assessment. There's
22 been a small decrease in the past year or so in the number of cases, but it
23 remains a significant part of our inspection assessment effort.

1 There's been some increased activity in the area of wrongdoing,
2 but speaking to the output measure, the goal was a 180-day efficient time on
3 average, and the current time is a 137 days.

4 Going to enforcement, again a bit of a decreasing trend. The
5 output measure in this area is tracking timeliness on estimated enforcement.
6 Here, I'm speaking of, under the old program, Severity Level 3 and above
7 violations.

8 In the new program, issues that meet the determination process
9 rise to a greater than a degree finding, we are meeting much better than the
10 goal. The goal is a 120 days on average, and the current average is 78 days.

11 Investigations. Very many caseload. The output measure --
12 several output measures. The first is average time to close. The goal is nine
13 months. We're doing those now in five months, and speaking also to the
14 backlog of older items, the goal is nine percent operator for 12 months, and the
15 current percentage is seven percent. So, you can see we're doing better with
16 the goal.

17 A great deal of coordination goes on between the regions and the
18 field offices, given the significant caseload, at best to our effort in that area.

19 Self-assessment is just a couple of things Sam mentioned in self-
20 assessments. I want to speak a bit more in a moment about the exact oversight
21 assessment being performed, but I think a couple of things that, speaking from
22 the regional perspective, are very valuable to us, in the audits that are done in
23 the allegations area each year.

1 Field offices know why and benefit from the audits. Each region is
2 performing self-assessments. Just to name one that we've done recently in our
3 region, is of the implementation of the new enforcement policy changes.

4 Coming to the next slide, which talks about challenges, looking
5 forward, the most significant to talk about is the assessment that is beginning of
6 this first year implementation program.

7 First, detailed assessment measures were established. Groups
8 are forming. The groups are made up of the regional people and Headquarters,
9 looking at both individual issues that have arisen, like how to deal with cross-
10 cutting issues in the new program, level of documentation and inspection reports
11 and the like, as well as rolling up all of the data that has been collected through
12 feedback forms as inspectors have performed inspections and modifying the
13 program, inspection procedures and guidance.

14 This will be a heavy activity in January-February. There are both
15 internal and external lessons learned. Workshops. All this will be rolled up at
16 the end of June in a commission paper.

17 Staffing. Staffing is always a critical issue. It's a critical issue
18 now. Certainly as we move to this new program, several arenas continue to train
19 people on the program itself. It's still evolving. It will undoubtedly evolve for
20 some time.

21 Also very important, training and making sure people have the
22 skills to do this program. Just to give you an example, fire protection. We have

1 to be sure we have the people, the tools, the skills, to do that inspection program
2 effectively.

3 There's a task force that has formed jointly among the regions
4 with Headquarters and NRR, and they're examining program guidance for
5 inspector qualifications, and, lastly, I think all of us are very much in a hiring
6 mode, and we need to replenish the staff with top talent.

7 There's another aspect of that, and that is, training those people,
8 the matriculation process, retaining those individuals, so all regions, and as Sam
9 mentioned, are in a heavy effort of training and providing the skills to be
10 effective, and we in the region have an interim program developed to assure that
11 folks who come to us have very high skills and are given the needed attention
12 and mentoring and the like to be effective.

13 Communications, Frank mentioned at the beginning. I won't say
14 anything more than that it continues to be a significant activity as change occurs
15 in really several arenas.

16 The GAO study last year reported a certain skepticism about the
17 new program. I would say that we have come a long way. I believe in terms of
18 having people have buy-in in this program and the support, but that's a
19 continuing effort and a continuing challenge.

20 The last thing I want to mention is the area of enforcement. Two
21 things to mention here. There's a task force that has been formed to address
22 issues that have arisen over the way we handle our cases, employment
23 discrimination.

1 This is a group led by Phil Archer, OGC, regional people, program
2 offices, and numerous meetings that have been held with input from
3 stakeholders, meetings in six cities actually, cities that were in fact targeted in
4 some cases to have personnel event history and traffic in this area.

5 We have to reach out and get input, examine options, and at this
6 point, the task is on target to deliver an assessment to the Commission in June.

7 Just briefly, one last item, and it has to do with examining
8 alternative dispute resolution, looking at the potential of damages. That will be
9 the end of September.

10 MR. MESERVE: We'll now turn to Mr. Congel for his
11 presentation.

12 MR. CONGEL: Good morning, Chairman, Commissioners.

13 I'm pleased to be here this morning to describe to you the
14 program accomplishments by my group for the past year.

15 Before I get into Slide Number 10, I'd like to just quickly reflect on
16 our output measure, the output measure for the IRO, as reflected in the
17 Emergency Response Performance Index. That index is composed of seven
18 parameters that we believe are critical to performing the measure of capabilities
19 that we maintain in this agency's response requirements and responsibilities.

20 As an example, I won't go all through them, through all seven, but
21 I'd point out, as an example, responsible organization staffing is one of the
22 principle parameters. It's a reflection of the level of readiness we have. We all
23 have designated positions with a goal of having at least three people who train

1 and qualify for that position. We have exceeded that. There are only actually a
2 couple that are 3D, most are 4, 5 and 1.

3 Also want to point out that this index reflects both Headquarters
4 as well as regional capabilities. We frequently have to trade responsibility for
5 being ready. More recently, in Region 4, it resulted in our staff here going out to
6 back up in case anything happened in the Region 4 plant. Conversely, if we had
7 a snow day here, one of the regional offices would back us.

8 We have spent extra time also to ensure that Region 4 is capable
9 of essentially replicating the capabilities here, and in any case, all of these seven
10 parameters are combined linearly to provide a measure of effectiveness.

11 When we established this about three years ago, we had a goal of
12 90 percent based on seeing what kind of level that we were attaining. We've
13 been meeting 99 percent of change over the years, and it was 95 percent last
14 year, to hopefully 99 percent coming in.

15 So, you will provide a continuing challenge for this agency to
16 perform in an outstanding manner in this area.

17 Now, I'll go to my first slide, Slide 10. Over the past year, the
18 principal major accomplishments are listed here. Of course, Y2K response effort
19 was substantial. I just find it remarkable that something of that magnitude has
20 faded actually so quickly, but there was, as you all know, an agency-wide place
21 in this, and I would have to say the extra effort has paid off in terms of it turning
22 out to be a relatively smooth transition.

1 What we have done, of course, is learned from that, and we'll get
2 into, in a few moments, how we had continuing efficiency study and response
3 early on in my organization at all times.

4 But just as a reminder that we not only had the establishment in a
5 very effective way in Region 4 as a back-up capability, but we also utilized that
6 experience to combine with the agency's requirements to have continuity of
7 operations planned.

8 Overall, what we did for Y2K continues. That's particularly
9 notable in our communications capabilities as well.

10 The one-voice initiative, another major effort that is on-going. It
11 was a result of an accident that happened in Japan over a year ago now, and
12 what we found out from that experience is that the existing infrastructure, which
13 is oriented toward naturally self-protecting U.S. citizens, did not work in as
14 effective a way when we had a distant accident that didn't have a direct impact
15 on the United States, but nevertheless generated substantial interest in what
16 possibly could happen here if we had the same technology.

17 As a result of the increase in the activation of the response center,
18 we learned very rapidly that EPA had lead responsibility, did its job, mainly
19 activated the radioactive sensors around the country to ensure protection of the
20 citizens. However, the questions remain from news sources about what was
21 going on technically, and what did we have here in the United States?

22 In fact, there's a meeting with the FRPCC going on right now,
23 where a proposal in front of them is being discussed, but we are working with our

1 departmental agencies on when an issue like this comes up again, we're
2 coordinating beyond what the role of EPA is currently.

3 I would say we're roughly halfway through that, and there is
4 awareness now that didn't exist a year ago.

5 A major effort initiated over the past several years and is
6 continuing now has to do with the presidential decision directives. Since the
7 bombing in Oklahoma City in 1995, there have been four PDDs issued that put
8 direct responsibility on us as well as other federal agencies to be ready for this,
9 what's called, unconventional threats to national security.

10 There are efforts involved here that go well beyond what we had
11 in the past. There are multiple -- there are no single points of contact to
12 coordinate this, and it continues to be a real challenge to ensure that we fulfill
13 our statutory responsibilities for public health and safety in our licensed facilities
14 but also would be able to function in the environment where there are new
15 responsibilities on our law enforcement agencies.

16 I believe that we've made substantial progress. We conducted
17 two initial exercises with our counterpart federal agencies, law enforcement
18 ones, over the past year, and we are well on our way to another major exercise
19 this year.

20 I'd point out that we have submitted a commission paper
21 approximately a year ago with an estimated schedule and have been able to
22 exceed what we anticipated doing within this time frame. We hope to be able to
23 continue with this same progress.

1 As an ultimate measure, of course, of our readiness, is how we
2 respond to real actual events, something other than an exercise, and, of course,
3 the most notable one at this time period was Indian Point 2, and we looked at our
4 activation times, decision-making times, all of the parameters that go into our
5 performance index and found that we indeed met, if not exceeded, them.

6 We also have smaller events to respond to, not as major as
7 Indian Point, but all of them were also subject to the same test.

8 Very levels of activation of our response center as well as the
9 corresponding regional response center.

10 Next slide, please. This refers to self-assessment activities. My
11 organization performed this about three years ago. All of the principal findings
12 were implemented either as they come out of the report before it was completed
13 or shortly thereafter.

14 The principal efforts continuing as a result of this self-assessment
15 were areas where we can improve efficiencies, and data is essential in terms of
16 the budget structures that we're in now, and I'd like to just point out a couple of
17 examples where we have continued to do that.

