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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BRIEFING ON REMAINING ISSUES RELATED
TO PROPOSED RESTART OF MILLSTONE UNIT 3

PUBLIC MEETING

Nuclear Regulatory Commission
Commission Briefing Room
One White Flint North, Room 1F-16
11555 Rockville Pike
Rockville, Maryland
Tuesday, June 2, 1998

The Commission met in open session, pursuant to notice, at 8:05 a.m., the Honorable SHIRLEY A. JACKSON, Chairman of the Commission, presiding.
COMMISSIONERS PRESENT:
SHIRLEY A. JACKSON, Chairman
GRETA J. DICUS, Commissioner
NILS J. DIAZ, Commissioner
EDWARD MCGAFFIGAN, JR., Commissioner

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STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE:
JOHN C. HOYLE, Secretary
SAMUEL J. COLLINS, Director, NRR
DR. WILLIAM TRAVERS, Director, Special Projects
Office, NRR
HUGH THOMPSON, NRR
EUGENE IMBRO, Deputy Director for ICAVP, SPO, NRR
PHILLIP MCKEE, Deputy Director for Licensing and Oversight, SPO, NRR
WAYNE LANNING, Deputy Director for Inspections, SPO, NRR
STEPHEN G. BURNS, NRC Office of General Counsel
BRUCE KENYON, President and CEO, NNECo
MIKE MORRIS, Chairman, President and CEO, NU
MIKE BROTHERS, Vice President, Nuclear Operations
MARTIN BOWLING, Vice President, Technical Services
JOHN STREETER, Vice President, Nuclear Oversight
DAVID AMERINE, Vice President, Human Services
BRIAN ERLER, Senior Vice President, ICAVP Project Director, Sargent & Lundy
DON SCHOPFER, Vice President and Verification Manager, Sargent & Lundy
THOMAS SHERIDAN, First Selectman
TERRY CONCANNON, Nuclear Energy Advisory Council
JOHN MARKOWICZ, Vice Chairman

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STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE:
(continued)
DEBORAH KATZ, President, Citizens' Awareness Network
ROSEMARY BASSILAKIS
MARK HOLLOWAY, Citizen Regulatory Commission
GUY MENDENHALL, Citizen Regulatory Commission

8 RONALD McKEOWN, Friends of Safe Millstone
9 DAVID A. LOCHBAUM, Union of Concerned Scientists
10 DONALD W. DEL CORE, SR.
11 HARRY BLANK, Millstone
12 DAVE COLLINS, Millstone
13 GARY F. VERDONE, Millstone
14 MIKE MEEHAN, Millstone
15 JOSEPH M. AMARELLO, Millstone Employees Group
16 JERILYN M. DUEFRENE, Millstone Employees Group
17 MIKE KENNEDY, Millstone Employees Group
18 WILLIAM H. HONAN, Families of Southeastern
19 Connecticut
20 JENNIFER GUTSHALL, Alliance for Sustainable
21 Connecticut
22 SCOTT CULLEN, Standing for Truth About Radiation
23 THOMAS J. MASTRIANNA
24 PAUL BLANCHE, Consultant
25

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

2 [8:05 a.m.]

3 CHAIRMAN JACKSON: Good morning, ladies and
4 gentlemen. We are having an amplification problem and so I
5 am going to call on everyone in the room to be as attentive
6 as they can be and for every speaker to project as much as
7 they can. We hope to have the problem resolved within about
8 10 or 15 minutes, but our amplification, as you can tell, is
9 not working.

10 Can everyone hear me?

11 [Discussion off the record.]

12 CHAIRMAN JACKSON: Well, no one wants to hear the
13 opening remarks anyway --

14 [Laughter.]

15 CHAIRMAN JACKSON: -- so I will give them while
16 they are working on the amplification.

17 Good morning, ladies and gentlemen. This meeting
18 is the second of two scheduled Commission meetings to assess
19 readiness for restart of the Millstone Unit 3 plant.

20 The first meeting, held on May 1st, covered the
21 following items from the Restart Assessment Plan for
22 Millstone Unit 3 -- first, licensee progress to establish a
23 safety-conscious work environment and an effective employee
24 concerns program; second, licensee improvements to oversight
25 and quality assurance; and third, licensee resolution of

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1 non-restart related issues and items commonly called
2 "backlog management."

3 The Staff had evaluated these issues to be
4 acceptable to support restart of Unit 3.

5 The Commission in its decision dated May 19th,
6 1998, agreed that the licensee had made appropriate
7 improvements such that these issues are acceptable to
8 support restart of Unit 3 subject to continued third party
9 oversight of the areas of employee concerns and
10 safety-conscious work environment and future inspection that
11 will measure the effectiveness of licensee actions related
12 to backlog management as well as oversight and quality
13 assurance.

14 Today's Commission meeting will cover the
15 significant remaining issues related to the Restart
16 Assessment Plan for Millstone Unit 3.

17 Issues to be discussed include the following:

18 one, the Independent Corrective Action Verification Program;
19 two, the actual Corrective Action Program; three, the
20 Operational Safety Team inspection; work planning and
21 controls; five, the significant items list; and six,
22 licensing issues.

23 The Commission will hear presentations today from
24 Northeast Utilities, the contractor associated with the
25 licensee's Independent Corrective Action Verification

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1 Program, public official and interest groups, and the NRC
2 Staff.

3 Unit 3 has been shut down for approximately 26
4 months. All three of the Millstone units were placed on the
5 NRC's Watch List in January, 1996. The units were
6 recategorized as Category 3 plants in June of 1996. This
7 action necessitates Commission approval for restart of each
8 of the units.

9 There have been six previous Commission meetings,
10 held roughly quarterly, to assess the status of activities
11 at the site. The Commission is interested in comments,
12 evaluations, and conclusions from all participants today to
13 gauge how the licensee has addressed the critical areas
14 related to plant restart.

15 I particularly am interested in hearing comments
16 related to the number and significance of what are called
17 the Level 4 DRs, Discrepancy Report items, that do not
18 result in the plant being outside its licensing basis, and I
19 would like the NRC Staff in particular to discuss how it has
20 handled these in light of its criteria for scope expansion,
21 also the Level 3 DRs that were identified, and whether there
22 are any trends that have safety significance.

23 As I stated at last month's meeting, we have a
24 long day ahead of us, and it's longer today. The
25 Commission, with much help from the Office of the Secretary

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1 has planned a schedule to maximize discussion of the issues
2 and to obtain a fair hearing from those on all sides of
3 these issues, and we look forward to an informative meeting.

4 I again ask for everyone's patience and to
5 project, and we have made available the display area off the
6 lobby in the 2 White Flint building as an overflow room
7 where anyone is invited to observe if they so desire.

8 Copies of the presentation material are available
9 at the entrances to the meeting, and unless my colleagues
10 have any opening comments, Mr. Morris, please proceed with
11 your presentation.

12 MR. MORRIS: Thank you, Dr. Jackson. Good morning
13 to you and your colleagues. We are happy to be here for
14 this second and very important meeting to touch on the
15 issues and give your our view of where Northeast Utilities
16 and the Millstone Station Unit 3 is, particularly to those
17 six issues.

18 I would like to thank you and your colleagues for
19 the conclusions that you reached after our May 1st meeting.
20 We obviously have read the conditions, understand them, and
21 have no trouble with them at all. We think that that will
22 help us continue to improve in the safety-conscious work
23 environment area and others and we appreciate that very
24 much.

25 Today you will hear from our team on occasion

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1 talking about events in Mode 2 and events during plant

2 operation and plant power ascension, and I want to make
3 crystal clear to all of you that we aren't presupposing a
4 thing, but when we put together our presentation it just
5 made sense to speak in terms of those things, because some
6 events happen at those stages of bringing the units back
7 online, so I apologize to you and hope that you don't think
8 it's being presumptuous of our team, because we understand
9 the very critical vote that you still have to have on these
10 issues.

11 Lastly, let me simply say that the Northeast
12 Utilities team from our Board of Trustees through the
13 Executive Management, to Bruce and his team, understand our
14 obligation and are willing to dedicate ourselves to
15 fulfilling that obligation to this Commission, to the people
16 who work at Millstone Station, to the employees of our
17 company, and the people of Connecticut, and we thank you for
18 the many hours that you have devoted and dedicated to
19 understanding the situation and helping us better understand
20 the situation.

21 So with that I will turn this program over to
22 Bruce Kenyon and we will begin our presentation. Thank you.

23 MR. KENYON: Thank you and good morning.

24 The recovery of the Millstone Station, beginning
25 with Unit 3, has been an arduous undertaking. It has meant

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1 changing leadership. It has meant raising standards and it
2 has meant bringing the performance of the organization into
3 conformance with these standards.

4 Among the many more specific issues, it has meant
5 re-establishing compliance with the licensing and design
6 bases and rebuilding the work environment such that it
7 properly satisfies the conditions of a safety-conscious work
8 environment.

9 The purpose of our presentation today is to review
10 the important remaining restart issues not reviewed at the
11 May 1st meeting. I understand that I have to audibly
12 indicate when we change slides until the microphone is
13 operable, so if I could have the next slide.

14 This slide shows the agenda for our portion of the
15 meeting. I will overview Unit 3's restart readiness. More
16 detailed presentations will be made by Mike Brothers and
17 Marty Bowling on the topics indicated, and then John
18 Streeter will present the conclusions of oversight. Next
19 slide.

20 Other NU representatives in attendance include, at
21 the table, Dave Amerine in case there are any further
22 questions on safety-conscious work environment; Frank
23 Rothen, our Vice President of Work Services, is in the
24 audience.

25 Also present are three members of our Board of

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1 Trustees and its Nuclear Committee, Elizabeth Concannon, who
2 is our lead Trustee, as well as John Turner and Cotton
3 Cleveland.

4 We also have three members of the Nuclear
5 Committee Advisory Team present -- Phil Clark, who is
6 succeeding George Davis as Chairperson of ENCAT, Dominic
7 Monetta, and Tom Murley. Next slide --

8 CHAIRMAN JACKSON: Let me ask you one quick
9 question. Has your Board's Nuclear Committee concurred that
10 you are ready for restart?

11 MR. KENYON: The Board's Nuclear Committee has
12 closely followed what we are doing and observed our actions.
13 Our process does not involve at this point the Board

14 formally passing on our readiness, but ENCAT closely
15 watching what we are doing and ENCAT separately and
16 independently advising the Nuclear Committee has been our
17 process.

18 MR. MORRIS: And they have in fact come to that
19 conclusion. The Nuclear Committee of the Board meets every
20 other week and there is a tremendous amount of knowledge,
21 understanding of where we stand.

22 MR. KENYON: For my portion of the presentation I
23 will overview the Unit's readiness to restart, and then
24 recognizing that no plan to achieve restart readiness is
25 satisfactory without also having put in place the actions to

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1 ensure the performance is sustained, and then as a longer
2 range measure a plan to achieve excellence, and I will be
3 addressing both of these issues, and finally I will review
4 the status of our restart readiness affirmation criteria.
5 Next slide.

6 As I have stated on several previous occasions,
7 the decline in performance of the Millstone Station was
8 largely reflected by performance declines in the 16 issues
9 listed on this slide. Consequently, the recovery of
10 Millstone's performance has been largely based on achieving
11 satisfactory performance in each of these important issues.

12 The status of these site issues has been addressed
13 in each of the briefing books we have sent you for this and
14 previous meetings.

15 At the May 1st meeting, I reported that all but
16 one issue, work control and planning, was satisfactory for
17 restart. The restraint on this issue was that we had not
18 yet achieved satisfactory levels of productivity. I am now
19 pleased to report that work control and planning, and thus
20 all 16 issues, are not satisfactory for restart.

21 CHAIRMAN JACKSON: Mr. Kenyon, which of these
22 issues do you feel have the greatest margin and which do you
23 feel have the thinnest? -- just from your personal
24 perspective.

25 MR. KENYON: I feel that all the issues are

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1 satisfactory. The issues that we have worked the hardest on
2 recently have been work control and planning, where that was
3 getting an appropriate level of productivity. We have
4 worked hard on operations and the concern here, our people
5 are well trained, they have a conservative approach to
6 decision making. They have good command and control. But
7 what we have to focus on is that it has been two years, more
8 than two years, since the plant has operated and, thus,
9 evolutions that historically have been routine evolutions
10 are not necessarily routine evolutions today.

11 So we have endeavored to address that by -- for
12 appropriate evolutions, treating them as if we had never
13 done them before and, thus, very thorough briefings. We
14 have put additional licensed operators in the control room,
15 both at the senior level and at reactor operator level. We
16 have put unit management in the control room to ensure that
17 standards are being met and to reinforce those standards.
18 Oversight continues to watch. So, while I think we have
19 good operations, we are taking special care to ensure that
20 as we go forward. So I would identify that as one item.

21 I think one of our -- just to give you one at the
22 other end of the spectrum, and there are many that I could
23 pick from, but I am particularly pleased with oversight.
24 Oversight, I believe is playing a very strong, important and

25 valuable role in working with line management, helping to

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1 sustain standards, helping to set standards, helping to
2 point out wherever performance dips from that. I think they
3 are functioning in a very cooperative -- and I don't mean
4 that in the negative sense, but they work closely with line
5 management. And in so doing, I think they are making a very
6 strong contribution to the performance of the station. So
7 that's one I would identify at the other end of the
8 spectrum.

9 Next slide. I now want to address the major
10 actions we are taking to ensure that performance is
11 sustained. It begins with having defined a very
12 conservative start-up and power ascension program. We will
13 continue to emphasize high standards and conservative
14 decision making. The power ascension program is divided
15 into five plateaus. We will hold at each plateau for
16 evaluation prior to moving to the next. Both unit
17 management and oversight will be on shift, as I indicated,
18 to monitor performance and to reinforce standards.

19 CHAIRMAN JACKSON: Is that around the clock?

20 MR. KENYON: Yes. And we will discuss testing
21 results with the NRC prior to moving to the next plateau.

22 Next slide. More generally, the sustaining
23 performance plan includes the following. It includes the
24 performance of key site issues being carefully monitored.
25 We will use approximately 90 performance indicators. The

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1 use of these performance indicators is valued as a
2 systematic approach to tracking the performance of the
3 organization. The indicators are summarized in a quarterly
4 report, the first issue of which is included in Section 4 of
5 the briefing book.

6 A commitment to provide -- the sustaining
7 performance plan also includes a commitment to provide
8 performance reports to the NRC on a quarterly basis. It
9 includes extensive self-assessments by line management for
10 the purpose of identifying and correcting any weaknesses.
11 There have been 60 assessments so far this year. There are
12 another 115 planned for the balance of the year.

13 And, finally, there will be strong oversight with
14 good checks and balances. In part, this means a strong
15 nuclear oversight organization as I have described and they
16 will use a modification of their restart verification plan
17 to monitor performance on a going forward basis. It also
18 means that our Nuclear Safety Assessment Board will
19 critically review what is happening, and it means that EDCAT
20 as an agent for the Nuclear Committee will continue to
21 aggressively monitor what we are doing.

22 CHAIRMAN JACKSON: Does this mean that this is how
23 you plan to operate these plants or is this a plant that you
24 are putting into place to last for a finite period of time?

25 MR. KENYON: No, this is how we plan to operate

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1 the plants.

2 CHAIRMAN JACKSON: Plan to operate the plants.

3 MR. KENYON: With the exception that as we go down
4 the road, I will not keep unit management on shift beyond
5 the power ascension program. I will not keep extra
6 operators on shift beyond the power ascension program. But
7 in terms of the strong role of oversight and that, I won't
8 keep oversight on shift forever either, but the overall
9 philosophy is certainly the philosophy we intend to follow.

10 We are very -- this next slide. We are very

11 committed to not having the continuing Unit 2 recovery
12 activities compromise in any way the ongoing performance of
13 Unit 3. This is achieved as follows. Unit 3 operations
14 will be maintained separate from Unit 2 recovery. Each
15 reports to a different officer who then reports to me.
16 Sufficient resources have been established to support both
17 Unit 3 operations and Unit 2 recovery.

18 And to provide increased confidence on this
19 matter, for the duration of the Unit 2 recovery, any
20 significant organization changes or resource reductions
21 affecting Unit 3, other than the planned phase out of
22 contractors, which is in progress, will be discussed with
23 the NRC in advance.

24 We have also made it clear to the various support
25 organizations that the operating unit has priority. And

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1 while we do not expect to have financial resources further
2 constrained, should that eventuality arise, the pace of Unit
3 2 recovery will be slowed as opposed to constraining the
4 financial resources for the operating unit.

5 Now, just as it is important -- the next slide.
6 Just as it is important to maintain strong operational
7 performance, it is equally important to ensure that we
8 maintain and strengthen our Safety Conscious Work
9 Environment.

10 Particular actions which have been instrumental in
11 helping to achieve current Safety Conscious Work Environment
12 performance, and which will be maintained to ensure
13 sustained performance, are, first of all, the grouping of
14 the various people-related functions which includes Human
15 Resources, Safety Conscious Work Environment staff, our
16 Employee Concerns Program, Training. We have grouped all of
17 those under one officer, Dave Amerine. This has been very
18 effective and his, what he calls his people team, which are
19 representatives from these and other functions, meet daily,
20 the principal function being to discuss and handle any
21 emerging issues, so that continues.

22 We will continue with ERB to ensure there is a
23 very careful review of any proposed formal discipline or
24 staff reductions, including contractor reductions. The
25 leadership assessments and cultural surveys have been

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1 important measurement and diagnostic tools. These will be
2 continued on a six-month interval. The next leadership
3 assessment was administered in the last two weeks. We will
4 have the results shortly.

5 And I think it is important to point out that the
6 Employee Concerns Oversight Panel, ECOP, which is an
7 independent group which reports directly to me, and which
8 assesses the effectiveness of the Employee Concerns Program
9 and, more generally, our Safety Conscious Work Environment
10 effectiveness also will provide continue vigilance.

11 CHAIRMAN JACKSON: Realizing, again, that the
12 specific forms that things take, you may decide should
13 evolve over time, but, again, are these elements, essential
14 elements of how you intend to maintain the Safety Conscious
15 Work Environment going forward? Or is this, again, a
16 program that is going to end at a specified date?

17 MR. KENYON: These are essential elements going
18 forward.

19 Next slide. Our long term commitment is to
20 achieve excellence and not simply sustain performance that
21 is acceptable for restart. We have prepared a rolling

22 three-year performance improvement plan to guide a
23 reference. The plan contains the vision, mission, values
24 and performance standards and it is built around the
25 following strategic focus areas.

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1 Safety, which deals with nuclear, industrial and
2 radiation safety. It deals with human performance. It
3 deals with environmental and regulatory compliance.

4 Operating excellence, which I think is
5 self-explanatory.

6 Work environment, which deals with leadership,
7 Safety Conscious Work Environment, Human Resources
8 performance.

9 Organizational effectiveness, which includes
10 fiscal accountability and efficiency of resource
11 utilization.

12 And external relations which recognizes that
13 maintaining good communications with various external
14 constituencies is important to us going forward.

15 Next slide. During the transition from recovery
16 to operations, the plan is designed to have a near-term
17 focus on sustaining performance through self-assessment and
18 monitoring, and to begin selected initiatives toward
19 excellence. Overall strategies have been established. Work
20 is proceeding with implementing plans recognizing that full
21 implementation will not be achieved until Unit 2 recovery
22 has been completed. And KPIs have been established to
23 monitor performance and progress on all key improvement
24 initiatives.

25 CHAIRMAN JACKSON: KPIs being key performance

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1 indicators?

2 MR. KENYON: Yes. Thank you. I try to avoid
3 those.

4 Finally, I want to review the status of our
5 restart readiness initiatives. Next slide, please. Restart
6 readiness affirmation criteria.

7 First, root causes for decline in Millstone
8 performance have been identified and corrected. This is
9 satisfactory and this was reviewed at our May 1st meeting.

10 Second, compliance with the licensing and design
11 bases has been restored. We believe this satisfactory and
12 it will be discussed in much greater detail in Mr. Bowling's
13 presentation.

14 CHAIRMAN JACKSON: Did that involve a lot -- many
15 technical specification changes?

16 MR. KENYON: Yes, it involved a number.

17 Can either of you quote the numbers?

18 MR. BROTHERS: Twenty-six.

19 MR. KENYON: Third, Safety Conscious Work
20 Environment has been established. This is satisfactory.
21 This was reviewed at our last meeting and Little Harbor has
22 issued an update which indicates even stronger results.

23 Fourth, self-assessment and corrective action
24 processes. Identify and resolve problems in a timely
25 manner. We believe this is satisfactory. The

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1 self-assessment portion was addressed in our last meeting
2 and corrective action will be addressed by Marty Bowling's
3 presentation shortly.

4 Next slide. We are there. Fifth, unit and
5 support organizations are ready to resume operations. This
6 is satisfactory. One outstanding item had been work
7 planning and control. This was a productivity issue, that

8 is now satisfactory.

9 Sixth, the entire station is prepared to properly
10 support unit operations. This is satisfactory. One
11 outstanding item had been that the plan to ensure sustaining
12 performance had not been approved. It now is approved.

13 Seventh, management controls and oversight
14 measures are in place to prevent significant future
15 performance declines. This is satisfactory. This was
16 discussed extensively at our last meeting.

17 And eighth, restart readiness is affirmed using a
18 rigorous process. This is satisfactory, meaning that the
19 affirmation process is in place and that line management,
20 oversight and the NSAB have each affirmed readiness for
21 restart subject to satisfactorily concluding the remaining
22 work items required for Mode 2.

23 CHAIRMAN JACKSON: Now, will Mr. Streeter discuss
24 the findings from these evaluations?

25 MR. KENYON: Yes, he will.

21

1 This -- if there aren't any questions for me, I
2 would like to call on Mr. Brothers.

3 MR. BROTHERS: Thank you, Bruce. Good morning.

4 I am pleased to have the opportunity to present
5 what we believe is an excellent story. I intend to
6 demonstrate in this presentation that Millstone Unit 3 will
7 be ready to safely resume power operation in early June.

8 Next slide. My presentation today will be broken
9 down into the four major areas of readiness shown on this
10 slide. I will demonstrate that the unit is substantially
11 physically ready, that the unit is in compliance with all
12 regulations, that the organization is ready to support
13 operation, and, finally, that the unit is operationally
14 ready to return to power.

15 CHAIRMAN JACKSON: As part of your discussion,
16 could you give us some discussion about the issue with the
17 power operated relief valve?

