

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

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BRIEFING ON LESSONS LEARNED

DAVIS-BESSE REACTOR VESSEL HEAD DEGRADATION

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ROCKVILLE, MARYLAND

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TUESDAY, FEBRUARY 4, 2003

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The Commission met in open session at
2:00 p.m., at the Nuclear Regulatory Commission, One

White Flint North, Rockville, Maryland, the Honorable
Richard A. Meserve, Chairman of the Commission,
presiding.

COMMISSIONERS PRESENT:

RICHARD A. MESERVE Chairman of the Commission

NILS DIAZ Member of the Commission

GRETA J. DICUS Member of the Commission

EDWARD McGAFFIGAN Member of the Commission

JEFFREY S. MERRIFIELD Member of the Commission

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

STAFF AND PRESENTERS:

H. PETER BURG Chairman & CEO, FirstEnergy

GARY LEIDICH Executive VP, FirstEnergy

LEW MYERS COO, FirstEnergy

L. WILLIAM PEARCE VP Oversight, FirstEnergy

ROBERT SAUNDERS Pres. & CNO, FirstEnergy

JOHN "JACK" GROBE NRC IMO 0350 Panel, Chairman

BILL DEAN NRC IMO 0350 Panel, Vice Chair

JIM DYER NRC Region III Administrator

WILLIAM KANE DEDO

WILLIAM TRAVERS EDO

PAUL GUNTER Director, Reactor Watchdog

Project, NIRS

ALEX MARION Director, Engineering

Nuclear Energy Institute

JERE WITT County Administrator,

Ottawa County, State of Ohio

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

2 (10:29 a.m.)

3 CHAIRMAN MESERVE: Good afternoon. The
4 head corrosion at the Davis-Besse reactor in Ohio is
5 one of the most serious recent events in the NRC's
6 history. A few weeks ago the Commission heard from
7 the NRC staff concerning the work of the NRC's own
8 lessons learned task force.

9 The focus of that meeting was on the
10 actions that the NRC should take as a result of this
11 incident to improve its own processes and procedures.
12 The Commission has endorsed the implementation of over
13 50 recommendations arising from the task force's work.

14 Today's meeting will focus on the actions
15 by the licensee and the industry. The Commission will
16 hear first from FirstEnergy, the licensed operator of
17 Davis-Besse. The second panel will consist of staff
18 involved in the inspection of Davis-Besse in
19 connection with resumed operation. The third panel
20 will consist of various stakeholders with an interest
21 in the Davis-Besse incident.

22 We are not here today to address whether
23 or when operation of the Davis-Besse reactor should be
24 allowed to resume. That is a matter that is the
25 subject of continuing work by the licensee and

1 inspection by the staff. Our aim is to examine the
2 progress in the resolution of the various issues
3 raised by the Davis-Besse event.

4 This meeting is part of the NRC's
5 aggressive efforts to ensure that the Davis-Besse
6 event is carefully evaluated and that the
7 circumstances that gave cause to it are not repeated.
8 This will be the second public Commission meeting on
9 the subject, and, of course, all of the Commission
10 have been actively following the efforts by the staff
11 and the licensee very carefully.

12 The staff, in turn, has been actively
13 engaged in examining every aspect of the event, and at
14 last count has held over 40 public meetings to address
15 the issues. The NRC is taking this event very
16 seriously.

17 At the table as our first panel are
18 various representatives of FirstEnergy. They include
19 Mr. Peter Burg, Chairman and Chief Executive Officer;
20 Mr. Robert Saunders, President and Chief Nuclear
21 Officer of the FirstEnergy Nuclear Operating Company;
22 Mr. Gary Leidich, Executive Vice President of FENOC;
23 Mr. Lew Myers, Chief Operating Officer; and Mr.
24 William Pearce, Vice President of Oversight.

25 We are interested in the actions that

1 FirstEnergy has taken since the identification of the
2 vessel head degradation to restore the facility, to
3 address the issues identified in the root cause
4 evaluation, and to demonstrate compliance with NRC
5 requirements.

6 Mr. Burg, you may proceed.

7 MR. BURG: Thank you, Chairman. Chairman
8 Meserve and members of the Commission, as the Chairman
9 already indicated, I am Pete Burg, Chairman and Chief
10 Executive Officer of FirstEnergy, and we do want to
11 thank you for the opportunity to be here today.

12 Obviously, we're disappointed by the
13 problems that have occurred at Davis-Besse, but we're
14 here to tell you that we're encouraged by the -- in
15 the improvements that we have made that we believe
16 will help ensure a safe and reliable return to service
17 of the facility.

18 We've already introduced our senior
19 management team in place, so I don't do that. We will
20 try to share today with you some perspectives on the
21 lessons that we think we've learned at Davis-Besse, as
22 well as lessons that we think can help others in the
23 industry. And we'll discuss the principal
24 improvements that we've been making to address the
25 technical and human performance issues at our plant.

1 As you may know, FirstEnergy gained full
2 ownership and operational control of Davis-Besse, as
3 well as Perry, in November of 1997 following the
4 merger between Centurion Energy and Ohio Edison that
5 formed our company. We had a number of challenges to
6 overcome in our nuclear operations as we saw it,
7 including making much needed improvements at the
8 Beaver Valley facility after gaining full operational
9 control of that unit in 1999.

10 We believed that Davis-Besse, from all
11 indicators, was a strong performer. The plant's
12 material condition and overall performance was solid
13 on paper. Clearly, that turned out not to be the
14 case.

15 While safety has always been a top
16 priority at our company, the Davis-Besse situation
17 underscored the fact that safe nuclear operations
18 require an unrelenting, uncompromising commitment to
19 safety throughout our nuclear program. The highest
20 levels of productivity are meaningless if they're not
21 achieved with a strong focus on safety.

22 And as our management root cause analysis
23 report indicated on what happened -- concluded what
24 happened at Davis-Besse, former management at the
25 plant became complacent and isolated and were living

1 off past successes and did not have the right safety
2 focus.

3 So what are we doing to help ensure that
4 this does not happen again? I think you know we've
5 made some fundamental changes in the personnel and key
6 systems and programs. We added a new senior executive
7 team, completed upgrades to safety-related systems,
8 we'll be adding a new leak detection monitoring system
9 prior to restart, and implemented extensive changes to
10 policies and programs that affect operation of these
11 systems.

12 As Bob Saunders will discuss in more
13 detail in a minute, these changes include enhancements
14 to the FENOC and site management structure and a
15 revised safety policy and safety conscious work
16 environment policy.

17 It was never our intent that performance
18 goals set for Davis-Besse be achieved without a focus
19 on safe operations. Now more than ever we recognize
20 the critical role our safety culture plays in our
21 nuclear program.

22 To ensure that we maintain priority of
23 safety over production, we've learned that it is
24 absolutely essential to have a thorough system of
25 checks and balances, from the control room to the

1 board room. It is clear to us now that this was not
2 the case when it came to Davis-Besse.

3 Under the original structure of FENOC,
4 which was formed in 1998, site vice presidents
5 reported directly to the President of FENOC, who was,
6 in turn, the direct and really only link, you might
7 say, to corporate, and to the FirstEnergy Board of
8 Directors. Oversight and self-regulation standards at
9 all of our plants must be consistent, and in hindsight
10 the original structure of FENOC was not sufficient.

11 Obviously, we've made some significant
12 changes. Among the most important I think is the
13 addition of our Vice President of Oversight, Bill
14 Pearce, who brings 35 years of experience from our
15 Beaver Valley plant and other nuclear facilities
16 around the country. Bill reports directly now to
17 FENOC President Bob Saunders, and importantly I think,
18 and maybe uniquely, to our Board's Nuclear Committee.
19 So he meets directly with them.

20 The Board Committee, by the way, continues
21 to be fully engaged in our efforts to prepare Davis-
22 Besse for a return to service and in monitoring the
23 performance of our other units, Perry and Beaver
24 Valley. Nuclear committee members, including Bill
25 Conway, who is with us today, are now meeting monthly

1 and have been onsite to meet with plant management and
2 observe restoration efforts underway at Davis-Besse.

3 They are also continuing to closely
4 monitor the changes that we're making throughout FENOC
5 as we work to restore confidence in our nuclear
6 program. And they're doing so with the full support
7 of our Board of Directors, which has reiterated that
8 safety is the top priority of the company's nuclear
9 operations through passage of a recent formal board
10 resolution.

11 However, we also recognize that actions
12 are going to speak louder than words, and we've taken
13 many steps to help ensure the safe and reliable
14 operation of all of our nuclear units, including the
15 restructuring of FENOC. Its new structure will play
16 a key role in our future success.

17 In addition to our new oversight
18 capabilities, FENOC has also named Lew Myers as Chief
19 Operating Officer. As you know, Lew is a seasoned
20 nuclear professional with more than 35 years of
21 experience in the nuclear industry, including stints
22 at Perry and Beaver Valley, as well as other
23 facilities.

24 We've also added Gary Leidich as Executive
25 Vice President, who brings a unique industry

1 perspective with him from his years at INPO. These
2 and other new management positions have brought depth,
3 experience, and talent that we need, and also provide
4 the strong, centralized oversight of nuclear
5 operations that was lacking before. And our new
6 organizational structure is helping address the many
7 management and human performance issues that
8 contributed to the problems at Davis-Besse.

9 Davis-Besse management had become
10 complacent and lost their sense of accountability and
11 ownership. And with our imperfect system of checks
12 and balances, we didn't really recognize the cultural
13 issue or understand just how powerful a force it was
14 in leading to the challenges that we're overcoming
15 today, including instilling a keen sense of
16 accountability and ownership in all of our nuclear
17 plant employees.

18 Today we're continually driving home the
19 message that safety is our top priority and that the
20 corporation never expects it to be compromised for the
21 sake of production. I personally delivered this
22 message at recent meetings with every one of our
23 nuclear employees at all three sites, and we continue
24 to reinforce that as nuclear operators we must
25 remember the extraordinary responsibility that we have

1 and recognize that responsibility every single minute
2 that we're on the job.

3 We now have a greater appreciation for the
4 fact that we must get the job done right the first
5 time to regain the confidence of our customers,
6 regulators, employees, investors, neighbors, in our
7 nuclear program.

8 That's an overview of what we're about to
9 tell you, Chairman. Now I'd like to turn it over to
10 Bob Saunders, who will give you, really, an update on
11 our new safety policy and related procedures.

12 Thank you.

13 MR. SAUNDERS: Thank you, Pete.

14 Mr. Chairman, members of the Commission,
15 I am Bob Saunders, President and Chief Nuclear Officer
16 of FirstEnergy Nuclear Operating Company.

17 What I'd like to provide more detail on is
18 the changes that we have made at the corporate level
19 to make sure an event like this never happens again at
20 any of our FENOC facilities.

21 First, as Pete has already mentioned, our
22 new organization. Gary Leidich, as Executive Vice
23 President, will develop and control all of the
24 processes and programs we use to operate our plants.
25 Gary will ensure that these programs and processes

1 meet high industry standards and that they are updated
2 and maintained current as appropriate.

3 Lew Myers, as our Chief Operating Officer,
4 will implement these programs and processes and drive
5 improvements at our plants. Lew will also continually
6 assess these programs to make sure they're effective
7 and properly implemented, and that there is ownership
8 at the facilities for these programs and processes.

9 Just one example of these programs, and a
10 good one, is our much improved boric acid control
11 program. We view this as being the best in the
12 industry currently, and it is well implemented at both
13 of our sites that use boric acid. And we recently
14 successfully used it for a head inspection at Beaver
15 Valley Unit 1.

16 Finally, Bill Pearce, our independent Vice
17 President of Oversight, will ensure that all of this
18 happens.

19 I also sponsored an independent root cause
20 team to investigate the management issues, to be
21 certain that they were properly identified and
22 resolved. The report was completed last August, and
23 it found that we had a less than adequate safety
24 focus. To correct this we've issued a new nuclear
25 safety policy, and we have trained all of our

1 employees on it.

2 The policy is focused on commitment of the
3 corporation, of management, and the individuals at the
4 facilities. Each of those levels has attributes which
5 we can assess for effectiveness and sensitivity for
6 nuclear safety.

7 As Pete said, the highest levels of
8 productivity are meaningless if they are not achieved
9 safely, and we're committed to never allowing
10 productivity considerations to prevail over safety.
11 In fact, we've revised our incentive compensation
12 program for all nuclear employees, including myself,
13 linking it directly to safety measures.

14 Now more than ever we recognize the
15 importance of a strong safety conscious work
16 environment. We have just recently completed training
17 with all of our supervisors on this very important
18 topic to help them ensure employees feel free to raise
19 concern. And that's not to say our employees didn't
20 raise concerns before, because they did. Through our
21 corrective action program, our employees identified
22 boric acid on the head.

23 However, the former plant management
24 failed to recognize the significance of these reports,
25 and, therefore, did not take appropriate corrective

1 actions. But I think the important thing here is to
2 recognize that our employees have always raised safety
3 concerns.

4 In the human resource area, we've named an
5 experienced corporate human resource professional as
6 our FENOC HR manager, with just a total focus towards
7 the nuclear organization. We have strengthened our
8 Leadership in Action training program, which develops
9 all of our supervision, to have a much stronger focus
10 on nuclear safety, including a profound respect for
11 protecting the reactor core.

12 We've added two new competencies to our
13 employee appraisal program -- nuclear professionalism
14 and nuclear safety consciousness.

15 What does all of this mean for us today
16 going forward? It means that every day when employees
17 come to the plant they will have a clear vision in
18 their minds of the unique nature of the technology and
19 the special respect that it demands of the
20 professionals who manage it. As long as we keep that
21 vision in our minds, we will have the safety culture
22 that we need.

23 Thank you for your attention. And with
24 that, I would like to turn it over to Gary Leidich.

25 MR. LEIDICH: Thank you very much, Bob.

1 I'm Gary Leidich, Executive Vice
2 President, FirstEnergy Nuclear Operating Company.

3 Good afternoon.

4 As Bob indicated, FirstEnergy Nuclear,
5 FENOC, is moving forward by examining how we do
6 business in all areas. I'd like to specifically
7 address how we're implementing changes that centralize
8 and standardize our support functions at the FENOC
9 corporate level, but first let's step back.

10 One of the first things that we did -- and
11 this is late last summer -- was take a look at Davis-
12 Besse engineering to ensure that we had strong
13 technical rigor and ownership. These were issues that
14 were contributors to the overall RPB head incident.
15 And to ensure that our engineering personnel were
16 approaching their work with the highest possible
17 standards.

18 At about that time, we issued Principles
19 and Expectations for Engineering, which is a handbook
20 which applies to all FENOC engineering personnel at
21 all three stations and the corporate office. And this
22 establishes strong and rigorous standards for the work
23 that we do every single day in the engineering
24 organization.

25 We have also implemented a new standard

1 engineering organization; again, one that applies to
2 all three of our facilities. We developed this
3 organizational template by benchmarking the industry.

4 This benchmarking included a high-level
5 review by industry engineering executives from the
6 major nuclear utilities, and the result of this effort
7 is essentially really an industry best practice
8 composite organization for engineering. We were able
9 to take the best practices from what we saw all over
10 the United States, collect it into one standard
11 template, and that's our approach for a common
12 organization in a design area, system engineering, and
13 plant support areas.

14 This standard template for organization
15 for engineering is now in place at all three FENOC
16 stations. And as we go forward, we're working towards
17 standardizing other organizations in the fleet --
18 operations, maintenance, and so forth -- across our
19 three stations. This approach ensures that we have
20 well-defined responsibilities, very clear
21 accountabilities, and really it facilitates a fleet-
22 wide cohesiveness, an approach that we didn't have
23 before.

24 In addition, as Bob indicated, we've
25 established a central corporate organization at FENOC.

1 The new organization here centralizes activities,
2 centralizes where it makes sense, areas such as
3 equipment support, component expertise, fuel design,
4 and so forth.

5 More importantly, this standardization
6 also provides across our fleet a standard approach for
7 programs and processes. Program managers in the
8 corporate office will direct program development, and
9 they will follow up -- again, part of the checks and
10 balances -- to ensure that we're implementing our
11 programs in the field.

12 A recent example of the company standard
13 that's now in place across FENOC is our revised
14 problem-solving process. In fact, we were in a
15 meeting yesterday at Davis-Besse, and the operations
16 manager indicated that this was a watershed event, to
17 be able to rigorously approach problem-solving, to
18 ensure that problems are adequately handled at the
19 right level in the organization.

20 Like many nuclear utilities, we previously
21 had in place a consensus process for establishing
22 common processes across our fleet. We realized, as
23 others have realized, that a consensus process doesn't
24 always focus on the best industry practices. It has
25 not provided us with sufficient checks and balances

1 for implementation; we're fixing that.

2 Industry best practices is our goal, and
3 implementation will be verified now at the FENOC
4 corporate level. An example of this approach is the
5 Engineering Assessment Board, which provides an in-
6 line independent review of engineering products at
7 each of our facilities.

8 This board is really an industry
9 recognized best practice from our own Perry plant, and
10 we've now applied that practice to Davis-Besse and
11 Beaver Valley. It helps us assure that our
12 engineering products are the highest possible quality
13 in all cases.

14 Overall, our centralized approach at the
15 corporate FENOC level, which is well underway, will
16 help us achieve and sustain strong, safe, and reliable
17 operations at all of our facilities.

18 Thank you for your attention. I'd like to
19 turn the program over to Lew Myers. Lew?

20 MR. MYERS: Thank you, Gary.

21 I'm Lew Myers, the FENOC Chief Operating
22 Officer, and Acting Vice President of our Davis-Besse
23 power station.

24 As you know, in May of last year, we
25 initiated a seven-step return to service plan that was

1 designed to ensure safe, reliable return to service,
2 and then safe and reliable operation of our plant.

3 Under that plan, we have made -- we have
4 taken several key steps toward achievement of this
5 goal, pending the NRC's approval of restart. Today,
6 I would like to provide you several areas that we have
7 taken actions in.

8 The first action is improvement in material condition.
9 Next, actions to improve the management personnel
10 performance. And, finally, actions that we have taken
11 to improve the performance of several of our programs
12 and procedures.

13 First, we focused on the material
14 condition. We opened and then resealed our
15 containment building to install our new reactor vessel
16 head. A new reactor vessel head has been thoroughly
17 examined, and subsequently we installed a new service
18 structure on it. Finally, the reactor vessel head and
19 assembly were aligned to the reactor vessel flange to
20 ensure it is ready to operate.

21 Next, we performed a comprehensive
22 inspection on our safety-related systems to address
23 equipment problems and ensure that our systems will
24 operate as designed. Additionally, beyond these
25 requirements, we refurbished two of our reactor

1 coolant pumps, refurbished our high pressure feedwater
2 heaters, defueled our reactor, and then drained down,
3 so that we could perform preventive maintenance on the
4 first valves off the reactor coolant system, and then
5 inspected all of our fuel to ensure quality
6 performance.

7 Now, with the new reactor vessel leak
8 monitoring system, the containment sump strainer
9 that's new, and our new leak rate monitoring program,
10 Davis-Besse has safety margins that I believe are
11 truly unique.

12 Second, we recognize that those safe and
13 reliable operations of the Davis-Besse plant will
14 depend much on unit performance as much as good
15 equipment performance. To ensure that we have the
16 highest standards of performance in both areas, we
17 have taken a number of key steps, including
18 implementation of fundamental changes to our
19 organizational structure.

20 Obviously, the former Davis-Besse
21 management was both isolated and did not have the
22 proper safety focus. The new management team, the
23 implementation of our management development program,
24 and the oversight capabilities will ensure that we
25 have confidence to move forward in the future.

1 Our new senior team is strong, proven, and
2 technically competent. The management team has over
3 450 years of nuclear experience, and, more
4 importantly, they have proven leadership performance.
5 Fifteen of these managers are new to Davis-Besse. All
6 but one are new to their position. Nearly all have
7 senior reactor operator licenses or certification.

8 We have improved the operability
9 determination standards at our plant. More than 200
10 plant operators and engineers have completed our new
11 operability qualifications to help ensure that
12 operational issues are properly evaluated. We provide
13 your staff with our approach to ensuring our safety
14 culture commitments are being properly implemented.

15 We provided you with a management and
16 human performance root cause in August of 2002. We
17 have taken many actions there. We have revised our
18 business plan to strengthen our focus on safety. We
19 have revised our vision to show safety as the first
20 cornerstone. We have prepared a policy on safety and
21 trained all FENOC employees, not just Davis-Besse, all
22 FENOC employees. We have developed attributes for our
23 management team to assess our effectiveness.