18 The International Event Scale. It's a process where all of the
19 cooperative agencies in the world go, and we're looking into having some
20 manual submissions as we course over an imminent basis similar to the Hughes
21 system that was utilized during Y2K.

22 A state outreach program is one that is very popular, and we
23 continue to get requests that exceed our capability in responding, and what we

1 are doing with state outreach is looking into ways in which we can combine the
2 training, combine meetings, combine the different subjects, so that we can make
3 maximum use of this unique communication link that we have, it's an essential
4 one, and at the same time improve the manner in which we interact.

5 There is nothing that substitutes for direct face-to-face-type
6 interactions.

7 Overall, utilization of the agency's web page as well as use of the
8 Internet communication is one of the places where we're spending substantial
9 amount of time in order to promote efficiency.

10 Interactions, for example, with FEMA during a national event,
11 through the Internet home system has been utilized a number of times, and this
12 will be something that we'll utilize again. The old way we did it was with fax
13 machines.

14 The Diagnostic Evaluation Program was in place when I arrived at
15 the agency and continued in a support role for some number of years. This past
16 year, we were able to link it directly with the new Reactor Oversight Program, so
17 that the features of the diagnostic evaluations that have proved very valuable in
18 the past were preserved but integrated with an existing program so that it was a
19 nice smooth flow with an overview associated with NRR's responsibilities with
20 this already-established program.

21 The Commission was informed of this relatively recently, but it
22 was another efficiency area that wanted to preserve the safety functions
23 performed.

1 In addition to the key challenges I've just mentioned, particularly
2 with the PEDs, we have and continue to have a challenge of assuring and
3 ensuring that we have our direct access lines to all of our licensee sites.

4 There was and continues to be difficulty in transitioning from the
5 FTS-2000 to FTS-2001 System. We got our own, have developed a separate
6 contract with AT&T, the original providers of the direct access lines, because the
7 transition did not take place within the originally-established time schedule.

8 We're still working on that. We regard it as a key part of our
9 capability to respond, and there has been no loss of continuity in this system at
10 all as a result really of my staff's substantial effort here.

11 I mentioned the PDDs. We're working with the FB. That has
12 presented a number of challenges and other law enforcement agencies but
13 principally the FBI. Their structure is different than ours. The orientation of a law
14 enforcement agent is different from ours and has presented a challenge to our
15 technical staff.

16 I believe that with the interactions we're having, particularly with
17 their field offices, proving to be fruitful, and I look forward to the end of this fiscal
18 year, resulting in a plan in place that we can be fully reliant on if one of the
19 terrorist-based events occurs.

20 And with that, I will entertain questions at the end of the
21 presentation.

22 Thank you.

23 MR. MIRAGLIA: We'll turn to Ashok Thadani.

1 MR. THADANI: Thank you, Frank.

2 Good morning. May I have Slide Number 12, please?

3 I will very briefly cover the Office of Nuclear Regulatory Research
4 accomplishments and the challenges that we face in the reactor environment.

5 We slightly exceeded our measure of 45 products. We've had 47.
6 By the very nature of a researcher's work, most issues tend to be one of a kind,
7 but I have divided our accomplishments in four areas to give a sense of what
8 we're involved in.

9 First area is analytical evaluations. The second area relates to
10 experimental work. The third is programmatic, and the fourth one is cooperative
11 efforts.

12 I will give some illustrative examples to give you a sense of the
13 areas. In the analytical area, we're continuing to improve the agency's analytical
14 tools to increase our efficiency and effectiveness and be able to conduct more
15 realistic analyses.

16 We're now consolidating multiple approach and conduct a modern
17 approach. At the same time, we're trying to improve the fidelity of these goals.
18 Last year, we also qualified. This was actually a center accident code which was
19 modified to be able to do this.

20 We also consolidated three vehicles, some probes, Track B,
21 Track P and Ramona. We did a single track code. We for the first time did a
22 pilot 3-D project for pressurized water reactors. We think this is particularly

1 important as we go forward having to do with issues, such as mock spill and so
2 on.

3 Another example under analytic area is the evaluation of
4 operating experience the office conducts. As you know, this is a function that
5 was formerly the responsibility of the Office of Analysis and Evaluation of
6 Operational Data.

7 Key elements of the work here is, as Frank mentioned, Strategic
8 Plan has a goal of no more than one significant precursor, the Accident
9 Sequence Precursor Program, that evaluates and attempts to understand risk
10 significance of operational events.

11 Another area of the operational experience and evaluation has to
12 do with understanding reliability on the more important systems. We've
13 conducted a number of studies. This is on-going effort. Continuing to see if
14 there's training in terms of the systems, frequency of various events.

15 We also conduct some specialized studies, such as issues related
16 to design errors, their importance, as well as this year, we completed a study of
17 the elements of valves, to see if they have issues that deserve attention.

18 These evaluations have additional value in that they identify
19 important areas of inspection activities, reviewing submittals, as well as
20 understanding the training in terms of maintaining safety and performance.

21 In the experimental area, I will just discuss one example we have
22 of accomplishments on leak. An example I want to talk about has to do with
23 coatings and emergency coolant system performance.

1 Containment coatings applied during construction are expected to
2 last for four years and during a loss of coolant accident as well. Qualified
3 protective coatings and containments are actually checked during the design life
4 cycle, and this has raised concerns.

5 Failure of such coatings could result in a debris source which
6 could transport to and impact emergency system sump performance.
7 Specifically, the accumulation of debris on sump screens or strainers, as the
8 case may be, could increase the resistance across the screens and thus reduce
9 the net positive suction head to the emergency pumping system that takes the
10 suction.

11 We divided research in two areas. The first part is coatings, and
12 the second part is the sump performance. Coatings is essentially complete. The
13 coatings research will provide data on most proper coatings debris
14 characteristics, and we will use in dealing with potential sump products.

15 Results will also be used to support or revise an SDN coating
16 standard for nuclear power plant safety codes. The emergency systems will be
17 used to understand transport path to internal features and will include the
18 suitability at the loss of net positive suction at margin to debris accumulation on
19 subsequent ones.

20 That is because we believe that there will be some path-specific
21 issues of the geometry level in kind on the transport to the sump. Finally, of
22 course, we will conduct regulatory analyses to determine what actions are
23 appropriate.

1 In the area of problematic considerations of risk-informed
2 regulations, the Commission has been briefed on a number of occasions. I
3 believe you know all the major issues. So, I will not go over those.

4 I just want to say a couple of words about risk-based performance
5 indicators. We're looking at the technical feasibility to see if we can develop a
6 set of performance indicators that can provide an expanded understanding of
7 contribution to risk from operational considerations.

8 We are working with the Office of Nuclear Reactor Regulation and
9 internal stakeholders to ensure that whatever concerns they may be looking at,
10 we consider.

11 The other commission paper this Summer as well as brief, we will
12 provide that paper in the future.

13 Another program area has to do with generic safety issues. Over
14 the last two years, we've had significant attention on this matter, and I believe
15 the results were the result of this increased attention. We were able to resolve
16 last year six generic safety issues.

17 The fourth area relates to cooperative agreements. Again in our
18 attempt to be more efficient and partially compensate for some of the budget
19 reduction efforts we've experienced, we have increased our cooperation both
20 with domestic organizations, such as Department of Energy, Electric Power
21 Research Institute, as well as the international community, and we have signed a
22 number of additional agreements of cooperative research.

1 Chart Number 13, please. The research involved in several self-
2 assessments, I'll very quickly cover four of them. The first has to do with issues
3 processing. We developed a draft management directive, October of 1999,
4 which we believe provides more efficient procedures for handling and evaluating
5 generic issues, and we are actually conducting some trial cases using the
6 revised safety.

7 The lessons learned, we will discuss with the Advisory Committee
8 in March, and we will finalize the management directive in June of this year.

9 The second area has to do with regulatory effectiveness
10 responsibility. As part of this effort, we assessed the effectiveness of two
11 regulations, the station black-out regulation and the anticipated transient
12 regulation.

13 These assessments are based on comparison of the expectations
14 and determinable outcomes. Basically, the station black-out activity, considering
15 the risk reduction expectations were achieved, and that industry and NRC costs
16 to implement the rule -- these rules were reasonable.

17 There were a few areas that were identified for NRC attention as
18 a part of this evaluation.

19 We also have had on-going effort at evaluating research
20 programs. You might recall in 1997, there was a Research Review Committee
21 which provided -- evaluated research programs to provide guidance to the
22 Director of Research and its recommendations to the Commission as well.

1 That function has now been taken over by the ACRS, and it
2 conducted an annual review of research programs and provided a report.

3 As part of this evaluation, we also have Research Effectiveness
4 Review Board, composed of senior managers from research, NRR and NMSS.
5 We also have a regional representative as part of this board. They look at the
6 effectiveness of our internal processes, quality, timeliness, research audits, and
7 again we owe a paper to the Commission, which we hope to complete in the next
8 two-three months.

9 A lot of evaluation, and this time, it's an external panel that's being
10 conducted, by a panel of experts from industry, public interest groups,
11 Department of Energy. They are particularly looking at the role and direction of
12 research and some of the issues that we may have to deal with.

13 The panel is chaired by former Commissioner Kenneth Rogers.
14 They have prepared a draft proposal on Phase 1 of their evaluation. Getting into
15 more details under Phase 2, meetings are set for January 24th and 25th, this
16 month. They expect to complete their report in March of this year.

17 That went to some of the key challenges that the office faces.
18 Once again, I will not go into challenges, because I think you know that very well.