18 MR. BROTHERS: Yes, I could do that now. One of
19 the items that came up in the operational safety team
20 inspection that occurred when we were transitioning into
21 Mode 3 was two lifts of what is called the power operated
22 relief valve. That was -- the first lift was in operation
23 of the master pressure control. The second lift was in the
24 -- on isolation of the valve.

25 We attributed this event, and I'll talk about,

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1 there were five events, this is one of the four, to
2 primarily a lack of familiarity and the fact that we have
3 been shut down for greater than two years. But extensive
4 corrective action and training has taken place and, in fact,
5 one of the modifications we made changed the mode of
6 operation of that, it won't operate that way any more. It
7 wasn't for that purpose but it does do that.

8 CHAIRMAN JACKSON: Is that something that would
9 tend to only show up in this kind of a circumstances?

10 MR. BROTHERS: It would only show up if you were
11 switching from manual to auto or auto to manual in the
12 master pressure control, not something that is normally
13 during operation.

14 Next slide, please.

15 The first area of readiness that I will cover is
16 the area of physical readiness. This slide summarizes our
17 conclusion that Millstone Unit 3 is ready to safely resume
18 power operation. This slide makes the point that Unit 3 is

19 substantially physically ready, that the material condition
20 of the plant is very good, and that all prerequisites to
21 enter mode 2 or reactor start-up will be met in early June.
22 The next three slides are metrics supporting the
23 overall conclusion of this slide. One quick note with
24 regard to the metrics in this presentation. The metrics in
25 the presentation are up to date as of May 26th, which was

23

1 our submittal date. If there are any pertinent changes in
2 the actual data, I will update each metric with data up to
3 date as of this morning.

4 Next slide, please.

5 This slide supports the first bullet on the
6 previous slide; that is, all required modifications required
7 to resume power operation are physically complete.

8 CHAIRMAN JACKSON: Excuse me. So does that say
9 that there's some post-mod testing --

10 MR. BROTHERS: Yes.

11 CHAIRMAN JACKSON: -- that remains to be done?

12 MR. BROTHERS: Exactly correct. A few mods have
13 not had their final release to operations due to remaining
14 re-tests. Those are primarily constrained, so we have to
15 get in to do the re-test.

16 CHAIRMAN JACKSON: And how many?

17 MR. BROTHERS: Eight.

18 CHAIRMAN JACKSON: Eight.

19 MR. BROTHERS: All of these are scheduled in our
20 heat-up, start-up and power ascension program. As I have
21 pointed out in previous presentations, we have completed 224
22 modifications to restore complete compliance with our design
23 and licensing basis. Of the 224 mods, 182 involve physical
24 work and the remaining 42 involve documentation only.

25 Next slide, please.

24

1 This slide illustrates that we have completed
2 essentially all required tasks required to resume power
3 operation. As of today, we have 40 tasks remaining to
4 complete our readiness to enter mode 2.

5 As this slide shows, over the last two years and
6 two months, we have completed over 12,000 tasks, and I have
7 a breakdown of the 40 items that are remaining. They
8 primarily break down into three big buckets. One, we're
9 waiting on two tech spec implementations. Wave some issues
10 associated with steam generator tube rupture and SLCRS, leak
11 collection and recovery system that have to be resolved.
12 Those compromise the majority of the 40 remaining items to
13 demonstrate our readiness to go into mode 2.

14 CHAIRMAN JACKSON: Does Oversight have a view on
15 any of these open issues?

16 MR. STREETER: Yes. Yes, we do, Chairman. We are
17 following both of these and both of these items are on what
18 we call our mode 2 issues list that I'll discuss in my
19 presentation.

20 MR. BROTHERS: Next slide, please.

21 This slide shows that we have completed --
22 substantially completed our corrective maintenance backlog.
23 As of this morning, I'm pleased to say that the actual
24 numbers are 494 power block items and 253 maintenance rule
25 systems. So we have made good progress and have met the

25

1 goals in both power block and maintenance rule, corrective
2 maintenance work.

3 CHAIRMAN JACKSON: Let me ask, do you track for
4 yourselves these -- also in terms of manhour loading? I

5 mean, some tasks have more complexity than others, so the
6 straight numbers don't necessarily tell you everything. So
7 do you track how much time it would take to bring the
8 backlog down?

9 MR. BROTHERS: That's correct. That's how we
10 build the schedule, the rolling schedule, is by manhours.
11 Each of those tasks has an estimate that's put together by
12 the first-line supervisor which goes into the scheduled
13 planning in our twelve-week rolling schedule.

14 CHAIRMAN JACKSON: And so when you say twelve-week
15 rolling and you play that against manhours, is that to say
16 that -- what's your target in terms of how long it would
17 take to work off the backlog, your target goal in terms of
18 how much backlog and manhours you would expect to have?

19 MR. BROTHERS: I don't think it's going to be
20 possible to ever have zero backlog. We have --

21 CHAIRMAN JACKSON: No, no, no, I understand that.
22 But I'm saying, so the issue is what is your manhour target
23 in terms of what is a manageable size backlog?

24 MR. BROTHERS: I don't have a good answer for a
25 manhour target for backlog. I can get you that, but I don't

26

1 have it with me.

2 Next slide, please.

3 This slide summarizes the second area of
4 readiness, that of regulatory readiness. We measure our
5 readiness in this area by assuring that all required license
6 amendments will be implemented by early June, that all
7 significant items list items have been submitted to the NRC,
8 all NRC commitments are on track for completion in early
9 June, and that all of our 50.54 foxtrot significant items
10 required for a restart list will be completed prior to entry
11 into mode 2.

12 The next three slides will show metrics which
13 support each of the four bullets on this slide.

14 CHAIRMAN JACKSON: What do you call foxtrot items?

15 MR. BROTHERS: Those are the items that, in
16 question 1 of the 50.54 foxtrot letter, were required to
17 document those items.

18 CHAIRMAN JACKSON: Oh, F is foxtrot.

19 MR. BROTHERS: Yes.

20 CHAIRMAN JACKSON: Okay.

21 [Laughter.]

22 CHAIRMAN JACKSON: I just want to make sure we're
23 all talking from the same page.

24 MR. BROTHERS: I apologize.

25 One of the things we've insisted upon in our plant

27

1 for our operations people is to use the alphanumeric
2 alphabet, and so we try to emulate it in management as well.

3 Next slide.

4 This slide was deleted. The reason it was deleted
5 is because it did a poor job of representing our current
6 status with regards to license amendments. Independent of
7 this slide, I'll put the current status with regard to
8 license amendments.

9 During this shutdown, we have submitted 24
10 amendments to our technical specifications. We previously
11 talked about 26. Those are two anticipated 9118 USQs
12 associated with steam generator tube rupture and SLCRS.

13 We have received approval for 23 of these
14 amendments. The one remaining license amendment request
15 requiring approval involves our resolution to the

16 pressurizer overflow concern which could result in what is
17 referred to as the inadvertent safety injection.
18 Next slide. We have submitted all 216 packages
19 which correspond to the 86 zones on the Millstone Unit 3
20 specific attachment to Manual Chapter 0350. The last
21 package, our compliance with NUREG 0737 or the Three Mile
22 Island Action Plan was submitted in late May.
23 To date, the quality of packages, as verified by
24 numerous internal and external inspections, has remained
25 high.

28

1 Next slide, please.
2 CHAIRMAN JACKSON: They are all closed?
3 MR. BROTHERS: No, they are not. I believe the
4 staff will be reporting on closures in the SECY letter that
5 came out as well.
6 Next slide, please.
7 This slide shows that we have completed
8 essentially all of the NRC commitments that are required for
9 restart. As of today, the actual remaining number is nine.
10 We define a commitment as a written statement that's
11 docketed, a verbal statement to take specific action agreed
12 to by an officer or an NRC requirement.
13 In addition to completing current commitments, we
14 have completed a review of the entire Millstone Unit 3
15 docket to verify that all commitments have been adequately
16 dispositioned.
17 CHAIRMAN JACKSON: Are these nine, remaining nine,
18 are any of them new commitments or are they just answers to
19 old issues?
20 MR. BROTHERS: They come up new. For instance, we
21 have a weekly phone call with your staff and the SPO, and if
22 we -- if it rises to that level, it becomes a commitment at
23 that point.
24 CHAIRMAN JACKSON: And what's holding them up? Is
25 it engineering or --

29

1 MR. BROTHERS: Primarily plant conditions and the
2 resolution of the remaining 40 ARs I talked about earlier.
3 CHAIRMAN JACKSON: Okay.
4 MR. BROTHERS: When the ARs close, those 40, these
5 nine will close as a matter of course.
6 Next slide, please.
7 This slide demonstrates that we have essentially
8 completed all of the significant items required for restart.
9 As of today, there are 34 items remaining out of a total
10 population of over 4,500. In addition to the items required
11 for restart, we have continued to complete deferrable items
12 as I reported at the May 1st meeting. At this time, we have
13 completed approximately 70 percent of deferrable items.
14 Next slide, please.
15 The third area of readiness is organizational
16 readiness. This slide summarizes some of the more important
17 aspects that make up our determination that Millstone Unit 3
18 is soon to safely resume power operation. Mark will cover
19 our corrective action program following my presentation.
20 The next several slides will focus on departmental
21 assessments of readiness, the procedure upgrade program and
22 our own current high-level of procedure compliance.
23 Next slide, please.
24 CHAIRMAN JACKSON: Your back-up slide shows two
25 yellow areas. Could you describe them?

30

1 MR. BROTHERS: This slide has one area, one area

2 yellow.

3 CHAIRMAN JACKSON: Okay.

4 MR. BROTHERS: It's on the next slide coming up.

5 CHAIRMAN JACKSON: Okay.

6 MR. BROTHERS: This slide shows our current
7 organizational assessment. At the May 1st Commissioners'
8 presentation, I reported that all departments except work
9 planning and outage management were satisfactory to support
10 power operation.

11 This slide, as I said, was submitted on May 26.
12 At that time, work planning was ready -- was not yet ready
13 based upon our own rigorous metrics. During the week of May
14 18th, we conducted a stand down as a result of a reactor
15 coolant system valve program that I will discuss in some
16 detail in just a moment. The resultant negative impact on
17 schedule adherence caused us to go yellow. This week, and I
18 will talk about it in the next slide, they will work to
19 support restart along with all other Millstone Unit 3
20 organizations.

21 CHAIRMAN JACKSON: Now everybody can hear you.

22 [Laughter.]

23 MR. BROTHERS: Next slide.

24 This slide shows that for the week of May 18th, we
25 did not meet our online work management goals of greater

31

1 than or equal to 75 percent of planned schedule starts,
2 greater than or equal to 70 percent of schedule completions.

3 As I stated on the previous slide, this was
4 directly attributable to the stand-down that we imposed on
5 the workforce to reemphasize our standards.

6 Last week's performance was again essentially a
7 goal. These goals will continue to be raised as our
8 performance with regard to schedule adherence continues to
9 improve. Our current performance, while not world class, is
10 acceptable to support unit restart.

11 Next slide.

12 As I stated earlier, the procedure upgrade program
13 is complete for Millstone Unit 3. This program will cover
14 approximately five years and 4,000 procedures. The adequacy
15 of the program has been inspected and validated by ourselves
16 and the Nuclear Regulatory Commission.

17 Next slide.

18 Our current level of procedural compliance is very
19 good. As this slide shows, in December, we did exceed our
20 goal of less than or equal to .5 errors per one thousand
21 hours of work. Management attention was correctly applied
22 and satisfactory performance has been maintained for the
23 last four months. In my view, this is an excellent example
24 of the proper use of a well-designed performance indicator.

25 This extended outage has inculcated the use of

32

1 performance indicators into the organization. As we resume
2 power operation, performance indicators, as Bruce said, will
3 continue to be a key management tool for identifying trends,
4 both good and bad, in the Millstone unit in station
5 performance.

6 Next slide, please.

7 The fourth area of readiness and the one which
8 pulls all the other areas together is the area of
9 operational readiness. This slide summarizes the major
10 components which make up our assessment that Millstone Unit
11 3 is operationally ready to safely resume power operations.
12 They are the physical condition of the plant as it directly

13 affects the ability of the operators to operate, evidenced
14 by temporary mods, et cetera; operator performance start-up
15 and power ascension program, and finally training.

16 Next slide.

17 This slide shows that we are on track to meet our
18 goal of less than or equal to 15 temporary mods. As of
19 today, we have achieved our goal. The actual number of
20 installed temporary modifications is 15, and four will be
21 removed in the near future.

22 CHAIRMAN JACKSON: Has Oversight reviewed this?

23 MR. STREETER: Yes.

24 MR. BROTHERS: Next slide, please.

25 Operator work-arounds are meeting our goal of less

33

1 than or equal to ten. The actual number is ten.

2 Next --

3 CHAIRMAN JACKSON: Is there a consistent
4 definition, do you think, in terms of what an operator
5 work-around is?

6 MR. BROTHERS: Yes. We use the INPO definition,
7 which is, to put it succinctly, is anything in the plant
8 that could inhibit the ability of the operator to operate
9 the plant in either normal or transient conditions.

10 CHAIRMAN JACKSON: And that's your definition?

11 MR. BROTHERS: That's correct.

12 Next slide, please.

13 We are also meeting our goal of less than or equal
14 to ten control room deficiencies. The actual number is
15 seven, of which zero are older than six months.

16 CHAIRMAN JACKSON: When you talk about operator
17 work-around and/or control room deficiencies, is there a
18 risk gradation on these?

19 MR. BROTHERS: Each one of them is reviewed, and
20 if, in fact, it has any risk associated with it, it can't be
21 carried on the program. In other words, they have to be
22 worked immediately. The priority system in our trouble
23 report system sets that, and so anything that has
24 significant risks on it will not ever show up as a tracked
25 item.

34

1 CHAIRMAN JACKSON: Do you ever use PRA to arrive
2 or, you know, to help make that decision about the risk?

3 MR. BROTHERS: Yes, we do.

4 CHAIRMAN JACKSON: Okay.

5 MR. BROTHERS: Next slide, please.

6 This slide shows our current percent of low
7 significant precursors to total human errors. Our
8 aggressive internal goal is to have greater than or equal to
9 95 percent of all human errors to be of a low significance
10 precursor type. As I've said before, it's desirable to keep
11 this percentage high so that corrective actions can take
12 effect at a lower level prior to an actual event on the
13 significance ladder.

14 Our performance level for the month of May was 92
15 percent. Although this is a good percentage, we have had
16 several events of an operational or organizational type
17 which we are addressing. The next two slides summarize the
18 events and our managerial response to increase the
19 operational focus of our organization.

20 Next slide, please.

21 As this slide indicates, our initial transition
22 out of Mode 5 did not meet our expectations. We have
23 performed a causal factor analysis of the events and
24 determined that while there is no common route cause, the

25 fact that the unit has been shut down for greater than two

35

1 years results in virtually every evolution which occurs in
2 the mode greater than mode 5 being a first-time evolution.

3 The operational safety team also pointed out that
4 some of our operational programs, like the lock valve check
5 list, breaker alignments, et cetera, while not resulting in
6 safety problems, do not meet industry best practices.

7 Finally and most significantly, our repairs to a
8 packing leak on a reactor coolant system valve did not meet
9 our standards.

10 CHAIRMAN JACKSON: In that case, was an engineer
11 not listened to or did you just not plan adequate
12 contingencies?

13 MR. BROTHERS: I think the best thing for me to do
14 is to talk about in general, the results, the interim
15 results of the independent review team and just go over
16 those with you, if you would like.

17 CHAIRMAN JACKSON: Sure.

18 MR. BROTHERS: I have some back-up slides
19 associated with the valves, if you would like to have the
20 details, but I --

21 CHAIRMAN JACKSON: Why don't you just talk.

22 MR. BROTHERS: Okay. The results of the
23 independent review team indicate that the areas that broke
24 down in maintenance -- there was an overconfidence in the
25 ability to deal with a familiar or common activity, and

36

1 operations did not take a leadership role in dealing with
2 the 132 issues, not proactive or aggressive. Engineering
3 raised DISTEM separation, your point, but the appropriate
4 engineering and maintenance supervisory management was not
5 proactive in following up and holding them accountable for
6 resolution.

7 Work control and management lacked the leadership
8 role in controlling the work activities. In the case of the
9 management team, incomplete communications in the management
10 team, spotty and poor communications. And finally, what
11 I'll get to when I get back to my text is my take on the
12 whole instance. But what we had was an organizational
13 failure. Enough information was there that the independent
14 review team and the event review team together confirm that
15 we had adequate indication of DISTEM separation and didn't
16 act correctly on it.

17 CHAIRMAN JACKSON: So it was a learning moment?

18 MR. BROTHERS: Yes.

19 Okay. I'm back on slide number 37.

20 As I said, although the team made the correct and
21 conservative decision to correct this minor leak and the
22 team made the correct and conservative decision to
23 depressurize the reactor coolant system to work on the
24 valve, all of the possible problems were not anticipated and
25 contingency plans were not in place when the repair was

37

1 attempted.

2 Fundamentally, although the organization had the
3 plant in the right conditions to perform the repair, the
4 sacrosanct nature of the reactor coolant system was not
5 appreciated by my team. Just as there is a zero law of
6 thermodynamics, my priority is the maintenance of the three
7 barriers of reactor safety, the fuel clad, reactor coolant
8 system, and the containment. The purpose of our unit-wide
9 stand-down and the organizational changes was to reinforce

10 these priorities to our organization.
11 Next slide, please.
12 This slide summarizes the high level actions that
13 we are taking to enhance the operational focus of our
14 organization. We have placed unit management on shift with
15 clearly identified roles and responsibilities to reinforce
16 our conduct of operation standards. We have made additional
17 senior reactor operator and reactor operator personnel
18 available for shift augmentation for key evolutions. These
19 key evolutions come from our review of our heat-up and power
20 ascension procedures to identify first-time evolutions.

21 We have assigned one shift managers the
22 responsibility of coordinating the return to 100 percent
23 power. To that end, this shift manager has been removed
24 from his rotating shift assignment and now resides in our
25 work planning department as a key interface between unit

38

1 management and the operating shift.

2 Industry benchmarking against our operational
3 programs such as our lock valve checklist, how we document
4 vendor supplied equipment and how we document electrical
5 switches, et cetera, and valve reliance will be
6 accomplished.

7 Finally, the formation of an operational support
8 organization with the purpose of consolidating operational
9 programs and eventually unit support programs will solidify
10 our performance against a clear set of operational
11 principles.

12 Next slide.

13 Our start-up and power ascension program is in
14 place and has been reviewed by the Institute of Nuclear
15 Power Operations and the NRC. This slide gives the
16 highlights of that program. Suffice it to say that our
17 return to 100 percent power will take into account that we
18 have been shut down for over two years. The shifts will be
19 augmented with additional licensed staff. Unit management
20 will be on shift to ensure compliance with our expectations
21 for conduct of operations. Nuclear oversight will be on
22 shift as an independent agent assessing our performance and
23 pre-arranged assessments of our ability to continue power
24 ascension along with communications with the Nuclear
25 Regulatory Commission will occur at 30 percent, 50 percent,

39

1 75 percent and 90 percent power. Contingency shutdowns are
2 also included after each of these assessments.

3 Our return to 100 power will be controlled and
4 deliberate. After 26 months, there is simply no point in
5 rushing.

6 Next slide.

7 This slide summarizes the training that has been
8 conducted for our operating crews. We have conducted
9 detailed training on all modifications which have an impact
10 on how operation configures or operates the plant.

11 We have conducted extensive training on our
12 start-up of power ascension programs as discussed
13 previously. Finally, the trio of reactivity management,
14 conservative decisionmaking and conduct of operations
15 familiarization has been completed or all licensed and
16 non-licensed operating personnel. This training is aimed at
17 the raising of standards, and each session was kicked off by
18 myself or another senior manager within Unit 3.

19 Next slide. Back one, please.

20 Slide 41.

21 We firmly believe that Millstone Unit 3 is ready

22 to safely resume power operation. Within the area of
23 physical readiness, the material condition is very good.
24 All required modifications are physically complete. And we
25 have met our goals for corrective maintenance backlogs.

40

1 In the area of regulatory readiness, we have
2 received and implemented all but one of our required
3 technical specification amendments. We have submitted all
4 manual chapter 350 significant items list packages for
5 enclosure. We have reviewed our NRC commitments and cleared
6 all but nine of those required for restart. We have
7 completed all but 34 of the 50.54 foxtrot significant items
8 required for restart.

9 Organizationally all departments are assessed as
10 ready to support power operations. Our procedure upgrade
11 program is complete, and our procedure compliance rate is
12 very good.

13 CHAIRMAN JACKSON: Let me ask you a question
14 since, you know, we've talked a lot about corrective actions
15 and maintenance, and your use of KPIs -- key performance
16 indicators. Have you -- and maybe you haven't had the
17 opportunity to do this -- but have you thought about whether
18 the way you -- the indicators you've used -- whether they in
19 fact conform with the kind of indicators that perhaps you
20 should use relative to the maintenance rule?

21 I had a discussion with another licensee about
22 this that there's a maintenance rule, that in a sense it
23 changes the focus. But people seem to still use the same
24 indicators as if there isn't a maintenance rule, and so have
25 you had an opportunity to think about that, or is that a "to

41

1 be done"?

2 MR. BROTHERS: I don't think we've fully done it
3 as much as we should. We have a few indicators that
4 directly relate to maintenance rule performance, and we have
5 a monthly maintenance rule system A1 status report.
6 However, it's not completely throughout the performance
7 indicators.

8 Another point that I think along that point is
9 that there are performance indicators that can -- if used
10 incorrectly can drive incorrect behavior, and you have to be
11 careful that you don't manage the indicator versus manage
12 the right process. So we're very careful about that as
13 well.

14 CHAIRMAN JACKSON: Okay.

15 MR. BROTHERS: In the area of operational
16 readiness we have met our goals for temporary mods, operator
17 workarounds, and control room deficiencies. Operator
18 performance is being closely tracked and it is acceptable to
19 resume power operations. Our startup and power sensor
20 program is in place, and all required training for our
21 operation crews has been completed.

22 In summary, the plant is in excellent physical
23 shape. As Marty will show, we are in compliance with the
24 design and licensing basis. Our organization is adequately
25 staffed, qualified, and trained to support the resumption of

42

1 power operations, and our Operations Department is ready to
2 resume operational control of the unit to begin our safe
3 return to 100-percent power.