24 Third, we have made fundamental
25 improvements to our programs and procedures designed

1 to help with human performance and ensure that
2 activities are performed as required. For example, we
3 have strengthened our corrective action program to
4 ensure an open line of communication with our
5 employees. This is the line management program that
6 allows employees to address their concerns on safety
7 and reliability issues.

8 We now provide an e-mail feedback to
9 employees that identifies a problem to ensure they
10 understand our corrective actions. We allow, through
11 our employee concerns program, anonymous condition
12 reports as a method of confidentiality.

13 We've enhanced our corrective action
14 review group, which now includes the plant manager,
15 who serves as chairman, as well as the operations and
16 engineering managers. This group is critical, because
17 it monitors the programs to ensure that the condition
18 reports are properly classified and then evaluated.

19 We have retrained and recertified all of
20 our root cause evaluators -- every one. I believe
21 that if this program had been properly utilized we
22 would not be sitting here today.

23 A new nuclear operating procedure
24 formalizes our approach to problem-solving, and we're
25 using it. This procedure implements a consistent and

1 comprehensive approach to addressing plant issues such
2 as degrade plant equipment.

3 We've revised our boric acid program. It
4 now has the proper inspections, criteria for
5 identification and evaluation of any signs of boric
6 acid on plant equipment. We have implemented a
7 stringent qualification program for boric acid
8 inspectors -- our own program.

9 We have also completed the operations root
10 cause and have an improvement plan. This plan is
11 designed to ensure that operations is in a leadership
12 role. We have approved a new command and control
13 policy at all three of our plants that addresses the
14 role of our shift manager.

15 We have implemented a restart readiness
16 review program. Our managers formally sit down as a
17 group to assess our readiness to move forward as we
18 change plant operating conditions. We assessed the
19 implementation of our safety policies, our management
20 commitment to these policies, and the individual
21 implementation -- individual's implementations of our
22 programs and procedures. These are the basic
23 commitments of the safety culture model that we
24 provided your staff.

25 In summary, we've made solid progress to

1 return the plant to service. We are preparing now to
2 reload our reactor core and then pressurize our
3 reactor, to both test and inspect our equipment. As
4 we move forward, we're benchmarking our efforts to the
5 industry to ensure that our approach to operating,
6 inspecting, and maintaining the plant meets high
7 industry standards.

8 We are proud of the progress we've made to
9 date, the actions we have taken to address plant
10 equipment, the actions we have taken to improve our
11 management and human performance. The actions we have
12 taken to anchor our changes and standards in our
13 procedures and programs will ensure that Davis-Besse
14 station is returned to service with sustained and
15 reliable operations. We wouldn't pursue its return to
16 service otherwise.

17 Thank you for your attention, and I will
18 turn it over to Bill Pearce, our Vice President of
19 Oversight.

20 Thank you.

21 MR. PEARCE: Thank you, Lew.

22 Good afternoon. I would like to review
23 some important initiatives in the area of oversight at
24 FENOC. First, we established new standards and
25 expectations for quality assurance. The objective was

1 to ensure that assessments are timely, intrusive,
2 performance-based, and add value to the organization.

3 The requirements of 10 CFR 50, Appendix B,
4 are at the heart of our work, of course, so our focus
5 must always be on nuclear safety, particularly as it
6 relates to fission product barrier control, reactivity
7 management, and the control of radioactive material
8 and radiation exposure.

9 In my newly-created position, I report
10 directly to the FENOC President and the Nuclear
11 Committee of the Board of Directors, assuring
12 independence from such pressures as cost and schedule.
13 While as a company we must pay attention to such
14 issues, they must not interfere with matters related
15 to nuclear safety.

16 So in terms of quality assurance, they are
17 not relevant. Intrusive and rigorous quality
18 assurance oversight is provided through our assessment
19 process. The independence of the quality assurance
20 organization allows quality assurance to reach
21 independent conclusions without influence of the line
22 organization.

23 We have reevaluated this process and are
24 making the appropriate improvements. These actions
25 validated our baseline activities, and we will anchor

1 them in our inspection processes. Like other
2 departments in the company, all quality assurance
3 personnel have been trained to establish, maintain,
4 and promote a work environment where safety concerns
5 are raised freely, without fear of retaliation.

6 Further, we have reaffirmed the authority
7 and responsibility of quality assessment to stop
8 unsatisfactory work, based on safety issues or other
9 reasons, within the quality assurance purview.

10 The independent company Nuclear Review
11 Board provides oversight of the quality assessment
12 function. We have strengthened this board by adding
13 new members with extensive experience in Babcock and
14 Wilcox reactors, like the Davis-Besse reactor.
15 Further, we refocused this board on reviewing elements
16 of nuclear safety, such as fuel integrity, reactor
17 coolant system integrity, and containment integrity.

18 Now I'd like to address the most important
19 issue. That is, safety-conscious work environment.
20 We recognize that this area is key to long-term safe
21 operation of the plant. As part of our improvement
22 effort, we completely overhauled our process for
23 raising and addressing safety concerns.

24 Changes include bringing in an experienced
25 employee concerns manager and independent professional

1 investigators to resolve safety concerns identified by
2 our employees.

3 In summary, we have trained management on
4 this new process, emphasizing the importance of
5 recognizing and enforcing safety conscious work
6 environment expectations throughout the organization.

7 Thank you. And now Mr. Burg will close.

8 MR. BURG: Just for a second or two, if I
9 could, Mr. Chairman. I want to, again, thank you for
10 the opportunity to be here and share what we think are
11 lessons learned at Davis-Besse, and to discuss the
12 fundamental changes and improvements that we think
13 we've made to ensure return in a safe and reliable way
14 of the unit to service.

15 We recognize that the safe and reliable
16 operation of Davis-Besse will depend as much on human
17 performance as it will on equipment performance, and
18 we're committed to never failing in either one of
19 these areas again. I will personally meet with all of
20 our shift managers at each of our units before we
21 restart to drive this point home.

22 As you've heard today, we're greatly
23 enhancing our safety culture with the new safety
24 policy and related programs and procedures,
25 strengthening our management team and oversight

1 capability, and implementing key programs and system
2 improvements. We are making solid progress.

3 In closing, let me stress that we will
4 only return the plant to service when we are convinced
5 that it will operate safely and reliably.

6 Thank you very much for your attention.

7 CHAIRMAN MESERVE: Thank you for a helpful
8 presentation.

9 The Commission alternates how we do our
10 questioning, and I think it's -- today is Commissioner
11 McGaffigan's turn to go first.

12 COMMISSIONER McGAFFIGAN: I didn't realize
13 that, Mr. Chairman, so I'll try to start out here.

14 Let me focus on the safety culture issue
15 and try to get you to tell me a little bit more. I
16 was not at the meeting last week where Dr. Haber, if
17 I'm pronouncing her name right, presented what she was
18 planning to do there. But I've seen some of the
19 accounts of the meeting.

20 How is her effort going to factor into
21 this -- your restart decisions?

22 MR. MYERS: Well, you know, we think it's
23 up to our management to ensure that we have the right
24 safety culture. So we're using her as an independent
25 consultant. We have her reporting through our human

1 resources group, so she can maintain her independence.

2 Now, we have a model that we've adopted.

3 It starts out with policy-level commitment,

4 management-level commitment, and then employee

5 commitment. And if you go look at the attributes we

6 have for each one of those, they are somewhat

7 subjective on the first two and very objective on the

8 third one, where we can actually measure performance.

9 It's our intention to take the methodology

10 that Dr. Haber provides us, look at that methodology

11 to help strengthen our model, and then take the

12 information that she provides us also, and what she

13 will provide us is areas where she thinks that she is

14 seeing improvements in safety culture and areas

15 needing improvement. So we'll take that information

16 and filter it into our plans for startup.

17 COMMISSIONER McGAFFIGAN: She has worked

18 at other nuclear facilities and has a methodology that

19 she is going to use at your facility that she has

20 tried out in other places?

21 MR. MYERS: That's correct. Her

22 methodology is a proven, we think, methodology. It's

23 a five-step process. I believe it's called convergent

24 validity. And what you do is there's -- you go

25 through like interviews, you go through questioning,

1 you set in meeting, and you look for common
2 attributes. And when you find those common
3 attributes, you have convergence of an issue. So the
4 model that she uses is the convergent validity
5 approach.

6 COMMISSIONER McGAFFIGAN: And she's going
7 to interview about 10 percent of your workforce.
8 She's going to have surveys with the rest of the
9 workforce. I think somebody -- and she has -- she has
10 colors. Everybody has colors -- red, yellow, green,
11 presumably, or some variation thereof.

12 If she has red findings, you're going to
13 get her report in the March timeframe. How will you
14 deal with that? You know, it's a hypothetical, but
15 how do you -- it is conceivable that she will find
16 some real problems.

17 That was the case at Millstone. We had a
18 group there Little Harbor, that, you know, had some
19 things in the red initially, and they were not red by
20 the time restart occurred. So --

21 MR. MYERS: Well, you know, actually her
22 findings -- that's -- the color code system is our
23 color code system. And her findings -- she'll provide
24 findings or issues and areas, and that may cause us to
25 take one of the attributes, for instance in

1 maintenance or operations or chemistry or something,
2 and term one of those attributes red or yellow.

3 Now, our restart -- our process, you know,
4 if you have red findings it requires immediate
5 management attention with a plan to go look at that
6 issue and try to fix it. So no, I wouldn't anticipate
7 that we would start up with any areas that are red.

8 COMMISSIONER McGAFFIGAN: How do you
9 prevent a focus on getting things done dominating
10 safety? What incentives -- I mean, there has been
11 concern in the past I know that people felt they had
12 to get something done and didn't feel that they were
13 being given the time to do it.

14 Now, my advice to you is to not do that
15 because every one of these plants that have had
16 problems, in our experience, any sort of schedule has
17 proven to be optimistic. But, what
18 incentives are you putting in place, so that people do
19 not feel overly pressed to get a particular job done
20 that particular day, to check off an item on a
21 checklist?

22 MR. MYERS: You know, there is two or
23 three things. Bob talked about our incentive programs
24 that we've changed already. If you go look at --
25 we're stressing in our 4C's meetings, which I've now

1 met with over 500 employees at the plant.

2 And I meet with those employees for about
3 two hours at a time, and we stress consistently, you
4 know, just stop -- you know, really, the fastest way
5 to get the job done and the best way to get the job
6 done is do it correct the first time. And if it takes
7 longer, then one of the attributes in our management
8 model that we look at is the resources. The resources
9 is the right people, right amount of time, and the
10 right equipment. You know? You've got to have all of
11 those things to get the job done right.

12 And, you know, recently, you know, we've
13 been looking at fuel load. And as a management team,
14 one of the things we have to do consistently is
15 demonstrate our ability to stop and take corrective
16 actions. And, you know, we made a decision to go and
17 fix several things prior to this fuel load. We think
18 there was defense in depth by having two trains of
19 decay heat, so we waited to get two trains of decay
20 heat.

21 So over and over again we have to be
22 willing to demonstrate to our employees that we're
23 willing to take the time to do the job right. And we
24 think we've demonstrated that on several occasions.

25 We've talked about our refueling crane

1 that we have, and, you know, we didn't get the
2 performance there that we wanted. So we delayed our
3 activities for several weeks while we went back on the
4 overhead crane and made sure it was in excellent
5 material condition before we went forward.

6 COMMISSIONER McGAFFIGAN: That was
7 actually an example, initially, of the opposite,
8 though, wasn't it? There was some haste in that
9 initially that led you to that stop work situation.

10 MR. MYERS: Well, it was actually an
11 example of one of our employees that -- you know, in
12 his mind he was trying to get the job done, he said,
13 you know, and in our mind we want him to do it right.
14 So we -- when we did a management walkdown -- one of
15 the key things that we've implemented is a strong
16 management observation program. And when we did the
17 management walkdown of that job, it didn't meet our
18 standards, so we just stopped and --

19 COMMISSIONER McGAFFIGAN: I think those
20 are strong signals to send, and I urge you to continue
21 to send them to all of your workforce. I know in
22 turnaround situations you're -- it is hard to get the
23 entire workforce, and you have contractors in addition
24 to your permanent employees all on the same
25 wavelength. And everything you can do to do that I

1 think is very important.

2 One last question, and it goes to the
3 incentive structure that I think Mr. Burg or somebody
4 talked to that put safety much more prominently in the
5 incentives of the senior executives.

6 I won't name the executive, but one
7 company that was in to see me recently had a safety
8 gate for bonuses for various levels of the plant. And
9 unless you met the safety goals, all of the other
10 incentives, which tended to be production incentives
11 -- and those are fair incentives, you're in a business
12 -- but all of the other incentives weren't achievable
13 if you didn't get through the safety gate first.

14 I don't know how you've structured your
15 incentives at the current time, but do you have -- do
16 you think you have enough focus? That sounded to me
17 like a best practice, at least from the point of view
18 of a safety regulator. And are you comfortable that
19 you really do have enough safety focus in your
20 incentive structure at all levels of the plant now
21 that people will, you know, get the word through their
22 paycheck as well as through whatever you say to them?

23 MR. BURG: Yes, Commissioner. I really
24 believe that we do. I mean, there are certain goals,
25 not significant really for most levels of management,

1 that are corporate-wide. But the --

2 COMMISSIONER McGAFFIGAN: Right.

3 MR. BURG: -- ones that are associated
4 specifically with the plant we've done a lot of work
5 to ensure ourselves that there's a significant amount
6 of safety-related, people-related, human performance
7 type issues embedded within those programs. And we're
8 very confident that that's in place.

9 But I'll also tell you that as we go
10 forward we'll -- it's not -- not cast in concrete
11 either. If we find a better way to do it, it will
12 evolve over time as well.

13 COMMISSIONER McGAFFIGAN: Thank you, Mr.
14 Chairman.

15 MR. MYERS: You know, I'd like to add to
16 that also, we're fairly unique as a company. So a lot
17 of our goals and incentive programs go all the way
18 down to our first-line employees. So, you know, they
19 have exactly the same goals that I do. So if they're
20 aligned properly, that's a good message.

21 COMMISSIONER McGAFFIGAN: That is a good
22 way to do things. Thank you.

23 CHAIRMAN MESERVE: Commissioner
24 Merrifield?

25 COMMISSIONER MERRIFIELD: Mr. Chairman,

1 thank you. I've got some questions I want to ask. I
2 would like to start off by making a couple of comments
3 and observations.

4 Here for our part at the NRC, over the
5 course of the last month, I think there has been a lot
6 of interaction internally as well as a dialogue with
7 some of our external stakeholders about the decisions
8 that led -- the events that led to the decision as to
9 allow FirstEnergy to have an additional 45-day
10 extension of the inspections of the control rod drive
11 mechanism.

12 I think some of the attention to that has
13 -- takes us away from the underlying issue. And I
14 think the underlying issue is, irrespective of that
15 decision or not, it is my view that we would still be
16 here today having a panel discussing the issues
17 relative to the head and the head degradation. That
18 degradation did not take place over 45 days. It took
19 place over a long period of time.

20 The issues associated with that we've
21 talked about a little bit already internally with the
22 Commission, and I think we recognize we've got some
23 changes to make here as well. And I need not go over
24 those with the panel today.

25 I appreciate the comments made by Mr. Burg

1 and the recommitment of FirstEnergy to having a high
2 level of safety consciousness in moving forward. I
3 think that's the right signal in the right direction.

4 In terms of moving forward, obviously
5 there are the mechanical issues -- getting the head
6 fixed, making sure that the internals are where they
7 need to be in meeting our requirements, and the notion
8 of having an inspection team go in and be assured that
9 that is, in fact, the case.

10 The second thing is more subtle and
11 underlying and does go I think to some of the comments
12 that you've made today, and that is the issue of a
13 safety culture and having a recognition among your
14 staff that, in fact, safety is first.

15 It also goes to an issue of trust. That
16 is something that obviously is something once lost
17 does take time to reestablish.

18 I want to go into -- you talked a little
19 bit about the management changes that you have made
20 relative to the site and to FENOC, and those have been
21 extensive. Clearly, it brings with it a higher level
22 of expectation of performance in terms of safety.

23 I'd like to have you go into a little bit
24 more detail in terms of how these expectations, as
25 well as the programmatic changes that you're making,

1 are going to become institutionalized in such a way as
2 if we were to, in fact, move forward and allow the
3 plant to be restarted that we're not slipping back
4 into old routines. Is this change made more permanent
5 within the company?

6 MR. SAUNDERS: Let me just lead off. We
7 certainly plan to institutionalize our ability to
8 monitor and measure our safety culture. Lew talked
9 briefly about all of the indicators we have there in
10 a program that -- it's in its infancy now. We're
11 working our way through it, trying to understand it.
12 It does have a very large subjective piece to it, but
13 there are very good objective measures.

14 So this program will be institutionalized
15 within FENOC across all three sites, and we'll do the
16 things that other people do on a regular basis as well
17 -- the safety culture surveys that are done, so we can
18 see if we're progressing and we have the proper trend,
19 and that kind of thing. So it's definitely in our
20 plan to institutionalize it, and we think we're a
21 little bit on the cutting edge with what we're
22 developing here -- an ability to measure and monitor.

23 COMMISSIONER MERRIFIELD: Lew, do you want
24 to add anything?

25 MR. MYERS: Well, I think there's two

1 parts, or maybe three. Gary talked about the
2 corporate organization that we have now. Basically,
3 he's going to own the programs. I'm going to make
4 sure that we do good self-assessments and we implement
5 them properly. And on top of that, we have the new
6 oversight group that's looking over me.

7 So from a standpoint of isolationism, and
8 Davis-Besse was pretty well ran as an isolated plant
9 a few years ago, that won't happen again. And that
10 way we can show that what we inspect is what we
11 expect.

12 MR. PEARCE: Let me add one example to
13 that. Commissioner McGaffigan asked about, you know,
14 made some mention of Little Harbor. One of the people
15 that we've just added to the company Nuclear Review
16 Board, independent board overseeing what we're doing,
17 was heavily involved in that. And they will go on in
18 the future and make sure that we have a focus in both
19 safety culture and safety conscious work environment
20 and continue to give us feedback.

21 That's a program that will go forward, and
22 we tried to go out and hire people that have expertise
23 in that to ensure that that carries forward for a
24 period of time, not just focused on restart, but
25 actually this is focused after restart. So we want to

1 make sure that we are anchoring these changes so that
2 they will continue post-restart.

3 COMMISSIONER MERRIFIELD: Identification
4 of safety concerns and having a workforce that
5 recognizes that those items need to get into the
6 corrective action program is clearly vital, and you
7 mentioned that today.

8 But I'm wondering -- obviously, the second
9 key component to that is having a corrective action
10 program that works. Are you -- can you talk to me a
11 little bit about the changes that you've made in that
12 program, in your equipment training program, to give
13 you a better -- earlier indication of potential
14 problems that may exist rather than relying on it to
15 manifest itself in an operational circumstance.

16 MR. MYERS: The corrective action program
17 is really our line management program. On top of that
18 we have the employee concerns program. Several
19 changes we've made -- basically, the old program was
20 being managed at a very low level, and we found that
21 our employees -- they identified over 20 CRs,
22 condition reports, that should have led us to the
23 right answer along the way that we had some leakage.

24 They didn't get properly characterized,
25 and they didn't get properly evaluated. We've now --

1 the charter has completely changed at all of our
2 plants, so that our plant manager is the chair now.
3 It's not at a low level. The operations manager is
4 there, and the engineering manager is there. And then
5 we have our corrective action review group that's also
6 monitoring the owners of the corrective action
7 program, our implementation of properly classifying
8 CRs.

9 Now, we've strengthened our evaluation
10 process also. All of our evaluators have been
11 requalified. Now, we would expect that the program
12 that we have now -- we're also giving feedback to the
13 individuals when they identify a problem how we
14 resolve it. They need to know that. That wasn't
15 there before. So they would identify the problem, and
16 they never got feedback on what we did with it.

17 So we believe that we've put some changes
18 in this process that's going to help our employees
19 help us do a better job. And it will also assure that
20 we have the right ownership as a management team to
21 ensure that our problems get -- that are identified
22 get properly characterized, evaluated, and then fixed.