19 Another area that I think is beginning to be probably more likely
20 that we'll be facing some of these challenges has to do with advanced reactors
21 and advanced technologies, new technologies.

1 In terms of advanced reactors, the long-life reactor technology,
2 PBMR, in fact, is something we have to deal with in the not-too-distant future. At
3 the agency, we hope we have the expertise or experience in this technology.

4 Even internationally, many of the people who are actively
5 engaged have retired, and we're going to be struggling to retrofit some
6 geotechnical information.

7 We are preparing a plan on PBMR which we hope to send to the
8 Commission in about six weeks, four to six weeks.

9 Obviously you know about the potential challenges for AP-1000,
10 high-risk designs. There will be some unique issues, I believe, in terms of
11 scaling key design functions, and we'll be challenged in terms of our ability to
12 perform analyses, for example, for design.

13 In the advanced technologies, there are several areas, but two
14 areas I want to highlight, and one has to do with continuing changes in the digital
15 controls as well as the industry's moving forward to go to newer code and
16 planning designs.

17 There are important barriers in terms of limiting any releases. We
18 need to make sure that we have an adequate database as the industry moves
19 forward.

20 The last challenge which I think -- I personally think is probably
21 the biggest challenge, which is threatening our infrastructure, which really is
22 related to the points I've been making in terms of our capability to deal with the
23 major issues, redesign, new technologies and so on.

1 From a research perspective, infrastructure is highly skill-staffed,
2 has key experimental facilities, and up-to-date analytical tools. It is in my view
3 difficult to have one without the other two. I think one needs to have three key
4 elements.

5 At the Office of Research, we have a particular challenge. 49
6 percent of the staff is actually eligible for retirement. I think it will be a challenge
7 to recruit highly-skilled, well-recognized specialists as we move forward, but we
8 are working on that.

9 Over the past several years, as you know, there's been a decline
10 in terms of the percentages available to us. I think there is danger that some
11 additional facilities will be shut down over the next two to three years.

12 In fact, recently, we were informed by the University of Michigan
13 that they're going to shut down their reactor. This is going to be particularly
14 challenging for us because that reactor was modified to be able to do special
15 studies for us in terms of looking at the pressure vessel materials.

16 They are able to take big pieces of materials, look at the
17 influence, without repeating cycles. That is, they promise that they'll operate the
18 reactor continuously, so the temperature and cycle situation will be proper.

19 If they shut down, which I believe now they have made the
20 decision to shut down, now we're going to be looking to see what our alternatives
21 are because we do need to make sure that we have data in terms of the
22 regulatory requirements of this material for long-term operation.

1 So, in summary, I see the issue of infrastructure as probably the
2 biggest challenge to the Office of Nuclear Reactor Regulation research, and we
3 are trying to compensate for some of these challenges, as I said previously.

4 Thank you.

5 MR. MIRAGLIA: We'll go next go to Mr. Raglin.

6 MR. RAGLIN: Good morning. Slide 14, please. I'd just like to
7 highlight a couple of major points. This will be in technical training for the reactor
8 arena.

9 There's one key output measure and some secondary measures.
10 The key output measure is that the numbers and types of forces provided can
11 meet at least 90 percent of the cumulative identified needs by the office agents.

12 There are some secondary measures for quality, effectiveness
13 and efficiencies that are immersed in those slides.

14 I would like to reinforce one thing that Hub Miller mentioned a little
15 earlier in the presentation, and that is the training in support of the initial
16 implementation of the revised reactor oversight process.

17 We were able to accomplish that training while providing a
18 regularly-expected set of technical training courses, and this was not a trivial
19 effort. We trained 438 staff members, I think 12 courses, two of which were
20 given in each of Regions 1, 2 and 3, three in Headquarters, one in Region 4, and
21 two in the Technical Training Center.

1 This required very close coordination between HR, NRR and the
2 regions to keep the content updated as the program continued to evolve, even
3 while the training was in progress.

4 The secondary measures for technical training, quality is
5 measured based on the percentage of course examinations that are satisfactory
6 or better. In fact, this is measured by percentage of students who pass the
7 exams or courses which have exams. Inefficiency is based on the enrollment in
8 terms of actual versus capacity. All of these measures are exceeded for reactor
9 technical training.

10 Slide 15, please. There are a couple of key challenges, mainly in
11 two areas. One has to do with the qualification and training requirements for
12 reactor program inspectors in general, and the other has to do with risk training
13 in support of a reactor arena.

14 Hub Miller mentioned the Manual Chapter 1245, which has been
15 created and is working and will continue to work till about the end of the summer.

16 This task group is sponsored by NRR and contains active
17 participation from each region, NRR and HR. Additionally, there is a steering
18 group consisting of SES managers and HR, NRR and Region 2. Additionally,
19 this group has met in various locations. They have or will have met in
20 every regional office, here in Headquarters a few times, and at the Technical
21 Training Center, and as such, they've taken the opportunity to gain the
22 perspectives of the regional and Headquarters managers up through office
23 directors and regional administrators.

1 This is a comprehensive effort, and part of the work is to develop
2 competency requirements and associated knowledge, skills and other attributes
3 for the inspection staff, to assess the current inspector qualification
4 requirements, refine the objectives of Manual Chapter 1245, and consider new or
5 revised training requirements in the context of the revised director oversight
6 process.

7 The group will be making a number of recommendations by about
8 late summer, and then we will have the challenge of incorporating those
9 recommendations, modifying the program as necessary to provide the reactor
10 technical training needed for the future.

11 Another key challenge has to do with risk training for some
12 selected regional personnel. There is a need to develop a small cadre of people
13 within each region who can assist the regional senior reactor analysts in working
14 through the probabilistic STPs.

15 As such, the Office of NRR, the regions and HR are again
16 working in concert to develop a program which will allow this, and we generally
17 anticipate that three to four people from each region will attend this same formal
18 training that has previously been done to qualify the senior reactor analysts.

19 HR will therefore be providing a second series of these
20 sequenced PRA courses to support that effort for FY 2001. We generally expect
21 to do the same thing for FY 2002.

22 With that, I'll pass it back.

1 MR. MIRAGLIA: Slide 16 is a brief summary. We've met our
2 strategic and performance goals, and we're using a disciplined planning and
3 oversight assessment process to address the key challenges.

4 That completes the staff's prepared presentations, Mr. Chairman,
5 Commissioners.

6 MR. MESERVE: Thank you very much.

7 It's apparent from the presentations you've made this morning that
8 you have a sweeping set of responsibilities and a very aggressive set of
9 programs you have underway. I'd like to thank you very much.

10 Let me turn to Commissioner Dicus first for any questions.

11 MS. DICUS: Okay. Let me ask a couple generic questions and
12 then probably maybe have one or two specifics very quickly.

13 Communications has been talked about quite a bit, and you
14 brought up the issues with it and dealing with it, and it's one of the key
15 challenges which I think we all can agree to throughout in various offices and the
16 input of this arena and maybe even in getting to the training.

17 I know one of the things that we've talked about in the past is with
18 the Revised Reactor Oversight Program, being sure that we have buy-in all the
19 way through the staff, and you mentioned the quals of inspectors and things of
20 that nature, the challenge of doing team inspections, a little bit different than
21 what we've done.

1 You want to elaborate on how you feel that we're really getting
2 down to the last person in the arena to get the buy-in, to have the training, to feel
3 a comfort level? Anyone?

4 MR. MIRAGLIA: We've added many internal communications
5 plans relative to that subject. Hub addressed it briefly in his remarks.

6 Sam, do you want to add to the perception that we have? We
7 haven't conducted a survey in follow-up in terms of getting statistical data, but I
8 think in terms of our interactions with the staff at counterpart meetings, region
9 communications with staff, I think there's the initial implementation broadened
10 the understanding of the program.

11 The completion of the training gave a level of understanding of
12 the program. I think our sense is, is that the survey would show a significant
13 improvement.

14 MR. MILLER: Yeah. We spent a lot of time in the field, and
15 obviously one of the things we're looking for is our people, you know, accepting
16 the program and doing it with some enthusiasm, and my feeling is that as they
17 have gotten into it, and it has been challenging, the acceptance and the support
18 for it has gone up.

19 They've seen the results. They've seen the positive results.
20 They're inspectors, and they are questioning, and, so, they need to continue to
21 question and make sure that it's the best program we can possibly produce, but I
22 think acceptance has improved.

1 MS. DICUS: Okay. That's good to hear. Did you want to add to
2 it?

3 MR. COLLINS: Thank you. I think this is a very good area. It's a
4 challenge both internally and externally between the NRC staff themselves, the
5 licensees who are one of the direct stakeholders, and the interested and affected
6 public.

7 We're approaching it in various ways. There's internal staff
8 training which Ken and our regions are sponsoring. Bill Dean and his team have
9 done numerous briefings within the regions at counterpart meetings. There's
10 been specific training and updates to the revised process as changes ensue as a
11 result of the initial implementation done at each region.

12 They have visited a number of selected sites at each region
13 throughout the revised oversight process to sit down with the resident inspectors
14 who are a significant stakeholder, and licensees to receive feedback.

15 My impression, and, John Johnson, you keep me honest, is that
16 we do intend to do another survey to ensure that we do have buy-in or
17 understand the issues from stakeholders. We have the web site, which not only
18 depicts the on-going status of the program implementation but also allows for
19 questions to be asked through the interactive web site, and the results of those
20 frequently-asked questions are posted on the web site to ensure that the
21 clarifications and the issues are available to all stakeholders.