4 If there are no further questions, I'll turn it
5 over to Marty Bowling to discuss corrective action and
6 ICAUP.

7 CHAIRMAN JACKSON: Thank you.
8 MR. BOWLING: Good morning. For the past year and
9 one-half I've been discussing the status and effectiveness
10 of corrective actions at Millstone. Today I'm pleased to
11 report to you that corrective actions are sufficiently
12 healthy and robust at Millstone to support the safe
13 operation of Millstone Unit 3.

14 Next slide.

15 I have used this slide in previous meetings to
16 depict the robustness of corrective actions for Millstone 3
17 and to provide you our internal self-assessment of the
18 process elements and individual attributes that in aggregate
19 result in effective corrective action. At our May 1 meeting
20 I discussed a number of these attributes. Of the remaining
21 attributes I have provided the performance indicator or
22 status which supports the restart of Millstone Unit 3 as
23 backup information in your package.

24 Today I would like to focus on engineering quality
25 and effectiveness. I will also be addressing the point that

43

1 you raised in your opening remarks with respect to our
2 assessment of the Level 4 discrepancy.

3 CHAIRMAN JACKSON: Okay. Why are tentative issues
4 area yellow and the unit organization --

5 MR. BOWLING: The two elements, unit
6 organizational readiness was discussed by Mike --

7 CHAIRMAN JACKSON: So it comes out --

8 MR. BOWLING: The work control --

9 CHAIRMAN JACKSON: Okay.

10 MR. BOWLING: Based on that self-assessment, and
11 the repetitive issues I'd like to discuss. In fact, this
12 topic is tracking but is not yet satisfactory. And that's
13 the elimination of repetitive issues.

14 I first want to emphasize on the next slide that
15 our engineering and technical efforts during this recovery
16 have overall been very effective. This slide provides a
17 number of key engineering, technical, and program issues
18 that have been addressed and resolved during this recovery.
19 In many cases this required getting program ownership and
20 management support prior to being able to resolve the
21 technical issue.

22 I am particularly pleased by the raising of
23 standards in the safety evaluation program area. This was
24 accomplished through upgraded procedures, management focus
25 and involvement, and by increasing the knowledge level of

44

1 the engineering personnel performing safety evaluations.

2 The standards have been set and reinforced by our
3 plant operating review committee, and the Nuclear Safety
4 Assessment Board. However, this is an area that we still
5 want to improve, and therefore we are currently providing up
6 to three additional days of supplemental training primarily
7 to site engineering personnel involved in the preparation of
8 50.59 safety evaluations and screens.

9 The remaining items on this slide are now
10 acceptable for Unit 3 restart. Each item continues to
11 receive management and nuclear oversight monitoring.

12 Next slide.

13 However, even with these successes, management is
14 still focusing on and providing attention to two key areas.
15 Mike has already discussed the operational area, and I will
16 discuss engineering quality and standards on the next slide.

17 I want to again state that our engineering quality
18 is acceptable for identifying and addressing issues that are

19 important to safety and which assure conformance to the
20 design and the licensing basis. Nevertheless,
21 attention-to-detail issues with calculational accuracy and
22 administrative procedural compliance continue to occur.

23 To address this situation, a number of steps are
24 being taken. First, our engineering management recognizes
25 and is taking ownership for these issues, is now providing

45

1 coaching and followup to raise the standard of what is
2 expected. This coaching will be provided to our principal
3 engineering contractors as well.

4 To further raise the standard, I have established
5 an engineering quality board made up of myself and the
6 directors of each engineering department. Our purpose is to
7 monitor quality and set the standards. I am also personally
8 meeting with the various engineering managers to raise
9 expectations and standards.

10 Second --

11 COMMISSIONER DIAZ: Just for you and Mr. Brothers,
12 because you're bringing the issue of engineering now, we
13 just went through an issue of about -- in which I guess the
14 conclusion was that you know you recognized the problem but
15 did not follow through, and I wrote something down that I'm
16 going to repeat to you, Mr. Brothers, that you said that
17 there didn't seem to be proper respect for the three
18 barriers for fission products release. And how does that
19 incident overall indicate the present quality of your
20 organization to be able to follow through issues of such a
21 nature?

22 MR. BROTHERS: Okay. I'd like to answer that
23 first, and I'll give you the answer I've given other people
24 associated with that. This did not meet our standards.
25 However, the argument that I call my bounding argument is

46

1 that the organization put the plant in the right condition
2 to conduct the maintenance. The fact that it was in Mode 5
3 and depressurized mitigated the organizational breakdown
4 that did occur. So that is the bounding argument that I
5 have.

6 After this in fact took place, we've made several
7 direct enhancements in association with our preventive
8 maintenance and monitoring system. We had a stand-down of
9 the unit that took place for about five days to reinstitute
10 that. The entire management staff met with every person who
11 works on Millstone Unit 3 in groups of working departments
12 to reiterate those standards, and we believe we have our
13 hands running. The follow-on activities associated with the
14 valve were handled very well.

15 COMMISSIONER DIAZ: Is there a level of
16 consciousness necessary for your engineering people to
17 systematically address issues of this nature with the proper
18 care?

19 MR. BROTHERS: I guess there is. I would not,
20 although the system engineer did bring it up, he did not use
21 our RP4 process, which is our corrective action process.
22 Had he done that, the formality of the response would have
23 been preordained. However, he did in fact raise it to a
24 sufficient number of people that it still should have been
25 handled.

47

1 MR. MORRIS: But I think there has been, and this
2 is the point that Mike's trying to make, that with the
3 stand-down and with the discussions that we have all had

4 with the Millstone team on this issue that we have raised
5 the awareness of what processes should have been used and
6 how to handle it. So we started right, didn't do well in
7 the middle, but we've done well in the after-event
8 evaluation and recalibration of the team, and we hope that
9 that sends a signal to you and others that we're prepared to
10 deal with these issues and make sure that everyone is
11 sharing the standards that we're trying to implement.

12 Bruce and Mike and the Millstone team are working
13 day and night at raising that, and as you can imagine, it
14 takes time for that kind of an approach to sink into
15 everybody. But Dr. Jackson said this was a learning moment.
16 It was a learning day or week, but it was a learning event,
17 and I hope that's good. We treated it as such. We wished
18 that it would have been different.

19 I think the maintenance conclusion that we thought
20 it was a simple matter, it's an inch-and-a-half line, you
21 know, when you think about the things you could work on in a
22 station, you know, we probably went at it without the right
23 degree of concern because of that. It looked familiar.
24 Packing a valve looked familiar. But we've learned, and the
25 standards are forever being raised.

48

1 MR. BOWLING: And, Commissioner Diaz, back to the
2 point I made before your question, our engineering
3 management recognizes what the standard is now, and between
4 them and myself we're personally setting that standard in
5 the engineering organization.

6 COMMISSIONER DIAZ: In other words, the bottom
7 line, when one of these things happens and there is a risk
8 associated with any of the barriers, a light bulb is
9 supposed to go on. I'm just asking whether a light bulb is
10 coming on.

11 MR. BOWLING: We are making that point.

12 COMMISSIONER DIAZ: All right.

13 MR. MORRIS: It's working better than the audio
14 system here today.

15 [Laughter.]

16 MR. MORRIS: Now I retract that statement.

17 [Laughter.]

18 COMMISSIONER MCGAFFIGAN: One of the issues that
19 Mr. Lockbaum raised at the last Commission meeting had to do
20 with what the role of contractor support and engineering
21 might be after restart, after the ICAVP program formally
22 concludes. I've looked at his testimony, I'm not sure
23 whether he's going to say it again this afternoon, but he
24 thought there might be a role, an enduring role for Sargent
25 & Lundy type activity; perhaps not as formal as it's been.

49

1 Do you see a need for any sort of external help as you go
2 forward?

3 MR. BOWLING: I do not, and a lot of my remaining
4 remarks will go to that issue.

5 Continuing on with our addressing engineering
6 quality, and I can't overemphasize that management --
7 setting proper management expectations right from the top
8 are critical to making sure the light bulb does turn on.

9 Second, though, engineering workloads need to be
10 rebalanced and leveled. The primary cause of the quality
11 issues has been the tremendous amount of engineering work
12 required during this recovery. This will be accomplished
13 through organizational realignments to more effectively
14 utilize our engineering resources. These realignments are
15 being planned for implementation after Millstone 3 safely

16 returns to power operation. The realignments will have as a
17 specific objective a focus on operational engineering
18 support and backlogs.

19 In addition, the design and configuration control
20 functions will be consolidated into one engineering
21 department.

22 Detailed action plans are also being developed to
23 address specific self-assessment findings, as well as the
24 ICAVP identified process weaknesses.

25 The ICAVP final report, which I'm sure Sargent &

50

1 Lundy will discuss during their presentation, recommended
2 several engineering enhancements in the areas of data
3 management, process efficiencies, engineering quality and
4 configuration control.

5 In addition, we have been binned and trended the
6 ICAVP DRs, as well as our own condition reports, to identify
7 the need for additional process enhancements, and to further
8 raise our standards.

9 With respect to the ICAVP self-assessment
10 feedback, I believe these results are providing us
11 additional insights in understanding our strengths and
12 weaknesses. I have discussed some of the weaknesses and
13 strengths. In my opinion, we have a strong and safe
14 operation.

15 Finally, we are using our engineering assurance to
16 measure our self-assessment nuclear oversight. I will get
17 back to that, and our efforts. Thank you.

18 CHAIRMAN JACKSON: Let me ask a question.

19 How do you judge engineering quality? Things come
20 to my mind such as risk resolution. How do you judge?

21 MR. BOWLING: We want to use a combination of
22 three elements. First is performance indicators, which can
23 include repetitive issues, particularly design issues, the
24 number of higher significant condition reports. So that's
25 the first area, is to get a proper or a set of indicators

51

1 that you can set a goal, set the standard, and then measure
2 your performance against it.

3 Second is the use of self-assessment, and this is
4 internal within engineering. We also have an engineering
5 assurance section whose primary focus is to look at
6 engineering quality, and then we have the nuclear oversight
7 self-assessments. So that's the second element.

8 CHAIRMAN JACKSON: Okay. The point is, do you
9 have performance-oriented criteria or indicators? See,
10 because in a certain sense -- okay. I guess inherent in
11 your indicators, is that what you're telling me, because --

12 MR. BOWLING: Yes.

13 CHAIRMAN JACKSON: -- because one could argue that
14 having indicators and doing self-assessments is how you do
15 it, but the issue is, you know, what's the focus in terms of
16 the result.

17 MR. BOWLING: Well, we use the engineering quality
18 board to set the goals for the indicators and then to
19 monitor the performance.

20 If I could have slide 47.

21 At the May 1st meeting, I briefly discussed the
22 review we conducted in response to several design
23 modification issues -- most notably, the RSS orifice
24 modification and resultant damage to the expansion joints
25 during testing.

52

1 In retrospect, it turned out to be a very complex
2 issue -- and we all missed it. By we, I mean Westinghouse,
3 Stone & Webster, the expansion joint vendor, Flextronics,
4 Sargent & Lundy, the ICAVP contractor and, most importantly,
5 NU.

6 As a result, we have performed a comprehensive
7 root cause and then expanded our review by assessing an
8 additional 194 physical modifications performed during this
9 outage.

10 Key causal factor areas addressed in the review
11 included adequacy of the design, testing and vendor
12 interfaces. To this scope was added a review of level 1
13 design-related condition reports.

14 Finally, we reviewed the twelve RSS related
15 modifications in aggregate to confirm design and licensing
16 requirements. Nuclear Oversight independently reviewed
17 these results, along with making their own technical
18 assessments.

19 No significant new issues were found. The overall
20 conclusion was that the design process and technical quality
21 was adequate. The ICAVP contractor provided additional
22 assurance by reviewing the final RSS modifications and
23 reaching a consistent conclusion.

24 Next slide.

25 The response to the ICAVP DRs demonstrates

53

1 acceptable engineering quality. Recognizing the
2 arm's-length communication protocol requirement which was
3 established to insure independence between NU and the NRC
4 and ICAVP contractor, 78 percent of the DRs were responded
5 to about the need for additional follow-ups. Of the
6 remaining 22 percent, over two-thirds of the follow-up were
7 due simply to a need for additional information or
8 clarification of what was being asked by Sargent & Lundy or
9 being provided by NU.

10 A better measure of the quality of the NU
11 responses are provided in the last two items on this slide.
12 The key measure of quality is the number of initial DR
13 responses that required the need for additional corrective
14 action by NU in order to be acceptable to the ICAVP
15 contractor. Only four percent of the DR responses by NU
16 were in this category, including three level 3 DRs.

17 As I will discuss in the next two slides, the
18 Millstone Unit 3 engineering effort has been effective in
19 both identifying and addressing the safety significant and
20 the DB/LB conformance issues.

21 This slide shows the number of reportable issues
22 identified during the recovery and their safety significance
23 based on risk-informed insights. Most were self-identified
24 by the Unit 3 engineering effort. The ICAVP process has
25 been very useful by providing additional assurance and a

54

1 higher level of confidence that all of the safety
2 significant issues have been identified.

3 Our engineering effort to restore the design and
4 licensing bases was comprehensive. Nonetheless, the ICAVP
5 process did find additional issues. This slide shows the
6 breakdown of discrepancy reports identified by the ICAVP
7 contractor. Of the 974 confirmed DRs, over one-third were
8 either determined to be non-discrepant or previously
9 identified by NU after further review.

10 Of the remaining two-thirds, 20 -- this slide
11 indicates 18, but there have been a couple since submitted
12 -- of the remaining two-thirds, 20 have been determined to

13 be level 3 DRs, which are DB/LB issues of low safety
14 significance. Only one of these was determined to be
15 reportable under 50.73. This demonstrates that the
16 Millstone Unit 3 engineering effort was effective in
17 identifying the LB/DB issues.

18 With respect to the large number of level 4 DRs
19 confirmed by the ICAVP contractor, I would like to make
20 several observations.

21 First, as I have said at previous meetings,
22 although we have done a reasonably effective job of
23 engineering, it is not perfect. Our own inattention to
24 detail has contributed to some of the identified level 4
25 DRs.

55

1 Second, the Millstone Unit 3 Configuration
2 Management Review was a graded safety review. This means
3 that once reasonable assurance was obtained that there was
4 no safety, regulatory, DB or LB issues, the review was
5 stopped. Therefore, in addressing the level 4 DRs, we have
6 used trending and self-assessment to determine if, in
7 aggregate, these findings represent a significant
8 programmatic weakness in the graded safety review approach
9 that we took. We have not found this to be the case.

10 As you know, we are committed to addressing each
11 of the level 4 findings. In addition, we will be raising
12 the standards on attention to detail issues so that over
13 time, these type of minor errors will be corrected.

14 Third, we have used self-assessment including
15 trending of the Level 4 DRs to expand the scope of our
16 engineering reviews. I have indicated on this slide the
17 principal areas where additional reviews were conducted in
18 order to ensure that the Millstone Unit 3 design and
19 licensing basis has been adequately restored.

20 A timeline for these reviews as well as other
21 self-assessments conducted during the last two years is
22 provided as a backup in your slide package, but as an
23 example you will note the fifth item on this slide, which is
24 calculational control. We looked hard at this area in
25 October of 1997 as a result of our own self assessments, as

56

1 well as the ICAVP findings and discrepancy reports. Based
2 on these reviews, we strengthened the calculational control
3 area by assuring that the key calculations of records were
4 identified and properly utilized when making changes.

5 Calculational control is also enhanced by the
6 incorporation of Unit 3 calculations into the automated
7 passport system.

8 Finally, we have provided guidelines for
9 periodically reviewing and updating key calculations. This
10 corrective action has been completed.

11 COMMISSIONER DIAZ: Let me go back to the same
12 issue again.

13 Obviously you have a serious -- a good
14 organization of elements in here and my question is do you
15 believe after all of this time, and there's a lot of time
16 that you have, that your Engineering organization has
17 developed into a safety-conscious Engineering organization
18 that is capable of providing the engineering safety
19 standards for Millstone Unit 3 to operate the maintenance
20 modifications, et cetera, et cetera?

21 MR. BOWLING: Yes, I do, and the reason for that,
22 as I move through this briefing, is that the Engineering
23 organization has found the safety significant issues. They

24 are capable of finding and understanding what is the design
25 and licensing basis and have been able to effectively

57

1 restore that and to maintain that.

2 COMMISSIONER DIAZ: Okay. You are telling me that
3 in the case of the restrainer in the line and the case of
4 the primary coolant leak that really at least a significant
5 part of the lightbulb came on?

6 MR. BOWLING: Yes, and that is where we're at now
7 is down below these levels to the attention to detail, to
8 the sensitivity of the impact on operations and driving
9 those points into the standard of the organization.

10 COMMISSIONER DIAZ: And do you believe that the
11 Operations and Maintenance organizations have confidence
12 that the Engineering organization has the right safety
13 awareness?

14 MR. BOWLING: I believe they do, in my --

15 MR. BROTHERS: I would concur with that. We have
16 an example going on right now today in which what is holding
17 us up to be ready to go into Mode 3 is work on a nonsafety
18 pressure control valve associated with the electric main
19 feed pump.

20 We found the valve had some washout, some
21 below-minimum welds. The valve is not in use during normal
22 operation. Operations asked the question to Engineering,
23 can we go forward without doing a weld buildup on the valve.
24 Engineering said you cannot, and so we are doing that weld
25 buildup at this time and that is the type of thing that we

58

1 have at all times.

2 COMMISSIONER DIAZ: Thank you.

3 MR. BOWLING: Slide 53, please.

4 The corrective actions necessary to restore DB/LB
5 conformance that was identified by the ICAVP process are
6 substantially completed. This slide shows the status of
7 correcting the confirmed Level 3 and 4 DRs.

8 The few remaining Level 3 DR assignments will be
9 completed prior to entry into Mode 2.

10 The remaining Level 4 corrective action
11 assignments will be completed as committed to in our
12 deferred items Backlog Management Plan discussed at the May
13 1st Commission meeting. However, you can see that a
14 substantial amount of the Level 4 DR corrective action
15 assignments have already been completed.

16 A comprehensive effort has been made to restore
17 the design and licensing basis for Unit 3. An equally
18 comprehensive effort is being placed on maintaining
19 compliance with DB, LB and regulatory requirements. This
20 effort has consisted of establishing programs and
21 implementing procedures, organizational realignments and
22 focus, assigning ownerships, and providing comprehensive
23 training.

24 For example, several thousand site personnel have
25 now received configuration management training. To provide

59

1 additional assurance in maintaining DB/LB, two new
2 organizations, Engineering Assurance and Unit Configuration
3 Management teams, were established and are now fully
4 functioning.

5 Finally, the ICAVP process along with the NRC's
6 OSTI and 40-500 inspections have provided additional
7 assurance that configuration control is effective and can be
8 maintained. Next slide, please.

9 In summary, it is our assessment that the

10 engineering design and technical adequacy of the work that
11 went into restoring the Unit 3 design and licensing basis
12 was adequate. The Millstone 3 engineering design review was
13 comprehensive and was expanded as necessary based on our own
14 self-assessments.

15 These reviews identified the safety significant
16 and DB/LB conformance issues. The corrective actions
17 necessary to restore the design and licensing basis
18 conformance and to comply with the license regulations in
19 the FSAR have been substantially completed. The few
20 remaining Level 3 DR assignments will be addressed prior to
21 entering Mode 2.

22 The configuration management and 50.59 safety
23 evaluation training has been provided to a large segment of
24 the Millstone workforce. Periodic and supplemental training
25 is being provided. The necessary programs, processes, and

60

1 procedures along with clear ownership and organizational
2 roles, are in place to maintain DB/LB conformance and
3 regulatory compliance.

4 We will be realigning our organization
5 post-restart to further strengthen configuration management,
6 consolidating all DB/LB control activities into one
7 department.

8 Engineering resources and talent are sufficient to
9 support the safe operation of Unit 3 and the recovery of
10 Unit 2. Engineering management is committed to raising
11 standards, and you have my personal commitment on that.
12 Next slide.

13 In conclusion, the NRC's August 14th, 1996
14 Independent Corrective Action Program order can be closed
15 for Millstone Unit 3. The basis for this conclusion has
16 been docketed with the NRC and provides the basis for future
17 operation of Unit 3 in accordance with its license
18 regulation in the FSAR.

19 Our assessments have confirmed that a robust and
20 effective Corrective Actions Program is in place that has
21 addressed the root causes of the Millstone performance
22 decline, resolve technical issues, supports the
23 safety-conscious work environment, and has restored
24 conformance to the design and licensing basis and compliance
25 with the NRC regulations.

61

1 An effective self-assessment program that I
2 discussed at the May 1st meeting supplements and reinforces
3 the Corrective Actions Program.

4 Our Backlog Management Plan submittal provides the
5 commitment and the necessary oversight to address the
6 post-restart backlogs. Backlog status will also be provided
7 quarterly to the NRC.

8 The ICAVP process has provided the public
9 additional assurance and a higher confidence that Millstone
10 can be operated in conformance with its design and licensing
11 basis. The ICAVP process has also independently validated
12 that Millstone 3 Engineering was effective in restoring the
13 design and licensing basis for the 88 key maintenance rule
14 systems.

15 As a final point, I want you to know that I am
16 personally confident that Millstone is now ready to support
17 the safe operation of Unit 3.

18 If there are no further questions, I will turn
19 this over to John Streeter.

20 MR. STREETER: Good morning. My presentation will

21 address Nuclear Oversight's independent assessment of the
22 readiness of Millstone Unit 3 for safe, event-free service.
23 Oversight's conclusion is that Millstone 3 is
24 ready for restart.

25 There are two things I would like to point out at

62

1 the outset and then I'll run through my presentation.
2 Number one, this conclusion as to readiness for restart is
3 contingent upon completion of all the items on Nuclear
4 Oversight's Mode 2 issues list that I'll refer to
5 periodically.

6 Secondly, a theme that has run throughout our
7 presentations, and will go throughout mine, is although we
8 are saying we are ready for restart, there is not one of
9 these areas that we as a team do not realize that we need to
10 make further improvements, and we are committed to work
11 together to continuously improve our performance.

12 The results of our intensive assessments confirm
13 that progress in meeting the restart success criteria for
14 the 16 key issues is satisfactory to support restart.
15 Limited aspects of the success criteria that have not been
16 achieved at this time are being carefully tracked by us on
17 the Mode 2 issues list to successful completion. All of
18 these issues are constraints to entry into Mode 2.

19 Oversight has reached agreement with line
20 management on each one of these Mode 2 issues as this time
21 to successfully resolve them, and I am personally committed
22 and involved in assuring their satisfactory resolution.