23 MR. PEARCE: Let me add about the
24 indicators that when you asked earlier about the red
25 and green windows and --

1 COMMISSIONER MERRIFIELD: Right.

2 MR. PEARCE: -- those indicators about how
3 the corrective action program is working, and how
4 effective it is, are the inputs into -- some of the
5 inputs into some areas in the red and green
6 indicators. So, you know, we see those as very
7 important, and I want to make sure that those -- that
8 that program is well implemented, well understood, and
9 well used by the employees prior to restart.

10 MR. MYERS: Let me give you one other
11 thing that you asked about culture a while ago and the
12 corrective action program. We have an employee of the
13 month program. It has not been as effective as I'd
14 like. We now have that -- we're changing that as we
15 speak to be based on condition reports.

16 So people -- we're going to take good
17 catches on condition reports that are safety issues
18 and collect those over the month. And then us, as the
19 senior management team, will make the employee of the
20 month a -- we'll pick those from good condition
21 reports, which is a completely different message than
22 we used to say -- send.

23 COMMISSIONER MERRIFIELD: Noteworthy
24 condition reports?

25 MR. MYERS: Noteworthy condition reports.

1 The margin of safety --

2 (Laughter.)

3 COMMISSIONER MERRIFIELD: You want to set
4 up a system that rewards people that are going to find
5 your most significant problems.

6 MR. MYERS: That's right. That's exactly
7 right.

8 COMMISSIONER MERRIFIELD: As we dealt with
9 the issues at plants in the past, the issues that
10 frequently come up are sufficient review of the --
11 during the operational readiness review to make sure
12 that there was an understanding that -- as to the
13 condition of the plant and identify issues, like the
14 sump issue which you have mentioned, to make sure that
15 those can be corrected appropriately.

16 There is the parallel issue of making sure
17 the items aren't deferred, that items are, in fact,
18 addressed so the plant is in the appropriate operation
19 and safety condition. How are you dealing with those
20 twin issues -- problem identification and problem
21 resolution?

22 MR. BURG: Gary, go ahead.

23 MR. LEIDICH: My turn? Okay. The problem
24 identification was one where we really have -- and I
25 won't say overnight, but over the past several months

1 -- substantially lowered the threshold for
2 identification problems.

3 So what that really looks like and what
4 I've seen elsewhere in the industry is that there is
5 a low threshold, so that people identify very minor
6 issues. Those go into this system and they're
7 properly evaluated, properly coded, so we really
8 understand, you know, what those are.

9 So that's the first thing is ensuring that
10 there's the right threshold that's out there. We
11 substantially lowered that, particularly at Davis-
12 Besse. Other stations were fairly low, but we've improved
13 it across the fleet.

14 The issue on deferrals is really aback to
15 what actions we take, not what words we have. And the
16 actions that we've taken in conjunction with this
17 restart are to go after many issues at Davis-Besse
18 that, quite frankly, we wouldn't have to tackle, but
19 that we are tackling -- issues such as the redesign of
20 the containment sump. We have made modifications to
21 valves at the station. We are making modifications to
22 diesel generators.

23 So many of the modifications that we're
24 doing are "optional," but we felt it was very
25 important to send a strong message not only internally

1 but externally that we're going to make changes to
2 this plant that sends the right message in terms of
3 what does and does not get deferred. So whether it's
4 maintenance, modification work, we've tackled a
5 tremendous amount of work during this particular
6 outage at Davis-Besse, and it's not our intent to push
7 things off into tomorrow.

8 So that's a matter of actions, and that's
9 a matter of involvement at the management level to
10 send those signals. And I will tell you, this
11 management team, as well as the management team at the
12 station, is very much involved in day to day.

13 And regarding your earlier question about
14 what makes a difference, what makes a big difference
15 is management engagement, management involvement. In
16 fact, Bill Pearce has some buttons he says -- a button
17 that says, "I know because I looked."

18 (Laughter.)

19 And that's a motto that we've got in all
20 levels of the organization. I don't think that's a
21 motto that, really, many plants have, but particularly
22 Davis-Besse didn't have it before.

23 There was a reliance on the process. And
24 what this really takes in this industry -- and what I
25 have seen and the rest of us have seen -- is a

1 tremendous amount of involvement by management at all
2 levels in operational issues, those that get
3 identified, what you're going to solve now, if you are
4 going to defer something why, and challenge that at
5 the right level in the organization.

6 COMMISSIONER MERRIFIELD: Thanks, Mr.
7 Chairman.

8 CHAIRMAN MESERVE: I think that from your
9 presentation you have made clear that you face the
10 challenge of really reinventing as part of your
11 business, and you obviously have some very severe
12 challenges in accomplishing that effectively and
13 you've done a lot of work to do that already.

14 Some of Mr. Leidich's comments presented
15 me with an issue I think that you no doubt have
16 thought about, but maybe you could help me. You've
17 indicated that one of the things that you're doing is
18 to strengthen the corporate level organization that --
19 I can appreciate that that gives you a capacity for
20 standardization, gives you bench strength and skills,
21 but that is sometimes a danger -- that the people who
22 are at the plants, then, have lost their skills
23 because they've now been centralized.

24 And you made the point just now that "I
25 know because I looked" and --

1 MR. LEIDICH: Right.

2 CHAIRMAN MESERVE: -- for the people who
3 are at distant corporate headquarters, they may not
4 have the opportunity to look. There's got to be some
5 balance between the skills which are centralized and
6 those -- and the capacities you have at the plant.
7 How would you assess that? And are you sure you
8 haven't overreacted?

9 MR. LEIDICH: Well, certainly, within the
10 last four and a half years at the Institute of Nuclear
11 Power, I've seen a lot of examples of a variety of
12 different utilities' approaches to this centralization,
13 whether it's a strong central organizational approach
14 or whether it's a very strong autonomous approach at
15 the individual station.

16 So as we look from our perspective at our
17 experience of trying to find the right spot, we're
18 really adopting some fundamental principles. The
19 first of those is you centralize what makes sense, and
20 you provide corporate oversight, where necessary, for
21 appropriate level of checks and balances. I think the
22 key phrase there is checks and balances.

23 And if an organization is on its own in
24 terms of -- again, to your point -- identification of
25 issues and resolution of issues, and there's no checks

1 and balances there, there's no questioning, this
2 industry requires a questioning attitude.

3 And if there's no questioning of that,
4 either at the station or from an independent
5 organization such as oversight, which is corporate, or
6 a corporate program office, then those checks and
7 balances may lead to the wrong conclusions and the
8 wrong answers.

9 So it's centralize what makes sense,
10 and I will tell you we are approaching it one issue at
11 a time. We're not setting up a large organization at
12 corporate. Right now we've got about a dozen folks in
13 the corporate office, strong program management,
14 leadership-type folks, as opposed to a lot of
15 individual contributors and implementers. They'll be
16 there to provide leadership and oversight.

17 So we're taking it one step at a time as
18 well, to make sure that we don't take the pendulum too
19 far over in the centralization, if you will. It's
20 important that the site recognize that they have the
21 responsibility for the day-to-day operation of the
22 facility. It's critical.

23 MR. SAUNDERS: When it comes to human
24 resources -- excuse me, Pete -- we started with a very
25 strong bench when we entered into this Davis-Besse

1 situation. Since then, Beaver Valley just recently
2 graduated a class of 26 licenses. Our Perry facility
3 graduated a class with over 10 licenses. And we're
4 also actively recruiting from outside the
5 organization. Gary is a fine example of that.

6 So we recognize the need to have a senior
7 management team well experienced. So we develop
8 within, and we're recruiting from outside as well.

9 MR. BURG: Mr. Chairman, also, just in
10 terms of lessons learned, I mean, I asked myself this
11 many times. I was -- after we took over operations of
12 the nuclear facilities, I was always very reluctant to
13 have a "centralized staff." In my mind, it was going
14 to create a bureaucracy that wasn't needed in my view,
15 that I thought that the people at the plant, you know,
16 would really know best.

17 You know, honestly, in hindsight, I think
18 that is one of the lessons that I have learned, that
19 you find the right balance in terms of some things
20 that make sense, like probably oversight, that you
21 centralize, and maybe some engineering functions that
22 you centralize. But you still want the plant to
23 operate -- you know, they're going to operate the
24 plant, but there is a balance and we're -- I think
25 we're finding that balance now. But it is a lesson I

1 think I've learned.

2 MR. MYERS: Which you can't have. I want
3 to add to this, too. We had a corrective action
4 program that we would have told you was identical to
5 all three of our sites. And I've worked at all three
6 of them now. I want to tell you, the corrective
7 action program was not the same at Davis-Besse as it
8 was at Perry and Beaver Valley.

9 And one good example of that is the
10 operability determinations. The program that we've
11 worked so hard on now at Davis-Besse was called
12 operability justifications. That's not the case at
13 our other two sites.

14 So even though the program we thought was
15 the same, it wasn't. My new job -- and through self-
16 assessment and oversight, we're going to make sure
17 they're implemented the same.

18 CHAIRMAN MESERVE: One of the outcomes of
19 the root -- your root cause evaluation and of our own
20 lessons learned was that there was not an adequate
21 integration of operating experience with basically
22 significance evaluation. As you know, the corrosion
23 products were clogging filters, and, for whatever
24 reason, nobody was asking why, saying, "They'll be
25 corroding. What could it be?"

1 It seems sort of self-evident after the
2 fact, but obviously there was a problem there. How
3 are you addressing that problem?

4 MR. SAUNDERS: I think fundamentally it
5 begins with the right sensitivity in the workforce for
6 exactly what our industry is all about and what sets
7 us apart, and that's the reactor core, and the right
8 sensitivity to the reactor core.

9 We didn't have that. And to me, that's
10 like fundamental in the nuclear safety policy. The
11 new policy is driving at that. So I think that's a
12 good entry-level step.

13 And then, as we said here I guess a number
14 of times, how does management demonstrate it's
15 interested in safe operation? And that's by the
16 things we do. We've got to walk the talk, and we were
17 not doing that before at Davis-Besse. But I think we
18 are today, and I think we're doing it quite well.

19 So I don't think it's complicated. I just
20 think it takes total commitment, and that commitment
21 is here.

22 MR. PEARCE: And maybe another way to
23 address it with another level is from oversight.
24 We've made oversight independent, and the purpose of
25 that is so that we don't get involved with the same

1 issues and rationalize to ourselves over time like the
2 plant can get into when they're trying to get a lot of
3 things done.

4 And I truly believe that we can stay
5 independent enough and questioning enough to bring
6 those issues to the plant when they have -- if we see
7 things that don't seem to make sense to us, and we
8 don't believe they're handling them properly.

9 And if they still refuse to acknowledge
10 the issue that we -- you know, we now report all the
11 way up through the top of the company, and we will
12 take that route if we have disagreement -- I'm
13 perfectly willing to go there if we think we're right
14 about it.

15 MR. MYERS: There's really three parts to
16 your question, I think. One is the corrective action
17 program. If we had properly classified and then
18 properly evaluated the issues that we had, then we
19 would have taken the right actions. We didn't do
20 that. I think we fixed that with our new charters,
21 with our evaluation process, and our performance
22 monitoring tools we have in place.

23 And then, with the oversight that we have,
24 and self-assessment, they should also catch those
25 things. So we have barriers now to keep that from

1 happening.

2 So, you know, if we would have done the
3 right evaluations, or quality oversight had said, "You
4 didn't do the right evaluations, come to the right
5 conclusions," we wouldn't be sitting here.

6 CHAIRMAN MESERVE: Thank you.

7 Commissioner Dicus?

8 COMMISSIONER DICUS: Thank you, Mr.
9 Chairman. I've got three questions, and hopefully
10 they can be answered rather quickly.

11 I go to slide 15, and you mention that you
12 brought in a strong and technically competent
13 management team, a new team. And I think if I heard
14 you correctly, you said you have 15 people in new
15 positions --

16 MR. MYERS: Right.

17 COMMISSIONER DICUS: -- or a certain
18 number in new positions.

19 MR. MYERS: All but one are in new
20 positions.

21 COMMISSIONER DICUS: Okay. My question
22 goes to sometimes when you bring people in to new --
23 I mean were they -- did they come from they outside or
24 were they promoted from within? And sometimes when
25 you have a whole new team that comes in to new

1 positions, they have a learning curve. So what are we
2 doing?

3 MR. MYERS: This is an excellent question.

4 Well, two things. When we developed our return to
5 service plan we had some options. Fortunately, for
6 us, we had the ability to go to our other plants and
7 bring in some managers that we know that are good
8 performers and bring them over to our Davis-Besse
9 plant. If you look at our engineering manager, he
10 came from Perry. So a large portion of those managers
11 came from other plants. There's about three that came
12 from outside.

13 COMMISSIONER DICUS: Mr. Saunders knows
14 where the next question is going because of that,
15 because he and I have discussed this. So what's going
16 to happen to Perry? I mean if you're grabbing people
17 from another plant and bringing them in, what might
18 happen at these other plants?

19 MR. MYERS: Okay. Do you want to answer
20 that?

21 MR. SAUNDERS: Yes, I do.

22 MR. MYERS: Go ahead.

23 MR. SAUNDERS: The luxury that we had is
24 that as we uncovered the Davis-Besse situation, we had
25 tremendous bench strength at the other two sites. And

1 as Lew just told you, we were able to draw heavily on
2 that. We still have more than adequate resources at
3 the other sites, but we also recognize the need to
4 build the bench strength back up, and we are actively
5 doing that. I think I mentioned 26 new licenses at
6 Beaver Valley, over ten new licenses at Perry. We're
7 getting ready to put in place a new license class at
8 Davis-Besse. And then also we have a very active
9 recruiting program going on, looking at trying to
10 attract some senior management down into the
11 organization. And we have actually added a couple of
12 people very recently here.

13 MR. BURG: But, Commissioner, it's also
14 just right on point with respect to some of the
15 directives that we put out on day one that were more
16 than, and have been more than, reinforced by the
17 Nuclear Committee of our board, including Mr. Conway,
18 as well as our full board, and that is while we're in
19 this situation, do not take your eyes off of Perry or
20 Beaver Valley. And believe me, we are working very
21 diligently to do that.

22 COMMISSIONER DICUS: That's exactly where
23 I'm going. You can't rob Peter to pay Paul.

24 MR. MYERS: Can I add on to that a little
25 bit?

1 COMMISSIONER DICUS: Yes, please.

2 MR. MYERS: We've got the SOR classes
3 going on. Through our succession planning program,
4 and that's I think what's helped us at our other two
5 plants, the bench strength that we have, we don't just
6 promote people up through Operations to get a license.
7 The people's that's in those licensing classes, the 26
8 and the 11, are people that a lot of them are hand
9 picked to be our managers in the future. And a lot of
10 the shift managers we have now we put them in as shift
11 managers to move them out into the organization. So
12 it's real bench strength.

13 COMMISSIONER DICUS: Okay. Second
14 question: You said you've met with 500 employees for
15 two hours. Was that one big group meeting or, surely,
16 it's not individual meetings.

17 MR. MYERS: Yes. There's individual
18 meetings of -- there's two or three kinds of meetings.
19 We have all-hands meetings, we do those once a month.
20 I have a weekly, and I might miss a week every now and
21 then, but what I call four C's meeting, and they're
22 designed to sit down with employees and look at
23 compliments, complaints, concerns and changes and get
24 their feedback. We openly talk about managers or
25 whatever they want to talk about. And that's where

1 I've met with about 500 employees now at --

2 CHAIRMAN MESERVE: What's the size of each
3 of those?

4 MR. MYERS: About 20 to 15 people in a
5 meeting.

6 COMMISSIONER DICUS: Okay. Where I'm
7 going with this is questions that you've already been
8 hearing to be sure if an employee really wants to talk
9 about something, they're comfortable with doing it,
10 because some people won't speak out if it's a large
11 group of people, and they speak out more in a smaller
12 group. And that's where I was going.

13 MR. BURG: Yes. I think that's totally
14 true, but I'll also tell you that, you know, I have
15 also held myself all-hands meetings at each of our
16 three plants to go over all the things that I've
17 talked about here today. And I want to tell you, in
18 the question and answer sessions even there they
19 haven't been shy about asking some of the kinds of
20 questions that you've been asking, honestly. So
21 that's been encouraging, actually.

22 COMMISSIONER DICUS: Good. That's good.

23 MR. MYERS: I have an indicator that I use
24 on that. At the four C's meetings, the first thing we
25 do is we pull the independent contractor initially --

1 now we use one of our communications people -- to sit
2 down with the employees and they develop all the
3 questions and concerns. So it's independent. So I
4 don't know who came up with those. And what's
5 interesting is what I measure in that meeting is who
6 says this is my question. I write that down each and
7 every time. And almost every question and concern
8 that we've had on the list recently somebody in the
9 meetings will say, "I wrote that." And that's a real
10 good indicator.

11 MR. PEARCE: Let me explain that some, and
12 he knows what he's talking about.

13 COMMISSIONER DICUS: Well, maybe not if
14 you need to explain it.

15 MR. PEARCE: All right. What he does is
16 there's an independent group that meets with employees
17 first, and they get their questions down, and if the
18 employee chooses to have a question and not be
19 identified --

20 MR. MYERS: That's fine.

21 MR. PEARCE: -- to get over the issue
22 exactly that you brought up, then they may do so. And
23 what he's saying is one of the things he looks at is
24 how many of them are willing to say, "That's the
25 question I asked" and get further explanation.

1 COMMISSIONER DICUS: Okay. Well, that's
2 good. Final question, and I think it should be
3 answered yes or no simply. Of all of the lessons
4 learned in the get well issues that you've been
5 dealing with, had all of this been in place and
6 effective and being utilized, would we be sitting here
7 today?

8 MR. BURG: No.

9 MR. MYERS: No.

10 COMMISSIONER DICUS: Okay. That's it.
11 Thank you, Mr. Chairman.

12 CHAIRMAN MESERVE: Commissioner Diaz.

13 COMMISSIONER DIAZ: Thank you, Mr.
14 Chairman. You know, sitting here and looking back, I
15 realize that we all have gotten used to performing
16 against a very high or maybe the highest standards of
17 performance regarding safety. The industry always
18 faces that, we face that, and the point is that this
19 highest standard of performance against safety is not
20 only on things that have happened or release already
21 activity, but we also have to abide by the fact that
22 we are being confronted with what could happen, and
23 this is essentially what happened with you. It's this
24 idea that we are really in this industry, in this
25 regulatory agency held to a higher standard, is that

1 permeated through your facilities, to your people, the
2 fact that people have to realize that we have to
3 perform on a higher level than what you normally
4 perform in any normal type of industry, because that's
5 the nature of where we are?

6 MR. BURG: I really believe it is,
7 Commissioner. I mean, again, hopefully people believe
8 many of the things that we tell them in the plants.
9 For example, at our all-hands meetings, I mean we
10 talk about the fact that Chairman Meserve is going to
11 an INPO CEO forum and telling every single CEO in the
12 country that has a nuclear power plant what has
13 happened here and what are the lessons learned and
14 what we all should have done. I think that kind of
15 information going back to employees it's helpful to
16 them.

17 Or they are sometimes astounded that the
18 investment community wants to know every single thing
19 there is about the Davis-Besse facility. Well, in the
20 past, that's been kind of a non-event for them, that's
21 never entered their mind that someone outside of Oak
22 Harbor, Ohio had some interest in this facility.

23 Again, hopefully something we can draw
24 from all this in a positive is that that very lesson
25 that you're talking about has come home to our

1 employees in the sense that this is a global event, if
2 you will, and a global kind of community that we
3 operate in.

4 COMMISSIONER DIAZ: Because this high
5 level of safety performance is not going to go away;
6 it's a fact. You guys might have contributed to make
7 it higher, you realize that.

8 PARTICIPANT: We understand that, sir.

9 MR. MYERS: I hope we have.

10 COMMISSIONER DIAZ: All right.

11 COMMISSIONER MERRIFIELD: But we're not
12 seeking any more contributions like that in the
13 future, just so that's clear.

14 (Laughter.)

15 COMMISSIONER DIAZ: Thank you,
16 Commissioner Merrifield, your contribution is
17 appreciated.

18 When we went through another facility,
19 which everybody knows what I'm talking about, and had
20 a lot of problems, safety cultures, and we went
21 through a long process, there was a Commission meeting
22 here that I clearly remember. They were going through
23 the list of things that they have done to improve the
24 plant, and then I asked a question, and what other
25 safety issues have you found during your reviews and

1 your processes? What other things that were not
2 related to the hole in the head at Davis-Besse, what
3 other things have you found out, and has there been
4 disposition? And so now that I have this opportunity,
5 and commissioners are infamous for using this
6 opportunity, did you find out any other safety
7 significant issue that you corrected or disposition?