22 In a broader aspect under new initiatives in the Office of NRR, we
23 have budgeted resources in the area of converting the staff to a risk-informed

1 mindset, if you will, to ensure that we continue to progress in that area, and also
2 staff outreach and changed management.

3 Those two areas are budgeted with resources, FTE and contract
4 dollars, to provide for expertise through the next three years.

5 MR. MIRAGLIA: I think Sam's last comments are indicative of the
6 challenges not only within the context of the reactor oversight process, it's all the
7 changes that are on-going, and we need to continue. It's going to be a
8 continuing challenge, and I'm not sure that the challenge's ever going to be
9 gone.

10 As the degree of change occurs, we're obligated to explain
11 internally and externally the reasons for the change and how it's consistent with
12 our mission and provides the training and the understanding both internally and
13 externally. So, it's going to be a constant challenge.

14 MR. THADANI: If I may just give you a sense? So, I think
15 research has some unique aspects that deserve some mention.

16 We periodically, with all our staff, in addition to the various plans,
17 such as risk-informed regulation, communication plan and so on, a number of
18 meetings that we have with our own staff to make sure that they have an
19 understanding of what some of the initiatives are, and how they relate to the
20 work that the office does, including the various external assessments and so on
21 that are going on.

22 In addition to that, it has become increasingly important for us to
23 have continuing dialogue with Electric Power Research Institute, Department of

1 Energy and some other organizations in this country, to share with them what
2 our views are on major issues, where we might be heading, and where they're
3 going to see if there are opportunities for cooperation. So, it's an important
4 element for us.

5 MS. DICUS: And it's clear that everyone, all of us, need to
6 understand exactly where we fit in with the Strategic Plan, what our job does to
7 support that, and also the performance goals and the output measures
8 ultimately.

9 One other thing, kind of along this line. Since we've gone to the
10 arenas, and this is the first briefing that we've had on the reactor side of the
11 house, with multiple offices involved, and certainly we had the one for the
12 materials side of the house.

13 Are there any lessons learned or any challenges or opportunities
14 that you've seen among the various offices interacting in this arena?

15 MR. MIRAGLIA: I think there have been a number of those
16 alluded to at the briefing today.

17 Many of the initiatives that -- where the lead would be in a
18 particular office, Frank Congel mentioned the PDDs. That was an integration not
19 only across the reactor arena but also the materials arena again.

20 So, I think that's fostering the communications across the agency.
21 The challenge continues to be how do you integrate the competing needs within
22 the arena, and then integrate all of the arenas, and that's going to be a
23 continuing challenge, and that's because of the budget realities that exist.

1 Sam, you are going to add to that.

2 MR. COLLINS: I think that is an insightful question, in that the
3 more that our programs cut across program offices, and we depend on arenas to
4 provide for continuity and clarity and predictability, which is a concern of our
5 stakeholders, as you know, or at least three years ago, that's what drove a lot of
6 our new initiatives, we have to be fairly tightly coupled and have the same
7 philosophical view and be willing to share leadership and support roles.

8 Examples of that would be the role of the Office of Enforcement in
9 defining and supporting the significance determination process and the action
10 matrix as well as their role to provide for support for OI findings in discrimination
11 cases.

12 Frank provides for the role of the Incident Response, which is
13 heavily dependent on the availability and the expertise of the program offices.

14 The arena managers provide for that. My view, looking up at that
15 landscape, is that through the role of Frank and Bill and the arena managers,
16 they keep everybody closely coupled.

17 At the executive level of the offices themselves, there needs to be
18 continued emphasis on the willingness to share information and challenges, and
19 we have those. Those are real issues, as you cut across the Research Review
20 Board as a way to deal with those.

21 We had a meeting yesterday, for example, with HR on workforce
22 planning, and as we continue with these specific initiatives, the challenge in the

1 future will be to be sure that the lead office who defines the program keeps the
2 implementers, if you will, engaged and involved and provides for feedback.

3 The cost center initiatives under the agency, I think, are going to
4 further stress those areas that you mentioned, Commissioner Dicus, and we're
5 moving in that direction.

6 MS. DICUS: Okay. One quick final question. You mentioned
7 that you met all of your timeliness goals with IP-2, with the response to IP-2. Are
8 there any lessons learned in IP-2 response?

9 MR. CONGEL: There are two things. Sam sitting next to me was
10 one of the initial decision-makers, and we can add some firsthand oversight, but
11 we learned something from all of our responses, regardless of whether they're
12 an exercise or the real thing.

13 The guidelines that we have is that after initial call is received,
14 we'd like to make a decision what the agency response would be, if it's an
15 escalative response within 30 minutes.

16 The other goal is that after you've made a decision to respond, do
17 we have staff in the operations center ready to perform those functions within 60
18 minutes, and then, as I recall, with Indian Point 2, the timeliness actually with that
19 one was pretty easy because the severity of the event lent it to a rather
20 straightforward decision. So, that was easily made.

21 In terms, it was approximately 8 or 9:00 in the evening, and we did
22 -- I got there after Sam, I remember. We looked, and we were staffed up in our

1 usual time, as we have done unannounced practices, in the 50- to 55-minute
2 range.

3 MS. DICUS: Okay. What about lessons learned? Were there
4 any? Have there not been?

5 MR. CONGEL: The lessons learned with that, the principal one
6 that came out was in terms of communications. The manner in which we
7 expressed the accident in the public arena, the glitch that I remember very well
8 was the statement about off-site radioactivity releases, and we have had a
9 number of sessions since then because if you talk in absolute terms, essentially
10 something did come up. There was an operation that was performed in terms of
11 internalizing the release.

12 Rather quickly, there was one that took place for awhile. You
13 can't say zero, but there certainly was something insignificant. We learned a lot
14 about how we have to communicate this in the future. We worked very closely
15 with Bill Meecher and his staff on that.

16 MR. MILLER: Commissioner, can I add a few things, having been
17 involved in that from about 8:00 one night till 6 the next day, the afternoon, as we
18 secured from our heightened monitoring in the region?

19 The decision-making went well. We went in to stand by, and I
20 was in conversation with Sam and with Frank's people and made timely
21 decisions. We made good timely decisions with respect to shifting from standby
22 back to regional monitoring.

1 There are always things that you learn from the point of view of
2 how the ops center works in the region, the incident response center, and we are
3 always in fact learning almost more from those than we do from exercises, and,
4 so, there are a lot of detailed things that we typically learn from that.

5 With respect to the issue of the release, there is an issue that we
6 learned, I think, industry-wide, and I was with Luiz yesterday in Region --
7 speaking to plant managers of Region 1 and Region 2, in fact, talking about this.

8 That is, the need to condition stakeholders, off-site response
9 people, to the much more likely situation that if there is an event that involves an
10 alert as this one did, that it's far more likely that it will be something that is minor,
11 that if there is a release, it is small, as opposed to the very significant events that
12 they normally practice on.

13 It's a matter of conditioning people off-site so that when they hear
14 about a release, they're not instantly reacting as if it's the thing that we practiced
15 on, and there was a fair amount of that.

16 So, that's an industry-wide learning, I think, that has been passed
17 around. I know ConEdison has attempted to pass that on. That's less
18 something for us, you might say, but it's, I think, one of the most significant
19 things that came out of that event.

20 MS. DICUS: I may need to dust off my reality and exercises
21 speech.

22 Thank you.

23 MR. MESERVE: Commissioner Diaz?

1 MR. DIAZ: Thank you, Mr. Chairman. I have one question with
2 two parts that will be addressed to Sam, to Frank, to Ashok, and to Ken, and it
3 addresses, you know, the issues of this year and next year or past year and this
4 year.

5 We have always been talking about, and it's clear in here, that
6 we're always looking for key process improvements, and by key, I mean,
7 something that will rank high as a significant determination process available will
8 really be something that will catch your attention.

9 So, for this past year, I want each one of you to tell me one key
10 significant improvement, change, okay, that contributed to increase efficiency,
11 effectiveness and realism, okay, in the agency, okay, and for this following year,
12 one similar issue that has some policy implications that the Commission needs to
13 be aware that will be able to increase efficiency, effectiveness and realism.

14 So, last year, this year. Sam, would you like to take the lead on
15 that?

16 MR. COLLINS: Yes. Thank you. I think I have some choices
17 here, but I'll focus on --

18 MR. DIAZ: Have to be big now.

19 MR. COLLINS: Have to be big?

20 MR. DIAZ: Big.

21 MR. COLLINS: Okay. For last year, I would focus on the license
22 renewal process. Let me explain the efficiency, effectiveness and realism aspect
23 of your question.

1 This gets into a question that Commissioner McGaffigan asked
2 during Bill King's Materials Arena Briefing, too, Stretch Goals.

3 I believe the original prospect for license renewal was five years,
4 and we're down to 36 months, and we're at 36 -- 30 months now. We're at 25
5 months without a hearing.

6 Additionally, as a result and specifically not only have we met that
7 goal time-wise, but the initiatives from Chris Grimes and his team with the
8 issuance of the Generic Aging Lessons Learned Report and the Standard
9 Review Plan, although there are challenges that have been expressed by the
10 industry as far as the use of those and the depth of those, I believe that those
11 will further improve our ability to achieve the 30-percent efficiencies that we're
12 challenged with in the out-going years.

13 MR. DIAZ: Okay. I'm sorry. We realize that, you know, what was
14 the key process improvement that actually led you to achieve the outcome?

15 MR. COLLINS: All right. Well, I would point to those products
16 themselves, and those products which are -- especially the Generic Aging
17 Lessons Learned, which is an optional document, created for the purpose of
18 forwarding information to the industry and providing standards, if you will, for
19 follow-on plants.