23 We continue to participate with line management in
24 holding the workforce accountable to high performance
25 standards by Oversight closely monitoring the work

63

1 activities and reinforcing performance standards. We will
2 assure continued progress toward achieving excellence in all
3 phases of our performance.

4 As has been the case with earlier key milestones,
5 Oversight will have a voice in making decisions on power
6 level changes during startup and power ascension.

7 The Nuclear Oversight Restart Verification Plan
8 that we have spoken of frequently in our briefings of you
9 assesses key issue program effectiveness using industry,
10 NRC, and NU management standards and expectations. Areas
11 needing improvement are routinely provided to the line to
12 achieve excellence in performance.

13 Oversight also assesses the collective impact and
14 significance of emerging issues which sometimes offer
15 additional performance perspectives.

16 For example, a recent NORVP process conclusion was
17 that there were no Mode issues in the area of the conduct of
18 operations, whereas a collective assessment of a series of
19 operational events that Mr. Brothers has talked about
20 earlier identified some Mode 2 issues which we are now
21 following.

22 Oversight maintains the Mode 2 issues list, which
23 consists of items that must be resolved as a condition of
24 our approval and concurrence of entering into Mode 2. It is
25 a living document. Issues are added and deleted based on

64

1 emerging issues and resolution progress.

2 A project manager has been assigned by me to
3 follow the issues and he provides daily information to line
4 management. He also meets with me on the status of these
5 issues several times a week to status them and to understand
6 if proper resources are being dedicated to the resolution.

7 Oversight will continue to use the nuclear
8 oversight restart verification plan results in conjunction
9 with the Mode 2 issues list as the basis for our decision on
10 the readiness to proceed into Mode 2.

11 You will recognize this slide as an update of the
12 nuclear oversight restart verification plan results that we
13 have routinely presented to you in past briefings. This
14 information was current as of Friday, May 15. Progress has
15 been made since that time which is reflected in our results
16 of this past Friday, May 29. That time, training, conduct
17 of operations, and materials all achieved a green status.
18 The remaining yellow areas are engineering and mode changes.
19 The area of mode changes will not achieve a green status
20 until all of the issues on the Mode 2 issues list have been
21 resolved.

22 Although all areas --

23 CHAIRMAN JACKSON: Excuse me. What were the
24 issues that kept materials yellow up until this past Friday?

25 MR. STREETER: Primarily the area of assuring that
65

1 parts installed in safety application had the proper
2 qualifications.

3 CHAIRMAN JACKSON: And so what happened as of last
4 Friday to turn that to green?

5 MR. STREETER: That issue has been resolved where
6 the review -- the line conducted the review of the work
7 history of safety-related applications of parts. They
8 identified those parts that did not have the proper
9 pedigree. And there were some approximately 50 of those I
10 believe, and of those, they have all been determined to be
11 acceptable for operability.

12 MR. BOWLING: John, if I could add --

13 CHAIRMAN JACKSON: Excuse me a second. Have you
14 determined that the methodology for making those judgments
15 is equally acceptable?

16 MR. STREETER: Yes.

17 MR. BOWLING: I'm sorry.

18 CHAIRMAN JACKSON: That's okay.

19 MR. BOWLING: What John was conveying is our -- it
20 was keeping this open in a series of responses to the NRC
21 staff on one of the COL item issues in order to get that to
22 closure, so this has basically been a series of responses to
23 the NRC staff on the adequacy of the qualification of parts
24 and materials in the plant, and we have resolved those
25 issues.

66

1 CHAIRMAN JACKSON: Okay. You have resolved them
2 relative to the, again, the specific parts and materials, or
3 you have resolved them relative to your methodology for
4 making --

5 MR. BOWLING: Both.

6 CHAIRMAN JACKSON: Judgments? And the NRC staff
7 concurs with that, as far as you know?

8 MR. BOWLING: As far as I know.

9 MR. STREETER: As far as we know.

10 COMMISSIONER DIAZ: Why isn't training a Mode 2
11 issue? I understood from all the presentations that you
12 still are a little bit concerned about people being a little
13 rusty because you've been shut down two years. What made
14 you decide that training is no longer a Mode 2 issue?

15 MR. STREETER: Commissioner, training -- the
16 training aspect that you see on this slide includes all
17 those areas that related to operator performance, and I'll

18 talk to you specifically here in a second, as well as all of
19 the training department.

20 In our observations of the training department as
21 a whole, including operational training, is that they have
22 made sufficient progress in resolving Mode 2 issues to where
23 we believe that they are -- they're sufficiently ready for
24 restart. Keeping in mind that there's no way I'm
25 representing this as a top-caliber performance, as I would

67

1 not in any of these areas.

2 COMMISSIONER DIAZ: Okay. Would you -- in all of
3 that, how would you place the training status of the
4 operating crew?

5 MR. STREETER: How I would characterize that is in
6 our oversight of the operations activities we have
7 determined that all of the training that should have been
8 conducted has been conducted. Additionally as a result of
9 these operational events that occurred there was a
10 determination made that we needed some what we call
11 just-in-time training to refresh people's recollection and
12 to avoid repetition of these kinds of events we've confirmed
13 and we attended some of that training and we're convinced
14 that that was conducted.

15 Now I would also say that between now and Mode 2
16 we are watching very closely operations performance, and
17 should we see the need for additional training in there, we
18 will discuss that with the line, and I'm sure that we will
19 reach agreement to do whatever is necessary.

20 COMMISSIONER DIAZ: Okay. Thank you.

21 MR. STREETER: In the following slide -- pardon
22 me -- on the right-hand side I failed to point out you'll
23 see a little annotation there with -- a lower-case "m" with
24 a circle around it. Those are just to indicate to you those
25 areas where we have Mode 2 issues on this -- Oversight's

68

1 Mode 2 issues list. Now you note some of those areas are
2 green. So one can't simply go by the color and say it's a
3 go-no go. You can still have one that appears satisfactory
4 restart, but there may be an issue, and there are in some of
5 these cases issues that still have to be resolved before
6 proceeding.

7 What I'd like to do now is in the next few slides
8 focus on those areas that are yellow which generally means
9 those that are in need of the most improvement, and those
10 that are designated with the "m."

11 Since last Friday I will mention that there are
12 two additional areas that should be so annotated with an
13 "m," and that's in the areas of fire protection and
14 environmental monitoring. And this just illustrates the
15 living list concept of this Mode 2. This is the way it is
16 today. It could change tomorrow. It could get smaller; it
17 could get larger. But we will assure through this list that
18 all issues that need to be resolved prior to entering Mode 2
19 are so done.

20 So in the following slides I'll talk about the --
21 what you see up there is the yellow areas, and those
22 designated with an "m."

23 CHAIRMAN JACKSON: Let me stop you for a second.
24 You said this is a living designation. And how do you
25 decide -- how do you go about deciding whether some issue is

69

1 a Mode 2 issue or not? I mean, either it is -- I mean, this
2 goes kind of drawing from Commissioner Diaz's comments about
3 the training -- I guess I'm confused about how you decide

4 that something is a Mode 2 issue?

5 MR. STREETER: If we could take that training,
6 just to illustrate the point. First it's important for me
7 to tell you that the people that we have on -- who are
8 looking at operations activity specifically, they're very
9 well qualified people on this round-the-clock coverage.
10 They have experience from a lot of plants in looking at
11 these activities. Most of them are previous --

12 CHAIRMAN JACKSON: No, no, what I'm trying to get
13 at is whether if something gets this little annotated "m"
14 because you think it's an important issue to be in the green
15 before you go to Mode 2 --

16 MR. STREETER: I was --

17 CHAIRMAN JACKSON: Or do you feel that it's
18 because there's something that comes up, and then that makes
19 it a Mode 2 issue? That's what I mean by what are your
20 criteria for deciding if something is a Mode 2 issue?

21 MR. STREETER: It's based on our experience and
22 judgment.

23 CHAIRMAN JACKSON: So you don't have any criteria?

24 MR. STREETER: That's what I was -- criteria other
25 than I alluded to the restart success criteria. That is

70

1 one. Of course if we -- there were issues on our Mode 2
2 list that are necessary for compliance with our tech specs
3 that we will be going into when we go into Mode 2. So that
4 would be a criteria. As far as performance standards go,
5 it's all of the attributes that are in our nuclear oversight
6 restart verification plan. So we have a lot of criteria
7 that we look at to make these judgments.

8 MR. KENYON: Let me try and add to that, Chairman
9 Jackson. What oversight has participated in setting the
10 standards, and then on an ongoing basis it evaluates
11 performance against the standards, and it can judge for a
12 period of time that something appears to be satisfactory,
13 and then there can be an event or there can be an assessment
14 that shows well, whereas we thought this was okay, now we
15 think otherwise, and thus it becomes an issue for Mode 2.

16 So that's the point that John was making on this
17 being a living. The standards aren't moving around, but you
18 are -- on an ongoing basis they are evaluating the
19 performance of the organization against the standards. They
20 are constantly looking. So when something materializes
21 because they've looked at something they haven't looked at
22 before or because there's a performance event or whatever,
23 that can become an issue if it's a serious departure from
24 the standard we have set. So there are the standards, there
25 is the ongoing view, and things come on and off the list

71

1 based on performance.

2 CHAIRMAN JACKSON: Okay. Because one could argue,
3 you know, why are not all of these on slide 60 Mode 2
4 issues, and then they may or may not pop up depending on
5 whether something comes up. That would have been -- that
6 would have given me more comfort. Or to say that you
7 actually have some specific criteria for determining when
8 something in fact is a Mode 2 issue as opposed to something
9 that's buried through this plan, that plan, this list, that
10 list. So --

11 MR. KENYON: They all are Mode 2 issues; what he's
12 showing is what are the open issues.

13 CHAIRMAN JACKSON: But that's the question. He
14 didn't say that. You just did. Okay. Thank you.

15 MR. KENYON: Yes.
16 MR. STREETER: Slide 61, please. Moving to the
17 area of operations, based on the Nuclear Oversight Restart
18 Verification Plan and results, control room observations,
19 this 24-hour coverage and other oversight assessment,
20 oversight concludes that operations is ready for restart.
21 The status changed from yellow to green in the most current
22 assessment, but we still see the need for considerable
23 improvement.
24 Oversight is determined that the restart success
25 criteria be met and we are tracking Mode 2 issues to

72

1 resolution. The principal issues outstanding at this point
2 are configuration control and operator performance.

3 I mentioned to you in the May 1st Commission
4 briefing that oversight was providing around the clock
5 presence in Unit 3 until we complete start-up and power
6 ascension activities. That coverage continues to be
7 provided by very capable individuals, most of whom were
8 previously licensed or certified operators. Oversight will
9 continue to maintain the 24-hour coverage until operations'
10 performance justifies reduced coverage.

11 Next slide, please. Oversight is satisfied with
12 the preparations for the Unit 3 start-up and power
13 ascension. We have reviewed and concurred in the start-up
14 and power ascension plans, reviewed the procedures, assessed
15 the training in those procedures, and will be following
16 procedure implementation.

17 To take advantage of industry experience, we
18 brought in an oversight staff member from another plant that
19 had recently restarted from an extended recovery outage to
20 provide us with advice on areas to monitor. We have also
21 had SROs from other plants likewise advise us. Further, we
22 have added a person experienced in operation assessment to
23 coordinate our around the clock operations coverage and
24 staff that effort with the experienced people I previously
25 alluded to.

73

1 There are no oversight Mode 2 issues related to
2 start-up and power ascension. As I indicated earlier,
3 oversight will maintain the 24-hour plant coverage
4 throughout the power ascension program. This not only
5 includes observation of the control room but maintenance and
6 other plant activities as well. Oversight will concur in
7 decision making on raising power levels as Unit 3 progresses
8 through the power ascension stages.

9 Oversight concurs that the corrective action
10 program is ready for restart. Our assessments indicate the
11 work force supports and implements an effective corrective
12 action program. The restart success criteria have been met
13 and there are no Mode 2 issues in this area. Oversight will
14 continue to monitor the identification, evaluation, closure
15 and effectiveness of corrective actions for continuing
16 improvement.

17 The restart success criteria for configuration
18 management and regulatory compliance have been met.
19 Oversight concurs that compliance with the Unit 3 licensing
20 and design basis has been restored and that the areas of
21 configuration management and regulatory compliance are ready
22 for restart. Several Mode 2 issues have been identified,
23 are being tracked to resolution. Oversight will continue
24 to monitor compliance with the licensing and design basis.

25 Sixty-five, please. Oversight believes

74

1 engineering is ready for restart. We are not saying we are
2 content with engineering's performance, neither is the line,
3 but performance has progressed to a satisfactory level.
4 Engineering has been the subject of extensive oversight
5 reviews and we have observed performance deficiencies such
6 as lack of attention to detail in some engineering
7 activities. All of these deficiencies have been or are
8 being addressed to our satisfaction.

9 To ensure that an appropriate level of line
10 management focus continues in the engineering area,
11 oversight is meeting frequently with the engineering
12 director to address the engineering issues on the oversight
13 Mode 2 issues list. We expect that this interaction will
14 continue through start-up and power ascensions.

15 There are some Mode 2 issues and these are being
16 tracked to resolution, including issues related to training
17 for engineers and conducting operability determinations,
18 safety evaluations, screenings and such activities. We will
19 continue to maintain an intense level of oversight of
20 engineering performance during and after restart and power
21 ascension, with particular emphasis focused on areas such as
22 configuration management and design and systems engineering.

23 The status of the training area changed from
24 yellow to green on May 29th. Oversight has determined that
25 the restart success criteria have been met. There are no

75

1 Mode 2 issues for training. Oversight is currently
2 maintaining a substantial presence to monitor
3 self-assessment activities, corrective action and systems
4 approach to training within the training organization.

5 CHAIRMAN JACKSON: So let me repeat, let me get
6 you again here. Tell me precisely what occurred to go from
7 yellow to green on May 29th, vis-a-vis training?

8 MR. STREETER: It was improvements in the
9 self-assessment approach, implementation of corrective
10 actions. Those are the two areas.

11 CHAIRMAN JACKSON: Have any of your operators
12 complained relative to feeling adequately trained?

13 MR. STREETER: I have -- I am not knowledgeable of
14 any comments along that line.

15 MR. BROTHERS: The only item that came up in terms
16 of training was, as we talked of the power operated relief
17 valve, there was a general discussion as we probed into it,
18 but I wouldn't attribute that to training. It was never
19 identified as an evolution that was difficult and that
20 training has been enhanced.

21 MR. STREETER: Sixty-seven, please. Oversight
22 concludes that the materials area is ready for restart. It
23 is another area whose status recently changed from yellow to
24 green. The Mode 2 issue that was being tracked to
25 resolution was resolved yesterday and it was the last

76

1 remaining Mode 2 issue list for materials. Oversight will
2 continue to monitor this area for further enhancements.

3 There are some other areas that I have not covered
4 at this point that have outstanding Mode 2 issues, and those
5 are emergency preparedness, environmental monitoring and
6 fire protection, each with an issue.

7 In total, there are 18 issues on the nuclear
8 oversight Mode 2 issues list. The majority of those relate
9 to engineering, approximately half of them. There's another
10 group in regulatory compliance. And probably one of the
11 most substantive areas that we have to resolve in the Mode 2

12 issues list is operator performance, following that, make
13 sure that we remain competent in the performance prior to
14 entering Mode 2.

15 The Nuclear Oversight Restart Verification Plan
16 has been an invaluable tool in improving performance and
17 preparing for the safe, event-free return to service of Unit
18 3. Consequently, we intend to continue the use of this tool
19 and focus our intensive efforts already in progress on the
20 operational aspects of Unit 2 and to assess the Unit 2
21 recovery efforts.

22 NORVP will be revised by June 26th. By reflecting
23 the progress we have made at Millstone in our NORVP
24 experiences, it will enable us to more smartly direct our
25 resources to those areas in need of most attention.

77

1 In conclusion, oversight believes Millstone 3 is
2 ready for restart. Our intensive Nuclear Oversight Restart
3 Verification Plan reviews confirmed that progress toward
4 meeting the restart success criteria is satisfactory to
5 support restart. Elements that have not yet been fully met
6 are being closely tracked to successful completion by
7 oversight. We maintain a continuing review of Mode 2 issues
8 which must be completed to our satisfaction before we will
9 give our final approval to proceed into Mode 2.

10 During our assessments, we have continued to
11 emphasize line management and oversight performance
12 expectations. I am confident that this approach will lead
13 to an excellent level of performance in all areas.
14 Oversight will continue to maintain around the clock review
15 of operations and activities during start-up and power
16 ascension. We will not reduce our coverage until we are
17 satisfied that performance merits a reduction.

18 Finally, we will concur in the power level change
19 decisions as we proceed in the start-up and power ascension
20 towards safe, event-free, full power operations.

21 If there are no questions, I'll turn it back over
22 to Mr. Kenyon.

23 CHAIRMAN JACKSON: No, I do have a question. I
24 just want to be sure I understand what you mean on Slide 60.
25 You are not saying that these issues are not important to

78

1 going to Mode 2. When you have the M's, you mean something
2 specific has popped up on the radar?

3 MR. STREETER: That's correct.

4 CHAIRMAN JACKSON: Is that what you are --

5 MR. STREETER: That's correct.

6 CHAIRMAN JACKSON: Okay. Because all of them are
7 important.

8 MR. STREETER: All of them are vitally important.

9 CHAIRMAN JACKSON: Okay.

10 MR. KENYON: Chairman Jackson and Commissioners, I
11 believe that Millstone Unit 3 is ready for restart subject
12 to completing the remaining Mode 2 items. The significant
13 issues resulting in the performance decline at Millstone
14 have been addressed. We have worked diligently and with
15 great effort to regain the trust and confidence of our
16 employees, the NRC and the general public. The essential
17 lessons have been learned.

18 We pledge that should the Commission authorize the
19 restart of Unit 3, we will resume operations with
20 conservatism, vigilance and a profound respect for the
21 public safety, which is our responsibility. We respectfully
22 seek your approval of our restart readiness. This concludes
23 our presentation.

24 CHAIRMAN JACKSON: Thank you. Mr. Morris.
25 Any further questions from any member?

79

1 [No response.]

2 CHAIRMAN JACKSON: Thank you very much for your
3 presentation.

4 We will now hear from the representatives from
5 Sargent & Lundy, if you could come forward, please. Thank
6 you.

7 Okay. We will -- we have lost our sound again.
8 The meeting will come to order, please. Thank you

9 MR. ERLER: I can talk pretty loud anyway, so
10 hopefully everybody can hear until they correct the sound.

11 Good morning, Chairman Jackson and Commissioners,
12 I am please to talk to you on Sargent & Lundy's review of
13 Northeast Utilities' Millstone corrective action program.

14 With me is Don Schopfer, Verification Manager for
15 our review. Sargent & Lundy, I am pleased to report, has
16 completed the review and this has been an extensive in-depth
17 review covering many aspects of the plant, from system to
18 performance, licensing, control processes, operation and
19 testing. I believe it is one of the most comprehensive
20 verification programs to date.

21 S&L; has put a team of our experts for over a year
22 reviewing documents, inspecting the plant and its
23 operations, making sure of the in-depth understanding of the
24 performance and the corrective action. It has been done
25 under an open protocol to allow full review of each step by

80

1 the general public. To date, we are ready to review with
2 the Commissioner the results, as we have done in the past.
3 Don Schopfer, the Verification Team Manager will be
4 presenting the results of our review.

5 MR. SCHOPFER: Good morning. Thank you. In terms
6 of background, just very briefly, before we get to the
7 conclusions of the overall review, I would like to go over
8 the objectives of the ICAVP as described in the order that
9 was issued in August of 1996.

10 The objectives were to verify that for the
11 selected systems that Northeast Utilities' configuration
12 management plan had identified and resolved existing
13 problems with the design and licensing basis. That
14 Northeast Utilities had documented and utilized the design
15 and licensing basis for those systems. And that Northeast
16 Utilities had established programs, procedures and processes
17 for effective to configuration management in the future.

18 As described in Commission Paper 97-003, the ICAVP
19 was performed in a three-tiered process. Those tiers were
20 structured to take care of various pieces of the overall
21 scope of the ICAVP. Tier 1 was to verify that the systems
22 meet the licensing and design basis and system
23 functionality. Tier 2 was to verify that the system design
24 parameters relied on to mitigate the consequences of
25 postulated accidents analyzed in the FSAR were consistent

81

1 with the performance of the current system configuration.
2 And Tier 3 was a verification that configuration control
3 processes have not introduced changes that have put the unit
4 in non-conformance with its licensing and design basis. The
5 bulk of that review process that we have performed was the
6 Tier 1 system review.

7 The scope of the review, as Brian mentioned, was
8 very significant. We did a detailed review of four system

9 groupings and those groupings consisted of 15 of the 88
10 maintenance rule group 1 and 2 systems. We also did a
11 limited review of 51 interfacing systems with a special
12 emphasis on electrical and I&C;. The electrical system feeds
13 from the safety related bus to the individual component was
14 reviewed in its entirety and the I&C; signals to and from
15 interfacings systems to the selected systems were reviewed.

16 In addition, Tier 1 reviewed some 1500 corrective
17 actions that Northeast Utilities had identified during their
18 configuration management plan.

19 Tier 2 reviewed some 230 critical characteristics
20 of 22 accident mitigating systems that are used and analyzed
21 for accidents, analyzed in the FSAR.

22 And Tier 3 reviewed 11 different change processes
23 and the implementation results of those processes on the
24 more recent time frame, and we reviewed 284 past changes
25 that were done under previous time frames and systems and

82

1 processes, and 71 other corrective action documents, meaning
2 a selected sample outside of the 15 systems.

3 CHAIRMAN JACKSON: Let me take you back to the
4 Tier 1 system. Early on in the process there was a lot of
5 talk about the number of systems and so in conclusion, you
6 know, coming to this point, you are satisfied in terms of
7 your review of the 15 systems, that that's comprehensive
8 enough, and with the interfaces, that it appropriately
9 covers what needs to be covered and allows you to answer or
10 address the objectives of the ICAVP order?

11 MR. SCHOPFER: Yes.

12 CHAIRMAN JACKSON: And did anybody on your team
13 feel any need to go deeper into any of the systems?

14 MR. SCHOPFER: Well, the first question, yes, I
15 think the selection was adequate. The grouping of the
16 systems made it such that we had an electrical system, we
17 had an HVAC system, we had two mechanical systems, and, of
18 course, the boundary discussions and the interfaces that
19 were set up covered much more than that besides the systems
20 in particular. So I think we did have a very broad view of
21 systems within the plant that reflected their overall --
22 NU's overall configuration management process.