8 MR. MYERS: The containment sumps would be
9 a good example.

10 COMMISSIONER DIAZ: All right.

11 MR. MYERS: Additionally, when we come out
12 of this outage, we will come out of the outage in a
13 situation where we had seven A1 systems, maintenance
14 related A1 systems requiring monitoring. We plan to come
15 out with all of that fixed. So we've built that into
16 the outage over and above what the issues were. We'll
17 come out with new dryers on our diesel and some of the
18 line has been stainless steeled for the air start
19 system. There's a lot of issues, design basis
20 improvements, we'll have some of those. I think our
21 system notebooks that we have now -- outside of my
22 office I've got about 36 system notebooks, and from a
23 future standpoint we've walked all of our systems
24 down, and we have a really good list of all the things
25 we might want to work on in systems in the future.

1 I'll give you one example. We have a
2 relief valve, I think it's one of our cooling water
3 systems, and evidently the design was fixed, and so at
4 7:30, eight o'clock the night I came back to my office
5 from the Plant, and it was one of our engineers over
6 there, and he says, "You know, we have the design, but
7 it's not a restart item. I would like to get this
8 added to a restart item, and it's only \$40,000 and
9 would you approve that?" "Absolutely." I said, "It's
10 been a long-standing problem." You know, we've got
11 the engineer coming forward wanting me to sign a TA to
12 fix that valve. It was a no-brainer.

13 COMMISSIONER DIAZ: Let me then go
14 forward. Will you say at this time that you are
15 reasonably confident that there are no other safety
16 issues that is pending fixing at Davis-Besse at the
17 present time?

18 MR. MYERS: Yes.

19 COMMISSIONER DIAZ: All right. I think
20 the Chairman -- thank you very much -- the Chairman
21 alluded something that I caught my eye, the issue of
22 centralized oversight versus decentralized oversight.
23 Of course, we are worried about that. I think you
24 explained that, Mr. Leidich, that in a certain way you
25 centralize some of the oversights and you distribute

1 the implementation. I turned out to read that Mr.
2 Myers is between a rock and a hard place, and I
3 appreciate that. I also believe that we constitute
4 another rock and a hard place in the process, and we
5 intend to fulfill that.

6 As you do this and continue to look at how
7 you come up with oversight and come up with some
8 implementations, when we had the other meetings I had
9 this comment that I don't know whether it's -- I
10 didn't express it right. But when you have problems,
11 any time that a problem occurs, say, corrosion on a
12 head, and the problem is of a very large magnitude,
13 nobody misses it. You have a significant valve that
14 is malfunctioning and it's leaking, it's there. I
15 mean all of these things when they have the right
16 magnitude there are no issues. Of course, they might
17 attract attention but in fact those are less insidious
18 and easier to fix than the smaller problems that have
19 the frequency, that are repeated or that are
20 continued.

21 What are your efforts to make sure that a
22 slow developing, small magnitude problem that
23 continues with time or is repeated in time, because it
24 might not be continuous, it might just repeat itself,
25 will actually be able to be dispositioned and properly

1 put in the Corrective Action Program and taken care
2 of?

3 MR. LEIDICH: Obviously, the key is the
4 Corrective Action Program that has, first of all, the
5 right level of threshold, and then, secondly, that
6 we've got, as I indicated earlier, enough checks and
7 balances around that Corrective Action Program. So it
8 isn't just a matter of one item being identified and
9 being dealt with, it's a matter of what scrutiny does
10 that item or accumulation of items related to it get
11 from other perspectives?

12 If it's part of a program, for example,
13 then the program management in the corporate office
14 would be involved in understanding that issue and
15 helping deal with the disposition of that issue. And
16 then, again, as you noted, the oversight organization
17 looks at all of that. If it's an operational issue,
18 then, for example, we are involved in day-to-day
19 operating status phone call every morning where we
20 understand what the key operational issues for the
21 station are, and we provide oversight from our level
22 on that.

23 COMMISSIONER DIAZ: It's small, I mean
24 it's there.

25 MR. SAUNDERS: The repeats get trapped in

1 the Corrective Action Program.

2 MR. MYERS: Let me give you something that
3 I'm proud of, though, and that is at our Perry and our
4 Beaver Valley plants, we didn't have this have this at
5 our Davis-Besse plants, but we think we've gained
6 substantial improvements in performance with what we
7 call our Latent Issues Program. And what we do every
8 year is we pick a couple systems, two, three, and
9 continuously every year go to a different system and
10 bring in an entire management team with engineers,
11 operators, whatever we need, EHC experts, and we walk
12 those systems down and we look for aging materials, we
13 look for improvements that people have done in the
14 industry, and we get a report, and that report's
15 presented to the senior management team.

16 And Bill was at our Beaver Valley Plant.
17 I mean if you go say what have we done to improve the
18 material condition at that Plant, that's how we've
19 identified, for instance, EHC problems at the Beaver
20 Valley Station that we've fixed now. So we're
21 constantly looking for those.

22 MR. PEARCE: That's exactly what that
23 program is all about is to delve into a specific
24 system with all the history, with a look at design
25 basis, physical condition, walk it down looking for

1 problems, bring all that together, and we named that
2 the latent issues, and I think latent issues kind of
3 describes what it's about and probably what your
4 concern is about too.

5 COMMISSIONER DIAZ: All right. Okay.

6 Thank you, Mr. Chairman.

7 CHAIRMAN MESERVE: Thank you. I'd like to
8 thank the panel. This has been very helpful. We've
9 obviously been spending a lot of time, all of us, in
10 dealing with Davis-Besse issues and it's good for us
11 to hear firsthand from you.

12 Our next panel is the NRC staff. We have
13 our Inspection Manual Chapter 0350 effort, and they're
14 coming to the table now. We have Bill Travers, Bill
15 Kane, Jim Dyer, the Regional III Administrator, Jack
16 Grobe and Bill Dean who are the Chairman and Vice
17 Chairman of the Inspection Manual Chapter 0350 Panel.
18 Dr. Travers?

19 DR. TRAVERS: Thank you, Chairman, and
20 good afternoon. Since the shutdown of Davis-Besse in
21 February of 2002, problem discovery and resolution
22 activities on site are ongoing and are being carefully
23 evaluated by the NRC staff. As you've mentioned Jack
24 Grobe and Bill Dean have been leading the Agency's
25 response at Davis-Besse, as Chairman and Deputy

1 Chairman of the Davis-Besse Oversight Panel.

2 Although we have been keeping each member
3 of the Commission regularly informed about NRC staff
4 activities, this is the second time we have had an
5 opportunity to formally meet with you to discuss
6 Davis-Besse related activities. On January 14, we
7 discussed the results of the NRC's own self-
8 evaluation, the Lessons Learned Task Force and
9 described our plans to address the Lessons Learned
10 Task Force recommendations.

11 Davis-Besse remains the only nuclear
12 facility warranting the staff's use of its procedures
13 for oversight of a plant in a prolonged shutdown with
14 performance problems. These procedures are detailed
15 in NRC Manual Chapter 0350. Under Manual Chapter
16 0350, the NRC's routine reactor oversight process is
17 suspended, and the Oversight Panel defines and directs
18 the NRC's activities regarding the facility.

19 The Oversight Panel process has been used
20 successfully by the NRC to assess the performance of
21 other plants which have had lengthy shutdowns because
22 of performance problems. The Panel for Davis-Besse is
23 composed of experienced managers and staff, including
24 some with considerable experience on earlier oversight
25 panels at other nuclear facilities. At this time, I'd

1 like to turn over our presentation to Jim Dyer.

2 MR. DYER: Thank you, Dr. Travers. Good
3 afternoon, Chairman, Commissioners. The agenda for
4 the staff's presentation today is outlined in Slides
5 2 and 3. First, I will present a brief discussion of
6 the activities leading up to the formation of the
7 Manual Chapter 0350 Oversight Panel and then turn the
8 presentation over to the Panel Chairs for their
9 discussion of the specific activities of the Panel.
10 Slide 4, please.

11 The NRC was first informed of the cavity
12 in the reactor vessel at Davis-Besse on March 6, 2002.
13 The discovery was made by the Licensee during repair
14 activities on Nozzle 3 for cracks found during
15 inspections, pursuant to NRC Bulletin 2001-01.

16 Based on the initial reports from the
17 site, we really weren't sure of the corrosion rate or
18 mechanism, the extent of condition or its generic
19 applicability. NRR took the lead for coordination
20 with the industry's Material Reliability Program and
21 issued NRC Bulletin 2002-01 to gather information on
22 the material condition, inspection and maintenance
23 programs for the vessel heads throughout the industry.

24 Region III took the lead for an Augmented
25 Inspection Team inspection, or AIT inspection, to

1 gather additional facts and technical information
2 concerning the Davis-Besse head degradation and issued
3 a confirmatory action letter to ensure effective
4 communications with the Licensee on our expectations
5 for resolution of this problem.

6 The specific expectations agreed to by the
7 Licensee and confirmed by our letter included their
8 quarantining of the vessel head materials and control
9 rod drive components for NRC review, determining the
10 root cause, extent of condition and safety
11 significance of the degradation around the vessel head
12 penetrations and obtaining NRC approval for any
13 repairs or modifications to the vessel head and
14 restart of the reactor.

15 On April 5, we conducted an AIT public
16 exit near the site. The AIT conclusions were that the
17 cavity was not the result of the new corrosion
18 mechanism but rather had occurred over several years,
19 and the Licensee had missed several opportunities to
20 identify the nozzle leakage and resultant wastage.
21 Slide 5, please.

22 The week following the AIT exit, I briefed
23 the NRC senior managers on the results of the AIT.
24 Continuing dialogue led to the initiation of enhanced
25 oversight under NRC Manual Chapter 0350. Manual

1 Chapter 0350 provides for a focused, centralized and
2 structured approach to the NRC regulatory oversight of
3 a plant and communication activities for shutdown
4 plants. After consultation with the Deputy EDO for
5 Reactor Programs and the Director of NRR, I appointed
6 Jack Grobe as the Chairman of the Oversight Panel and
7 directed him to form a team to manage the regulatory
8 oversight activities associated with the Davis-Besse
9 shutdown.

10 The Reactor Oversight Program was
11 suspended at the Site in favor of the Panel's directed
12 activities, but I encouraged the use of the
13 significance determination process and action matrix
14 to determine the extent of follow-up of issues and the
15 use of existing inspection procedures to the maximum
16 extent practicable. Let me now turn the presentation
17 over to Mr. Grobe and the Manual Chapter 0350 Panel
18 Chairman.

19 MR. GROBE: Thanks, Jim. Slide 6, please.
20 I'd like to start -- we have three additional members
21 of the Panel here in addition to Bill and myself.
22 Christine Lipa over here on the left is Branch Chief
23 in the Regional Office responsible for inspection
24 oversight; Tony Mendiola -- raise your hand, Tony --
25 is Section Chief in NRR, responsible for overseeing

1 licensing activities, and you can't see John Hopkins,
2 he's in the booth turning the slides, but he's the
3 Licensing Project Manager. That's five of the eight
4 members of the Oversight Panel.

5 By the end of April, the NRC had
6 sufficient information to conclude that there was
7 significant performance deficiencies at the Davis-
8 Besse facility. The depth and breadth of those
9 performance issues as well as the necessary extended
10 shutdown to repair the reactor pressure vessel head
11 necessitated the use of a different tool to provide
12 safety oversight than the routine reactor oversight
13 process.

14 Pursuant to Manual Chapter 0350, a charter
15 was established on May 3 for the Davis-Besse Oversight
16 Panel. The Panel supplants the routine reactor
17 oversight process and guides Agency activities
18 regarding the Davis-Besse facility. The Panel
19 includes experienced executives, managers and staff
20 from the NRC offices here in headquarters, in Region
21 III and at the Davis-Besse site. As was mentioned,
22 Bill Dean and I lead the Panel. Several of the Panel
23 members have prior experience with successful
24 implementation of the Manual Chapter 0350 process.

25 The Panel charter defines the goals and

1 responsibilities of the Panel. First, the Panel is
2 expected to establish a restart checklist containing
3 those issues that must be addressed before the Panel
4 can consider the question of restarting the facility.
5 In addition, a process plan has to be established
6 which guides the internal operation of the Panel and
7 a communications plan delineating the tools the Panel
8 will use to interface with our internal and external
9 stakeholders. Slide 7, please.

10 The Panel continually assesses Licensee
11 performance and establishes the scope and depth of
12 necessary NRC activities during the extended shutdown.
13 In addition, the Panel will continue to assess
14 Licensee performance and make restart recommendation
15 to John Dyer when it feels that the Licensee has
16 demonstrated it can restart and operate the Plant
17 safely.

18 The Panel will continue to provide
19 oversight and guide Agency actions following facility
20 restart until such time as the Panel makes a
21 determination and recommendation that NRC activities
22 at Davis-Besse can be effectively accomplished under
23 the routine reactor oversight process. And, finally,
24 the Panel is expected to establish a complete and
25 scrutable record of the activities of the NRC at

1 Davis-Besse. Slide 8, please.

2 The Oversight Panel issued a restart
3 checklist documenting those activities necessary to be
4 completed before the NRC could consider restart of the
5 facility. The checklist includes the adequacy of the
6 technical and organizational root cause assessments
7 that the Licensee has performed, the adequacy of
8 safety significant structures, systems and components,
9 of safety significant programs, the adequacy of
10 organizational and human performance, and this area
11 includes the reestablishment of an adequate safety
12 culture and safety conscious work environment, the
13 readiness of systems programs and the organization for
14 restart, resolution of licensing issues and the
15 completion of the confirmatory action letter
16 commitments. Slide 9, please.

17 In response to the Panel's continuing
18 assessment of activities at Davis-Besse, the Panel
19 determined that there were additional necessary areas
20 of focus before restart and revised the restart
21 checklist appropriately. The Panel added an
22 evaluation of the design and installation of the
23 containment sump modification, a review of the
24 Radiation Protection Program and inspection of First
25 Energy's process to assure complete and accurate

1 records of NRC submittals. Slide 10, please.

2 The Panel guided inspections early last
3 summer of Licensee activities to evaluate the effects
4 of the boric acid laden atmosphere inside containment
5 on equipment. Those NRC inspections identified
6 deficiencies in the training and qualifications of
7 Licensee staff, the procedures and processes being
8 used to accomplish those activities and the adequacy
9 of the Licensee's evaluations of equipment.

10 First Energy stopped work, reestablished
11 the qualifications of its staff and improved its
12 processes and procedures before recommencing.
13 Continuing NRC inspections of these activities and
14 implementation of other aspects of the Licensee's
15 return to service plan addressing the restart
16 checklist items have confirmed that the Licensee is
17 adequately implementing its plans.

18 The Oversight Panel continues to plan,
19 implement and oversee inspection activities, tracking
20 the Licensee's progress in implementing its return to
21 service plan. At this point, I'd like to turn it over
22 to Bill Dean. Bill will provide additional detail
23 regarding NRC's licensing activities and the Oversight
24 Panel's initiatives to interface with our varied
25 stakeholders and provide public access to information

1 regarding the NRC's activities at Davis-Besse.

2 MR. DEAN: Thank you, Jack. Good
3 afternoon, Chairman, Commissioners. Slide 11, please.
4 Initially, Davis-Besse had considered repairing the
5 vessel head degradation instead of replacing it but
6 eventually came to the conclusion that replacing the
7 vessel head was the appropriate approach to take, and
8 they were able to obtain the vessel head from the
9 canceled Midland plant. While this eliminated a
10 potentially challenging review effort on the part of
11 our technical staff to evaluate the adequacy of a
12 repair methodology, it still caused both the staff and
13 the Licensee to assess the adequacy of the Midland
14 head for appropriate use at Davis-Besse.

15 During this effort, there were several
16 issues that were identified which required the
17 Licensee to seek relief from the ASME code
18 requirements. These reliefs dealt with the
19 unavailability of some of the original radiographic
20 tests that were done in the '60s and also the
21 inability of the Licensee because of some lifting lugs
22 that were on the vessel head to complete 100 percent
23 examination of the vessel head flange weld. So each
24 of these issues were evaluated by the staff and were
25 appropriately dispositioned. So at this point, there

1 are no other licensing issues that remain to be
2 resolved at Davis-Besse. Slide 12, please.

3 With respect to public access and
4 stakeholder involvement, over the past 11 months we've
5 made a substantial effort to provide access to the
6 public in our efforts to facilitate stakeholder
7 involvement. To date, we have conducted approximately
8 40 public meetings. At the centerpiece of these
9 meetings is our monthly meetings with the Licensee
10 where the 0350 Panel in the afternoon meets with
11 Davis-Besse Licensee Management to discuss current
12 issues, to discuss status on the return to service
13 plan, and those are publicly observed meetings, and we
14 provide opportunity at the end of those meetings for
15 public questions and answers.

16 In addition, that evening we have a
17 meeting with the public where we spend time explaining
18 to the public that could not attend the afternoon
19 meeting what transpired and then also to engage in a
20 question and answer session with the public in order
21 to establish a continuing dialogue with the local
22 community. So we've been quite proactive in that
23 regard.

24 In addition to conducting these frequent
25 public meetings, we've established a very informative

1 web page that's been devoted to Davis-Besse and
2 related issues, which has served as both a valuable
3 resource to the staff as well as to the public and
4 interested stakeholders. Slide 13, please.

5 While most of the meetings that we've had
6 -- public meetings that we have had have been at the
7 local vicinity in Oak Harbor, there have been several
8 meetings that have been conducted here in headquarters
9 as well as in the Region III Office. For these
10 meetings, we've established both phone and video
11 access, conferencing access to allow those
12 stakeholders who could not attend the meeting to be
13 able to participate, and that's after some initial
14 technical issues at some of the early meetings, and I
15 think it's turned out to be a very appropriate
16 methodology for those that can't attend the meeting to
17 at least be able to participate and listen in.

18 Except for some of the initial meetings
19 that we conducted as an 0350 Panel, we have
20 transcribed a vast majority of the meetings and have
21 made those transcriptions available on the web for
22 those who are neither able to attend to the meeting or
23 participate by video or phone conference. They can at
24 least read the transcript and understand what took
25 place.

1 In addition to the public meetings, there
2 have been frequent opportunities for the NRC to meet
3 with congressional members and their staff as well as
4 state and local officials, and to date we have
5 conducted over 20 briefings of these officials.

6 Finally, with respect to public process,
7 we did have one 2206 petition that was filed by a
8 member of the public. This petition, as you know,
9 requested the NRC issue an order for the Licensee to
10 require a verification by an independent party for
11 issues related to the reactor vessel head degradation.
12 This petition was denied in light of actions taken by
13 both the NRC and the Licensee which addressed all of
14 the actions and proposed tasks described by the
15 petitioners. These actions included conducting an
16 Augmented Inspection Team inspection and forming both
17 the 0350 Panel and the Lessons Learned Task Force, as
18 well as Licensee's developments of a return to service
19 plan, a restart organization and several oversight
20 boards, which include non-Licensee personnel.

21 In summary, we believe we've made a
22 considerable effort to include and inform the public
23 relative to the 0350 Panel activities. That concludes
24 my part of the presentation. I'd like to turn it over
25 to Jim Dyer for concluding remarks.

1 MR. DYER: Thank you. Slide 14, please.

2 In conclusion, the staff believes that First Energy is
3 making progress in improving the overall safety at the
4 Davis-Besse facility. The hardware improvements at
5 the Site are evident during facility tours,
6 engineering analyses are being conducted to verify
7 safety margins, and key programs responsible for
8 ensuring safety are being revised to improve their
9 quality.

10 The Manual Chapter 0350 Panel is closely
11 monitoring Licensee performance to ensure the proposed
12 safety improvements are adequately implemented. When
13 Licensee performance has not met acceptable standards,
14 as was found in the initial inspections of the
15 containment and some of the program reviews, we have
16 provided this feedback to the Licensee and rescheduled
17 inspections. When the new issues have been
18 identified, such as the Radiological Protection
19 Program and needed containment sump improvements, we
20 have added them to the restart list.

21 Overall, the Manual Chapter 0350 process
22 has served the NRC well during a very demanding
23 period. It has focused licensing and inspection
24 resources to identify and address key safety issues
25 and facilitate communications between internal and

1 external stakeholders. That concludes my
2 presentation.