20 Standard Review Plan is a more typical document. However, I
21 think its composition would lend itself towards achieving those sufficiencies and
22 effectiveness.

1 Realism is a scoping issue in license renewal, and I would say
2 that the ability to limit the scope of license renewal to those areas that
3 specifically are age-related degradation with the input of the industry and the
4 stakeholders would reach to that argument.

5 Next year, 2001, I think we could talk about either the revised
6 oversight process, but perhaps I'll focus on the security and safeguards area and
7 talk briefly about not only the integrated rulemaking of Part 7355, which the
8 Commission is well aware of, and the staff is challenged, and this is an area
9 that's integrated with OGC support and Materials support from Bill King's office,
10 as well as other stakeholders.

11 It cuts across a number of areas, including the OSRE and the
12 SPA. I would say that the efficiency and the effectiveness and the realism in a
13 performance-based area is the redefinition of the OSRE Program, the testing on-
14 site, and our ability to achieve that with the input of stakeholders, although
15 certainly that's still an evolving area.

16 More importantly in the transition to the SPA, which is the industry
17 initiative for testing, I think that will be another efficient and to-be-seen
18 effectiveness that will have to be tested, that will include realism, and the first of
19 those is scheduled some time in the March area. We believe that it may be a
20 little later than that.

21 NEI is a large stakeholder in that SPA initiative as far as
22 sponsoring the pilot for pilot plants.

1 The definition -- I don't want to get into a lot of detail, but the
2 definition of the adversary characteristics as far as efficiency, effectiveness and
3 realism, I think, is an accomplishment that will move forward.

4 Spent fuel pool and the SPC and the working group report having
5 to do with security is yet to play out. The report is in front of the Commission
6 now. I think we have that to look forward to, but the intent of that is driven by the
7 initial exemption request, and the Commission's tasking of the staff to do that
8 study is meant to provide for efficiencies and realism in the handling of spent
9 fuel.

10 MR. DIAZ: Okay. All right.

11 MR. COLLINS: Did I wear you down?

12 MR. DIAZ: Yeah. No, no.

13 MR. COLLINS: No?

14 MR. DIAZ: I will see you later.

15 MR. CONGEL: I think you have, Sam.

16 MR. DIAZ: Key process improvements, last year or on-going, and
17 this year, its policy implications.

18 MR. COLLINS: I would focus on the OSRE.

19 MR. CONGEL: No. You're done.

20 MR. COLLINS: I'm done. Thank you.

21 MR. CONGEL: You're out. I believe mine is pretty
22 straightforward. The thing that has provided the major challenge over the past
23 year has been upgrading our interactions with law enforcement agencies.

1 I certainly touched on it briefly with my presentation, but you have
2 to picture we went from a rather mature program, where we had the
3 infrastructure with our fellow federal agencies to a wide range of what we
4 consider conventional-types of accidents, and we went from that into an arena
5 that involved an evolutionary process within our society itself, new major
6 responsibilities on law enforcement agencies, and, of course, the same
7 requirements thrust upon us.

8 The challenge was, is to make use of the existing infrastructure to
9 the extent possible and practical, and at the same time, learn and grow with the
10 lessons that were being applied and in an area for which we don't have a lot of
11 internal expertise.

12 I believe that we were able to meet most of the challenges in that
13 time frame by making use of the expertise that existed with NRR and particularly
14 NMSS, but also at the same time communicate the new needs in a changing
15 environment.

16 MR. DIAZ: Okay. This year?

17 MR. CONGEL: Okay. Next year is really a continuation of that.
18 We had two drills that were learning processes with law enforcement agencies
19 last calendar year. What we did and plan to do this coming year, we're waiting
20 for feedback from the Commission on our proposed exercise schedule, and that
21 is, to build on what we've learned, to replace what I consider a conventional
22 exercise, namely with the long-term infrastructure with a new one at Palo Verde
23 that is one based on the lessons learned we've had in the past, and then

1 proceed to a point where we have a degree of comfort that is close to the kind of
2 capabilities that we feel confident with currently with our standard approaches.

3 MR. DIAZ: Okay. Thank you. Key process improvements this
4 past year, this coming year.

5 MR. MILLER: One thing that we did in Region 1, and I think other
6 regions did similar things, but we set up a work control center to help facilitate
7 this planning process, to schedule all of the inspections that have to be done. It
8 has been very challenging, and we've met the goals so far, and I think much of it
9 is the result of the tools that were established.

10 We developed some tools actually for tracking inspection hours as
11 a part of that, and I think I'm a little bit like Frank. I see this coming year as
12 being continuation of that same thing, you know, the effort to implement the
13 program effectively; at the same time, this assessment roll-up for the first year
14 and respond to these special situations.

15 MR. DIAZ: Okay.

16 MR. THADANI: For this year, I will go back to the example I used,
17 generic safety issues. As I said, we've revised the process. Both the initial
18 assessment and the prioritization process has been changed.

19 We are now -- we have an interoffice group that takes a look at
20 any identified issue, making a decision on is it important enough to pursue at all,
21 and if it is, then to go forward with a friendly abbreviated prioritization process,
22 and then during the resolution phases, we have increased management
23 attention.

1 I have monthly meetings on the status of the generic safety
2 issues. What the challenges are, and how we might want to deal with those? I
3 think it's worked pretty well, and we're going to continue to do that.

4 I'm going to go to a somewhat different example for future
5 because I think in the end, it achieves the same objective, and that has to do
6 with, as I said, we're moving towards more realistic analytical tools, but in
7 addition to that, there's some aspects that I think are very important.

8 An example of that is the use of graphical user interface
9 approach, wherein the people who use these codes can be more effective and
10 less prone to make mistakes with the availability of tools, such as the graphical
11 user interface.

12 We hope to complete that next year, and I expect that that's going
13 to lead to some efficiencies.

14 MR. DIAZ: Thank you. Ken?

15 MR. RAGLIN: For this year, the most significant thing that I can
16 think of was the integration of the Training and Development Web Site, coupled
17 with People-Self Training Administration, coupled with On-Line Registration.
18 These are three IT-related things.

19 When the former Technical Training Division of the former AEOD
20 was combined with the Office of Human Resources, we basically started with a
21 web site that had two different structures added together. It's now totally
22 integrated, same look and feel, seamless to the user.

1 By shifting to the People Self-Training Administration module,
2 we've gone away from three different training recordkeeping systems that were
3 used in the past to one, and a side benefit of that is that it opens up opportunities
4 for people in each of the offices, appropriately-designated people, to access the
5 training records, get training profiles on employees and so forth.

6 Finally, we've gone to on-line registration through the use of the
7 web site. That eliminates the need for paper processing from the employee to
8 the supervisor, and it automatically works through e-mail in something that acts a
9 little bit like work flow as far as the registration goes.

10 For the future, it's my opinion that the most significant thing that
11 we can and should do is to transition some part of the technical training, where
12 appropriate, and some part of other training, where appropriate, to some sort of
13 distance learning methodologies.

14 It's always difficult for people to go on travel to attend training
15 courses, particularly to attend relatively short ones. So, I believe that that's
16 certainly an area that we should and could pursue distance learning, including
17 web-based training and other possibilities.

18 MR. DIAZ: Thank you. For time purposes, I'm not going to go
19 back and ask what were the policy implications of these future things, but it might
20 be something that when you see me the next time, you might want to bring up.

21 Thank you.

22 MR. MESERVE: Commissioner McGaffigan?

1 MR. McGAFFIGAN: Thank you, Mr. Chairman. I want to join the
2 Chairman in commending the staff for getting a lot done over the past year and
3 recognizing that they have an awful lot more to do.

4 My first question goes to Frank, and it's just a presentational one.
5 When I first saw the graphs, and I looked at your challenges, I was going to say,
6 well, geez, where are all the other challenges, and then they all were in the later
7 sections.

8 I mean, but if I were looking in your Graph 4 at the major
9 challenges facing this area in terms that might drive budgets and whatever, I
10 would have had Sam's challenge of trying to, you know, deal with license
11 renewal, which he's talked about several times.

12 I would have had Hub's challenge of continuing to revise the
13 reactor oversight process and make improvements in it. Those are two huge
14 undertakings that we keep -- whenever we see something -- whenever we do
15 letters to someone, we tend to stick them -- the Commission keeps sticking them
16 in the front, and we get this boilerplate.

17 So, I think all the challenges have been identified by the various
18 other folks, but why did you highlight these three as opposed to the challenges
19 that sort of individuals identified later?

20 MR. MIRAGLIA: I think the key challenge is identifying all the
21 challenges. I think as an arena, these are integrated challenges. This is what
22 faces the arena.

1 Sam's challenge is my challenge, and in fact it flows to other
2 areas. I think a key challenge is balancing and integrating the competing
3 priorities, and part of that challenge is the Commission direction, and that
4 changes the balance, and the key is how do you integrate these competing
5 needs and competing priorities within the resource constraints for the reactor
6 area?

7 MR. McGAFFIGAN: You're a good predictor of my next question.
8 How is all of this -- I mean, if I were trying to convey to an external stakeholder --
9 I see Mr. Beetle in the audience and others -- just how tight are things for you all
10 in trying to get these multiple challenges identified within tight budgets, with
11 events that are not budgeted for, as Mr. Collins suggested in your Point 2 was
12 not budgeted for, --

13 MR. COLLINS: Absolutely.

14 MR. McGAFFIGAN: How tight are things? How is morale? I
15 mean, I gave a speech at the Reg Info Conference about -- I think it was last
16 year or the year before, about the seven simultaneous miracles you guys were
17 trying to pull off, and how pressed you were to do that.