23 And you asked if anybody felt the need to go
24 deeper.

25 CHAIRMAN JACKSON: Or broader.

83

1 MR. SCHOPFER: Good. Because the deeper,
2 absolutely not. We went as deep as I think we could
3 possibly go. As far as broader, no, I don't think we felt
4 that there was anything not touched, any specific area not
5 touched with the variety of systems that were purposely
6 selected that way by the staff. And so we did not have any
7 issues of thinking that we weren't covering certain areas,
8 because I think we did cover all areas.

9 CHAIRMAN JACKSON: Okay. Thank you.

10 MR. SCHOPFER: Next slide, please. This slide
11 shows the grouping of systems. The terminology that I have
12 used in the past and will use is down at the bottom of the
13 page, and the systems that are included in those groupings
14 are included above. The service water system, the quench
15 spray and recirculation spray systems and the refueling
16 water storage tank included in the grouping RSS. Three HVAC
17 systems, under our terminology HVACs "slickers" which is
18 supplemental leak -- leakage collection and release system,
19 the aux. building, HVAC, the safety related portion of the
20 aux. building HVAC and the diesel generator ventilation --

21 diesel generator room ventilation system.
22 And then under the electrical included, the diesel
23 engines and generator and all supporting auxiliary systems,
24 including the sequencer for the diesel loading sequence and
25 the 4160 volt electrical system.

84

1 Our process identified findings during our review
2 and we termed those findings discrepancy reports or DRs.
3 Those were issued to Northeast Utilities under the protocol
4 and to the NRC staff, the NEAC and the public via the web
5 site. We closed DRs based on NU's response, after reviewing
6 their response, their proposed corrective action and, in
7 some cases, depending on the nature of the corrective
8 action, we actually looked at the implementation of the
9 corrective action, if it was an engineering type of analysis
10 or calculation that had to be done. If it was a relatively
11 minor corrective action, and many of those were deferred, we
12 just looked at the corrective action plan.

13 The DRs were closed in various categories. They
14 were -- confirmed DRs were those that were not previously
15 identified by Northeast Utilities' configuration management
16 plan, an agreed discrepancy. There were also discrepancies
17 that, after further review by NU and Sargent & Lundy, based
18 on their response, identified that NU had previously
19 identified it in their configuration management process and
20 we were unable to determine that initially. And then there
21 were discrepancy reports that were later termed
22 non-discrepant based on further information provided by NU.

23 CHAIRMAN JACKSON: As you went through this
24 process, let me make sure I understand, was your focus on
25 the degree to which NU or the NU configuration management

85

1 plan made similar identifications of DR type issues? Or was
2 your focus on the proposed solution or on the actual
3 solution?

4 MR. SCHOPFER: Our focus in initially identifying
5 the DR was to identify a discrepancy -- that we thought was
6 a discrepancy. We did not -- we started to, and then we
7 found it very difficult and very time-consuming, to try to
8 see if they had previously identified this issue. They were
9 much better at determining if it had been previously
10 identified than we were, so we went away from spending an
11 inordinate amount of time trying to determine if they had
12 previously identified it. So in terms of identifying,
13 writing the DR, if we found a discrepancy with the design or
14 licensing basis, or one of the other issues, we wrote that.
15 If they had previously identified it, they would tell us
16 that and we would verify that that in fact had been the
17 case.

18 Then the focus then was, if it was an agreed or
19 confirmed discrepancy not previously identified or not
20 non-discrepant, then our focus was to look at what they
21 proposed to fix, to correct the identified issue.

22 CHAIRMAN JACKSON: Then you said in some limited
23 circumstances looking at the actual resolution.

24 MR. SCHOPFER: Right. If the corrective action
25 was to re-do an analysis, especially to support

86

1 acceptability of something or to ensure that it was in fact
2 functional, we would review that analysis. In many cases
3 where the Level 4's, which we will talk about, were minor,
4 much less significant, we did not intend to look at those
5 revisions of calculations or those revisions of drawings or

6 field minor changes, those kinds of things.
7 The next slide shows the significance level that
8 we identified for each DR. This provides the NRC staff
9 definitions that we have used in the ICAVP for those
10 significance levels.

11 In level 1, a discrepancy report was identified
12 when the system does not meet its design and licensing basis
13 and cannot perform its intended function, meaning that both
14 trains of a redundant system would be unable to perform that
15 function, and there were none of those. We'll get to it in
16 a minute.

17 Level 2 was similar except that one train of a
18 redundant train was not able to perform its intended
19 function as opposed to both trains.

20 Level 3 was a design and licensing basis issue,
21 but the system in some manner did not meet its design and
22 licensing basis, but the system was capable of performing
23 its intended function. That's a, as Mr. Bowling mentioned,
24 a design and licensing basis issue of relatively low
25 significance.

87

1 Level 4 was a discrepancy that did not impact
2 Northeast Utility's Millstone 3 design and licensing basis,
3 but there were errors in calculations, errors in drawings,
4 those kinds of issues that were not directly impacting the
5 licensing basis.

6 To summarize, the 974 valid preliminary DRs that
7 were issued to the staff, to Northeast Utilities and to the
8 NEAC and issued on the Website, 971 of them have been --
9 resolutions have been accepted and closed by Sargent &
10 Lundy. There are three remaining DR resolutions pending at
11 this time. Two resolutions are confirmed, with one of those
12 -- excuse me -- two resolutions are confirmed pending a
13 completion of the calculation and corrective actions
14 associated with that, and that, I believe, is due early this
15 week; and one NU resolution was not accepted by the staff --
16 excuse me -- was not accepted by Sargent & Lundy and not
17 agreed to by Northeast Utilities, and we referred that to
18 the NRC staff resolution.

19 CHAIRMAN JACKSON: What was that issue?

20 MR. SCHOPFER: This was an issue of some drain
21 valves associated with the filter housing unit on the SLCR
22 system. The valves were not identified as seismically
23 qualified and safety grade valves; they were non-safety and
24 our finding identified that we thought they should be
25 seismically qualified and safety related.

88

1 CHAIRMAN JACKSON: Okay.

2 MR. SCHOPFER: And that is the only DR out of the
3 nearly thousand where we were unable to reach resolution.

4 Of the 971 acceptable and closed resolutions,
5 approximately -- not approximately; these are the correct
6 numbers -- 620 were confirmed discrepancies, 100 of the DRs
7 were previously identified by NU and 251 were, in fact,
8 non-discrepant conditions based on further information and
9 review.

10 Of the 620 confirmed discrepancies, 20 are
11 confirmed level 3s and 600 are level 4s, and of the three
12 additional ones, the -- there is one level 3 that is
13 pending, one level 4 that is pending. Both of those relate
14 to the same calculation and corrective action that is going
15 on. That calculation will resolve both of these and the one
16 level 3 unresolved which we talked about a few minutes ago.

17 Based on our review, we have identified a number

18 of conclusions per the report, and I would like to go
19 through those now.
20 I've structured this with the overall conclusions
21 and supported by the conclusions associated with the various
22 tier 1, 2 and 3 reviews and the individual conclusions that
23 support this overall conclusion.

24 We did conclude that NU's confirmation management
25 plan has, in fact, been effective in identifying and

89

1 resolving the deficiencies in the Unit 3 design and
2 licensing basis. The number of confirmed level 3
3 discrepancies in that number was 20 at this point and
4 potentially 22, depending on the resolution of the other
5 items, was small in comparison to the number of design and
6 licensing basis requirements that were identified and
7 reviewed on the selected systems, and that number is well
8 into the 2,000's.

9 Secondly, the selected systems are considered to
10 be in conformance with their design and licensing basis and
11 are considered capable of performing their intended
12 functions, and third, we believe that NU has established
13 programs, processes and procedures to maintain effective
14 configuration control of their design and licensing bases in
15 the future.

16 CHAIRMAN JACKSON: With the second bullet, do you
17 mean the selected systems are considered to be in
18 conformance with their design and licensing basis and/or are
19 considered to be capable, since you did have some number of
20 findings, albeit small?

21 MR. SCHOPFER: Well, all the findings, all the
22 level 3 findings that were, in fact, design and licensing
23 basis issues have been corrected --

24 CHAIRMAN JACKSON: So that's what that statement
25 really means.

90

1 MR. SCHOPFER: Yes.

2 CHAIRMAN JACKSON: So as of today, that is a
3 correct statement.

4 MR. SCHOPFER: With the exception of those two
5 that are --

6 CHAIRMAN JACKSON: Except the two that you
7 mentioned. Okay.

8 MR. SCHOPFER: The one pending and the one -- in
9 fact, other than those, they are.

10 CHAIRMAN JACKSON: Okay. Thank you.

11 COMMISSIONER DIAZ: They were always capable of
12 performing their intended function.

13 CHAIRMAN JACKSON: Right.

14 MR. SCHOPFER: And I should reemphasize, there
15 were no level 1 or level 2 findings.

16 CHAIRMAN JACKSON: Right.

17 MR. SCHOPFER: They were always capable of
18 performing their design function.

19 CHAIRMAN JACKSON: So that's what I mean when I
20 say and/or --

21 MR. SCHOPFER: Yes.

22 CHAIRMAN JACKSON: -- capable of performing that.
23 Okay.

24 MR. SCHOPFER: We have conclusions to support the
25 overall conclusion on each of the tiers, and tier 3, because

91

1 of its size and how that review was done, is broken up into
2 various segments of the review process.

3 Under tier 1, we had a system review, a
4 configuration, management -- excuse me -- configuration
5 review which was, in fact, a walkdown of the field
6 conditions against the design basis, and we have an O&M,
7 operations and maintenance and testing review section, and a
8 modification review for all of the selected systems and a
9 corrective action review. Those are all pieces of the tier
10 1 review and our conclusions under each of those.

11 Under the system review, we conclude that unit 3
12 design and licensing basis is supported by the design output
13 documents and the design process documents, and that the
14 upper tier system level engineering drawings and the design
15 process documents are technically adequate and the design
16 bases for topical areas are adequately implemented, topical
17 areas meaning fire protection high energy line break,
18 flooding, those kind of things, where we did selected
19 reviews in certain areas.

20 Areas where we believe that improvement would
21 enhance the configuration of management process for
22 Northeast Utilities in the future -- I would like to mention
23 a few of those here on the slide.

24 The PMMS and PDDS databases -- and I probably
25 can't tell you the exact, but the plant maintenance and

92

1 design component databases -- contain a sufficient number of
2 errors of omission so as to render the data suspect for
3 design input and makes it more difficult for using that
4 information for design input.

5 I should note before I go through the rest of
6 these that these are conclusions that were based on the
7 numbers of level 4 or total discrepancies, but if you look
8 at the numbers, they're primarily level 4 discrepancies in
9 these areas, and none of the areas that we, as I said
10 before, that we are talking about has rendered anything not
11 functional or outside the design or licensing basis.

12 The second area that could --

13 COMMISSIONER DIAZ: Excuse me. You did use the
14 word suspect. Would you like to clarify what that means?

15 MR. SCHOPFER: I'm sorry?

16 COMMISSIONER DIAZ: You used the word suspect when
17 you said that the errors render the system suspect.

18 MR. SCHOPFER: There are pieces of the database
19 that are safety related qualified and pieces that are not,
20 but the database has-- it is not completely validated and
21 has information that makes -- a significant number of items
22 that were found in error or incomplete, that makes it
23 perhaps not as useable as it could be for effective
24 configuration management.

25 COMMISSIONER DIAZ: Okay. But you said level 4,

93

1 that the errors that were associated with a level 4 were of
2 a minor variety such that they have no impact on the overall
3 safety evaluation of the system from an engineering
4 viewpoint. Is that still correct?

5 MR. SCHOPFER: That's correct.

6 COMMISSIONER DIAZ: Okay. So I'm trying to put
7 those two things together.

8 MR. SCHOPFER: Well, the point is that if there is
9 information that's not useable and people do use it -- it's
10 valid, it's data that's there -- you can make errors
11 propagate through the design process.

12 COMMISSIONER DIAZ: But the error still will be at
13 a small level.

14 MR. ERLER: I think the emphasis has to be on the

15 -- you would want to make sure that you go back and verify
16 that data rather than use it as your design basis decision
17 as you move forward. That's the recommendation.

18 COMMISSIONER DIAZ: Okay. All right.

19 MR. SCHOPFER: And there were no instances where
20 the use of this data caused a design and licensing basis
21 problem.

22 The second item is that the procurement -- the
23 component procurement specifications and vendor drawings
24 have not been consistently kept up to date throughout the
25 last several years through the process.

94

1 The third item is an issue that I think Mr.
2 Bowling talked about also, is that there were a number of
3 instances where design inputs -- where incorrect design
4 inputs were used which indicated a calculation control
5 problem. This concern was related to primarily mechanical
6 sizing calculations and some electrical calculations.

7 The condition appeared to be due to the fact that
8 voided or superseded calculations were not completely
9 controlled in the past, so that incorrect input would be
10 used, and I think NU has addressed that in their new
11 calculation control process.

12 We had also identified a number of minor
13 discrepancies in both older, perhaps original design and new
14 calculations or relatively new, I should say. We revised
15 calculations in the errors -- calculation quality. Again,
16 that was discussed earlier. They could improve the
17 calculation quality, the accuracy issues that Marty talked
18 about.

19 The next bullet -- the next two items generally go
20 together. There were a number of issues on the HVAC systems
21 that were identified where the design and licensing basis
22 was not as clearly documented on the HVAC systems as they
23 were on other systems. There were some issues that related
24 to compliance with regulatory guide 1.52 which is related to
25 filter housing units, and we think the improvement of

95

1 defining that licensing basis and commitments in that area
2 would help solidify the design and licensing basis for those
3 systems and those components.

4 CHAIRMAN JACKSON: Now, HVAC systems often are
5 systems with plant-specific designs; is that correct?

6 MR. SCHOPFER: Yes. Very much so.

7 Next slide, please.

8 The next component of the configuration, the tier
9 1 review included a configuration review, and this was the
10 comparison of the as-installed condition of the plant with
11 the design.

12 Our conclusion there is that the as-installed
13 plant condition is consistent with the design output
14 documents, that the modification installation was in
15 accordance with the design packages and the plant physical
16 drawings are generally in conformance with the upper tier
17 system level engineering drawings.

18 Again, there were some areas where we think
19 improvements would enhance their configuration management
20 future, and there were three areas, again primarily
21 resulting from level 4 DRs, there were inconsistencies
22 between the cable and raceway database and the electrical
23 design documents related to tray covered data and conduit
24 support data.

25 CHAIRMAN JACKSON: But no cabling needed to be

1 re-routed?

2 MR. SCHOPFER: No. Again, this is database issues
3 not unlike the earlier discussion under the system review.

4 There were a number of undocumented attachments to
5 supports, though none of these undocumented attachments
6 affected the structural adequacy of the support and many
7 resulted from original design and construction. The
8 findings indicated that there may be some control mechanisms
9 to be looked at to prevent future recurrence of that type of
10 an issue.

11 There were a number of occurrences of component
12 tagging and labeling issues that were identified -- again,
13 nothing significant that would cause an operator action of
14 any kind.

15 Under the operations and maintenance and testing
16 conclusions, we concluded that selected systems have been
17 operated and maintained within the design and licensing
18 basis, and programs are in place to reasonably expect this
19 performance to continue in the future.

20 We also identified that some of the processes in
21 the areas of maintenance and testing place a high reliance
22 on the skill and performance of the individuals involved in
23 the process rather than a more rigorous procedure-driven
24 process-driven approach.

25 CHAIRMAN JACKSON: Did you view that as a

97

1 weakness?

2 MR. SCHOPFER: Yes. Yes. But we found again no
3 instances where that condition related to causing the plant
4 to be outside its design and licensing basis.

5 The modification review identified that the -- and
6 concluded that the design of the plant modifications was
7 technically adequate and the configuration control was, in
8 fact, maintained, and that the modifications have been
9 installed and implemented consistent with the design
10 packages and the procedures in effect at the time the
11 modifications were processed.

12 The final piece of the tier 1 review was the
13 corrective action review, and we have concluded that NU has
14 adequately initiated and implemented corrective actions
15 needed to restore the design and licensing basis for
16 Millstone Unit 3.

17 CHAIRMAN JACKSON: And this actually draws on your
18 own judgment that the configuration management plan was the
19 same for all of the systems, even beyond those that you
20 specifically reviewed; is that right?

21 MR. SCHOPFER: Yes, that's correct. And that's
22 based on the fact that this review, besides looking at those
23 1,500 corrective actions, we looked at the implementation of
24 those corrective actions and some additional corrective
25 actions outside the scope of that.

98

1 The tier 2 review again was the accident
2 mitigating systems, and our conclusion is that the accident
3 mitigating systems are capable of performing their
4 safety-related functions during postulated accidents.

5 Tier 3, three pieces to it -- we concluded that
6 the current Millstone changed processes as reviewed by the
7 ICAVP, and that was eleven processes, are adequate for
8 maintaining the design and licensing basis of the plant on a
9 going-forward basis.

10 We also concluded that NU is adequately following
11 their current change processes, and that's as a result of

12 our implementation review to see that they actually did what
13 their procedures say they do.

14 For the past changes reviewed, Northeast Utilities
15 has made changes that are technically adequate without
16 adversely affecting the plant design and licensing basis.

17 CHAIRMAN JACKSON: So you speak to the current
18 change processes, so they have changed?

19 MR. SCHOPFER: Yes. This tier 3 review looked at
20 both the current processes on a process review and then an
21 implementation review to see how well they've done in
22 implementing that, and it looked backwards ten years to the
23 commercial operation.

24 CHAIRMAN JACKSON: Okay. Thank you.

25 Questions, please?

99

1 COMMISSIONER DICUS: Yes, I have a question. I
2 think Northeast Utilities indicated that an independent
3 verification program of the nature that Sargent & Lundy has
4 been providing would not be necessary in a going-forward
5 mode. Do you concur with that assessment?

6 MR. SCHOPFER: Yes, I do.

7 COMMISSIONER DICUS: Thank you.

8 CHAIRMAN JACKSON: Commissioner?

9 COMMISSIONER DIAZ: Yes. You have been able to be
10 at what I'll call at a point where you can judge whether
11 engineering is actually placing the proper safety priority
12 on issues. What is your conclusion regarding the
13 performance of the NU engineering department as being able
14 to determine that an issue is safety related and deserves
15 proper attention?

16 MR. SCHOPFER: I guess the -- and clearly our
17 intention with NU was limited to the DRs.

18 COMMISSIONER DIAZ: Right.

19 MR. SCHOPFER: But the corrective actions that
20 they took related to the DRs was by and large appropriate.
21 We did have back and forth on a number of DRs, but generally
22 that was getting to the discussion of the right issue,
23 making sure that they understood what we brought them and
24 vice versa. So I think once the issue was clearly
25 understood, their corrective actions related to the

100

1 technical issues were sound and appropriate judgments made.

2 COMMISSIONER DIAZ: Specifically on the ability to
3 determine or discriminate that an issue is of safety
4 importance or not, that judgment you believe is there and it
5 is acceptable?

6 MR. SCHOPFER: Yes. I think the indication of
7 that is the number of DRs that were issued and responded to
8 with the initial number of level 3s, and as I've said at
9 previous briefings, level 3 was more or less a default
10 level, if we didn't know the impact of the condition of the
11 plant, on the design and licensing basis calculation or
12 another activity, and the results or the responses from NU
13 did go to the heart of that and made the appropriate
14 judgments as to what was, in fact, safety related and safety
15 significant and which ones were not.

16 COMMISSIONER DIAZ: Okay. Thank you.

17 CHAIRMAN JACKSON: Commissioner McGaffigan?

18 Well, thank you very much. We have become so
19 efficient that we have created a problem for ourselves, and
20 because we do have public notices that say how we're going
21 to structure our meeting, we're essentially left with no
22 recourse but to take the break until one o'clock. So we

23 will, instead of having an hour-and-a-half break, have a
24 two-and-a-half-hour break.

25 Thank you very much.

101

1 [Whereupon, the public meeting was recessed to
2 reconvene at 1:00 p.m., this same day.]

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102

1 AFTERNOON SESSION

2 [1:11 p.m.]

3 CHAIRMAN JACKSON: Good afternoon, everyone. We
4 seem to have recovered our ability to speak.

5 We're now going to begin a session where we hope
6 to hear from various public officials, public interest
7 groups, and individuals with interests and concerns relative
8 to Millstone Unit 3 potential restart.

9 We will begin with Mr. Thomas Sheridan, who's the
10 first selectman, aka the mayor, of the town of Waterford.

11 MR. SHERIDAN: Thank you, Dr. Jackson, and good
12 afternoon everyone. And thanks for the opportunity to say a
13 few words in support of the startup of Unit 3.

14 When I appeared here on May 1 I addressed the
15 impact the shutdown had on the plant and our local community
16 and the importance of the safe operation of Millstone
17 Station to the economic and environmental well-being of our
18 community and indeed the State. But today I want to focus
19 my discussion on changing attitudes and perceptions within
20 the community.

21 As an elected public official, I'm obliged to
22 represent the views of my constituency. I would not be able
23 to come before you today if I did not have personal
24 confidence in the improvements made at the Millstone site.
25 That knowledge comes in part from my participation as a

103

1 member of the Millstone Advisory Council.

2 In May '97 Bruce Kenyon approached a number of
3 community-minded individuals with diverse backgrounds to act
4 as an advisory council to improve the dialogue between
5 Northeast Utilities and the community. As first selectman
6 of Waterford, the community which you know is the host
7 community, I felt a responsibility to participate in this
8 council.

9 From the beginning, Northeast Utilities was
10 responsive to local members' questions and concerns. As a
11 group, we explored a number of significant issues, including
12 the adequacy of the ICAVP, leadership challenges and changes
13 and improvements, and the quality of training at the plant.
14 I was continually impressed by Northeast Utilities'
15 openness, willingness to allow us to pursue various issues,
16 and responsiveness to feedback from council members --
17 indeed, even allowing individual members of the committee to
18 observe control-room operations on an unscheduled basis.

19 Now I want to make a point here. This is new
20 management I'm talking about. I'm not talking about former
21 management. This is a changing attitude that existed there
22 since Bruce Kenyon and his new team came on board. While
23 some of the feedback offered by the council was highly
24 critical, even aggressive at times, I witnessed no or very
25 little defensiveness on the part of Northeast Utilities

104

1 management. Indeed, they welcomed our input.