3 DR. TRAVERS: Mr. Chairman, that completes
4 a relatively brief status of our efforts to evaluate
5 Licensee improvements at Davis-Besse. As you
6 indicated at the beginning of the meeting, we are
7 taking these matters very seriously. We have placed
8 some of our best staff in a position of helping to
9 evaluate those improvements, and we will continue to
10 keep the Commission advised on status of their efforts
11 and our efforts of oversight, and that completes our
12 presentation this afternoon.

13 CHAIRMAN MESERVE: Thank you. And I know
14 that the work of the Manual Chapter 0350 Panel still
15 continues and that there's more things to be done, but
16 on behalf of the Commission I do want to express our
17 appreciation for all the work that you've done to
18 date. We are following this all with great interest.
19 It's a very important activity for the Commission and
20 indeed for the American people. Commissioner
21 Merrifield?

22 COMMISSIONER MERRIFIELD: Thank you.
23 Thank you very much, Mr. Chairman. I echo the
24 comments you just made. I would also want to make a
25 note. I know in the previous meeting we had on

1 lessons learned I think all of us expressed our
2 gratitude to the staff for the amount of work that
3 they've put into this. I would like to take a
4 particular note to thank John Grobe and Bill Dean and
5 the other members of the 0350 Panel for an exceedingly
6 large task, not only in going through the significant
7 safety issues relative to Davis-Besse but a real
8 challenge in terms of meeting the expectations of our
9 public in having appropriate public confidence in an
10 open and clear process.

11 I think the first question I would have
12 would go to Mr. Grobe and Mr. Dean, and I talked about
13 it a little bit in my first round of questions, and
14 that's the issue of a full and complete effort to
15 identify issues of concerns at the Plant and get those
16 into the Corrective Action Program in a way in which
17 they can be resolved. Jim Dyer talked about how First
18 Energy is making progress in that respect, and I'm
19 wondering if you can go into a little bit more detail
20 about how that effort is being undertaken from your
21 perspective?

22 MR. GROBE: Certainly. First Energy has
23 separated their recovery activities into two phases:
24 discovery and recovery. And discovery activities are
25 nearing completion. As I mentioned earlier, our

1 inspections on the very first initiative to do
2 discovery activities, the Licensee performance was
3 lacking in several respects. That activity is
4 completed, the reactor head has been certified as
5 meeting the requirement of ASME Section 3. The design
6 engineering area, there are discovery activities
7 continuing today.

8 The vast majority of the discovery
9 activities have been completed. The Licensee has
10 generated several thousand condition reports as a
11 result of those discovery activities. Many of them
12 have been addressed. There are still several hundred
13 and probably over 1,000 that are yet to be closed out.
14 The number is not as important as is some of them are
15 very simple, some of them are more complex. But our
16 recent inspections have shown that their discovery
17 activities have been well focused, and the Oversight
18 Board, for example, the Engineering Oversight Board
19 and the Corrective Action Review Board have been doing
20 their jobs.

21 So our Panel is fairly satisfied with the
22 progress they're making on discovery. As I mentioned,
23 engineering design is one area that continues. Bill,
24 did you have anything you wanted to add?

25 MR. DEAN: No. I think that's

1 substantial.

2 MR. GROBE: Thank you.

3 COMMISSIONER MERRIFIELD: On a related
4 issue, given the importance of the Corrective Action
5 Program, I wanted to get some sense of our plans for
6 monitoring the future performance of this Program at
7 the Plant and what we would be looking at as early
8 indicators as to whether that Program is being run
9 effectively?

10 MR. GROBE: One of the aspects of the 0350
11 Panel is that it doesn't go away at restart. There
12 will be a significant period of time, if the Plant
13 achieves restart, following restart where we will
14 continue to provide oversight. A key focus of that
15 oversight will begin to be on the performance
16 indicators that the NRC already has established.
17 During the course of the shutdown those performance
18 indicators have atrophied because many of them are
19 predicated on operation.

20 In addition to that, the Licensee has
21 established a set of performance metrics that address
22 all aspects of Plant operation, including a safety
23 conscious work environment and safety culture, and the
24 Panel will be validating that those are in fact valid
25 indicators and that they are demonstrating an

1 appropriate safety focus. And we will also be
2 validating those indicators with our independent
3 inspection effort.

4 COMMISSIONER MERRIFIELD: Part of that
5 answer goes to, I think, a broader issue beyond just
6 the 0350 Panel. Prior to the identification of the
7 head degradation, obviously Davis-Besse had been
8 characterized as a good performer, one in which had
9 all green performance indicators. Going forward as an
10 Agency, how can we ensure that the failures that
11 caused the degradation and the other issues that we're
12 now dealing with are appropriately identified in our
13 reactor oversight process, not only through the
14 indicators but also through a more detailed risk-
15 informed inspection program?

16 MR. GROBE: This is a very good question,
17 particularly for our effort at Davis-Besse. You have
18 heard from the Lessons Learned Task Force and the
19 Senior Management Review Team, and the Commission has
20 endorsed those recommendations. Those will fix areas
21 that we had an opportunity to improve our programs
22 over the long term at all facilities. But at Davis-
23 Besse, for the Oversight Panel, we have to be
24 sensitive to those issues today.

25 Christine and Bill and I have been very

1 closely connected with the work of Art Howe and Ed
2 Hackett through the Lessons Learned Task Force to
3 ensure that we had a clear understanding of what they
4 were developing, both specific to the facility but
5 also programmatically, because we have to be
6 performing inspections at the site of concern in an
7 ongoing nature. So we are actively engaged in
8 providing oversight of our inspection program to make
9 sure that the aspects that where the Agency could have
10 done better in the past are being implemented today at
11 Davis-Besse.

12 COMMISSIONER MERRIFIELD: You mentioned,
13 and for those either here or viewing this through
14 televideo, obviously the Commission some weeks ago
15 with the staff had gone through a significant effort
16 to look at the lessons learned internally to the
17 Agency, and the Commission is certainly on board with,
18 as was mentioned, 49 of the 51 recommendations made by
19 that Panel. I'm wondering, and I do want to give you
20 the opportunity, given the efforts of the 0350 Panel
21 to date, have you identified any additional issues
22 that the staff should consider in addition to what the
23 Lessons Learned Task Force report has provided or do
24 you feel comfortable that in fact that report
25 encompasses the recommendations necessary to avoid

1 this kind of event from happening in the future?

2 MR. GROBE: I personally thought the
3 recommendations from the Lessons Learned Task Force
4 were very comprehensive. The areas -- from a regional
5 perspective, the areas that really hit home with us
6 was the importance of passive components which are not
7 modeled in probabilistic risk assessments. They're not
8 expected to fail, things like a reactor vessel head.
9 The importance of operating experience, not only for
10 the Licensees to learn from the operating experience
11 but for our staff to learn also and to ensure that we
12 incorporate those learnings into our programs and
13 procedures so that they may not be lost over time. So
14 those are the two areas that come forward to me right
15 now. But I thought the Lessons Learned Task Force had
16 a good set of recommendations.

17 MR. DEAN: I'm sorry, Commissioner, if I
18 may add, you know, one of the things that you
19 mentioned earlier was we really don't want to have a
20 whole lot of opportunities like this to cause us to do
21 some self-introspection, but, as you know, the reactor
22 oversight process incorporates, as part of its ongoing
23 nature, a self-assessment, and certainly I think the
24 oversight process will garner a number of insights.

25 I think the one that is of most interest

1 to me or one that strikes closest to home, I think, is
2 the fact that we probably have not done a very good
3 job in terms of considering the breadth and the wealth
4 of operating experience that may exist in other forums
5 and how do we bring that to bear in helping design a
6 risk-informed inspection program that doesn't become
7 just a pure compliance approach but indeed extracts
8 those things that are important to look at?

9 COMMISSIONER MERRIFIELD: I think that's
10 a very important observation, and you give me an
11 opportunity to clarify my comment earlier. That in no
12 way underscores my own belief that I think is shared
13 by the staff that our oversight program is a living
14 program in that it will continue to evolve and
15 enhance. As you, I think, correctly point out, my
16 only attempt there was to recognize that hopefully
17 it's not this type of an activity that will allow us
18 to learn lessons. I believe we can do so in more
19 normalized effort.

20 A last very brief question. I noted, and
21 there were comments in the earlier panel, about
22 experts and individuals being hired on by First Energy
23 to take a look at their safety culture, and obviously
24 we're concerned about a safety conscious work
25 environment. Last week, I believe it was last

1 Wednesday, in a presentation that I'm reading lasted
2 nearly six hours, the First Energy briefed that
3 particular program to the Panel.

4 In the intervening time, I'm wondering if
5 you had any opportunity to think a little bit more
6 about that presentation and any expectations that you
7 may have about that or any observations you'd like to
8 share relative to that presentation?

9 MR. GROBE: Two observations and then
10 maybe some discussion going forward. That meeting
11 covered two areas. One was an update on the
12 activities that the Licensee was implementing in what
13 it calls its management and human performance building
14 block, and that's the area that we were talking about
15 that includes safety culture and safety conscious work
16 environment. So several hours of that meeting were
17 statusing all of the corrective actions that they had
18 begun implementation on.

19 The second half of the meeting was their
20 presentation of a fairly broad set of metrics, and
21 this was our first opportunity to view those metrics.
22 They had not yet put them into place. And one of
23 those metrics involved the work of Dr. Haber and her
24 associates in evaluating or taking a snapshot of
25 safety culture. The metrics included probably, I'm

1 estimating, maybe 30 other varied inputs, and Dr.

2 Haber's was one of them.

3 We have not yet begun our inspection of
4 those metrics or Dr. Haber's work, so I don't have any
5 further illumination there. But what I can say is
6 we've done some thorough thinking on what types of
7 inspection we want to do in that area, and we're
8 seeking now some outside assistance for ourselves in
9 the area of how to design and evaluate a safety
10 culture evaluation tool and how we should evaluate the
11 safety conscious work environment and a safety culture
12 tool and someone with experience in recovering safety
13 culture to assist the Panel and the Inspection Team in
14 evaluations in this area.

15 DR. TRAVERS: If I can just add, this is
16 a subjective area, certainly, to assess, but we have
17 had experience in looking at this issue, as licensees
18 in other situations where plant performance has been
19 at issue have. We're going to continue to monitor it,
20 and we think that the development of metrics to
21 monitor the advancement of safety culture and safety
22 conscious work environment is the right way to go.
23 Even though our regulations don't speak specifically
24 to that, we can oversee their progress, and I think
25 the attitude that suggests that they're going to

1 continue to establish a program that will monitor and
2 measure their own view of how well they're advancing
3 their own safety culture is a good thing, and we're
4 going to continue to take a look at how well they're
5 doing in that area.

6 MR. GROBE: The Commission has -- the NRC
7 has provided a number of guideposts to assist us in
8 this area, and the Commission itself has a policy
9 statement that was published in 1996 that addresses
10 specifically expectations for the licensees in a
11 safety conscious work environment arena, and the Panel
12 is using that as a guiding light.

13 In addition, we have two regulations that
14 go directly to this issue, and that is 10 CFR 50
15 Appendix B, Criterion 16, Corrective Action
16 Requirements, as well as 10 CFR 50.7, which deal
17 directly with retaliation for raising safety concerns,
18 so that we have those foundational aspects, and we'll
19 be using those in our assessment of the Licensee going
20 forward.

21 COMMISSIONER MERRIFIELD: Thank you, Mr.
22 Chairman.

23 CHAIRMAN MESERVE: The last area you got
24 into I think takes away the focus of my questions,
25 which is it seems to me that you have a physical

1 system problems that you can expect and those are
2 something you can -- may be hard to do in some
3 circumstances, but you have a good idea about how to
4 do it and you can pursue things. The much harder
5 problem is dealing with the human issues, and a lot of
6 the presentation we heard from First Energy had to do
7 with their efforts to deal with safety culture, safety
8 conscious work environment, putting in processes and
9 procedures to try to create a -- reinvent their
10 workplace really in a fashion that's different than
11 before this whole incident occurred.

12 And it does seem to me this is a very
13 challenging area and a very important one for the
14 Panel to be satisfied. You've indicated that you're
15 going to be relying in part on the efforts that their
16 consultant is using, you're developing your own tools,
17 you're going to be monitoring the situation. I think
18 that this is an area where the Commission I'm sure
19 would like to continue to be informed about progress
20 in that area.

21 I guess the only other question I would
22 ask -- or a question I would ask, having just made a
23 comment, where do you -- what areas do you think that
24 the slowest progress is being made by First Energy?
25 Where are the biggest problems that remain?

1 MR. GROBE: I think there's three areas of
2 challenge that remain. One is the one you just
3 mentioned, which is having clarity in how to monitor
4 safety culture and how to measure it and being able to
5 monitor progress over an extended period of time.
6 Safety culture doesn't change overnight. I think Dr.
7 Haber, when I asked her this question the other day,
8 indicated that she expected three to five years before
9 First Energy executives could sit back and say, "I
10 think we're there," or, "All the indicators are
11 green," or whatever measure you might want to put on
12 it. So that's one of the challenge areas.

13 The second challenge area is what I call
14 bulk work. There's still an amount of work to be done
15 and has to be done right, and we're providing
16 inspection oversight. The third challenge area is
17 design engineering. During the course of the Licensee
18 performing their design reviews and then we've
19 performed independent design reviews on some
20 additional systems, there were some questions.
21 Whenever you do design reviews what you come up with
22 is a lot of questions. And there were some questions
23 that were difficult to answer and are still
24 challenging the organization to make sure that they
25 get the right answer.

1 As a result of that, they broadened their
2 look, both vertically and horizontally. Some specific
3 technical areas they found enough problems that they
4 wanted to look horizontally across all the systems,
5 and then they decided to look vertically and do
6 vertical reviews of design issues on the most risk-
7 significant systems, the remainder of the most risk-
8 significant systems. So that activity is ongoing, and
9 that's what I see as the third challenge area.

10 CHAIRMAN MESERVE: Thank you.
11 Commissioner Dicus?

12 COMMISSIONER DICUS: Thank you. The some
13 40 public meetings that you've had, how have those
14 gone? I mean how has the input been and the public
15 participation?

16 MR. GROBE: The meetings have gone long.
17 There's just a lot to talk about. It's been kind of
18 interesting. I don't know of any predictor to
19 identify how many people we're going to have at
20 meetings. We have anywhere from as few as 50 to as
21 many as several hundred. And we've had very engaging
22 dialogue with members of the public. There's been a
23 wide diversity of viewpoints expressed at the
24 meetings. The evening meetings that Bill mentioned
25 typically run from seven to ten, 9:30 or ten in the

1 evening, so there's an extended dialogue with the
2 public in those evening meetings.

3 COMMISSIONER DICUS: Do you get a feeling
4 that the public comes away satisfied with the answers
5 that they've gotten with our input? I mean I know
6 there will be a variable, but --

7 MR. GROBE: I think two ways to measure
8 that. One is personal interface with individuals
9 after the meetings. We always try to ask the person
10 if we've adequately answered their question. Some
11 people are not satisfied with the answers. They're
12 the answers we have. But we also have -- I've gotten
13 good feedback from people that the meetings have been
14 valuable. We also have our feedback system where we
15 have a little card that you can mail in, and that's
16 been fairly positive. The most common criticism has
17 been our sound system quality, and we continue to work
18 on that.

19 COMMISSIONER DICUS: Yes. I've had those
20 problems in some of my meetings. You heard my
21 question, I'm sure, that I asked that they're taking
22 people from Perry, for example, to help with Davis-
23 Besse, and I asked the question of concern, do we now
24 start worrying in three years about Perry? Do you
25 have a response to that?

1 MR. GROBE: Yes, I do. We're worrying
2 now, and Jeff Grant, Director of Division Reactor
3 Projects in Region III and Randy Blau in Region I --
4 Beaver Valley is in Region I, Perry's in Region III --
5 have had conversations in areas where either Bill or
6 I or Christine or Tony develop a concern that
7 something might be going on that they should be
8 looking at at Beaver or Perry, and we're handling that
9 through internal interface to make sure that we're
10 closely connected on that.

11 MR. DYER: Commissioner, if I made, as the
12 Regional Administrator, that's one of the areas I
13 really worry about, and I've had discussions with Lew
14 Myer on it and made a specific trip to the Perry
15 facility to discuss and see, talk firsthand what was
16 going on, and then subsequently they came in to make
17 a presentation as to what are they doing to make up
18 for the changes. So they do have a game plan, as
19 First Energy said, detailed specifically to the site
20 for addressing issues at the Perry facility.

21 COMMISSIONER MERRIFIELD: Mr. Chairman, if
22 I may interpose for a second, it may be the lawyer in
23 me but you both used the word, "worry." Can you
24 clarify -- define worry. Do you mean worry as in
25 you're keeping a close eye on it or worry as in you're

1 losing sleep at night over it?

2 MR. DYER: Keeping a close eye.

3 COMMISSIONER MERRIFIELD: Okay. I just
4 wanted to clarify that. Thank you, Mr. Chairman.

5 COMMISSIONER DICUS: And final question.

6 We've been discussing safety culture and clearly you

7 had a lot of findings in the 0350 process that

8 identified both people issues and equipment issues.

9 And without going into any details on the people

10 issues, can you give me a feel about was it 50/50

11 people issues and equipment issues or can you really

12 zero in on that?

13 MR. GROBE: I don't know that I can give

14 you a number, but I would say I would not focus on

15 people as much. I would focus on the organization.

16 The organizational issues are what caused Davis-Besse.

17 It is the principal root cause, and First Energy was

18 here a minute ago describing how that manifested

19 itself. It's a common attribute in my experience of

20 plants that find themselves in this condition that the

21 plant has become isolated and complacent, and Davis-

22 Besse took that one step further and got to the point

23 where it was clearly only dealing with symptoms and

24 not finding the source of the problem. So I think the

25 most significant root cause was the organizational

1 problems.

2 COMMISSIONER DICUS: Fair response. Thank
3 you, Mr. Chairman.

4 CHAIRMAN MESERVE: Commissioner Diaz?

5 COMMISSIONER DIAZ: Thank you, Mr.
6 Chairman. Let me ask a hard question. If there is
7 one thing that you, any of you, could recommend that
8 the NRC would do to prevent recurrence of an issue
9 like Davis-Besse, what would you recommend -- one
10 thing?

11 MR. DYER: I'll take the lead first. From
12 my perspective, and I relate back largely to a lot of
13 the comments in looking into the Davis-Besse Lessons
14 Learned Task Force. From my position as Regional
15 Administrator in 1999, when we had three 0350 sites
16 and three more senior management meeting watch list
17 sites and we weren't asking for help, that personal
18 reflection is the area, as the Regional Administrator
19 when I came in in 1999, we were in over our heads, and
20 it took a lot of effort to get our way out, a lot of
21 very hard work on the part of the staff and the
22 managers in Region III.

23 But going back and doing it again, we've
24 learned our lesson, region III as well as the other
25 regions in this, for ROP 4 have asked to identify

1 where we think we'll have the needs in the rest of the
2 year to execute the Reactor Oversight Program during
3 this cycle. And so I think we've learned that lesson.
4 But looking back at it from a Regional Administrator's
5 perspective is managing and forecasting the resource
6 needs more.

7 COMMISSIONER DIAZ: Thank you. I think
8 that's appreciated.

9 MR. KANE: I would echo Jim's remarks. I
10 would add to that to have a robust program, we have to
11 have a really strong continuing self-assessment of our
12 program. I think we've provided for that with the new
13 Reactor Oversight Program. And I think communication
14 of our expectations to all of our employees, all of
15 our inspectors to take a hard look, we want to
16 understand if there's something out there that they
17 don't think is right, to elevate it and get it dealt
18 with promptly by Management.

19 COMMISSIONER DIAZ: Would you like to add
20 anything to that?

21 MR. GROBE: I was just going to say when
22 you ask five people for one thing, you usually get
23 five.

24 COMMISSIONER DIAZ: I understand that.

25 MR. GROBE: I would just say that --

1 COMMISSIONER MERRIFIELD: At the

2 Commission, we certainly know that.

3 (Laughter.)

4 MR. GROBE: I don't think we do as good a

5 job as we can in the area of -- we've done an

6 excellent job bringing risk focus to our activities,

7 both how we choose to look -- what activities we

8 choose to look at and how we evaluate the results of

9 our inspections. I think we need to make sure that

10 we're adequately looking at the causal factors too and

11 rolling those up as -- it was your question,

12 Commissioner Diaz, on the many little things, making

13 sure that we're capturing the many little things as we

14 look at plant performance.