18 Do you continue to feel stressed, and can you, within the tight
19 budgets that we have, pull all this off?

20 MR. MIRAGLIA: I think the planning process is giving us the
21 ability to say what can go, and what work are we doing that we shouldn't be
22 doing? I think we have lots of competing demands.

1 I think during the course of the presentations, you heard of
2 several things that where we responded to either increasing workload or
3 decreasing workload. There had been a slight decrease in allegations.

4 Sam indicated that the timing of renewals didn't come in. So, we
5 had resources, and, so, we applied those resources to licensing actions, and, so,
6 we're limited in how much we can do because the slice of the pie. I mean, you
7 can only get so many slices out of the pie.

8 MR. COLLINS: We think things are tight, but we think the
9 planning, budgeting, performance management process that we're using, and I
10 think it's an improvement on sort of the global process that we're using, and it
11 gives us an opportunity.

12 It gives us an opportunity to come to the Commission with the
13 benefit of this sort of integrated thinking, such that we can make arguments for
14 or against pushing the envelope on our budgetary needs.

15 So, we haven't optimized that process in my thinking yet, and I
16 think we're making progress, and we're looking forward to going through it once
17 again with the goal and objective of integrating this kind of thinking into each of
18 the arenas and ultimately across arenas, so that we can come to you and say,
19 here's the key work. Here's what we think we need to do, and here's what we
20 think we need -- we're doing it in terms of resources.

21 MR. McGAFFIGAN: Could I ask Mr. Congel just briefly? It's
22 again a budgetary issue.

1 The fact that the transition from FTS-2000 to 2001 didn't work,
2 and we had to do some extraordinary things, have you -- how much did that cost
3 us that wasn't budgeted?

4 I know we're going to take it out of the hide and figure out how to
5 do it, but -- because it was vital that we do it, but do you have a guesstimate as
6 to how much that cost us?

7 MR. CONGEL: Well, yes. There are two aspects to it. In terms
8 of handling the transition, it took me more in terms of FTE than I had ever
9 anticipated. We had people both from IT as well as my group working with it.

10 In terms of the efforts expended, though, we're able to negotiate a
11 contract on our own, separate from GSA, that has ultimately now -- I couldn't
12 predict this three months ago, but based on the fact that there's been only one
13 transition to 2001, one site, we are ahead with the budget proposal that I had
14 made.

15 So, financially, it's not going to cost us any more than I had
16 estimated. It was just more staff work involved than I had anticipated.

17 MR. MIRAGLIA: But there is cost in terms of FTE.

18 MR. CONGEL: Yes.

19 MR. MCGAFFIGAN: The -- one challenge that hasn't -- that
20 wasn't mentioned that may be down a little bit in the weeds that I'll just mention
21 to you because we've been thinking about international issues on the
22 Commission, and that is getting ready for the 2002 Nuclear Safety Convention
23 Review Conference and writing the country report, and I forget.

1 I think NRR has the lead, but it's probably an arena-wide and
2 maybe even across agency, but how -- what resources do you envision
3 dedicating to that, and what sort of policy issues are going to have to be
4 revisited? Because in order to get ready for that review conference, which is
5 about 15 months away.

6 MR. MIRAGLIA: My recollection is that the resource numbers
7 were three or four FTE. We have the experience, Commissioner McGaffigan, of
8 the previous -- although we had ratified, we went through the process in
9 gathering the information, and I think we see a learning process in that.

10 So, it's within the context of the planning assumptions, and it's
11 planned-for activity in -- and I think it may be in the international arena.

12 MR. McGAFFIGAN: It's because some of the skepticism that the
13 Chairman faces when he goes to interim meetings, presumably that the team
14 that goes to that review conference is going to have to be ready for in terms of --
15 you know, if you read the French magazine Control that Mr. LaCoste puts out
16 every two months, there's obviously skepticism about risk-informed regulation.

17 There is some -- they're watching our revised reactor oversight
18 process with interest but with skepticism. The latest issue of Control, they had
19 the Swiss regulator bemoaning the fact that he had been -- you know, his
20 regulatory system was tweaked in the direction of our old process, just as we
21 were moving to a new process, which looked a lot, in his view, like our old
22 process -- like his old process.

1 So, I think you're going to get a fair amount of policy interaction
2 with other countries as they critique us, and we probably should take that very
3 seriously.

4 MR. COLLINS: I think that's true. Of course, Janice Stone Lee
5 with the Office of International Programs is the overall coordinator of this effort
6 for the agency in concert with the International Panel, which she chairs, and the
7 program offices represent the technical resources.

8 We have discussed this topic, and there's two challenges. One is
9 the update of the U.S report, and the other is the review of those reports of which
10 we are the member state.

11 The types of issues that we're looking at and the range of
12 expertise is from those that are very familiar with our programs, so they can
13 update our report and the status of the industry to the overall context of policy
14 and program issues which ultimately will be represented at IAEA itself, and that's
15 potentially a two-to-three-week assignment for a number of individuals in that
16 location.

17 MR. McGAFFIGAN: Up to and including the EDO himself, if Mr.
18 LaCoste is the person representing France.

19 MR. COLLINS: There is various opportunities there.

20 MR. McGAFFIGAN: Right.

21 MR. COLLINS: It has been budgeted for through the International
22 Programs. We're taking a wait and see attitude, depending on the grouping of

1 plants, and through Janice, ultimately that might be a policy issue which the
2 Commission determines they have an appropriate say of attendance.

3 MR. McGAFFIGAN: The output measures, you briefly mentioned
4 the need to keep revising those. For instance, the operator licensing one, which
5 may well be a success, that we had to give fewer exams than was planned
6 rather than a failure, because we met the need, and it may mean that the rule is
7 working, and people are indeed doing their own exams.

8 But what is the process for revising -- the other one that comes to
9 mind, you know, the Commission by Fiat a couple of summers ago said a
10 hundred percent in two years, 95 percent in one year, just because we were
11 pulling numbers out of the hat, and we wanted to improve.

12 But should you -- at some point, you should probably seize those
13 numbers yourself, and given that you're getting 98 percent in one year and a
14 hundred percent in two, maybe the goal should be a six-month goal or a nine-
15 month goal or a 15-month goal or an 18-month goal, not trying to push you to
16 perfection but to better align, you know, your actual work efforts.

17 What is the process for thinking about those sorts of performance
18 indicators -- those sort of output measures?

19 MR. COLLINS: That was actually a very disciplined process that
20 involves the quarterly reviews, which results in the operating plan and the
21 operating plan updates.

22 On a quarterly basis, the Leadership Team, which is composed of
23 the division directors in the Office of NRR, meet to look at the data, and the data

1 ranges from resources utilized, time, people and money, through the product
2 lines against the performance goals which are usually outcomes and outputs.

3 There is a standard that's established based on the operating plan
4 and the performance goals below the level that we've talked here. It goes down
5 to the individual products.

6 There are out-of-standard ranges that are applied to each one of
7 those. Every time there's an out-of-standard condition, that's reviewed by the
8 Leadership Team, and it's reviewed for under what influences. It can be out-of-
9 standard high as well as low.

10 If we're overachieving in one area but under-achieving in another,
11 then that means that we need to move resources to stay within the bands. We
12 look at those trends overall, and those trends are rolled up in many cases as
13 adjustments to the targets, to the indicators themselves, and it's usually done on
14 a semi-annual or an annual basis.

15 MR. MIRAGLIA: And that's done on the operating plan level, and
16 then, as arena managers, we have quarterly reviews to talk about the out-of-
17 standard conditions with respect to performance and strategic goals.

18 MR. McGAFFIGAN: I'm glad that's all going on. The only
19 question I have, and it may be a presentational question. We do in the budget
20 submission each year include output measures which really sounds like a one-
21 time snapshot as to what we really intend to do, but those are the ones that we
22 are sort of held to in some sense the next year when -- I'd sort of pull out the last

1 year's output measure and say, well, geez, why did you do this, why did you do
2 that?

3 We may want to caveat -- well, we may want to put in a little bit of
4 an explanation in the future, that this is a dynamic process, where, because of
5 budget reality and the need to balance things, these goals are reviewed
6 throughout the year, and in some cases are overachieved, some cases
7 underachieved, but we do so in order to make best use of our --

8 MR. MIRAGLIA: I think that's pretty much understood within the
9 GPRA process in terms that there are goals that are set, and there's two
10 outcomes. You either meet the goal or you don't meet the goal, and then, if you
11 meet the goal, you have to -- and perhaps if you meet it by a mile, you might
12 want to ask yourself are those reasonable kinds of goals, or, if you don't meet
13 the goal, are there contributing factors that influence that, and those are
14 acceptable kinds of things.

15 So, I think they are goals, and they are measures to say where
16 are you performing with respect to those kinds of goals, and it's a feedback
17 process. The whole strategic planning process that feeds into the GPRA has
18 that feedback. It's a closed circle.

19 We haven't gotten through all of those processes in a robust way
20 for all of the arenas, and, so, we're in a constant learning curve. So, those
21 things are being improved as we go along, and that feedback has to occur.

1 MR. McGAFFIGAN: As I say, I agree with everything you guys
2 are saying, absolutely, but I just hope everybody else is on the same sheet so
3 that we're not arbitrarily held --

4 DR. TRAVERS: Interestingly enough, this is part of the training
5 that all of the managers in the agency got associated with this process, that
6 included this emphasis on the nature of revisiting and re-evaluating and
7 changing, where appropriate, these larger issues.