2 At a recent community breakfast, which is a
3 quarterly event, a quarterly event held by Northeast
4 Utilities for members of the local community, I asked Mr.
5 Kenyon publicly what his intention was with respect to the
6 continuation of the Millstone Advisory Council meetings
7 following the restart of Unit 3. He indicated that he had
8 found the dialogue to be exceedingly helpful and important,
9 and that he wanted to continue the effort. My personal
10 experience has been that this management team under Bruce's
11 leadership is willing to listen. They have learned a great
12 deal, and I hope will continue to learn, and they are
13 willing to be responsive to the community.

14 My perceptions have been confirmed by the comments
15 also from the Millstone employees who live and work in the
16 community and participate in local government and community
17 events. Many have expressed confidence in this management
18 and have reported on the many positive changes that have
19 occurred at the station over the last two years. Employees
20 seem to recognize not only their right to raise issues but a
21 growing confidence in their ability to effect change. These
22 comments reflect a major departure from general employee
23 attitude witnessed only two years ago.

24 I want to add also that we have in Waterford
25 basically a volunteer government. We have an enormous

105

1 number of volunteers. Many of them are Millstone employees.
2 And their attitudes are important, and they're a good
3 sounding board, and we certainly hear and see a lot from
4 their involvement, and they are very supportive of the new
5 change and the new attitudes at the Millstone Point plants.

6 I also see a growing confidence on the part of the
7 larger community with regard to the regulatory process. We
8 are a better informed, more aware, and more vigilant
9 community because a public-minded citizenry has raised
10 questions about safety issues, and the Nuclear Regulatory
11 Commission has given repeated opportunities to all who wish
12 to provide comment.

13 Being able to ask questions, to obtain answers,
14 and on occasion to express discontent with regulators and
15 their regulatory process has allowed us as citizens to
16 participate fully in the recovery process. Ultimately I
17 believe that the public meeting process, a hallmark of our
18 democracy, will prove to have served our community well. I
19 am hopeful that an enlightened community led by a number of

20 active public citizens groups will continue to provide a
21 valuable check and balance on both Millstone operations and
22 the regulatory performance.

23 Recently officials, local elected officials from
24 surrounding communities, came together to sign what we call
25 a statement of support and reconciliation. That statement

106

1 was sponsored by the Friends of a Safe Millstone, or as it
2 is known, FOSM, F-O-S-M, a local community group founded to
3 support a safe operation at Millstone. Although FOSM
4 founder Ron McKeown may discuss his efforts when he sits
5 before you this afternoon, I believe it provides evidence of
6 the changing attitudes within the local communities
7 regarding Millstone Station.

8 The statement included a number of agreements
9 including the recognition of local officials that it is in
10 the interest of the region to have a safe operation and a
11 financially viable utility company. I don't believe that
12 two years ago any of us, any of those elected officials who
13 signed, that is, would have been able to sign this document
14 in good conscience.

15 Although this has been a painful and difficult
16 process, it has strengthened all of us. Northeast Utilities
17 is a better company, managed by a principled leadership who
18 believes in openness and communications. The Nuclear
19 Regulatory Commission is a stronger regulator with an
20 increased awareness of the need for aggressive external
21 oversight and public responsiveness, and we are a stronger
22 community because we have learned that we can make a
23 difference in influencing matters of public health and
24 safety.

25 As we go forward, I believe we can gain both

107

1 confidence and maturity in our expanded and independent
2 roles. In light of these changes, I ask that you authorize
3 the safe startup of Millstone Unit 3.

4 I would like to make one other comment, if I may,
5 that once the plant is started up, it's my hope, and I think
6 I speak for all of the people in our community, and indeed
7 surrounding communities, that NRC maintains a strong
8 presence at Millstone to make sure the plants are operated
9 safely. We do not want to go through this event again.

10 Thank you very much.

11 CHAIRMAN JACKSON: Thank you very much.

12 Commissioner Diaz?

13 Thank you very much.

14 MR. SHERIDAN: Thank you.

15 CHAIRMAN JACKSON: Let me call forward on behalf
16 of the Nuclear Energy Advisory Council the honorable Terry
17 Concannon, if he's here today, and Mr. John Markowicz, the
18 vice-chairman.

19 [Laughter.]

20 CHAIRMAN JACKSON: I apologize. I know how I'd
21 react if it happened to me. So please --

22 [Laughter.]

23 MR. MARKOWICZ: Terry with a "T."

24 CHAIRMAN JACKSON: Accept my apology. Welcome.

25 MS. CONCANNON: That's all right, Chairman

108

1 Jackson. It wouldn't be the first time it's happened to me.
2 I had a letter that clearly addressed me as a woman the
3 other day, but the secretary put "Mr. Terry" at the top of
4 the letter.

5 CHAIRMAN JACKSON: In case it's any consolation to

6 you, you know, I go around and around about being Chairman,
7 Chair, Chairwoman, Chairperson. So I understand what you
8 mean.

9 MS. CONCANNON: Good afternoon, Dr. Jackson and
10 Commissioners. Thank you for the opportunity to participate
11 in this public briefing prior to the Commission considering
12 authorization for the restart of Millstone 3. And my name
13 is Terry Concannon. I am the State representative for the
14 34th assembly district in the Connecticut legislature. And
15 I am a resident of the town of Haddam.

16 Since its inception on August 1, 1996, I have been
17 cochair of the State Nuclear Energy Advisory Council, or
18 NEAC, which was established pursuant to Public Act 96-245.
19 And with me today is vice-chair of the council, John
20 Markowicz.

21 NEAC was created in response to the concerns of
22 the citizens in southeastern Connecticut who were variously
23 alarmed, angry, confused, and somewhat frightened by the
24 developments at the three Millstone nuclear power-generating
25 plants in Waterford. The three were placed on the NRC watch

109

1 list on January 31, 1996. A history of safety violations
2 and the intimidation of employees, compounded by the
3 ineffective and arrogant approach of management, created
4 these problems for the public. In addition, the public had
5 lost confidence in the ability of the NRC to monitor and
6 enforce corrective action standards.

7 The NEAC was created as an independent council of
8 14 members to ensure that the health and safety of the
9 public, particularly those living within a five-mile radius
10 of the nuclear plants, is protected. Our charge is strictly
11 advisory, but we do interact on a regular basis with the
12 public, the utility, NRC staff members, and the engineering
13 firms contracted to carry out the independent corrective
14 action verification program. And we communicate with the
15 State government.

16 To date we have issued two annual reports. This
17 is our most recent one. The 14 members have diverse
18 backgrounds, some nuclear, scientific, and engineering, and
19 others in business. Their perspectives vary according to
20 the pros and cons of nuclear-generated power, and this adds
21 diversity and credibility to the council.

22 We believe it to be important that we retain our
23 objectivity, both real and perceived. When the council
24 embarked on this task, we had no idea of the magnitude of
25 the undertaking. We conjectured that quarterly meetings

110

1 might suffice, but that initially it would be better to hold
2 them on a monthly basis. As the process became clearer, our
3 schedule developed, and the intensity was much greater than
4 anticipated.

5 The dedication shown by our members has been
6 remarkable, and attendance by one or more at any and all
7 meetings of the NRC, NU, and/or the contractors more than
8 100 in number to this point has taken place. Thus we are
9 well informed as we have observed the progress over the past
10 22 months.

11 Four of our members signed the communications
12 protocol by the NRC. That enabled us to observe closed
13 meetings, to monitor phone calls between NU and the
14 contractors, and to attend meetings with Sargent & Lundy,
15 the Millstone 3 contractor, the NRC and NU in Chicago.

16 In addition, one member became mad -- badged --

17 [Laughter.]

18 MS. CONCANNON: -- so that he could enter the
19 plant unescorted at any time and he has been performing a
20 monitor watch in the Millstone 3 control room on a regular
21 basis including visits during off hours since December.

22 Today we have been advised to address the
23 principal issues remaining to be evaluated by the Commission
24 including the ICAVP, the Corrective Action Program, and the
25 results of the NRC's Operational Safety Team Inspection or

111

1 OSTI.

2 First, I will address the ICAVP and tie it in with
3 the Corrective Action Program, as we have seen it.

4 We became intensely involved with the ICAVP from
5 the start. Due to the skepticism of the public, we
6 questioned the independence aspect of the program. Since
7 the utility is paying the operator, is it possible for the
8 latter to be truly objective? We asked this in Connecticut
9 and we asked it in Chicago.

10 It became apparent that the contractor has a great
11 deal at stake, most of all it's reputation in the industry.
12 In our travels we also ascertained that the eyes of the
13 nuclear industry are focused on the outcome of Millstone's
14 efforts. Thus it would seem that independence and a
15 thorough review by the contractor of Millstone's ability to
16 establish adequate design basis and design controls are of
17 the essence.

18 Nevertheless, our Council has some reservations
19 and chose to delete the word "independent," calling it the
20 CAVP.

21 Comment. During the process of the CAVP our
22 observations have noted a consistent business-like style to
23 communication, whether over the table at a meeting or over
24 the telephone. An arms-length posture has been maintained
25 between the utility and the contractor.

112

1 Next came our involvement in the selection of
2 systems to be reviewed by the contractor in the first of
3 three levels in the audit plan. This was attended to
4 address the public concerns about the possible leak of the
5 list of systems to licensee ahead of the CAVP review. We
6 were invited to select two of the four functional groups of
7 systems for the Tier 1 review. A subcommittee of the
8 Council determined a method to guarantee a random selection,
9 and the names of the two systems were drawn out of a hat by
10 members of the public at a regularly scheduled NEAC meeting
11 in Waterford.

12 Comment. This process worked well and we
13 appreciated our inclusion, as reflected in the policy
14 released by the Executive Director of Operations, James
15 Taylor, on January 3rd, 1997.

16 It soon became apparent that the matter of the
17 discrepancy reports posed a problem. The public needed to
18 be able to understand the significance level of the
19 discrepancies being identified by the CAVP.

20 At first, it was easy to read and assimilate them
21 as they were published, but their numbers grew rapidly. In
22 response to these concerns and in response to our request,
23 the criteria for categorizing the relative significance of
24 these DRs was established.

25 Comment. This has facilitated the process in a

113

1 remarkable fashion. Everyone involved is familiar with the
2 significant levels and it has cut down on lengthy verbiage.

3 It has also got to know where Millstone 3 is concerned that
4 no confirmed Level 1 or Level 2 DRs have been found. This
5 means at the least that the systems reviewed are capable of
6 performing their intended function.

7 I shall also comment that we were totally
8 surprised by the DRs that have been made. When we were
9 hazarding a guess about the possible number before the
10 reviews began, we thought that some 250 to 300 might be
11 expected. That the number should have reached 1100 is an
12 indication in our estimation of how far the Corrective
13 Action Program at Millstone 3 had been permitted to
14 deteriorate. By the same token, it is also a measure of how
15 thoroughly Sargent & Lundy performed the review.

16 We were also talking today and thought that if
17 very few had been found, that might have also been
18 questionable, so there is a balance.

19 I have monitored phone calls between Sargent &
20 Lundy and NU on a random basis with occasional assistance
21 from my Co-Chair, Evan Woollacott. These same calls have
22 been monitored by the NRC Staff from the Special Projects
23 office. The communications have retained a constructive
24 businesslike tone as efforts are made to get additional
25 information so that problems can be resolved.

114

1 Several times I have felt that the NU team has
2 been overly enthusiastic or too determined to have its point
3 of view accepted. Thus, I was glad to hear the Sargent &
4 Lundy representatives hold firm to their position when
5 necessary.

6 We have also found it reassuring that there are
7 some discrepancy reports for which no agreement could be
8 reached between Sargent & Lundy and NU regarding the
9 Corrective Action Plan. The NRC has had to step in to help
10 resolve the situation in some 18 cases. Out of the 1100 DRs
11 issued by the contractor, some 20 plus remain to be closed
12 before restart as of May 26th. That is when I finalized
13 this statement.

14 The fact that less than 30 are expected to be
15 confirmed at Level 3, not meeting the licensing and design
16 basis, is less than 3 percent of the total, and from what I
17 understand today, the figure is 19.

18 NEAC is concerned that the corrective actions be
19 taken and has been assured that the outstanding items will
20 be appropriately tagged for identification purposes, as we
21 suggested, and that all corrective action will be completed
22 prior to the end of the next refueling outage.

23 The end of the CAVP is in sight. Some thousands
24 of hours and thousands of documents later, a picture of
25 Millstone 3 and its conformity and/or lack thereof to its

115

1 design and licensing basis has emerged. Of the 88 safety
2 and/or risk significant systems, a comprehensive review was
3 made of the design and licensing basis of 15 systems and
4 portions of 51 interfacing.

5 In addition, a validation of the critical design
6 characteristics for accident mitigation included 22 systems.

7 The results should enable the contractor and the
8 Commission to assess the restart capability of the plant in
9 concurrence with other essential criteria such as the
10 Employee Concerns Program.

11 The Operational Safety Team Inspection -- NEAC
12 members observed the OSTI entrance briefing, public exit
13 meeting, and several intermediate events. The team leader

14 and the 13 other members of the inspection were professional
15 and thorough. Significantly, this was the first time we had
16 met them and can certainly note that they provided a fresh
17 perspective to the Millstone 3 inspection process.

18 At the exit meeting and a subsequent NEAC public
19 meeting, NU officers have provided the status of aggressive
20 initiatives to correct the operator performance and system
21 valve alignment issues that were identified as deficiencies.

22 Lastly, we can reinforce the observations made by
23 Vice Chairman John Markowicz on May 1, '98 -- one, the
24 Corrective Action Verification Program as established by the
25 NRC has been comprehensive in nature and has been performed

116

1 at Millstone 3 in a credible arms-length manner by Sargent &
2 Lundy; two, Northeast Utilities has exhibited significant
3 and sustained improvement in management and in the manner in
4 which problems are addressed, whether they be of a personnel
5 or functional nature; three, in order for public confidence
6 to be fully restored in the safe operation of Millstone 3,
7 continued oversight and vigilance on behalf of the NRC will
8 be necessary. It's vigorous oversight will be required to
9 ensure that any possible future regression at the plant will
10 be prevented in a timely fashion. This is important so that
11 the NRC retain the improvement in public perception that is
12 the result of its substantial investment in Millstone and
13 its openness and availability to the public in the
14 surrounding area.

15 This completes my remarks on behalf of the NEAC,
16 and I thank you for your kind attention.

17 CHAIRMAN JACKSON: Thank you. Let me ask you two
18 questions.

19 One is based on your observations through the
20 process, would you put the "I" back in, and if so, why so,
21 and if not, why not?

22 MR. MARKOWICZ: Could I answer that, because I was
23 kind of the leader of what I call the "independence wars."

24 We could call it the "not so" -- we could have
25 called it the "almost independent."

117

1 I think what we were talking about with the word
2 "independence" is the difference between independence as we
3 have come to learn, it is defined by the regulator, and
4 independence as perhaps we would more commonly understand
5 it.

6 I think arms-length is very appropriate. I think
7 that to be truly independent you would have had to
8 functionally and financially separate it from the utility,
9 but from my personal opinion as a soldier of the
10 independence wars, it's good enough.

11 CHAIRMAN JACKSON: And my second question -- and I
12 appreciate the diligence and your speaking specifically to
13 the topics at hand, but my overarching question is net, what
14 do you feel are the major lessons learned out of all of
15 this?

16 MS. CONCANNON: The lessons learned by NU?

17 CHAIRMAN JACKSON: The whole process.

18 MS. CONCANNON: The whole process --

19 CHAIRMAN JACKSON: Right, that we should take away
20 and that we should take into consideration. Anything beyond
21 what you have already said?

22 MS. CONCANNON: I think the diligence of the NRC
23 is tantamount -- or paramount to this whole enterprise, that
24 the public does look for reassurance and I think we have
25 come a long way, but we have been in the midst of it. For

1 people outside, how much do they truly know? -- and we have
2 done our best to communicate this, but I think that your
3 participation, your oversight, and interest are important

4 MR. MARKOWICZ: I would like to say for the record
5 that credibility is precious and it is very difficult to
6 restore, and it comes at a very, very large price both in
7 terms of the amount of time and effort required to restore
8 it functionally, but more importantly the time and effort
9 required to reinvent it within the public which you serve.

10 I would say in addition to that that if you were
11 to ask me personally my position regarding the restart of
12 Millstone 3 I would answer it like this. I live a mile
13 away. I have a family. I understand the dangers. I also
14 understand the restrictions and the possibilities of nuclear
15 power.

16 If you authorize the restart of Millstone 3, I am
17 not moving.

18 CHAIRMAN JACKSON: Thank you. Commissioner Diaz?

19 COMMISSIONER DIAZ: Yes. As an independent
20 advisory council, you have had the opportunity for many
21 months, and I guess you even have somebody badged that goes
22 into the control room, what do you gauge from the workers of
23 the plant, their opinion on the ICAVP and the corrective
24 action? Do you get feedback from the workers, not the
25 management, from the workers of the plant and if you do,

1 what is that feedback?

2 MS. CONCANNON: We have had feedback, perhaps not
3 as much we might have liked. Time has also limited our
4 ability to go through the plant but I have met them outside
5 the plant as well as inside, and I feel that there is a
6 feeling of optimism and a feeling of commitment on the part
7 of the workers, and that -- a feeling of team spirit.

8 MR. MARKOWICZ: I can speak a little bit, because
9 I have attended some of the workshops that have occurred
10 pursuant to the Memorandum of Agreement and I think I kind
11 of expressed this to you the last time, that we were the
12 first, because of the independence issue, at those meetings
13 that when questions arose between the utility and the
14 contractor with the regulators sitting in the middle that
15 the reaction on the part of the utility to the questions
16 from the contractor was as I described, a "deer in
17 headlights" kind of look -- like oh, is that what you
18 wanted? And that kind of confirmed to us that the process,
19 the independence that you strove for, that we hoped would
20 also be achieved, what I characterize as "arms-length" was
21 achieved, that this fear that there would be this handshake
22 behind the scenes, that information wasn't going to be
23 readily shared, and therefore we the public could not trust
24 the results of the process -- which is what the independence
25 discussion was really all about -- I felt reassured that

1 that process was going to continue.

2 Moreover, there was the feeling in the public in
3 the beginning that the systems would be leaked to the
4 contractor and therefore you couldn't trust the process from
5 that perspective because NU would always know what would be
6 looked at, so by allowing -- I think by the regulator
7 keeping a distance from NU on the selection of their
8 functional systems and then allowing us to basically pick
9 two systems out of a hat not only added credibility to the
10 process that the information wasn't shared but also I think

11 put to bed this issue why you didn't make it 88 systems.
12 Well, in fact you did, because if the utility
13 didn't know which systems were being picked out of a hat,
14 and they are all in the hat, they have to have all 88 ready,
15 so by going and looking at 15 and then 51 and 22, however
16 you want to name the numbers, I think you have, at least in
17 my mind, and I think in the minds of the members of the
18 Nuclear Energy Advisory Council, restored the credibility of
19 the process and the process is fundamental to the
20 credibility of the regulator, and in the end result that is
21 what we have to trust -- the regulator and the people and
22 the process that you regulate.

23 COMMISSIONER DIAZ: Thank you.

24 CHAIRMAN JACKSON: Thank you. Commissioner
25 McGaffigan.

121

1 COMMISSIONER MCGAFFIGAN: I have no questions.

2 CHAIRMAN JACKSON: Thank you very much.

3 MR. MARKOWICZ: Thank you very much.

4 MS. CONCANNON: Thank you very much.

5 CHAIRMAN JACKSON: I call forward, representing
6 the Citizens Awareness Network, Ms. Deborah Katz, President,
7 and Ms. Rosemary Bassilakis. Good afternoon.

8 MS. BASSILAKIS: Hellos.

9 MS. KATZ: Good afternoon. We are little less
10 nervous this time, but not much.

11 CHAIRMAN JACKSON: You didn't seem nervous last
12 time.

13 MS. KATZ: Well, we want to thank you for having
14 us come back and talk. What we decided is we are not going
15 to address technical issues because there are a number of
16 people after us who will do that. But what we wanted to
17 talk about is what ordinary people experience, because
18 that's what we are. And even though we may come here to
19 talk about nuclear reactors, that's where we come from, we
20 come from reactor communities.

21 We are opposing the restart of Millstone at this
22 point. We are concerned with the issues of systemic
23 mismanagement that still exist after two years at the
24 reactor. Little Harbor has said that this reactor cannot
25 stand alone. That is of great concern to us in terms of the

122

1 chilled work atmosphere.

2 We are also concerned that a number of the issues
3 that Sargent & Lundy raised in terms of issues of
4 improvement were found in the 7007 document years ago, and
5 that they haven't been fully addressed. The issues that
6 individuals are carrying around information rather than a
7 process being established. In cases of an accident, this is
8 really dangerous and it does not give us much sense of
9 comfort. These have come up repeatedly. The idea that
10 there are still organizational breakdowns, and this is a
11 nice Lessons Learned and a learning experience, but we are
12 in the communities where learning experiences are taking
13 place and that does not comfort us. They should have their
14 act together, you know.

15 And what I have to say, you know, I have worked at
16 a lot of jobs, and you go to a job and you have a
17 probationary period and you either do your job after that or
18 they fire you. They don't continue the probationary period.
19 I mean I would like to find a place like that, but I
20 haven't. But it's as if that is what is going to happen in
21 this situation, is that Millstone will be extended after two
22 years another probationary period. We think that is

23 unacceptable.

24 We believe, and I want to go to the Focus '98
25 because that's part of this, because we in fact got the

123

1 2.206 petition and the Commission's response 5:00 o'clock
2 yesterday just before we left, and the issue that you
3 raised, it being a poor choice of words, well, yes, that's
4 true. But this is after two years. This isn't right when
5 it happened and you could say, God, that is poor choice of
6 words, we have to work with them. But this is after two
7 years of intense work and millions of millions of dollars
8 being put in this program, they are still using the same
9 language. And either this is an issue of incompetence, or
10 an issue of recalcitrance, or that what NU believes is that
11 a superficial adherence to the rules and regulations is sort
12 of all that is required. And what we are concerned about is
13 that the NRC will accept a superficial adherence, and that's
14 not good enough for the people because our lives are at
15 stake in this process.

16 So we believe Northeast Utilities' license should
17 be revoked at this point. That they have had two years to
18 pull themselves together and they could not do it. That's
19 the truth. Remember when we talked last time, you said,
20 well, how long would you give them? They passed a test here
21 and they did that, and it was all structured around restart.
22 And when we left, we said wait a second, they didn't pass,
23 and they didn't pass the chilled work atmosphere till one --

24 MS. BASSILAKIS: April.

25 MS. KATZ: In April. So that, to us, is a

124

1 statement that they have not pulled themselves together and
2 that they are still suffering from poor engineering. And
3 what is of more concern to us is that there is a question of
4 poor NRC oversight in all of this, and the issues go beyond
5 Millstone to us, because the issue is of systemic
6 mismanagement in New England reactors at this point.