15 COMMISSIONER DIAZ: You mean the little

16 things that are important when taken together.

17 MR. GROBE: That's right.

18 DR. TRAVERS: I wouldn't disagree with

19 anything anyone here has said, I just -- one thing I

20 think the Lessons Learned Task Force found that

21 captured my imagination is this idea that we should

22 more systematically look at our own messages to the

23 industry and follow up on those in some appropriate

24 way. It may be graded, and it may be different in

25 each case, but we ought to make a deliberate judgment

1 about following up on boric acid, a bulletin, for
2 example, or any other one where we're asking the
3 industry to self-assess their own situation and
4 perhaps take action as appropriate.

5 COMMISSIONER DIAZ: Okay. And leaving
6 Davis-Besse, which is, you know, something that I
7 really don't want to do but I have to do, looking, Mr.
8 Travers, during your tenure and especially starting
9 with Millstone, you have seen several 0350 Panels.
10 You also have seen the 0350 Panels dealing with
11 significant issues, including Millstone, Davis-Besse,
12 Indian Point, and you also saw the beginning
13 implementation of the oversight process, and
14 Commissioner Merrifield already alluded to that. But
15 is the 0350 Panel, the way that it's constituted
16 today, is it state-of-the-art? Does it serve us well?
17 I know that Jim Dyer said it's doing well. Is it --
18 have we looked at it? Is it the way it should be?
19 And, second part of the question, is the feedback from
20 the 0350 Panel being properly utilized for the reactor
21 oversight process?

22 DR. TRAVERS: Yes and yes, but it hasn't
23 been a stagnant process, it's been an evolving one,
24 and in fact we've made some changes over the years to
25 the approach we've taken in carrying out 0350. O350

1 is really just a tool for focusing us in our oversight
2 activities, in our limited resource on those issues
3 that are most important to an assessment of the
4 readiness of a particular licensee that's in trouble
5 to restart the facility.

6 And over the years, we found that we can
7 better focus those efforts, and we've been doing that.
8 And I think in this case, in particular, we've limited
9 the scope of the activities that we're keying in on to
10 those that are most important to our own assessment of
11 whether or not they've completed the activities that
12 they need to to be in a position to restart the
13 facility.

14 The feedback question, are we learning
15 from the conduct of 0350, is a good one, and I think
16 we have always learned something in connection with
17 0350. I'm sure we're going to learn some more things
18 as we go through the process here. At Millstone, we
19 learned a lot about assessing safety culture and
20 safety conscious work environment. I think we're
21 applying those lessons in our evaluation here at
22 Davis-Besse, so in that sense, you know, our
23 experience at Millstone was helpful. We learned a lot
24 about design basis issues in the conduct of the very
25 detailed design evaluations that were conducted at

1 Millstone. I think we've rolled those into an
2 occasional assessment of looking at design basis
3 issues associated with different plants in our ROP.
4 So I think we're doing that, and I think we need to
5 continue to do it. Hopefully, we won't have these
6 opportunities all that often, but I think we're
7 utilizing the information --

8 COMMISSIONER DIAZ: Well, systematically,
9 you would say that the Agency is focused in obtaining
10 valuable feedback information --

11 DR. TRAVERS: Yes.

12 COMMISSIONER DIAZ: -- from the 0350
13 Panels to improve their reactor oversight process.

14 DR. TRAVERS: Yes, sir. I think it's part
15 of the sorts of self-assessment that we have done and
16 will continue to do.

17 COMMISSIONER DIAZ: Okay. Thank you, Mr.
18 Chairman.

19 CHAIRMAN MESERVE: Commissioner
20 McGaffigan.

21 COMMISSIONER McGAFFIGAN: Thank you, Mr.
22 Chairman. Let me briefly ask Mr. Dyer something I
23 didn't intend to ask but you brought it up in your
24 remarks with Commissioner Diaz. One of the lessons
25 learned, as you said, was you probably should have

1 cried for help, but you had a, in my recollection, a
2 vacant engineer position and another person who had
3 multiple sites, one of which, I think, was itself a
4 troubled site at the time. So you really had very
5 little regional focus on this facility. Today, do you
6 have all of these positions filled and people are not
7 being diverted into Davis-Besse and we're not missing
8 something else somewhere else?

9 MR. DYER: I'm concerned about that. To
10 answer your question, Commissioner, we still have a
11 lot of turnover in our staff and moving around. The
12 Resident Inspector at Davis-Besse has accepted a
13 promotion to another region, and he starts his 120-day
14 clock, and I think we went to extend it, and we're
15 working on augmenting the site staff at Davis-Besse to
16 do that. I have other sites. I've filled resident
17 senior -- excuse me, four branch chief positions.
18 Three were with senior residents, and we delayed entry
19 for some of those to show up at the regional office so
20 we can try to get qualified folks at the site to
21 support it. So it's a never-ending challenge.
22 Specifically, to Davis-Besse, we're maintaining site
23 coverage.
24 COMMISSIONER McGAFFIGAN: But do you have
25 -- is this more of a challenge in your region than the

1 other regions?

2 MR. DYER: Last week, the four regional
3 administrators and deputies got together and held a
4 discussion, and we're all having challenges a little
5 different in each region for different reasons.

6 COMMISSIONER McGAFFIGAN: Well, we can
7 discuss that maybe at the annual meeting.

8 MR. DYER: Yes.

9 COMMISSIONER McGAFFIGAN: So I don't want
10 to get diverted. I think you have a -- I do want to
11 compliment staff. I think you have a very good web
12 page on Davis-Besse, but we also have another web page
13 on Davis-Besse which is the -- where a member of the
14 public might go to look at where they stand in the
15 reactor oversight process phase. And that web page
16 says, "current action matrix column under IMC 0350
17 process," and then everything on the page is green.
18 I mean inspection findings, performance indicators.

19 When are we going to have some
20 significance determinations made about the various
21 inspection findings that have been at least
22 preliminarily made and discussed in public, I believe,
23 in many cases? When are we going to start churning
24 out non-green color inspection findings to populate
25 the page, because we've been treating this Plant as if

1 it's a multiple degraded cornerstone plant since
2 March, and Mr. Lochbaum has been quoted as saying he
3 doesn't really mind whether we ever color anything,
4 because we've been acting the right way. But I think
5 it does convey a bad message if we don't start getting
6 some of this stuff through the process. So what is
7 the current plan?

8 MR. DYER: I think Jack can share with you
9 the schedule.

10 MR. GROBE: Thanks, Jim. First, about a
11 month ago, we issued an inspection report that dealt
12 with the off-site and on-site radiological
13 performance.

14 COMMISSIONER McGAFFIGAN: Right. That one
15 is relatively trivial. I'm talking about the real
16 things.

17 MR. GROBE: Okay. It included two white
18 findings, but the Cert Panel meets Thursday. This has
19 been a particularly challenging significance
20 evaluation. The entire design pressure boundary was
21 gone, and what was remaining was not designed to
22 retain pressure. So the evaluation of its failure
23 modes and failure mechanisms is very challenging.
24 Office of Research and NRR have been providing this
25 great support. In December, I believe it was the

1 first week in December, we received the results of
2 their research and analyses that went into an
3 assessment that didn't give us a specific probability
4 of failure of the cavity clad material. It gave us an
5 estimate of what that probability was with a broad
6 number of variables that are not well defined.

7 So Bill and I have been working closely
8 with the staff here in headquarters to try to take
9 that assessment and our Phase 2 risk analysis results
10 and meld those together into a significance
11 assessment. We believe we've been successful, and
12 we're meeting Thursday morning with the Significance
13 Enforcement Review Panel to finalize that assessment,
14 and shortly after that it should be available
15 publicly.

16 COMMISSIONER McGAFFIGAN: Let me just
17 clarify, though, I mean that's one element of your --
18 of a very comprehensive set of inspections you've
19 carried out over the past year. There presumably are
20 others. I mean Mr. Gunther later will say, "Given
21 that containment sump system screens were subsequently
22 found to be grossly undersized, reanalysis of accident
23 consequences would likely show an undo risk to public
24 safety as well." Is there anything in any inspection
25 finding that you guys have -- thus far that applies to

1 some screens, and is there any probability of an
2 inspection finding -- a colored inspection finding
3 with regard to some screen?

4 MR. GROBE: The Licensee identified -- let
5 me step back. The sump was completely aligned with
6 its licensing basis design. So there was nothing
7 wrong with the design of the sump, the square footage
8 of the screen area or anything. The initiative that
9 the Licensee has taken is far beyond the licensing
10 basis.

11 COMMISSIONER McGAFFIGAN: All right. So
12 just to clarify, just on that item, there is no
13 inspection finding, there is no color coming, they are
14 within their design basis, and indeed they're taking
15 something to go beyond what our requirements currently
16 require?

17 MR. GROBE: That's correct. In 0350
18 space, individual inspection findings that are
19 continuing manifestations of the same problem do not
20 often result in additional substantive action on the
21 part of the Agency. The Licensee identified several
22 specific installation issues with the sump. They
23 weren't part of our inspection findings, and they're
24 addressing those. So the answer to your question is
25 we have a number of issues that the evaluation is

1 ongoing in the design engineering area, and those are
2 sticky wickets, they're difficult design issues. Some
3 of those may result in substantive findings, I can't
4 project that at this point in time.

5 MR. DEAN: I'm sorry, Commissioner, if I
6 may interject as well, as you know, we have recently
7 completed an STP Task Force, which has looked at
8 issues that I know that are of concern regarding
9 timeliness of significance determinations and of
10 course the Davis-Besse event has resulted in a fairly
11 lengthy significance determination process. And I
12 agree with you in terms of public perception looking
13 at the web page and so on. But in a lot of respects,
14 the way that the Agency has reacted is really kind of
15 a success story in terms of we didn't have to wait for
16 a completion of a risk analysis or a risk assessment
17 to take the appropriate action as to assure public
18 health and safety. And so that's the message that
19 I've been conveying when I've been questioned by the
20 press or public on this issue regarding the length of
21 time for the significance determination. It's almost
22 moot really in some respects.

23 COMMISSIONER McGAFFIGAN: I agree it's
24 moot in terms of the actions we've been taking, but I
25 think it's an important thing that we need to tie up,

1 and I fully understand that some of these are very
2 complex and unique. I think you once set for
3 yourselves an impossible goal of doing significance
4 determinations in 90 days, and I think for the really
5 complex cases you need more time than that, and you
6 should amend your system so that you don't set
7 yourself an impossible goal. But I think at some
8 point we have to make a call and, you know, I'm glad
9 to hear that the Cert will be meeting later this week.
10 Mr. Chairman, I've got other questions, but in light
11 of the third panel, I think I'd better stop. Thank
12 you.

13 CHAIRMAN MESERVE: Thank you. I'd like to
14 express appreciation to the 0350 Panel and to the
15 staff for all the work that they've performed.

16 We have been going now for well over two
17 hours, and let me suggest that we take just a few
18 minute break and let people stretch their legs, and
19 then we'll get started with the third panel.

20 (Whereupon, the foregoing matter went off
21 the record at 12:44 p.m. and went back on
22 the record at 12:59 p.m.)

23 CHAIRMAN MESERVE: Okay, why don't we get
24 underway again. We have a third panel which
25 represents, is constituted by various stakeholders.

1 They include Paul Gunter who is the Director of the
2 Reactor Watchdog Project of the Nuclear Information
3 and Resource Service, NIRS. We have Jere Witt, who is
4 the County Administrator for Ottawa County in the
5 State of Ohio. And Alex Marion, who is the Director
6 for Engineering at the Nuclear Energy Institute.

7 Mr. Gunter, would you like to proceed?

8 MR. GUNTER: Thank you. My remarks today
9 are focused on the Task Force Evaluation, the Agency's
10 scrapping of the Davis-Besse Shutdown Order for
11 Bulletin 2001-01 Safety Inspections.

12 First Energy's deliberate neglect
13 destroyed the Davis-Besse reactor vessel head and
14 significantly risked a nuclear accident. The
15 recurrent lack of effective NRC oversight further
16 eroded a hole in the public's trust of the Agency's
17 commitment to safety.

18 The Agency's reactor oversight process
19 erroneously represented that First Energy was
20 maintaining its focus on safety. NRC plant
21 assessments failed to even mention the blizzard of
22 corrosive boron snow driven by reactor coolant system
23 leakage inside containment.

24 While First Energy eventually admitted
25 that placing production over safety had become a

1 routine course of business for years, NRC has yet to
2 admit its role in prioritizing company profit margins
3 over public safety margins.

4 The final report fails to address the
5 Agency's justification for abandoning its risk
6 analysis technique as outlined in Regulatory Guide
7 1.174.

8 The NRC policy statement on probabilistic
9 risk assessments encourages greater use of this
10 analysis tool in safety decision making. It provides
11 the staff and the licensee with clearly established
12 governing safety policies and procedures through a set
13 of five principles.

14 The five principles were applied by staff
15 in September 2001 as the basis for issuing an order to
16 noncomplying licensees to perform inspections of
17 control rod drive mechanism nozzles per the request of
18 the Bulletin. Staff concluded that four of the five
19 safety principles were not met. And the fifth, a
20 special circumstance existed where current regulations
21 were inadequate.

22 Using the guidance, staff concluded that
23 Davis-Besse was not safe to operate beyond December
24 31, 2001 and "determined a potentially hazardous
25 condition may exist such that the integrity of the

1 reactor coolant pressure boundary may not be
2 maintained at the Davis-Besse Nuclear Power Station."

3 An order was finalized in mid-November to
4 shut down Davis-Besse for safety inspections and
5 presented to the Commission, but never issued.

6 Following the abandonment of the order on
7 November 29, 2001, staff requested that the assessment
8 of the five principles be discussed in a briefing to
9 the Executive Director of Operations and the
10 Commission's Technical Assistants. The staff vu-graph
11 acknowledged again that four of the five safety
12 principles were not met for the extension of Davis-
13 Besse's operation beyond the Bulletin Advisory. Staff
14 concluded if inspections were performed, current
15 regulations are not met. One barrier is likely
16 degraded. Safety margins are likely reduced. Only a
17 small increase in CDF or core damage frequency
18 results.

19 The risk measurement is monitored only by
20 performance of the inspection. We question the
21 Agency's confidence levels in the core damage
22 evaluation given the large and numerous uncertainties
23 in predicting cracks, given that the NRC staff knew
24 First Energy had never fully inspected the reactor
25 pressure vessel boundary, and given an internal NRC

1 communication dated November 8, 2001 where First
2 Energy Vice President of Nuclear Operations
3 acknowledges to the Agency that "there is a high
4 likelihood that they, Davis-Besse, have leaks in the
5 primary pressure boundary."

6 In fact, NRC daily status report on the
7 Bulletin dated November 30, 2001, staff acknowledged
8 that not one of the principles was met with
9 confidence. "Although operation in this condition
10 could result in core damage frequency and incremental
11 core damage probability values, that are above the
12 normally accepted guidelines of Reg. Guide 1.174 and
13 Reg. Guide 1.182. The analyses also indicate that the
14 consequences of such an event would not constitute
15 undue risk to the health and safety of the public."

16 Despite findings that said don't do it,
17 the process was derailed to extend the operation at
18 the Davis-Besse beyond Bulletin advisory. In so
19 doing, NIRS contends that the Agency unreasonably
20 gambled an accident.

21 Given the containment system's screens
22 were subsequently found to be grossly undersized, a
23 reanalysis of accident consequences would likely show
24 an undue risk to public safety as well.

25 The task force did not acknowledge,

1 evaluate, nor make recommendations on the NRC
2 management action to abandon the steady judgment of
3 the Agency's established risk analysis technique for
4 safety decision making.

5 The abandonment of the order and its
6 regulatory basis is the result of an Agency management
7 culture that prioritized the corporate and financial
8 concerns of First Energy executives. The task force
9 report outlines that Davis-Besse's technical
10 specifications require the reactor to begin shutdown
11 within six hours of a determination of reactor leakage
12 and cold shutdown within 30 hours.

13 The task force finding that NRC does not
14 consistently enforce its licensing agreements for
15 maintaining the reactor pressure boundary is extremely
16 disturbing in light of the certainty that rust never
17 sleeps.

18 The Agency's inconsistency speaks more
19 clearly to an arbitrary policy of enforcement
20 discretion on matters vital to safety and internal e-
21 mail from an NRC manager to the Commission states, "We
22 could have made an argument for immediate shutdown,
23 but we are exercising discretion in allowing them to
24 go to December 31st, but not beyond."

25 Another NRC internal communication states,

1 "I said we can justify today to shut these plants
2 down. However, we are exercising discretion, noting
3 it would clearly be punitive to immediately shut a
4 plant down and they sit there for a month waiting to
5 obtain the correct inspection equipment, etcetera."

6 NIRS questions the use of the word
7 "punitive" in what sense? We can only conclude that
8 early shutdown for safety inspections is punitive to
9 the company's maximum capacity factor and annual
10 financial reports.

11 Internal Commission communications dated
12 November 21, 2001 clarify that First Energy President
13 Bob Sanders had spoken earlier to NRR Director Sam
14 Collins to say that he did not want an order because
15 idling the plant would have financial impacts.

16 Interestingly enough, an e-mail from the
17 previous day by the Resident Inspector told staff that
18 he had sat in on the station's morning management
19 meeting and observed "that licensee management
20 expressed cautious optimism that the NRC could
21 approve, would approve their plans to defer
22 inspections until April 2002." Staff noted their
23 surprise as "this is contrary to the message that was
24 sent to DB on Thursday, 11/14/2001." The order was
25 never issued.

1 The task force did not review, nor make
2 recommendations regarding the significant missed
3 opportunity for NRC to restore a measure of public
4 confidence and trust by issuing the Davis-Besse order.

5 The Agency could have demonstrated its
6 commitment to public safety by enforcing the licensing
7 agreement with Davis-Besse as established by federal
8 law. NRC missed an opportunity to demonstrated a
9 lesson learned from 1996 when Time Magazine "caught
10 the Nuclear Regulatory Commission at a dangerous game
11 that it has played for years, routinely waiving safety
12 rules to let the plants keep costs down and stay on
13 line."

14 Millions of lives ride on NRC safety
15 decisions each day. NIRS concurs with the emergency
16 enforcement petition recently filed by Ohio
17 Congressman Dennis Kucinich. It is more appropriate
18 for NRC to set an example of a commitment of safety by
19 holding a revocation hearing of First Energy's license
20 rather than proceed any further on the restart of the
21 Davis-Besse reactor.

22 Thank you.

23 CHAIRMAN MESERVE: Mr. Witt?

24 MR. WITT: Commission Members, thank you
25 for the invitation to address the Commission on this

1 important topic. I obviously do not provide you with
2 the expert technical information you've heard from
3 everyone else, but I believe I provide the common
4 sense approach to this issue.

5 I am Jere Witt. I am Ottawa County
6 Administrator for the past 25 years and a member of
7 the Davis-Besse Restart Overview Panel.

8 Ottawa County is the biggest stakeholder
9 in this process. The residents of Ottawa County are
10 most affected by the plant. Safe operation of the
11 plant has and always will be my first priority.

12 It should also be noted that Ottawa
13 County's Emergency Management Agency has demonstrated
14 itself to be one of the best in the country. This has
15 been done involving drills with FEMA and the NRC and
16 more importantly real life scenarios of tornadoes,
17 floods and collapsed buildings.

18 The protection of the residents is their
19 only goal.

20 My role on the Restart Overview Panel is
21 to represent Ottawa County to ensure the plant is
22 ready to restart and operate safely. I have observed
23 the restart activities since Day 1, attending over 60
24 meetings, many all day long. These meetings include
25 Restart Overview Panel monthly meetings, two tours of

1 containment, NRC public meetings, updates from NRC
2 staff, three full days with groups of employees on the
3 safety conscious work environment, meeting with
4 employees individually, two meetings with the First
5 Energy Board of Directors Nuclear Committee and
6 observing many plant activities including the Restart
7 Readiness Review Board. Obviously, I've been closely
8 involved.

9 We must evaluate the value of the
10 continued operation of Davis-Besse in terms of safety
11 and value to the community. Davis-Besse is the
12 largest employer and largest taxpayer in Ottawa
13 County.

14 Obviously, Davis-Besse and the NRC made
15 mistakes and we must ensure it never happens again.
16 I have personally been involved in the development of
17 the plan putting together the actions required to
18 safely and effectively operate Davis-Besse in the
19 future.