8 MR. McGAFFIGAN: Thank you.

9 MR. MESERVE: Mr. Merrifield?

10 MR. MERRIFIELD: Thank you very much, Mr. Chairman. The
11 first question I want to direct towards Frank Miraglia.

12 In the presentation, we did have on Page 4 a notion of the issue
13 of communications. One of the things that we are very concerned about
14 obviously is the cornerstone of increasing public confidence.

15 While it wasn't specified in the slides at all, obviously I expect it's
16 staff's interpretation that this -- the public comments are in concert with a lot of
17 the efforts that are underway.

18 In visits I've had with some of our inspectors, I know there's an
19 effort to try to get out and meet more with local government and community
20 leaders.

21 I know that we've had outreach to Congress. I don't know the
22 extent to which perhaps we've informed people in Congress how they can have

1 access to our new performance indicators, but that may be something worth
2 exploring.

3 The question. What are we doing within all of this to try to
4 increase public confidence? Are there some areas where we've had some -- you
5 would point out that we've had some success this year?

6 And in looking toward next year, what are some areas where we
7 can enhance this important area?

8 MR. MIRAGLIA: I think the area -- I think the answer is yes, and I
9 think we've had mixed success. I think the Commission has heard where there's
10 a view and a perception out there that we haven't done enough, and we could do
11 more.

12 I think the reactor oversight process is one where we have -- Hub
13 talked about the numerous meetings where, before implementation, we went out
14 to the region and local -- invited local people, local officials to understand the
15 process.

16 The PPR meetings resulted in meetings out there. Again, those
17 are public. We've had workshops in terms of initial implementation. We've had
18 a workshop within each region with the affected utilities as well as open to the
19 public to say what are the implementation issues, and things of that nature.

20 We'll have additional workshops, taking all of the input at these
21 initial meetings in terms of implementation issues, how we're going to prioritize
22 them, what are the most important changes, and how should we structure these

1 types of changes, and those workshops, as Hub indicated, are going to be taking
2 place in the January-February time period.

3 So, I mean, that is a model of what we've used in reactor
4 oversight, and I think in terms of feedback, and I think Hub could add to this, in
5 terms of meeting with local officials, in terms of meeting the transparency, the
6 web site Sam has indicated is out there, I think the response back or the
7 feedback is the local officials, state officials, seem to --

8 MR. MILLER: I've got good feedback from those meetings that
9 we held in connection with the start-up. The web site has been talked about by
10 people that I've been in touch with, and the ability to look at and see the
11 performance of the plant, I think, has had a positive impact.

12 Most important of all, of course, is licensees maintaining a high
13 level of performance. If their performance is not there, I assure you it's very
14 difficult to maintain public confidence, and we've got at least one situation where
15 that exists.

16 But I think these various initiatives, the best I can tell, have had
17 pay-off.

18 MR. MIRAGLIA: It goes without saying, though, is that that was
19 an extraordinary effort, and it has resource implications, and part of what we do
20 and how we decide what kind of outreach, and how much outreach to do is again
21 to use our four goals of maintaining safety and making those trade-offs.

22 DR. TRAVERS: If I could -- and I'll be very brief. I'm sorry.

1 I think you've highlighted an area where we find it very difficult to
2 at least quantitatively assess our success or lack thereof. I think the best thing
3 that making public confidence one of our strategic goals has done is to plant in
4 the front of our brain in all of the areas that we have responsibility for, what can
5 we do or try to do that enhances public confidence?

6 We may miss the mark on occasion, but it's something that we're
7 explicitly attempting to do and think about as we go forward in all of these
8 programs.

9 MR. MERRIFIELD: Thanks for your comment. I think it should be
10 at the forefront of our minds. I agree with that, and obviously continued
11 innovative thinking on all of our parts makes sense.

12 Sam Collins. A little different issue. You talk about meeting a lot
13 of your goals in terms of outputs, in terms of making sure that licensing actions
14 are done in a timely fashion, and I think the staff has done a very good job
15 overall in success in that area.

16 We have had some areas that I would term our "legacy" issues,
17 DPOs, 2.206 petitions, and other actions that have been out there from some
18 time ago.

19 Are you confident that we have identified those such actions that
20 are out there and have a plan to address those so that we -- going down the line,
21 we don't have any surprises about things that have been hanging out or requests
22 that have been outstanding for a significant amount of time?

23 MR. COLLINS: As far as the existing backlog of work --

1 MR. MERRIFIELD: Yes.

2 MR. COLLINS: -- in those areas, specifically 2.206, DPBs, which
3 will be the office responsibilities, DPO being the EDO level responsibilities, I am
4 confident that those are tracked.

5 There are some improvements that are warranted. Some of those
6 are based on the OIG report, for example, on the DPO/DPB process. 2.206 is
7 an initiative that we have underway. It's in the proofing process now, but there's
8 been significant changes to that process in the past year or so.

9 The challenge that we have, I think, on-going is ensuring that the
10 stakeholders who use those processes understand the expectations of them,
11 and I believe that's an area where we need to continue to interface.

12 Our work planning center, which is one of our premiere initiatives,
13 is meant to further refine that ability within the Office of NRR, all the way down to
14 workforce planning. So, we expect to get better in that area, but in those areas
15 that you mentioned, I believe I'm confident in saying that we know what we have.

16 MR. MERRIFIELD: We -- the next one is to Bill Travers. We had
17 a variety of comments today, talking about the number of our most mature
18 workers who are qualified to retire, who can retire at this point.

19 We've had some discussions lately about trying to get people in
20 the pipeline, new workers, and to the extent that we may be able to get people
21 from other agencies.

22 One of the things we haven't discussed is being innovative in
23 terms of retaining some of that knowledge, you know. I know that there are a

1 number of staff members who I've met who are over the age of 65, who are still
2 here, who are contributing very valuable work here to the agency.

3 Have we thought at all about using some innovative ways,
4 whether it's telecommuting or job-sharing or things of that nature, to try to retain
5 in a more limited capacity some of those workers who are eligible to retire, more
6 mature workers, but who can continue to contribute valuable work product to our
7 efforts?

8 DR. TRAVERS: It's among the things that we're looking at.
9 Certainly, we have had some experience with work-at-home in specific
10 instances, and across government, there's an initiative to look at where that sort
11 of thing can make sense, and where it can be effectively utilized by an agency.

12 We're looking at a host of measures that speak to the issue, the
13 very important one that you raised, of retention. Clearly, it doesn't do you much
14 good, even if you're bringing in high-quality people, if you don't have the work
15 place and the programs that support your being able to retain them.

16 Included in that, in my own view, is job satisfaction, training. Are
17 you actively engaging your workforce, vesting them with responsibility and the
18 tools to carry out that work?

19 I think we are, in connection with a mandate from the Chairman
20 and the Commission, looking at a number of other things that we might do, and I
21 think your entreaty to look particularly at how we might retain elements of older
22 NRC employees who might be utilized in some limited fashion perhaps, and I
23 agree with you, because what we're looking at today, as you've underscored, is a

1 lot of experience potentially walking out the door, and if there is some innovative
2 approach that we could use to retain that, even if it's on some limited basis, we
3 ought to try to explore that.

4 MR. MERRIFIELD: No. It's clear. A person's age is not a
5 limitation of what they can contribute, and certainly for our older workers, we
6 shouldn't limit ourselves in that respect.

7 MR. McGAFFIGAN: Commissioner Merrifield, could I just very
8 quickly?

9 MR. MERRIFIELD: Sure.

10 MR. McGAFFIGAN: I think there may be some statutory
11 problems. The person would want to retire. So, they'd be getting their
12 retirement check if they've got 30 years civil service, and then when they come in
13 and work for us, it can affect their retirement check, and if we want -- this may be
14 a governmentwide initiative, but at some point, we might have to look at -- all the
15 technical agencies face it, but in order to retain some of these folks, there may
16 be some statutory relief that has to be requested through OPM, but I'm not sure.

17 I just vaguely remember that there are these caps or these
18 reductions in retirement pay if you come in and also work at your old agency.

19 MR. COLLINS: That's true. That is a barrier for re-employment
20 rights, particularly if an individual is a full retirement. However, the Committee of
21 Age Discrimination, which we have met with recently, and I think all of the offices
22 are involved in, would say that there's two roles for those individuals.

1 One is to capture corporate knowledge and to move that into the
2 organization, particularly with the new hires, as far as lessons learned and on-
3 the-job training, and the second is, as a resource, which they are, there's some
4 more administrative barriers, maybe even statutory barriers, after retirement,
5 which, in today's age, where it's very difficult in some cases to achieve quality
6 contractors who do not have conflict of interest, that's an untapped resource at
7 this time.

8 MR. MERRIFIELD: Commissioner makes a good point. There
9 may be statutory limitations. It would be useful to have the staff think about that,
10 and if there are things we need to do, with the assistance of Congress, I agree
11 with you.

12 Ashok Thadani. You mentioned a lot of areas where we don't --
13 there are a lot of new innovative technologies out there where we need to be
14 thinking about.

15 To what extent -- let me phrase this a little differently. Do you
16 think we're doing the best job that we can in terms of capturing or understanding
17 what is going on in the international arena, so that we may take advantage of
18 what some of our international counterparts are doing, or is there more than we
19 need to do?

20 MR. THADANI: What I'd say reasonable amount in terms of
21 particularly the new technologies and the new designs in the international arena,
22 and we're staying fairly close in terms of the IAE activities, for example, on

1 PBMR, looking at current regulations, their application and trying to develop
2 some safety guides and so on.

3 We're also working closely, of course, with NEA, Committee for
4 Safety of Nuclear Installations, and there, NEA is now considering an effort to try
5 to develop best understanding they can in terms of what sort of technical
6 information would be necessary to deal with potential safety issues.