7 At Rowe, Yankee Rowe was allowed to operate with
8 deteriorating safety margins in terms of its reactor vessel,
9 and they -- the NRC was going to allow Yankee Atomic to run
10 the reactor with a one in 10,000 chance of an accident
11 instead of one in a million. Connecticut Yankee had no
12 operating backup systems when it closed down, and they
13 hadn't operated for 28 years. Maine had serious systematic
14 cable separation problems that were known for decades by the
15 NRC, and nothing was done about it.

16 Vermont Yankee, and I am handing in a 2.206
17 petition to the Commission today that we have put in on the
18 systemic mismanagement. I won't throw it on the table.

19 CHAIRMAN JACKSON: Thank you.

20 MS. KATZ: We are trying to be very careful. The
21 systemic mismanagement at Vermont Yankee, which are the same
22 issues that are coming up here at Millstone, the same issues
23 at Maine Yankee, Connecticut Yankee. As I said last time,
24 Pilgrim has been fine, but they are coming up with the same
25 problems, as is Seabrook. This is a systemic problem in New

125

1 England and it has to do with the NRC's lack of adequate
2 regulation.

3 If NU is allowed to restart, the people will have
4 felt that the NRC has failed them. I mean at this point the
5 NRC's credibility in reactor communities is deteriorating.
6 It will be non-existent if NU is allowed to go up, needing
7 as much help as it does.

8 And what I want to just talk about is the systemic
9 failure of the regulator to regulate. This has yet to be
10 addressed. The people who were involved in the regulation
11 of New England reactors are still regulating those reactors.
12 No one has been fired. Nothing has happened to change this
13 situation. And this issue is important to us. It is not
14 just we are anti-nuclear or we have an agenda.

15 You know, I live four miles from Rowe and around
16 15 miles from Vermont Yankee. We live in a poor rural
17 community. My kids swam in the river that the effluent from
18 the reactor was dumped in, that paper bleaching mills dump
19 their waste in, that herbicidal spraying took place in.
20 Issues of environmental justice are real and immediate to us
21 in this.

22 My community is ravaged by an epidemic of disease
23 at this point, that we fear is related to all the dumping
24 that took place. We have a tenfold increase in Down's
25 Syndrome. We have statistical significance in non-Hodgkin's

126

1 lymphoma, breast cancer, multiple myelomas. We are ravaged.
2 So that these are real issues to us.

3 And the issue that we have relied on the NRC to
4 protect us and our children is essential, and if you fail
5 us, what do we have? And that's what I want you to think
6 of. What do we have as ordinary citizens? We are not a
7 corporation, we don't have a lot of money. We don't have
8 anything.

9 So that the issue of your doing Millstone restart
10 will have a chilling effect in reactor communities for
11 ordinary citizens in terms of whether you are going to do
12 your job, and whether you are going to correct the systemic
13 mismanagement.

14 Now, I want to make clear that this problem did
15 not start on your watch, but it has been found on your
16 watch. And the question is whether you will rectify it or
17 not. Whether you are going to send a clear message.

18 And you have asked very good questions, and I have
19 some questions for you that I want -- I don't necessarily
20 expect you to address at this moment, but I want to raise.
21 Why, after two years, can't Millstone stand on its own?
22 After two years and millions and millions of dollars, and
23 two consulting firms, why can't it do it?

24 Why, after two years, are they still using these
25 words and using bad judgement, and repeating the same

127

1 mistakes in engineering? Why are reactors throughout New
2 England suffering the same systematic mismanagement
3 problems? And why has the NRC not investigated its own
4 Region to correct its own systemic mismanagement?

5 MS. BASSILAKIS: Hello. My name is Rosemary
6 Bassilakis, and I live one mile from Haddam Neck, I live
7 there with my husband and two teenage children. And I want
8 you to know when conversations come up about nuclear
9 reactors in Connecticut, people shake their heads and say,
10 you know, how could the NRC let this happen? You see, we
11 have not only the Millstone reactors, but we have Haddam
12 Neck, which is also operated by Northeast Utilities.

13 My community and other surrounding communities are
14 currently littered with radioactively contaminated concrete
15 blocks, soil, scaffolding, tools, and other materials.
16 These contaminated materials were allowed to leave Haddam
17 Neck reactor over the past 20 years. Such lax radiological
18 controls and lax NRC oversight is unconscionable.

19 Northeast Utilities is currently scrambling, with

20 the NRC at their heels, to not only locate and remediate
21 these materials at hundreds of off-site locations, but also
22 they must try to decipher what the doses were to members of
23 the public, including children. And these materials,
24 contaminated materials, were allowed to leave the reactor
25 over the past 20 years, and now they are throughout

128

1 surrounding communities.

2 Most recently it was determined that the wide
3 range stack monitoring equipment at Haddam Neck reactor are
4 non-conservative by up to 15 percent, and at this point in
5 time the NRC can't even assure us that their stack releases
6 were within compliance. These findings come after the
7 reactor permanently shut down. These findings come after
8 the NRC lifted the confirmatory action letter that was put
9 on Haddam Neck until they increased their radiological
10 control program. These findings come after the NRC did a
11 historical site assessment that assured Haddam Neck's
12 releases were in compliance.

13 And I -- you know, I know you might think, well,
14 what does Haddam Neck have to do with it? But I want you to
15 understand that Northeast Utilities operated Haddam Neck.
16 And Haddam Neck, in fact, was reason enough alone to revoke
17 Northeast Utilities' license.

18 Now, if the NRC was an effective enforcer, the
19 tragic occurrences at Haddam Neck wouldn't have occurred.
20 And, similarly, had the NRC done their job, the entire
21 Millstone debacle would have been mitigated years ago.

22 Now, we all have enough understanding of the
23 history of Millstone so that we don't need to go into it,
24 but the sheer fact that Millstone Unit 3 is still after two
25 years not ready to start up without Little Harbor

129

1 baby-sitting, and the fact that numerous serious violations
2 are still surfacing in very current inspection reports are
3 validation of how excessive and how irreparable the damage
4 was and the mismanagement at that reactor.

5 Now, some of the most recent inspection reports
6 show such things as the TMI action plan requirements are not
7 being met, fire barrier degradation, FSAR inaccuracies and,
8 you know, there is still this operator training which is an
9 issue. And this has been an historic issue, this isn't a
10 new issue. This started back with Millstone 1 with, you
11 know, the operators failing their examination, and it
12 continues still after two years.

13 Your agency's effort to date in the attempt to get
14 Unit 3 back on line further lessens your credibility with
15 the public. Your actions suggest that you just as
16 schedule-driven as NU rather than a tough enforcer. Now one
17 might expect this of NU because their job is to make money,
18 they are a corporation, but we don't expect this from the
19 NRC. Your sole job is to really protect the community as
20 well as to protect nuclear workers.

21 Now, the Special Projects Office was set up at
22 Millstone and it is comprised of the very same inspectors
23 who were around when the fall of Millstone occurred. The
24 same people are responsible for giving you the okay on
25 restart, that is completely unacceptable to us.

130

1 The Special Projects Office has already given the
2 green stamp of approval on NU's Nuclear Oversight Department
3 that we spoke about last meeting. This approval comes even
4 though the Focus '98 document surfaced as recently as

5 January, and even though there has been a recent shakeup of
6 managers in that department. Mr. Streeter is brand new, the
7 vice president just left about two months ago, and so did
8 another department head, Mr. Anon. I mean these are all
9 recent shakeups within the department and yet we are getting
10 the green stamp of approval on that whole office, and this
11 is acceptable.

12 In regards to the ICAVP, when the public -- you
13 know, when it first surfaced, the public demanded criteria
14 because of our concerns with subjectivity in interpreting
15 the inspection results. We were clearly told that a large
16 number of Level 4 DRs would probably warrant an increase in
17 scope. Now, in the most recent SECY, which we received on
18 Saturday, the Special Projects Office implies that a large
19 number of DRs, Level 4 DRs is of no surprise, that it is
20 inconsequential. Well, this is wrong. And the ICAVP scope
21 should have been increased a long time ago, not a decision,
22 you know, up at this last minute, should we increase the
23 scope. It should have been decided a long time ago and it
24 should have been increased, because these Level 4 DRs, you
25 can assume they exist throughout other systems, as well as

131

1 the Level 3 DRs.

2 I want to mention that within the past couple of
3 days we received these documents, two inspection reports,
4 the most recent SECY report, as well as a director's
5 decision. There's no way we can possibly digest this type
6 of information and be able to respond to it in a meaningful
7 manner. And I just wanted to mention that. It's very
8 difficult. We don't have experts that we can dispatch and
9 say take a look at the reports and give us a summary. We do
10 it.

11 Now in regard to the most recent -- the leaky
12 valve, the botched leaky valve repair, where the necessary
13 equipment was in Delaware, I'm sure we're all aware, Dr.
14 Jackson was quoted in the newspaper as saying that the
15 management's response to this event was a good sign. This
16 is comparable to a person doing a lousy gymnastic routine
17 and because they didn't fumble on the dismount, they get a
18 standing ovation. With all due respect to Dr. Jackson,
19 these types of comments, if they're in fact true -- which,
20 you know, they were in the paper -- if they're in fact true,
21 they sort of even further degrade our confidence in the NRC,
22 and makes a clear message that NU can do no wrong in a
23 sense.

24 And aside from the technical issues, which there
25 are many of, NU has only been getting passing grades from

132

1 Little Harbor, as Dudley just said, for a very short period
2 of time. But even in addition to that, there's other
3 reasons why we really believe NU should have its license
4 revoked. NU is currently being investigated by the NRC for
5 making false statements under oath. This is currently going
6 on by your agency. Furthermore, Northeast Utilities is
7 being investigated by the FBI, by the Department of Justice,
8 and by the Connecticut Department of Environmental
9 Protection. Would you want a person on trial for drunken
10 driving to drive a school bus. Would you let this happen?
11 I would doubt it.

12 Now NU wants to get Unit 3 back on line by July 1
13 so as to continue to collect \$13 million a month from
14 Connecticut ratepayers. That's their deadline. If they
15 don't get Unit 3 back on line by July 1 at 95-percent power,
16 they're out of the rate base. So we can understand their

17 schedule-driven nature. But what is the NRC's hurry? Given
18 that the entire nation is watching, just how your agency
19 deals with Millstone, and given that your agency's
20 credibility as a tough and effective regulator is at stake,
21 it's time that your agency bare its teeth and show that it
22 is not a lapdog. We are asking that you revoke Northeast
23 Utilities's license to operate nuclear reactors.

24 COMMISSIONER DICUS: Thank you.
25 Commissioner Diaz.

133

1 COMMISSIONER MCGAFFIGAN: I'm going to make a
2 statement, because I think I -- I disagree with much of what
3 you've just said. You made a political statement. There
4 wasn't -- we have just put Northeast Utilities through I
5 think the most enormous undertaking. And our staff has
6 integrity. It is not correct that every person is the same
7 people. Our staff has integrity as regulators. They have
8 overseen this process. You have the SECY paper that
9 outlines their conclusions. But the notion that we are a
10 lapdog because we will not revoke a license arbitrarily and
11 capriciously is something I just fundamentally disagree
12 with, and I'll say that as you leave the table.

13 MS. BASSILAKIS: I understand. But we're coming
14 from people who live in the communities, and had the NRC
15 been a tough enforcer, as I was saying, then this wouldn't
16 have occurred. It wouldn't have occurred at Haddam Neck
17 with radioactive materials being strewn throughout our
18 communities, and the whole Millstone issue wouldn't have
19 occurred.

20 COMMISSIONER MCGAFFIGAN: Well, it's not the time
21 to debate that, but I'd be happy to talk to you about Haddam
22 Neck, and I believe that the material that got offsite your
23 own Department of Environment has made it very clear that
24 the consequences were less than a millirem per year to any
25 individual that they've thus far been able to find. So it's

134

1 just not -- but whatever you want to --

2 MS. BASSILAKIS: The issue is more about the fact
3 that the systemic mismanagement at Millstone -- that the
4 regulator has to bear a degree of responsibility, which I
5 will say again is not at your watch. But we believe it
6 needs to be investigated to be understood so it won't happen
7 again. And that's part of why we're raising this, to show
8 also the systemic problem that goes beyond Millstone.
9 Because we're concerned for all of Region I at this point.

10 COMMISSIONER MCGAFFIGAN: I believe our job is to
11 judge Mr. Kenyon and his team and the results that they
12 have -- as the Chairman often says, the results they have
13 achieved thus far in preparing Unit 3 for restart, and
14 that's what we're about to do. But you're throwing in past
15 history going back decades, and we're judging an enormous
16 process that we've just gone through, I think probably one
17 of the most enormous processes this agency has ever
18 undertaken, and the people who -- both on our side, the NRC
19 staff side, and the utility, what they've been able to do.

20 And you have the staff paper. The staff paper
21 says that they believe that the utility is ready to restart,
22 and I did not hear anything in your statement that addressed
23 any of the staff's fundamental conclusions, other than to
24 throw out political points, but not specifics --

25 MS. BASSILAKIS: Well, we raise that other people

135

1 would raise technical specifics, and they will come along.

2 MR. McGAFFIGAN: We'll hear them.
3 COMMISSIONER DICUS: That's all right. If I could
4 here inject at this point in consideration of the time, we
5 do appreciate your comments, but I think perhaps we do need
6 to move on. We have several people who do want to comment,
7 and we certainly want to leave time for them to do so.

8 Again, thank you very, very much.

9 MS. BASSILAKIS: And thanks for the opportunity.

10 COMMISSIONER DICUS: I think the next group that
11 will come before us is the Citizen Regulatory Commission, I
12 believe represented by Mr. Mark Holloway.

13 MS. BURTON: Excuse me. May I raise a point of
14 order at this time. I'm Nancy Burton, and I'm an attorney,
15 and I have been representing the CRC, including involving
16 matters pending before the Nuclear Regulatory Commission. I
17 note that Dr. Jackson has absented herself from the meeting,
18 and I would request, given that the personal sacrifice that
19 was involved I know on the part of the Citizens Regulatory
20 Commission to send a representative here, that we sit here
21 and bide our time and await Dr. Jackson's return.

22 COMMISSIONER DICUS: I'll ask our counsel to
23 perhaps address your point. I might say, though, that Dr.
24 Jackson was called away, but we do have a quorum of the
25 Commission here, and I believe it is appropriate that we do

136

1 continue. But if you would address the issue.

2 MR. BURNS: Yes, that's at the option of the
3 Commission. There's a quorum present, and the meeting can
4 proceed in the manner the Commission decides.

5 COMMISSIONER DICUS: Okay. Do we need to formally
6 decide that at this point, or do --

7 MR. BURNS: No.

8 COMMISSIONER DICUS: We have the quorum --

9 MR. BURNS: Yes.

10 COMMISSIONER DICUS: And we can proceed.

11 MS. BURTON: Perhaps you could determine how soon
12 Dr. Jackson will return.

13 COMMISSIONER DICUS: I don't know, but I also will
14 note that this is a reported meeting, so the transcript will
15 be available.

16 MS. BURTON: I've made my objection.

17 COMMISSIONER DICUS: Please proceed.

18 MR. HOLLOWAY: I'd like to thank the Commission
19 for the opportunity to address you today. My name is Mark
20 Holloway. I currently live in Waterford, Connecticut. I've
21 been a resident of southeastern Connecticut my entire life.
22 I am employed by EG&G Services as an analyst and task
23 manager in the Systems Engineering and Design Department,
24 working primarily in the areas of combat control and sonar
25 system development for nuclear submarines.

137

1 Since 1995, September as a matter of fact, I've
2 been a member of the CRC. During its formation in August of
3 1996 I was appointed to the Connecticut Nuclear Advisory
4 Energy Council, and remain a member to this day. However,
5 I'd like to make very clear that my comments today do not
6 represent the viewpoint of the Nuclear Energy Advisory
7 Council, but are reflective of a position of the CRC.

8 I'm not an elected official worried about property
9 tax bases, nor am I a local business or civic leader
10 concerned about the consequences of NU's economic problems.
11 I've never been employed by a utility, nor have I ever
12 worked for a utility regulatory agency. My and the CRC's
13 general lack of any vested interest in the economics and

140

1 discharges? On at least four occasions in 1998, and I don't
2 get a chance to see all the LERs, but I am familiar with
3 these and personally have a copy, materials were improperly
4 discharged into Long Island Sound, resulting in LERs issued
5 and reports to the State DEP. This seems to be an
6 oft-repeated scenario is there's presently some legal
7 litigation pending that charges NU with the illegal dumping
8 of chemicals, including known carcinogens, into Long Island
9 Sound.

10 Let's talk some more about configuration
11 management. A number of DRs. Sargent & Lundy has issued a
12 staggering amount of DRs, depending on the count, probably
13 around a thousand, against Millstone 3. An inordinate
14 number of DRs have involved calculation errors. These DRs
15 have, for the most part, been Level 4, but the sheer number
16 and the fact that 20 percent of the initial resolutions,
17 proposed NU resolutions, have been rejected by Sargent &
18 Lundy, reflect a real difficulty in configuration
19 management.

20 As I said, this is just a sample, but amazingly
21 they still seem to be in kind of a problem discovery mode.
22 After being on non-operational status for a couple of years,
23 this is incredible. I mean you look at some of the bar
24 charts that I saw in your presentation, there's a lot of
25 flatline stuff there. There's not a movement, positive

141

1 movement there. Some of them do show improvement.

2 I want to say at this time that I have seen some
3 improvement in Northeast Utilities' handling of almost
4 everything. My big problem is that I haven't seen and the
5 CRC hasn't seen the degree of improvement that would cause
6 us to have confidence in this restart. There's still a lot
7 of stuff out there.

8 The State of Connecticut has recently enacted
9 deregulation legislation which will no doubt cause all our
10 potential energy suppliers to look at every way possible to
11 cut costs in order to compete.

12 Many of the NU's problems with past performance
13 can be directly attributable to management's attempts at
14 cost-cutting.

15 There are a lot of us around who believe that
16 deregulation and nuclear power are not a good mix.
17 Therefore, it is imperative that the NRC hold nuclear
18 generation facilities, the companies that operate these
19 facilities, to very stringent standards, even more than
20 ever, because we are going to see two things happening
21 simultaneously: the aging of this country's reactors and
22 the deregulation spreading across the nation.

23 I am very sensitive to the budget issues that the
24 NRC has in these areas too, but it's like you've got to be
25 tougher than ever and any judgment would have to be made on

142

1 a more conservative basis than ever in the opinion of the
2 CRC.

3 Mr. Bowling mentioned that he had -- they have a
4 need to rebalance the engineering workload after the
5 restart. This to me is a real indicator of the tremendous
6 amount of work that had to be done going into the situation.

7 I don't think anybody including myself, and I a
8 sure probably the NRC and Northeast Utilities are in this
9 category, really knew how many things needed to be fixed
10 before shutdown. I think we really have to look at an

11 aggressive schedule and say NU might operate by an
12 aggressive schedule but the NRC, and Dr. Jackson told me
13 this herself and I believe here, is not concerned with the
14 economics of the situation.
15 I think an approval for restart at this time would
16 be sending the wrong message and that I really -- really, I
17 live very close to the plant myself, and I'd sleep a whole
18 lot better if we took some more time to solve some of these
19 problems.
20 CHAIRMAN JACKSON: Thank you very much.
21 MR. HOLLOWAY: Thank you.
22 CHAIRMAN JACKSON: Commissioner Dicus.
23 COMMISSIONER DICUS: No.
24 CHAIRMAN JACKSON: Please.
25 COMMISSIONER DIAZ: Yes. I want to see if you can

143

1 define, because we need to understand, from the safety
2 perspective what is the degree of improvement that you
3 believe will be adequate in an industrial complex of this
4 magnitude that has the tremendous amount of oversight that
5 it has on it.
6 You say you are not satisfied with the degree of
7 improvement. I just want to know whether there is something
8 specific that you want to say, from the safety viewpoint --
9 we are not concerned with other things -- but safety. What
10 impacts on safety?
11 MR. HOLLOWAY: From a safety viewpoint I think
12 that invariably situations occur during an operational
13 scenario that are going to require your attention. That is
14 normal.
15 When you go into that operational scenario, if you
16 haven't cleared up enough of your backlog of items that
17 might have been deemed to be somewhat less safety
18 significant, that does not -- that to me says that those
19 things are going to be back-burner type issues, so I worry
20 very strongly about the amount of deferred work, about items
21 being put off till next refueling.
22 I think a lot of little things add up to big
23 things, and I think that -- this is my fear in the
24 situation.
25 COMMISSIONER DIAZ: Okay, so it is no single

144

1 specific safety issue that you would say we should not
2 consider at this point, the restart of Millstone 3, but is
3 the aggregate of many little things, the Level 4s, and
4 some --
5 MR. HOLLOWAY: Repeated violations -- I am
6 particularly bothered by the repetitiousness of some of
7 these problems, where things have been kind of longstanding
8 and they are sort of popping up and re-occurring, like the
9 recirculation spray system.
10 COMMISSIONER DIAZ: Okay, thank you.
11 MR. HOLLOWAY: Thank you very much.
12 CHAIRMAN JACKSON: Commissioner McGaffigan.
13 COMMISSIONER MCGAFFIGAN: No questions.
14 CHAIRMAN JACKSON: Thank you very much.
15 Appreciate it.
16 Before I call the next person forward, I realize
17 that I have stepped out and it was unavoidable, and it may
18 be unavoidable for others, on the Citizens Awareness Network
19 presentation. I apologize for that.
20 We would not continue the meeting if there were
21 not a quorum but I will review the transcripts of whatever I

22 have missed before I render my own personal judgment in
23 these matters -- so I just wanted to let you know that.
24 Let me call forward Mr. Ron McKeown, representing
25 the Friends of a Safe Millstone.