20 There is a new commitment to safety
21 developed and it will continue to grow. The
22 commitment started with the new management team and
23 demonstrated through their actions and involvement
24 with the staff. The leadership and action program is
25 making sure it permeates through all the staff from

1 the top to the bottom.

2 Employees are using the new systems as
3 evidenced by the many safety improvements being
4 brought to light and instituted, including major ones
5 such as the emergency sump and leak detection systems.
6 This will only help the safety culture continue to
7 grow.

8 There is a new system in place for
9 resolution of open issues. Employees are trained on
10 it and see the results. Management is out in the
11 plant observing the work and being directly involved
12 with the staff.

13 The CEO and Board of Directors are very
14 involved as evidenced by their time spent at Davis-
15 Besse and meeting with the Restart Overview Panel.

16 The 0350 process has been a good one to
17 get to where we are today. We now need a better
18 process to ensure it does not happen again.

19 I have some recommendations and some
20 thoughts for the Board to consider. The NRC should
21 meet at least semi-annually with Ottawa County to
22 update on the status of the plant and any risk
23 significant issues. We should be a player in any
24 discussion of potential safety risk.

25 The Restart Overview Panel should continue

1 in some format to continually review the plant
2 operation and the NRC's review of these operations.
3 This panel gives an expert, independent review of the
4 plant. I am sure many plants have expert consultants
5 that review their operations. But my experience on
6 this panel has made me keenly aware of how much better
7 this review is done if they meet as a group. They
8 have asked the toughest questions throughout the
9 Davis-Besse incident and continuously challenge each
10 other and the staff.

11 I also believe the NRC should be involved
12 at least as an observer. I truly believe that
13 independent experts such as this, acting as a group,
14 could have possibly prevented this incident.

15 I also would echo some of the questions
16 asked by the NRC Commission before to other panel
17 members as to how they're going to guarantee that
18 proper inspections are made to ensure safe operations
19 and what methods you would use to assess the
20 effectiveness of these changes and will there be
21 independent oversight of these changes.

22 I would also ask that the NRC consider how
23 it has -- it will change its safety culture as they
24 have asked Davis-Besse to provide information how they
25 will effectively change its own.

1 I know that First Energy has dealt with
2 the personnel issues of those involved and I would
3 hope that the NRC deals with its own appropriately, if
4 they have not already done so. This is vital to
5 public confidence. I will assure you that Ottawa
6 County will continue a more active role as a partner
7 in the future operation of Davis-Besse. We will
8 challenge and demand answers from both First Energy
9 and the NRC.

10 The systems and programs are in place to
11 safely operate Davis-Besse and I'm confident with the
12 proper changes made by Davis-Besse, FENOC, First
13 Energy and the NRC, we will all continually monitor
14 all facets into the future to protect the residents of
15 Ottawa County.

16 My family lives in the area along with my
17 grandchildren and I would never suggest restart if I
18 believe a credible safety risk is involved. It is
19 time to move forward in the process with safety as the
20 number one and only goal.

21 A renewed stringent regulation by the NRC
22 must be part of this process. This regulation must be
23 based on knowledge and common sense and not one
24 influenced by political agendas.

25 I would personally like to thank the NRC

1 staff, especially Jim Dyer, Jack Grobe, Bill Dean and
2 Christine Lipa and others for their open and candid
3 discussions with the residents of Ottawa County and
4 myself. They have gone above and beyond to ensure
5 that we are informed.

6 I would also like to express my
7 appreciation to First Energy, especially Pete Burg,
8 Bob Saunders, Lou Meyers and others for allowing me to
9 participate on the ROP and giving me free access to
10 all facets of Davis-Besse.

11 Lastly, I would like to thank the
12 Commission for the opportunity to address you today.
13 I hope my comments provide you useful information as
14 you continue your oversight.

15 I would be happy to answer any questions
16 at the appropriate time.

17 Thank you.

18 CHAIRMAN MESERVE: Thank you. Mr. Marion.

19 MR. MARION: Thank you, Mr. Chairman,
20 Commissioners and fellow panel members, good
21 afternoon. I appreciate the opportunity to briefly
22 summarize to you on industry activities that have been
23 affected in response to the Davis-Besse head corrosion
24 event. My discussion today focuses on three industry
25 organizations, the Institute of Nuclear Power

1 Operations, the Nuclear Energy Institute and the
2 Electric Power Research Institute.

3 May I have the next slide, please?

4 (Slide change.)

5 MR. MARION: This summarizes a couple of
6 the actions that the INPO organization has undertaken.
7 Workshops were conducted in each region last year for
8 utility executives and senior management. These
9 workshops involved senior management from First Energy
10 as well as INPO and they facilitated a candid, open
11 discussion of issues and activities prior to and
12 subsequent to the Davis-Besse event. The primary
13 focus was on organizational human performance and
14 management issues.

15 After these workshops or I should say
16 concurrent with these workshops, INPO initiated an
17 evaluation of their internal cornerstone programs to
18 try to establish what they did know as a result of
19 their programs, what they did not know relative to the
20 conditions at the plant with additional focus on the
21 organizational factors that may have contributed to
22 the event.

23 The overall objective of this effort by
24 INPO was to try to identify those actions and
25 activities that had an impact on safety. And as a

1 result of this focus, INPO conducted an assessment of
2 their cornerstone programs and identified 14
3 recommendations. And the cornerstone programs are the
4 ones that deal with evaluations, assist visits,
5 training and evaluating and communicating operating
6 experience.

7 May I have the next slide, please?

8 (Slide change.)

9 MR. MARION: Additionally, a Chief
10 Executive Officer Conference was hosted by INPO this
11 past November. The theme was building and maintaining
12 a safety culture. Additionally, INPO formed
13 a materials department to focus its effort on
14 materials issues as they relate to operational safety
15 issues and the basic objective was two-fold: to be
16 proactive in support of industry efforts in this area
17 and to have a good understanding of best practices to
18 ensure that best practices are implemented as far as
19 material performance is concerned.

20 Lastly, INPO initiated a review visit
21 program of reactor coolant system boundary integrity.
22 Two plants were piloted to establish the
23 reasonableness of the program and I'm pleased to tell
24 you that the first official review visit begins this
25 week and the objective is to review all the plants and

1 evaluate the practices and programs in place to assure
2 the reactor coolant system pressure boundary is
3 maintained. That program will be completed in
4 approximately three years time.

5 May I have the next slide, please?

6 (Slide change.)

7 MR. MARION: This slide summarizes a
8 significant operating experience report that was
9 issued by INPO towards the end of last year. It
10 discusses, the report itself discusses conditions at
11 Davis-Besse relating to management and oversight,
12 boric acid control program, the corrective action
13 program, and the philosophy of justifying and
14 accepting boric acid on the top of the reactor vessel
15 head over a period of time.

16 It also discussed missed opportunities and
17 it really focused on the willingness of the plant
18 staff and management to operate the facility with
19 degraded equipment.

20 There were three recommendations that are
21 summarized briefly on this slide. I'd like to speak
22 to them for a moment.

23 One of the recommendations calls for a
24 case study of the Davis-Besse experience for all
25 managers and supervisors and that all the utilities

1 periodically conduct a case study for new managers and
2 supervisors.

3 There's a continuing emphasis in assessing
4 the organization's focus, the utility organization's
5 focus on root cause and corrective action, to evaluate
6 degraded equipment and material condition of the
7 plants.

8 Lastly, there's a recommendation to
9 identify and document abnormal conditions and evaluate
10 potential effects of these conditions, whether they're
11 significant or whether they're small, to evaluate
12 worse case outcomes of the condition if the condition
13 is not repaired and to look at these conditions
14 individually as well as collectively in aggregate.

15 May I have the next slide, please?

16 (Slide change.)

17 MR. MARION: From the perspective of the
18 Nuclear Energy Institute, in November of last year,
19 our Executive Committee adopted a resolution to
20 support an industry-wide effort to improve materials
21 degradation management programs in the industry and
22 I'll speak to those programs in a little bit of detail
23 later on.

24 This effort called for a self-assessment
25 of all the materials programs and that self-assessment

1 was driven by two main factors: recent events that
2 have occurred over the past couple of years, for
3 example, the Indian Point 2 steam generator tube
4 rupture in February of 2000; the BC summer hot leg
5 weld cracking in October of 2002; the circumferential
6 cracks in the CRDM nozzles at the Oconee plant at the
7 end of 2000 and into subsequent outages for the other
8 plants in early 2001 and obviously, the Davis-Besse
9 nozzle cracking experience, coupled with the corrosion
10 situation.

11 There are other plant experiences that
12 have been identified that are not necessarily at the
13 same level of notoriety as the ones I've mentioned,
14 but the idea of this approach is to evaluate those
15 experiences and make adjustments in the program so
16 that the industry can be more proactive in heading off
17 these degradation -- identifying the degradation
18 problems and resolving them before they result in a
19 significant challenge to plant safety systems.

20 May I have the next slide, please?

21 (Slide change.)

22 MR. MARION: The self-assessment is
23 essentially a review of the current material programs
24 to identify barriers and gaps. To put it another way,
25 we're trying to capture what is working well, which

1 programs are effective and why; what is not working
2 well and what needs to be done to improve the
3 particular program. We're also looking for areas of
4 duplication and overlap and we're looking at what's
5 missing.

6 The second bullet, we identify some of the
7 programs that are captured in the self-assessment and
8 I'm not going to read that, but I do want to make it
9 clear that these programs include the NSSS owners
10 groups activity related to some material performance
11 project.

12 And EPRI provides technical support to
13 their programs and they're a significant contributor
14 in the self-evaluation.

15 The scope of the entire effort from the
16 standpoint of PWRs and BWRs includes the primary
17 system for primary water reactors, the dry well for
18 boiling water reactors, secondary side steam
19 generators for primary water reactors and materials
20 issues related to reactor fuel as an example of the
21 issues associated with axial offset anomalies.

22 Next slide, please.

23 (Slide change.)

24 MR. MARION: From an EPRI perspective, I
25 mentioned earlier that they're providing technical

1 coordination and support for the existing material
2 programs, but more importantly, they're supporting the
3 industry and NEI in providing us technical basis to
4 respond to and deal with the NRC generic
5 communications that have been issued over the past
6 several years.

7 The primary focus from the standpoint of
8 the technical analyses and the programmatic elements,
9 if you will, focus on three areas: inspection, repair
10 and mitigation.

11 Additionally, EPRI and the Office of
12 Research in the NRC have been discussing opportunities
13 for collaboration and I'm pleased to see there are
14 three areas that have been identified in the details
15 of the plan and obviously the costs are being worked
16 out as I speak. Hopefully to everyone's satisfaction.

17 But the areas involve boric acid corrosion
18 to get an understanding of the corrosion mechanisms
19 and its effect on materials; to evaluate primary water
20 stress corrosion crack growth rates of Alloy 600. And
21 Alloy 600 is the primary material used in head
22 nozzles.

23 And do metallurgical analyses of the
24 specimen that was removed from the Davis-Besse reactor
25 vessel head as well as the specimens that have been

1 removed from the North Anna 2, J-groove welds.

2 Next slide, please.

3 (Slide change.)

4 MR. MARION: Our basic objective is to
5 capture the findings and recommendations from the
6 self-assessment, to review and seek approval of the
7 recommendations by the industry's chief nuclear
8 officers, and our expected completion date is May
9 2003.

10 And I'd like to take a moment just to
11 identify several of the challenges that have already
12 been identified in this effort. Obviously, funding.
13 Money and resources is the key challenge. What we've
14 realized is each of these programs which are crucially
15 important to various elements of the industry are in
16 competition for research funds.

17 Prioritization, obviously. Communication,
18 within the industry as well as communication with the
19 NRC. Consensus resolution process as it's applied
20 within the program advisory structure. Regulatory
21 interface which involves NEI and the individuals from
22 these programs as well as the NRC. Accountability in
23 terms of if one of these programs is not successful,
24 to whom is the leadership of that program held
25 accountable?

1 Implementation, of course, implementation
2 of the guidance documents that have been developed by
3 the respective programs. And monitoring the
4 implementation of those guidance documents over a
5 longer term.

6 Next slide, please.

7 (Slide change.)

8 MR. MARION: In conclusion, I would like
9 to indicate that we believe that the NRC's lessons
10 learned task force effort that evaluated the internal
11 programs and policies is a healthy and positive action
12 that the NRC had taken. And we are willing to work
13 with the NRC staff as the action plan supporting the
14 recommendations are developed and implemented over the
15 next several months to a couple of years.

16 The benefits of such objective critical
17 review, both by the NRC and the industry is extremely
18 crucial and I think the industry, historically, has
19 demonstrated the discipline to systematically conduct
20 such critical reviews. It results in enhancement of
21 the industry programs and it results in continuous
22 feedback on implementation issues.

23 The bottom line is all of these efforts,
24 both from the NRC and the industry point of view
25 clearly demonstrate a continuing focus on assuring

1 plant safety. And that concludes my presentation and

2 I thank you.

3 CHAIRMAN MESERVE: I'd like to thank all

4 of the panels for their presentations. In light of

5 the lateness of the hour, I'll just have a question

6 for each of you.

7 First for Mr. Gunter, first a comment and

8 then a question. Your presentation relied principally

9 on the principles that were drawn from Reg. Guide

10 1.174. That is a Reg. Guide that is intended to be

11 used for changes in the licensing basis, that would be

12 license amendments that involve permanent changes in

13 the plant and by its literal terms would not be the

14 document which one would rely for temporary action

15 such as the one that the staff was making in allowing

16 six weeks of continued operation.

17 I recognize that you were invited into

18 reliance on it and the staff made reference to it in

19 some documents that NRC made available to you, but it

20 literally is not something by its terms was applicable

21 to the decision that was before the staff.

22 Question, we had an extensive presentation

23 by First Energy, the variety of actions it has taken

24 to try to deal with the circumstances at the Davis-

25 Besse plant. I wonder if you have any criticisms or

1 comments on the actions that the licensee has taken to
2 deal with the situation?

3 MR. GUNTER: Well, the first question that
4 came to mind today was am I correct in that there are
5 four reactor coolant pumps at Davis-Besse?

6 CHAIRMAN MESERVE: Four.

7 MR. GUNTER: Two have been refurbished.
8 Well, I guess my question is is that given the other
9 two were not refurbished, I guess there is a question
10 with regard to the material condition, particularly in
11 light of the age of those other two reactor coolant
12 pumps compared to the two that were refurbished.

13 Is there some way to get some comment on
14 that?

15 CHAIRMAN MESERVE: I don't think the
16 Commission is in a position to comment on that, but
17 I'm sure the staff would be in a position to be able
18 to answer your question about the reactor coolant
19 pumps.

20 MR. GUNTER: Or Davis-Besse.

21 CHAIRMAN MESERVE: Or Davis-Besse, I'm
22 sure.

23 MR. GUNTER: I guess one concern that
24 remains though is that the -- with regard to the
25 destruction of the trust that First Energy engaged in,

1 more than just material condition of the plant. There
2 is currently no metric system, let's say, right now
3 for restoring public confidence that the management
4 culture has done anything but shift seats and that the
5 same agenda probably even under more pressure right
6 now with regard to a restart plan, may not have
7 changed.

8 How is the Commission, how is the 0350
9 Panel to engage that broad area of uncertainty in
10 light of the fact that your trust should have been
11 torpedoed by this plant's actions?

12 CHAIRMAN MESERVE: Let me say I think that
13 is a fair comment and question and a lot of discussion
14 we've had today has dealt with the problems of
15 assessing how safety culture has changed and not being
16 able to monitor that. And I think that is going to be
17 a challenge for the panel, the 0350 Panel to assess,
18 evaluate the restart decision.

19 Mr. Witt, that does tie directly to the
20 question I had to you and the staff has had extensive
21 activities in trying to outreach in the community and
22 to try to get a sense of the community concerns.

23 Have those activities been effective? Are
24 there things that we should learn from this experience
25 as to how to do that job better and to communicate

1 with the affected community in a better fashion than
2 we have?

3 MR. WITT: I assume when you refer to the
4 staff, you're talking about the NRC staff?

5 CHAIRMAN MESERVE: Yes.

6 MR. WITT: No. I think they've been very
7 effective in doing that. They certainly have gone
8 above and beyond in keeping the local governments
9 involved, answered our questions, met with us to
10 explain issues.

11 I think they've done a very good job of
12 that. I can't think of anything quite honestly that
13 they could do to improve on that, other than Jack
14 Grobe suggested the sound system.

15 (Laughter.)

16 That's certainly not a reflection on the
17 NRC. That was just the facilities available.

18 But no, I think they've done everything
19 they can to keep people involved. I know that they
20 stay after the meetings to answer more specific
21 questions so someone is not taking up all the time.

22 We asked for and they certainly followed
23 our request in asking that the local public be allowed
24 to ask their questions first, so someone cannot
25 dominate the program. And they've done all that and

1 done a very good job of it, frankly.

2 CHAIRMAN MESERVE: Mr. Marion, you spent,
3 I think appropriately, the bulk of your time talking
4 about the self-assessment activity that the industry
5 is completing.

6 Let me ask the question about how you're
7 going to deal with the circumstance that maybe the
8 Davis-Besse plant presents for us in that we have a
9 high level effort to try to assemble information and
10 to make sure that the situation is analyzed, but
11 before the event of Davis-Besse we had a situation
12 where the people who were there were comfortable and
13 that they thought they had their hands around the
14 problems that existed in the plant and were not
15 necessarily open to receiving advice from outside in
16 this sort of area.

17 How are you going to deal with the problem
18 of getting to the plants that may not be actively
19 involved in assessment process itself, may be
20 comfortable with the world as it exists and they have
21 some problems that need to be addressed?

22 MR. MARION: Mr. Chairman, that's an
23 excellent question. I think it was mentioned before
24 by the representatives from First Energy that there
25 was a sense of complacency and isolationism on the

1 part of the management and staff at that plant.

2 And that's one of the human performance
3 and management issues that the INPO program is going
4 to focus on. And INPO is going to conduct their
5 evaluations of all the plants.

6 I mentioned communication is a significant
7 element in terms of a challenge before us as we move
8 forward and INPO makes it a point to communicate
9 within their advisory structure, their findings as a
10 result of these evaluations and review visits,
11 etcetera. And they also obviously communicate with
12 the utilities and their peers, but most importantly,
13 they communicate with the Chief Executive Officers in
14 the industry.

15 As I mentioned from an NEI perspective,
16 the same Chief Executive Officers are on our board of
17 directors of NEI and we've been communicating with
18 them our intent and objectives relative to the self-
19 assessment and materials programs. And we are unique
20 at NEI as compared to the other industry organizations
21 because we are the only organization that brings
22 together the chief nuclear officers in the industry.
23 And we have been communicating with them also,
24 relative to the results of our review of the materials
25 programs and INPO attends our meetings and also

1 communicates to that body, that level in the industry,
2 their findings as a result of these evaluations.

3 And I think having said all that, the
4 heightened level of awareness and sensitivity and all
5 of the documentation and information that's been
6 brought to bear relative to the technical conditions
7 at the plant and relative to the human performance and
8 materials conditions at the plant, I feel comfortable
9 in saying at every level within the industry, that
10 information is being integrated into the way the
11 utility personnel operate and manage their facilities.
12 And it's not the kind of thing that's going to change
13 overnight or improve overnight, but we have a number
14 of processes in place through the various
15 organizations.

16 CHAIRMAN MESERVE: Thank you.
17 Commissioner Dicus?

18 COMMISSIONER DICUS: Thank you, Mr.
19 Chairman. First of all, I do want to thank all of our
20 stakeholders for coming. You provide extremely
21 valuable input into the processes we deal with. I
22 want to thank you for that.

23 Mr. Witt, I particularly appreciate the
24 kind statements you made about the NRC staff. I also
25 appreciated your recommendations and I think you were

1 positively critical and that's a very good statement.
2 I also have dealt extensively in my former life with
3 local governments and I do appreciate the efforts that
4 you go to.

5 I have a question. I know when I was out
6 of the room I was able to listen to your comments.
7 Given the fact that INPO has a process, NEI has its
8 efforts, do you see anything changing in how INPO and
9 NEI may work down the road?

10 MR. MARION: Let me just answer that
11 question.

12 COMMISSIONER DICUS: You've got two
13 different goals.

14 MR. MARION: Absolutely. We do our best
15 to work together, all three industry organizations in
16 a complementary fashion to support the needs of the
17 industry.