7 That means to first define what the safety issues are, and we're
8 staying fairly close and engaged with them, and I indicated earlier that we'll be
9 sending up a plan to the Commission, and we'll be discussing some of these
10 issues in that plan as well.

11 MR. MERRIFIELD: Okay. That's helpful. One editorial comment.
12 You made a mention about the Michigan reactor and resources we have to
13 depend on. That was news to me.

14 I would opine that perhaps if there are areas where you think the
15 Commission ought to be made aware or where we can make Congress aware of
16 some concerns that we have about infrastructure, I think that's important
17 information we may want to transmit.

18 Let me -- my follow-up question goes to Hub Miller. You talked a
19 little bit of how we have eliminated the aggregation of issues leading to escalated
20 enforcement and made some changes in terms of the ways we go about doing
21 enforcement.

22 Given those changes, do you believe that there has been any
23 reduction in the responsiveness of licensees or any down playing of the

1 significance of what they focus on on some of these issues, given the fact that
2 we are treating it differently in enforcement space?

3 MR. MILLER: I see no -- nothing on the surface. One of the big
4 issues, of course, as we move forward in the new program is the question of how
5 we deal with cross-cutting issues; that is, issues that may not rise to the level of
6 a green or white finding, but which, if you look across the various cornerstones,
7 are an issue and an indicator.

8 I think we've got to sort through that and evaluate, you know, what
9 the right thing to do is, get input from stakeholders. I think it's too early to tell
10 really what the effect is there.

11 MR. MERRIFIELD: But would it be fair to characterize that you
12 haven't seen any reduction in safety as a result of reductions --

13 MR. MILLER: That's right.

14 MR. MERRIFIELD: -- in escalated enforcement?

15 MR. MILLER: That's right. I see none.

16 MR. COLLINS: Commissioner Merrifield, if I can add? The goal
17 of the oversight process and the enforcement policy, as Hub has articulated, is to
18 provide for that risk-informed safety view of ensuring that the most important risk
19 and safety sense issues are put before the licensee, and their corrective action
20 program prioritizes the disposition and the corrective action, such that there's no
21 undue and perhaps unintended consequences of the NRC driving the use of the
22 industry's resources in those areas.

1 I think the regions have a pretty good view of how that's working,
2 and to date, I believe, we can say we've met that goal in an interim way. I see
3 Alan out there. But I believe that's one of the areas that we need to address
4 after the first year of implementation to ensure that the Commission has that
5 information in the aggregate sense.

6 MR. MERRIFIELD: Mr. Chairman, I just want to make one closing
7 comment, and that is, I've only done so in private, but I would like to publicly
8 thank Hub Miller for a significant amount of work that he and members of his
9 staff have conducted relative to the difficulties we've had with Indian Point 2.
10 That has resulted in significant interest on the part of our stakeholders, on the
11 part of media and on the part of Congress.

12 I think Hub has done an outstanding job of responding to those in
13 a straightforward and honest manner and has certainly helped this agency in
14 terms of our commitment to public information.

15 Thank you.

16 MR. MESERVE: Yes. We're certainly all indebted to you for your
17 efforts.

18 MR. MILLER: A lot of help from these folks, I assure you.

19 MR. MESERVE: In light of the time, I'll be very brief. I just have a
20 couple of very hopefully short questions and maybe some comments.

21 One directed at Sam, and I won't turn this into a question, is that,
22 you have emphasized, I think appropriately, the fact that you have these efforts

1 to attain efficiencies in the processing of the license renewal applications, and
2 that simultaneously, you're trying to maintain some deadlines.

3 This is a singularly-important activity for the Commission, that we
4 process these applications in a thorough and complete efficient manner, and if it
5 should happen that the efficiencies that we all expect and hope that you would
6 attain prove to be a problem, that we would expect you to come to the
7 Commission promptly, so that we would have an opportunity to assist you in
8 being sure that those issues are addressed.

9 For Ashok, I have a few hopefully close -- short questions. You
10 had mentioned this issue, which I was not familiar with, with the containment
11 coatings and the possibility that debris might foul the sumps and compromise the
12 capacity response in a loss of coolant accident.

13 You didn't close the loop completely for me as to whether you are
14 satisfied that this is something we're going to be able to deal with in the normal
15 course, that this is something -- this is a high-priority issue that we should be
16 addressing more swiftly than we otherwise would.

17 MR. THADANI: It is -- Chairman, it is a high-priority issue, and we
18 have been very aggressive in trying to make sure we have adequate information
19 in terms of moving forward to resolve this issue.

20 I believe that we are moving at appropriate speed on this issue. It
21 gets a great deal of attention, and I'm pretty confident that we will be able to
22 finish the evaluations and reg analysis next year.

1 MR. MIRAGLIA: In terms of immediate safety issue, I think that
2 this issue has been looked at on a number of occasions, and the coatings issue
3 has raised a nuance in terms of transport and that kind of thing, and, so, in terms
4 of there's not an immediate safety need that needs to be addressed. I think that
5 was the direction of it.

6 MR. THADANI: No. There are two parts. We are talking about,
7 to begin with, a low probability of an initiating event, and there's still questions,
8 and the reason for our wanting to get additional information, there are still
9 questions whether one can actually transport significant amounts of debris to
10 actually impact the NPSH of these pumps, and, so, we're not certain yet that the
11 end result is going to be necessarily new requirements.

12 DR. TRAVERS: This issue, I should point out, has resulted in
13 interactions between us and our licensees. Information has been provided by
14 licensees. All of that has been factored into Frank's conclusion, and it's basically
15 a staff conclusion that there isn't an immediate safety issue at hand.

16 MR. MESERVE: Ashok, you mentioned this University of
17 Michigan reactor and the importance of the influence measurements on
18 materials for reactor pressure vessels, and that there's a unique facility
19 apparently that is there.

20 Are there alternatives that are available to us?

21 MR. THADANI: We don't think we have an alternative in this
22 country, but I have to confirm that. I believe we're still exploring that option.

1 It's quite likely that we will have to go to an international facility if
2 we want to try and get this information. There are a couple of international
3 facilities that may provide this information.

4 MR. MESERVE: There's an international source for this
5 information?

6 MR. THADANI: We believe there is, and we're exploring those
7 options now. We were just in fact, Chairman, we were just notified about the
8 decision by the university to shut down the reactor. So, it was, I believe, two or
9 three weeks ago.

10 MR. MESERVE: Did we have an understanding with the
11 University of Michigan about continuity of availability of that reactor?

12 MR. THADANI: Well, this was one place where they made the
13 modifications that they had to make, and their Safety Committee supported that.

14 Their operating costs are quite significant. Our contribution is
15 quite small in terms of the piece of work that they do for us, and we cannot
16 support the overall operating costs. They have discussed this matter with the
17 Department of Energy.

18 I believe their decision to shut down is final, as I understand.

19 MR. MESERVE: Mr. Raglin, you'd asked me a point about the
20 need for advanced training and special focus on training for regional staff in the
21 area of risk assessment. You didn't say anything about Headquarters, and
22 you've touched on the issue about training of the entirety of our staff as a vehicle

1 for building skills and being able to maintain the capacity to deal with issues as
2 they arise.

3 Do you see any unique issues with regard to our Headquarters
4 staff in connection with either risk assessment training or related areas?

5 MR. RAGLIN: I don't think I meant to limit it to just the regional
6 people. I believe there will also be some Headquarters participants in the same
7 program that will broaden the number of staff members who have risk training
8 roughly equivalent to that of the senior reactor analysts.

9 Over the last two or three years, there have been some initiatives
10 sponsored by NRR that led to development and implementation of certain PRA
11 courses for inspectors. We've had a fairly broad implementation of the PRA for
12 Technical Managers Course, which included really Headquarters managers as
13 well as regional managers, and then just stepping outside the nuclear reactor
14 safety bounds for a minute, there are some significant risk assessment training
15 initiatives with NMSS right now that brings into play risk assessment as applied
16 to NMSS plans to proceed with risk-informed regulation, as appropriate, of its
17 activities.

18 So, there are many things that are going on. At the same time,
19 we're maintaining the same core curriculum of PRA training that we've had
20 available for the last few years.

21 On top of that, there may be some specialized instances where
22 individual staff members attend externally-sponsored risk training of one type or
23 another.

1 MR. COLLINS: Mr. Chairman, just to elaborate on Ken's
2 response, our highest-ranking new initiative is to convert the staff to a risk-
3 informed mindset, and the details are to fully integrate risk-informed principles
4 into every-day staff activities, and the Executive and Leadership Team has
5 programmed 10 FTE and \$665,000 over the next three years to support that
6 goal.

7 So, we'll be working closely with HR and other sources to
8 implement those resources.

9 MR. MESERVE: Good. Well, let me, on behalf of the
10 Commission, thank you all for a very helpful presentation this morning.

11 It's clear, as we look at the wide range of things that you've done
12 over the past year, that this has been a year of very significant accomplishments
13 for which you all have to be commended.

14 It's also clear that you have in coming years great challenges
15 ahead, and we want to be as helpful to you as possible in ensuring that every
16 year, you're able to give a word about having met your goals, and, so, we want to
17 be able to commend you for your work, and we want to spur you on for greater
18 accomplishments in the future, and I'd like to thank you all again.

19 With that, we stand adjourned.

20 (Whereupon, at 11:51 a.m., the briefing was adjourned.)

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