18 Now INPO's mission focuses on maintaining
19 operational safety, doing all the necessary work
20 associated with evaluating operating experience,
21 making recommendations, etcetera, etcetera.

22 We maintain a boundary in our relationship
23 and interactions in terms of NEI is the organization
24 that was put in place to deal with the regulatory
25 issues. INPO provides them some support, but you will

1 hardly ever see INPO at a public meeting to discuss

2 some regulatory issue and they defer to NEI.

3 From the perspective of EPRI, EPRI

4 provides technical support to both organizations. So

5 I don't see any significant change in the way the

6 three organizations interact. Quite frankly, I've

7 been in Washington for approximately 15 years when I

8 first came to the predecessor organization, NUMARC.

9 And I think the organizations work very well together.

10 And the greatest advantage we have is when we can

11 integrate our efforts on a particular problem that

12 needs to be solved, where all three organizations are

13 supporting the needs of the industry and I think in

14 this area you have that.

15 COMMISSIONER DICUS: Okay, in light of the

16 hour, I'm going to stop.

17 CHAIRMAN MESERVE: Commissioner Diaz.

18 COMMISSIONER DIAZ: Thank you, Mr.

19 Chairman. I think that out of all of this, we of

20 course, I conclude and maybe my fellow Commissioners

21 too, that we have significant deficiencies that we are

22 facing. We're not perfect, not that we ever claimed

23 to be perfect, but we do try hard.

24 In this respect, I think they mentioned in

25 the last panel the fact that we are held to very high

1 standard. I think this is an issue that sometimes we
2 need to reflect on, that we are here facing this issue
3 which has consumed tremendous amount of our time, the
4 time of all stakeholders, because not that there were
5 really consequences to the public, but because there
6 could have been, and the fact that we cared about the
7 fact that there could have been consequences and
8 dedicate all of these amounts of time to show the very
9 high level of standards that we apply to all of our
10 processes.

11 And having said that, Mr. Gunter, I know
12 that you have in your presentation, you made some
13 strong statements regarding why we issued the order.
14 I don't want to visit that. I don't agree with that.
15 I think the processes that were surrounding that were
16 well justified. I also do not agree on the
17 implications that we put considerations on financial
18 conditions. I don't think we did. I'm sure the
19 Commission did not.

20 However, I am really intrigued by the fact
21 that I'm sure you want these processes to be better.
22 Outside of the order and the implications of financial
23 consideration which I disagree, what do you think we
24 could do better to communicate publicly what went
25 through and what are we doing? What do you see out

1 there that we're not doing that you think is important
2 to restore public confidence?

3 MR. GUNTER: Well, very briefly, I think
4 that adherence to enforcement of the licensing
5 agreement.

6 The public sees a tech spec, the limited
7 condition of operation which is the technical judgment
8 that's been established based on safety. The question
9 remains in our minds why wasn't the technical
10 specification enforced at the appropriate time when
11 First Energy admitted to the NRC that they agreed
12 there was leakage on the reactor pressure boundary.
13 Why wasn't the technical specification put into action
14 at that time?

15 I'm just saying that would provide the
16 public with a demonstrated commitment that the NRC is
17 willing to enforce its license agreement with nuclear
18 power operators. If that's abrogated, you don't gain
19 the public trust.

20 COMMISSIONER DIAZ: Right. I understand.
21 So maybe we should have made better effort to explain
22 the difference between the nozzle heads and the actual
23 hole in the head of the reactor in the reactor head.
24 That's -- there is a difference.

25 MR. GUNTER: Leakage is the question.

1 COMMISSIONER DIAZ: Leakage, but we can
2 have leakage and I don't want to get into an argument.
3 It's too late. We can have leakage from the reactor
4 coolant seal and the tech spec allowed certain amount
5 of leakage from a series of components in the plant.

6 MR. GUNTER: I understand.

7 COMMISSIONER DIAZ: And that's not
8 considered a violation of tech spec until they reach
9 a certain level, say two gallons per minute or
10 whatever the tech spec says.

11 But I do see your point. Thank you so
12 very much.

13 Mr. Witt, very quickly, you said -- a
14 question was asked to you whether the staff was
15 communicating properly and so forth. I think they
16 tried very well.

17 From your perspective, is there anything
18 else the NRC could have done with the county to make
19 sure that you were properly informed? Is there any
20 other thing that we could have improved on?

21 MR. WITT: You mean as part of the 0350
22 process?

23 COMMISSIONER DIAZ: No, no, as part of the
24 entire Davis-Besse process.

25 MR. WITT: I think -- first of all, I

1 think as I said in my presentation, some type of semi-
2 annual meeting with NRC staff, resident inspectors at
3 Davis-Besse would be appropriate. I believe it's
4 important enough for the residents of Ottawa County
5 that when a decision was made to allow the plant to
6 continue operating for the extra extended period of
7 time, that the county in the future should be
8 involved, at least know about that process. Frankly,
9 that's great hindsight right now and I'm not laying
10 blame on anybody for that, but I think it's a lesson
11 learned from this that the county who obviously has
12 the most to risk in this process, could be better kept
13 informed.

14 COMMISSIONER DIAZ: Okay. Mr. Marion, I
15 have said in a public document that I firmly believe
16 that we are never going to have another Davis-Besse.
17 Why? Well, that's why we're here. No matter what
18 anybody thinks, it is almost -- it's very, very, very
19 difficult to envision another type of that same
20 phenomena happening, the same place, leading to those
21 conditions.

22 However, that's not the issue that we have
23 to face, you as an industry and we as a regulator.
24 What is the other phenomena that might come out that
25 is totally different and that might come up in little

1 steps by steps? Can you tell me in simple words how
2 is the industry preparing not for corrosion of the
3 head, which I think we probably will not see another
4 one, but to the other type of phenomena that will
5 challenge the potential safety of public health and
6 safety, what are you doing?

7

8 MR. MARION: Well, from a material
9 performance point of view, the first step is to have
10 a system in place where you can identify and capture
11 operating experience, not only in the U.S. but in the
12 world. And INPO is positioned to do that.

13 One of the key elements of our
14 recommendations is to improve that particular area so
15 the information is available as soon as possible. To
16 give you an example, if I can, I was involved in
17 representing the industry and dealing with a head
18 nozzle cracking issue about 10 years ago when the
19 experience was identified at the Bougey facility. And
20 all the information, the data at that time indicated
21 that you would likely have axial cracks as opposed to
22 circumferential. And over that period of time up
23 until the Oconee experience, all of the experiences
24 with cracks and faults have been actually oriented.
25 And when the Oconee experience occurred, lo and behold

1 we found out that there was a plant in France that had
2 indeed experienced the circumferential crack and we
3 recognized that. And the point of evaluating
4 operating experience is to get that information, all
5 of the information together, so that we could
6 determine what the potential degradation mechanisms
7 are and what form they would take. That's a lessons
8 learned that's more responsive to your particular
9 question.

10 COMMISSIONER DIAZ: Thank you, Mr.
11 Chairman.

12 CHAIRMAN MESERVE: Commissioner
13 McGaffigan?

14 COMMISSIONER McGAFFIGAN: Mr. Marion, one
15 of the issues that staff is grappling with and I know
16 you're grappling with is the ASME code currently for
17 vessel head inspections is clearly not adequate for
18 what we need to do going forward. And how quickly do
19 you think we can put in place something that is a
20 revision to what we have today and we can have
21 confidence in the vessel head inspections going
22 forward?

23 MR. MARION: I'll give you a direct
24 response to the question which I'm sure you will
25 appreciate. The best level of effort by the standard

1 development organizations has typically been on the
2 order of three to five years. I was recently
3 appointed to the ASME Board of Nuclear Codes and
4 Standards. We do have a meeting later this week and
5 I will make it a point to see if they can find a way
6 to expedite changes to the code to deal with this
7 issue so that subsequently we can get NRC adoption.
8 But at this particular point, we're a couple of years
9 away.

10 COMMISSIONER McGAFFIGAN: You understand
11 in the interim we may have to do something?

12 MR. MARION: Absolutely. As a matter of
13 fact, I've made those kinds of comments to the NRC
14 staff that if there is a gap, they need to determine
15 a way to fill it.

16 COMMISSIONER McGAFFIGAN: Okay, and I
17 think we fully intend to do that.

18 Mr. Gunter, one of the issues that -- I
19 fully endorse everything that Commissioner Diaz said
20 to you in terms of disagreeing with many of the
21 elements in your presentation today. I think the
22 Chairman's response to the Inspector General's Report,
23 Mr. Hollahan's response to the Inspector General's
24 report which state our case, one of the issues you
25 were raising earlier was your interpretation of the

1 tech spec. This diagram shows where Davis-Besse
2 stood. It's one of our performance indicators for the
3 -- as part of the reactor oversight process. And they
4 were so far into the green range and reactor coolant
5 system leakage prior to February that there really was
6 no tech spec. We expect some leakage and this plant
7 was at the very top of the green band.

8 So I think you're misinterpreting our tech
9 specs which is your -- we get to interpret them. I
10 guess you get to try to interpret them. But there's
11 a fundamental difference there.

12 Let me get to my question. If
13 we had issued the order which a
14 unanimous staff felt it was not a safety case
15 for, but let's say we went ahead and issued the order,
16 we then would have found approximately January 20th,
17 we would -- instead of March 6th, we would have been
18 told that there's a full reactor head. How would you
19 have behaved differently since then? Would you have
20 not called for the reactor to be shut down? Would you
21 not be expressing no lack of confidence in us or the
22 licensee? You're milking our internal communications
23 about this draft order in ways that I don't agree
24 with, but just say we had done exactly what you know
25 we didn't do. We still would have had a problem. We

1 still would have had issues that we had to deal with.
2 The licensee would have had issues that they had to
3 deal with. But how would your behavior have been any
4 different?

5 MR. GUNTER: I think we would have taken
6 note of the process by which the Agency had engaged.

7 COMMISSIONER McGAFFIGAN: Really?

8 MR. GUNTER: Certainly. What we're
9 looking for right now is demonstration of enforcement.

10 COMMISSIONER McGAFFIGAN: Well, I will
11 never forget your organization coming in in early
12 December of 1999 with three rulemaking petitions,
13 basically asking us to shut down all the plants on
14 January 1, 2000 because it was your judgment that they
15 couldn't be operated safely.

16 We had had a process in that case that
17 went back at least three and a half years to totally
18 kill the Y2K problem in this industry. I mean just
19 absolutely be technically on top of it, be ahead of
20 all the other industries. And we, of course, did not
21 grant your petitions for rulemaking and we operated
22 through the night of Y2K and indeed we were on
23 heightened alert just in case we'd done something
24 wrong. And it was a fairly, it was a smooth
25 transition. We didn't need to shut the plants down,

1 nor did any other nation need to shut their plants
2 down.

3 We had a process in that case. We had a
4 process that extended back three and a half years that
5 was technically deep. And yet, your organization at
6 the eleventh hour, 59th minute comes in with petitions
7 for rulemaking, asking us on a noncredible technical
8 basis to shut down all the plants.

9 MR. GUNTER: I think they were more
10 focused on compensatory actions, as I recall,
11 particularly with regard to emergency diesel
12 generators back ups and that. I think that's a more
13 appropriate characterization.

14 COMMISSIONER McGAFFIGAN: I totally
15 disagree that there was any Y2K issue with regard to
16 emergency diesel generator backups.

17 So your answer to the question is you
18 would have given us some credit for having issued the
19 order, but would you today not be calling for the
20 plant not to be started up?

21 MR. GUNTER: I think indeed we wouldn't --
22 we would be calling for the same revocation hearing.
23 That's right. Because of the degree of degradation,
24 the breach of trust. Those are issues that are not
25 necessarily resolved by the order, even, but what

1 would have been established by the order was a
2 demonstration to reflect an Agency bias on the side of
3 conservative bias on the side of public safety.

4 COMMISSIONER McGAFFIGAN: I think we have
5 a very conservative bias on the part of public safety.
6 I do think you need to look at the biases of your own
7 organization and I've been here now six and half
8 years. I don't think you've ever given us credit for
9 anything, but that's -- I'll leave it at that.

10 Thank you, Mr. Chairman.

11 CHAIRMAN MESERVE: Commissioner
12 Merrifield.

13 COMMISSIONER MERRIFIELD: I think there's
14 a respectful difference of opinion, going to Mr.
15 Gunter, a difference of opinion on the motivation and
16 process that we use for getting to the decision that
17 we did.

18 I would agree with you that even if the
19 order had been followed along the lines that you would
20 have wanted us to, I too would believe that we would
21 still be here having this meeting today. It's
22 obviously a very serious issue and I think we still
23 would have been -- we obviously still would be in a
24 process going through the 0350 process and hearing
25 from our own staff.

1 I'm interested in hearing from you focused
2 on the process and actions that the NRC and FENOC have
3 taken to resolve the issues associated with head
4 degradation and how that has moved its way through the
5 0350 process.

6 MR. GUNTER: I think that we're still,
7 there are still a number of questions with regard to
8 how the tech spec failed us. I mean as Commissioner
9 McGaffigan has pointed out, the indications in the
10 tech spec that everybody was still agreeing, but in
11 reality the plant was eroding and it seems to me that
12 that's -- that we were all under false impressions of
13 the margins of safety that were at this plant. That
14 is a very disturbing insight.

15 COMMISSIONER MERRIFIELD: I appreciate
16 that observation. But the focus of my question is we
17 are in a process right now --

18 MR. GUNTER: Moving forward. Of moving
19 into restart. I understand.

20 COMMISSIONER MERRIFIELD: Well, we are
21 going through a process of reviewing the activities
22 being undertaken at the plant to make sure that the
23 plant is put in the condition where we have a comfort
24 level of the safety.

25 MR. GUNTER: I understand.

1 COMMISSIONER MERRIFIELD: So that's sort
2 of the focus on that question is the process we're
3 using through 0350 to get there --

4 MR. GUNTER: Again, my concern is that we
5 lost confidence in the technical specifications
6 reliability for actually monitoring plant condition
7 and that trust has not been restored in the restart
8 process. If, in fact, the plant could have been in
9 the green, in terms of reactor pressure coolant
10 boundary surety and the damage existed, it does --
11 it's disturbing to us that we could be moving along
12 the same lines under the same false assurances on
13 other systems.

14 COMMISSIONER MERRIFIELD: Well, I
15 appreciate that comment. I would make the observation
16 and others have made the observation about the tech
17 specs and I'm not going to -- I haven't looked at that
18 separately and I leave it to them, to their
19 assurances.

20 The one other, I think, instructive thing
21 is that when we actually took a look at the control
22 rod drive mechanism as a result of the inspections
23 taken after February of last year, we identified that
24 the nozzle cracking, in fact, identified after the
25 shut down was well within the levels that were

1 predicted by the staff. So I mean at least in terms
2 of that level, we did, as it relates to the control
3 rod drive mechanisms themselves, I'm not talking about
4 obviously the problem with the degradation on the
5 control rod drive mechanisms, it did in fact, meet our
6 predictions.

7 Mr. Marion, a quick question. On Slide 6,
8 you go into some detail about how you are going to try
9 to integrate a variety of industry programs while
10 facially this seems to be a good initiative,
11 historically, the industry as faced challenges with having
12 a variety of ongoing activities that it needs to balance,
13 given issues that are coming forward on an ongoing
14 basis.

15 Can you elaborate a little bit further on
16 how you're going to integrate these programs and
17 manage them in such a way as to be able to identify
18 those historic issues that are still out there that
19 you're grappling with separately in these programs?

20 MR. MARION: As I mentioned, one of the
21 early findings was that each of these programs are
22 somewhat -- well, not somewhat, but they are in the
23 competition for resources and support and attention,
24 etcetera. And one of the preliminary thoughts that
25 we're considering and this is under active

1 consideration. It's not a final. But it's responsive
2 to the question, is that we're seriously considering
3 an executive level oversight body as well as a
4 technical advisory group that would be structured to
5 evaluate all of the information relative to operating
6 plant experience with materials performance issues.
7 That technical advisory group, as an example, would
8 make an initial determination of what has potential
9 impact on similar materials in nuclear power plants.
10 And not only impacts from the standpoint of a
11 regulatory compliance issue, but impact from the
12 standpoint of operational safety and business
13 economics, quite frankly.

14 One of the things that we found as a
15 result of the effort thus far is that there's -- we're
16 dealing with humans and speaking of human performance,
17 one of the first characteristics when a problem is
18 identified is that it can't happen here. It's someone
19 else's problem. And then when you work through that
20 realization, then you start looking at the regulatory
21 process and try to bound the significance of the
22 process based upon NRC's current regulations.

23 Well, one of the questions that we're
24 struggling with and I suspect that we'll be discussing
25 that with the NRC staff at some time in the future, is

1 whether or not the tech spec action statements
2 relative to unidentified and identified leakage are
3 adequate and sufficient. We don't have an answer to
4 that, but that's one of the questions that we're
5 willing to come to grips with ourselves and also
6 engage the NRC on.

7 As I mentioned earlier to Commissioner
8 Diaz' question, the key advantage is to put in place
9 a process that allows the identification of operating
10 experience and does an expeditious review and
11 assessment of the impact of that experience in a more
12 holistic manner than what we used to do previously.
13 Quite frankly, the industry has been reactive. A lot
14 of these programs were put in place primarily because
15 of NRC concerns with material performance issues. And
16 we want to get beyond that reactive mode and get into
17 one that's more proactive.

18 I'm pleased to see a lot of good,
19 constructive, out of the box thinking. It's going to
20 help us in that regard.

21 COMMISSIONER MERRIFIELD: My last question
22 goes to Mr. Witt. I would second the comments made by
23 Commissioner Dicus in terms of the appreciation for
24 the work and the contribution made by our local
25 stakeholders, as you mentioned, live with these

1 facilities each and every day.

2 Our Agency, there have been a number of
3 commenters and editorialists who have been opining and
4 questioning the NRC's commitment to safety. Having
5 been a member of the Restart Overview Panel and having
6 interacted with our staff, is it your view or not that
7 the NRC is treating this issue seriously and that our
8 Agency has a sufficient commitment to safety?

9 Do you want to comment on that?

10 MR. WITT: Certainly. First of all, to
11 your first question, I believe that they are treating
12 it very seriously. Everything I've seen has
13 demonstrated that. And I think the NRC does have a
14 commitment, definitely to safety. That's my opinion.
15 That's your main goal.

16 I think we all know what happened here and
17 there was some -- you know, obviously wrong decisions
18 made and a lot of issues behind making those wrong
19 decisions, but I don't think that changes the fact
20 that the NRC is committed to safety and I think you
21 have to learn from these experiences and go forward.

22 One of the other things that I learned and
23 I forget who asked the question, but the question has
24 been asked a couple times is just by changing
25 management at the top, has that changed the safety

1 culture of the employees? My answer to that would be
2 because I talked to the employees. I spent three days
3 at the beginning of this process talking to employees
4 about safety culture. My belief is the only reason
5 the safety culture, the safety conscious work
6 environment failed in this system is because top
7 management didn't reinforce it and in fact, someone
8 would raise -- right a condition report or raise an
9 issue and nothing ever happened to it, so the
10 employees got complacent to the point where they said
11 well, if nothing happens with it, why should I write
12 a condition report?

13 I really believe now that the top
14 management has changed and they are paying attention
15 to the details of the condition reports and responses
16 are getting back to the employees, the employees
17 always had a safety conscious work environment
18 mentality, but they lost that because top management
19 was not paying attention to it. And I think by
20 changing top management and in fact, them seeing the
21 results of that, will make that safety culture develop
22 more and more with the employees.

23 I've seen it happen. I personally,
24 obviously, have observed a lot of these happen.

25 COMMISSIONER MERRIFIELD: I appreciate

1 that comment and I do appreciate a recognition as to
2 the commitment of our staff to safety.

3 I would tell you although you've had
4 little interaction with the Commission and senior
5 staff, but at least from my viewpoint the commitment
6 of the Commission and our senior staff is no different
7 and that safety is our priority.

8 Thank you, Mr. Chairman.

9 CHAIRMAN MESERVE: Good. Obviously,
10 Davis-Besse is a very important event for the NRC and
11 we're putting a lot of time into making sure that we
12 understand it and deal with it properly.

13 I very much appreciate the insights that
14 all of the panels today have brought to us. It's been
15 very helpful.

16 With that, we're adjourned.

17 (Whereupon, at 2:06 p.m., the meeting was
18 concluded.)

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