145

1 MR. McKEOWN: Good afternoon.
2 CHAIRMAN JACKSON: Good afternoon.
3 MR. McKEOWN: Thank you for inviting us. I am
4 very sorry I was not able to make it last time. Marvin
5 Scott, our Community Coordinator, has had -- his wife has
6 had a serious accident and that is why he is not with me
7 today.
8 Friends of a Safe Millstone has been in existence
9 since October-November.
10 Our main purposes have been to support the
11 employees in their work, to give credit where credit is due,
12 to attempt to bring a level of appropriateness, fairness and
13 truth in the public discussion, and to highlight that NU is
14 a major and important force in the area.
15 Our mantra is not "Millstone, My Millstone Right
16 or Wrong" -- up-front, if the plant isn't safe, and it's not
17 safe for our public, Friends of a Safe Millstone would want
18 it closed forever. We have had 6900 communications either
19 through web page, e-mail, fax, phone or mail that has come
20 from the public.
21 None of us who are very active in it are
22 technicians in nuclear power.
23 I, myself, used to be a Safety Director for the
24 American Red Cross. In fact, I used to write a newspaper
25 column for 17 newspapers called "My Safety" -- but our

146

1 communication has been real solicited and tried to separate
2 out people who worked for Millstone and their families. We
3 have attempted to get a sense of what the public who are not
4 pro-nuclear and who are not anti-nuclear, what they think
5 and what they feel.
6 I happen to be a PTA President and a Cub Master of
7 the largest Cub Scout pack in the country and a Boy Scout
8 leader. I meet with a lot of people in the region on a
9 daily basis. FOSM gets between 20 and 28 e-mails and phone
10 calls a day. We administratively can't handle getting back
11 to everybody, but we have received communications from 6900
12 people.
13 Three years ago there is not a prayer in God's
14 world that I would be here.
15 The voices and whispers of darkness about
16 Millstone were evident. They were evident on the baseball
17 fields. They were evident at PTA meetings.
18 Last year, beginning in April or so of last year,
19 verbiage by employees was very evident about confusion and
20 about safety and about training. They didn't like it.
21 Then something happened last summer. All of a
22 sudden all of this safety talk and all of this training
23 talk, all the confusion and anxiety and near-hostility about
24 it stopped, and some time late fall we saw -- and this is
25 what precipitated Friends of a Safe Millstone coming

147

1 about -- we saw that something different was happening. The
2 confusion, the anxiety, the tension by employees when they
3 were standing with their friends over a baseball game and
4 they were talking with their spouses and their kids and
5 their neighbors routinely seemed to break.
6 I was not involved in the process at that time,
7 and I couldn't really tell you at the time what caused it,

8 but it was clear and evident.

9 Since that time, and we have tried to get a handle
10 on how to say it and what we have seen about the safety
11 issue -- when you get a graduate degree or you get a degree
12 if you never had one before, or the first Master's you get,
13 all of a sudden you don't think you are an expert, all of a
14 sudden you -- you kind of get to a place of enlightened
15 professionalism, but you also recognize how much you don't
16 know and somehow you take a deeper breath and you are more
17 open-minded.

18 When we have had roundtable discussions at my home
19 among FOSM volunteers, the things that we hear is that all
20 of a sudden the employees are thinking differently. All of
21 a sudden the employees have somehow it is as if they have
22 gotten a graduate degree in Nuclear Energy and there's been
23 a heightened level of professionalism about who they are and
24 what they do. They are more proud than they have ever been
25 in our 12 years of living in the region about being part of

148

1 the nuclear industry. That is absolutely clear and evident.

2 They volunteer more now. They volunteer to teach
3 energy. They volunteer to teach merit badges more. Now
4 what magical thing that means I am not sure, but all I know
5 is that it seems to have been precipitated by the actions
6 and the firm hand that the NRC has had in this process.

7 There seems to be a resurgence of normalcy. The
8 dark whispers we had three or four years about money and
9 profit driving operations, supplies, materials -- we have
10 not heard that and I have been surprised we have not heard
11 that because one would think with the pressing needs and
12 pressing realities, you would hear it.

13 I would like to give you a handle on what we
14 believe the mainstream public really believes about this
15 process. The mainstream public by and large is very
16 ignorant about nuclear power. Most people over the age of
17 30 were not taught nuclear power and nuclear energy in
18 school.

19 We had public meetings in New England, just like
20 every other part of the country, where if it is a pool
21 issue, three or four hundred people will come out. If the
22 taxes are going to go up one mill rate, and people are upset
23 and angered by it, there's a zillion people there.
24 Sometimes we have had to go to a different system to
25 incorporate the numbers of people that come out when they

149

1 are concerned.

2 Yesterday, I had the opportunity to drive my
3 father-in-law to the beach, which is right across the bay
4 from Millstone. He is elderly, and as we were sitting
5 there, having an ice cream, it dawned on me how I could best
6 suggest to you what the real public believes, and I will
7 leave it to your own judgment.

8 People in southeastern Connecticut love their
9 families and love their homes and cherish their children.
10 If they were incensed, if they felt betrayed by you, they
11 would do what any of us in this room would do -- they would
12 show up at meetings in droves.

13 They would protest. This is mainstream
14 citizenry -- what they would do. They would be more
15 incensed than a 1 mill increase in taxes.

16 I have for you today -- this is a sign from
17 McCook's Beach, across the way from Millstone Point.
18 Yesterday there were 105 mothers and children playing on the

19 beach. If they felt it was filled with radioactivity or
20 they thought that right nearby plants and fruit that were
21 growing you couldn't eat, or if they thought you were doing
22 a shameful job, they wouldn't be playing on the beach, going
23 in the water with the most important thing in their lives.

24 The firm hand of the NRC has been felt in the last
25 two years. I wasn't involved in the process at all, but

150

1 prior to that I sensed there were troubles or management
2 control issues, but the here and now of it is this. I do
3 not believe for the life of me that one of those mothers or
4 one of those children yesterday that were on this beach and
5 right across the way from Millstone, if they did not think
6 there was a firm hand of control and rectification by the
7 NRC, they wouldn't be there.

8 Like Mr. Markowicz, I'm not going to move either,
9 and I live just as close.

10 Recently, on the same sand, just feet away, all --
11 as Mr. Sheridan said, many, many -- 100 percent of all the
12 government leaders that we invited to the beginning of the
13 process of reconciliation and bringing together, 100 percent
14 of those government leaders said yes, they would come and do
15 that. They praised in that document the whistleblowers, the
16 job of the NRC, the job of the new management, the Citizens
17 Regulatory Commission, and citizens in general. The process
18 of rectification and reconciliation is beginning. It's very
19 clear that right now, the here and now of it, that the firm
20 hand of the NRC is respected.

21 I thank you on behalf of our 4,250 members, and
22 maybe sometime tomorrow, I'll be on the beach. But thank
23 you again.

24 CHAIRMAN JACKSON: Okay. Thank you very much.

25 What's the breakdown, can you say, of your

151

1 membership between those who are Millstone employees and
2 those who are not?

3 MR. McKEOWN: We consciously carved out as we --
4 we carved -- we have about 2,100 additional
5 Millstone-related members. In our numbers, we do not use
6 those. We don't even tabulate those. It's somewhere,
7 2,000, 2,300 Millstone employees, workers, contractors or
8 spouses or family members. Then we have 4,250 over there
9 who are what I call mainstream citizenry. I could not give
10 you a guarantee that some of them didn't slip in there, but
11 we consciously did our best. In our numbers, we tried never
12 to blend the two numbers together. Again, we're not
13 technicians, we have a sense of what we hear and we have a
14 sense of what the process is doing.

15 CHAIRMAN JACKSON: Okay. Thank you.

16 MR. McKEOWN: Thank you.

17 CHAIRMAN JACKSON: Commissioner Dicus?

18 COMMISSIONER DICUS: No.

19 CHAIRMAN JACKSON: Commissioner Diaz?

20 Commissioner McGaffigan?

21 Thank you very much.

22 Let me call forward on behalf of the Union of
23 Concerned Scientists Mr. David Lochbaum. Good afternoon.

24 MR. LOCHBAUM: Good afternoon.

25 Slide 2, please.

152

1 According to NOrtheast Utilities, more than 180
2 physical changes to the plant, 450 changes to the updated
3 FSAR, and more than 2,000 configuration management items
4 have been completed in the last two years at Millstone Unit

5 3. Over 100 licensee event reports have been submitted,
6 including nearly 20 having moderate or high safety
7 significance.

8 Several of the modifications and LERs involved
9 problems dating back to the original construction of the
10 plant, while the remainder involved problems introduced
11 since that time. By any yardstick, considerable progress
12 has been made fixing plenty problems.

13 What does this volume of work tell us about the
14 condition of this facility when it last operated in March of
15 1996? That's not just an academic question; its answer is
16 directly relevant to your restart deliberations.

17 The question itself was first asked nearly three
18 years ago. In August 1995, George Galatis and we the people
19 submitted a 2.206 petition contending that because Northeast
20 Utilities willfully neglected longstanding safety
21 deficiencies, it lacked the corporate ethics to safely
22 operate Millstone.

23 We think this petition initiated a chain reaction
24 which led to the March 1996 cover story in Time Magazine and
25 the shutdown of all three Millstone units. Absent that

153

1 sequence of events, we sincerely believe that Millstone
2 would be operating today with inadequate safety margins.

3 That's our opinion and we understand that the
4 Commission and the NRC staff may not agree. That's fine.
5 That debate is not germane to today's agenda. But what is
6 germane is that fact that the Galatis petition remains
7 unresolved two and a half years later.

8 The huge volume of work completed by Northeast
9 Utilities suggests strongly that Mr. Galatis was right. We
10 do not understand how the NRC can contemplate allowing
11 Millstone Unit 3 to restart with this petition still open.

12 It's not the only thing we don't understand about
13 the NRC's actions at Millstone. The NRC ordered NU to
14 obtain an independent evaluation of its corrective action
15 program. Sargent & Lundy was selected as the independent
16 corrective action and verification program contractor for
17 Unit 3.

18 Slide 3, please.

19 The NRC's special projects office established a
20 four-level ranking scheme for Sargent & Lundy's findings
21 along with possible NRC responses to those findings. Level
22 1 findings were the most significant and level 4 findings
23 are the least significant under this scheme.

24 Slide 4, please.

25 Sargent & Lundy's findings were classified as

154

1 level 4 when the, quote, system meets licensing design basis
2 but contains minor calculational errors or inconsistencies
3 of an editorial nature. End quote.

4 The special projects office stated response for
5 level 4 findings was, quote, multiple examples could result
6 in expansion of ICAVP scope to evaluate for similar errors,
7 inconsistencies in other systems. End quote.

8 Slide 5, please.

9 According to Sargent & Lundy's data, 158 of its
10 level 4 findings involved calculational problems.
11 Calculation problems caused more level 4 findings than the
12 next three causes combined. 158 findings would seem to
13 constitute multiple examples warranting the NRC to probe
14 further; yet Special Projects Office elected not to follow
15 its own stated intentions.

16 Why not? Perhaps you should ask them. When the
17 public asks that question, Mr. Imbro replied that while
18 there were, indeed, numerous calculational problems, none
19 were safety significant and none affected equipment
20 operability.

21 Even if this were so, it contradicts Special
22 Projects Office stated protocol. By definition, no level 4
23 finding could be safety significant or affect equipment
24 operability. If it were safety significant or affected
25 equipment operability, then it cannot be a level 4 finding.

155

1 Thus, we suspect strongly that Special Projects Office was
2 unwilling or unable to stand behind its stated action for
3 level 4 findings. In other words, Special Projects Office
4 seems to have misled the public either by developing a
5 criterion with no chance of ever triggering the specified
6 action or by not taking the additional action that was
7 required by that criterion.

8 As bad as those implications are, it gets worse.
9 The root cause for the RSS orifice modification fiasco was a
10 calculation problem. The results from this bad calculation
11 were then used in a 50.59 safety evaluation that came up
12 with the wrong answer. Ultimately, all four RSS pumps were
13 rendered inoperable during what was intended to be
14 non-destructive testing; thus, a calculation problem
15 directly contributed to equipment inoperability in one of
16 the most risk-significant systems at the plant.

17 Sargent & Lundy had reviewed the RSS orifice
18 modification before the problem became self-evident. Had
19 they discovered the problem during that review, a level 1
20 finding would have been generated. Recall that the
21 criterion for a level 1 finding is that "System does not
22 meet licensing design basis and cannot perform its intended
23 function." The RSS system, with all four of its expansion
24 joint liners demolished, satisfied that criterion. NU is
25 extremely fortunate that Sargent & Lundy failed to identify

156

1 the problem.

2 Slide 6.

3 Speaking of failing to identify problems, in
4 January of 1986, the NRC issued Northeast Utilities an
5 operating license for Millstone Unit 3. That issuance
6 followed the NRC's determination that the facility met all
7 applicable regulatory requirements and that there was
8 reasonable assurance that the facility would be operated and
9 maintained in accordance with these requirements.

10 The extensive remediation in the past two years
11 demonstrates that neither criterion was satisfied. If
12 further proof is needed, the \$2.1 million fine imposed on
13 Northeast Utility last December for more than 50 violations
14 of safety regulations, some of which dated back to 1986,
15 should satisfy any skeptic.

16 How does that history affect today's restart
17 deliberations? During the May 1st Commission briefing, many
18 of the public presenters, including UCS, advocated measures
19 intended to provide margins above and beyond the restart
20 criteria. If confidence existed that the NRC could detect
21 declining performance and would take action to prevent
22 troubled plants from operating with inadequate safety
23 margins, then the public would not feel the need for these
24 kind of measures.

25 But no reasons exist for the public to have such

157

1 confidence. The NRC tracks, trends, charts, watches, and

2 may soon begin coloring plant performance; yet the NRC lacks
3 objective criteria to determine when performance at a
4 troubled plant has declined to the point that it must be
5 shut down. That was a key conclusion of the GAO report
6 issued in May of 1997. We feel that GAO's conclusion was
7 valid then and, more importantly, remains valid today.

8 Slide 7, please.

9 According to all the testimony by NU, the
10 independent contractors and the NRC staff, NU has satisfied
11 all the criteria for restart of Unit 3. Even if this were
12 so, it only addresses one of the two questions before you.
13 That question is whether the facility and its operator meet
14 all applicable regulations. The second equally important
15 question is whether the plant will be operated in compliance
16 with regulations in the future.

17 We remain truly concerned that the NRC staff lacks
18 both the criteria and the resolve to trigger the shutdown of
19 this facility in a timely manner if its performance falls
20 short of regulatory requirements. We cannot predict with
21 any degree of certainty what NRC's regulatory performance
22 will be after the restart of Millstone Unit 3, but neither
23 can the NRC staff. Everybody hopes that it will be better
24 than in the past, but what if it is not?

25 We build nuclear power plants with massive

158

1 containments and emergency systems for accidents that no one
2 thinks will happen because public health and safety must be
3 adequately protected even if they do occur. Likewise,
4 adequate protection demands that the NRC staff have the
5 wherewithal to shut down Millstone when it fails to meet
6 regulatory requirements.

7 History and ample circumstantial evidence strongly
8 suggests that the NRC staff in general and the Special
9 Projects Office at Millstone is not meeting this vital
10 adequate protection standard. Therefore, the Union of
11 Concerned Scientists respectfully urges you not to allow
12 restart of Millstone Unit 3 until you and the public in New
13 England have reasonable confidence that the NRC staff can
14 and will step in and stop declining performance at a
15 troubled nuclear power plant. Allowing Millstone Unit 3 to
16 restart without that confidence would simply be repeating
17 the mistake made by the Commission in January of 1986.
18 Please don't repeat that injustice to the people of
19 Connecticut.

20 There were no winners at Millstone. The licensee,
21 its employees, its stockholders, its ratepayers, the
22 citizens living around the plant, the nuclear industry and
23 the NRC all lost. There cannot be a repeat of a regulatory
24 meltdown at Millstone Unit 3 or any other nuclear power
25 plant. Worse yet, there cannot be an accident at any plant

159

1 operating with inadequate safety margins as the three units
2 at Millstone operated for so many years.

3 Thank you.

4 CHAIRMAN JACKSON: Let me ask you three questions,
5 Mr. Lochbaum. The first question is give us some specifics,
6 if you will, relative to your statement that the special
7 projects office is not operating or adhering to the adequate
8 protection standard.

9 MR. LOCHBAUM: I think the the Level 4 DRs that we
10 cited in the presentation. Beyond that, when the training
11 memo issue came up in July of last year, we were concerned
12 that NU's investigation and bringing in Admiral Carr to look

13 at that wasn't really going to get to the hard core of the
14 matter, was whether these people were discriminated against.
15 The focus of that inquiry was to determine whether those
16 people did the actions that warranted that response, that
17 corrective action, disciplinary action.

18 The concern we raised to Mr. McKee was that that's
19 only half the question. What has to be done is get
20 everybody, every employee at Millstone who did those
21 transgressions, suffer the same kind of disciplinary action.
22 That's the way you determine whether it was retribution or
23 not. That was not looked at. So I know Carr just concluded
24 that most of the employees had done the behavior that
25 warranted that disciplinary action; didn't look at whether

160

1 everybody else who was guilty of the same misdeeds suffered
2 some kind of disciplinary action. So it didn't really get
3 to the core of the matter of whether these people were
4 harassed or intimidated and retaliated against.

5 The issue was raised to Mr. McKee before that
6 investigation started, and then it was dismissed without
7 much of recourse.

8 We had the same issue with corrective actions
9 where we felt that the high rejection rate between Sargent &
10 Lundy and Northeast Utilities was disturbing. When it was
11 raised to Dr. Travers, I asked him if he had ever asked
12 Sargent & Lundy if they were satisfied with the response to
13 the corrective -- the resolutions. And this was last fall
14 some time. The answer was it never occurred to him to ask
15 that question because they were waiting until all the
16 corrective actions were done and the answer was done. But
17 that would be like taking a multiple choice test in school,
18 where if I answered B and the teacher says no, and I answer
19 C, the teacher says no, eventually I can get 100 on any test
20 that way. And that was the same way that special projects
21 was allowing the corrective action process to be evaluated.

22 So we -- there's been a history of raising
23 concerns and then really just not being addressed.

24 CHAIRMAN JACKSON: Let me ask you the second
25 question. You indicated that the second issue before the

161

1 Commission is whether Millstone 3, Unit 3, will be operated
2 in compliance with the regulations. Now I noted that
3 Sargent & Lundy's final slide states that they feel the
4 processes are adequate, you know, blah, blah, blah, on an
5 ongoing basis. Do you feel that their conclusion addresses
6 your item (b) in terms of the go-forward position?

7 MR. LOCHBAUM: It addresses part of it. It
8 addresses the part about does Northeast Utilities have the
9 structure in place to prevent declining performance, and I
10 would agree with Sargent & Lundy that they have at this
11 point that mechanism in place. But the second question is
12 really if, for whatever reason, that performance were to
13 decline in the future, will the Commission or will the NRC
14 step in and stop that. And Sargent & Lundy didn't address
15 that, that is beyond their scope. That's the true concern
16 we have with the second question.

17 CHAIRMAN JACKSON: Let me ask you this question
18 relative to that. Now it is true that the Millstone plants
19 ended up being shut down for various operational reasons.
20 Nonetheless, the NRC issued orders to effect improvement,
21 and do you believe that NU, for what improvement you will
22 admit that they may have made, that they would have been as
23 effective in identifying and correcting the issues or the
24 problems in the absence of the orders?

25 MR. LOCHBAUM: No. That brings the Commission --

162

1 those orders were very helpful in guiding or coercing or
2 getting NU down that pathway. So that without that, they
3 wouldn't be to the point where they are today.

4 CHAIRMAN JACKSON: And so is your concern that the
5 Commission would not similarly step in if it felt that there
6 were declining performance on a go-forward basis? Or is the
7 standard that you feel the plants should be shut down and
8 the Commission should do that?

9 MR. LOCHBAUM: Well, I don't -- I think the
10 problem is that there isn't that standard, there isn't that
11 criteria. If you look at NRC Manual Chapter 0350 for
12 restart of the plants, it -- although it's loosely defined
13 in what needs to be done, and on a case-by-case basis,
14 there's the ability to define what that process is, there's
15 -- nowhere have I seen was there a process identified for
16 what it takes to shut down a plant on a bad performance.
17 We've tried to develop an empirical data base by ourselves
18 where we can rate things to figure out what does and does
19 not constitute that, and we can't even figure that one out.
20 So that it's very difficult to figure out what causes, other
21 than media attention, NRC -- or plant shutdowns, and that's
22 not the right standard, we think.

23 CHAIRMAN JACKSON: I do agree with one statement
24 you made, which is --

25 MR. LOCHBAUM: I knew I'd get one eventually.

163

1 [Laughter.]

2 CHAIRMAN JACKSON: -- that it was media attention
3 which led to the actions that were taken. But -- and we'll
4 leave it at that.

5 MR. LOCHBAUM: Okay.

6 CHAIRMAN JACKSON: Commission Dicus?

7 COMMISSIONER DICUS: No questions.

8 CHAIRMAN JACKSON: Commissioner Diaz?

9 COMMISSIONER DIAZ: Yes. I believe that in
10 response to the second question, you have concern of what
11 will happen and, you know, what type of device or matrix or,
12 you know, do we have. And you said that you tried to look
13 at it and you couldn't find one way of doing it, and that's
14 probably the right answer. There is no single way of doing
15 it because we never look at one single little device or a
16 series of little devices. We are always looking at this
17 umbrella of adequate protection of health and safety, and it
18 is impossible for us to say whether we will respond to it
19 next six months.

20 I think the Commission and the Staff have shown
21 that we have responded to it in this case, even though it
22 was great demands, but -- and there's an issue that keeps
23 coming around, it's how far do you go in this democratic
24 system into a licensee. How much do you go into a private
25 citizen's life. We are a regulatory agency, which you know

164

1 very well, and we have a set of regulations that we have to
2 abide by, and we go many times beyond those regulations to
3 provide adequate protection of health and safety. We do not
4 control the future behavior of the licensee. It is not
5 possible for us to establish policies that will go at how
6 somebody will behave.

7 What we can do, and we are listening to you and
8 everybody, is establish requirements that are according to
9 law and that we can actually use and implement in a

10 day-to-day basis, and occasionally a month-to-month basis,
11 that would provide that adequate protection and standards.

12 If there is something else that we could do, I
13 would really like to know, because I just don't.

14 MR. LOCHBAUM: Well, you said you can't control
15 the future performance of licensees. I think you do have
16 that chance with Millstone Unit 3 at the moment. I think
17 that's the purpose of this hearing. You can control their
18 future performance with a no vote. But beyond that issue,
19 the question was adequate protection standards.

20 There are evidences that the NRC has taken actions
21 in controlling the plants with troubles, Salem, Millstone,
22 there are plenty of examples. I don't need to go through
23 them. The concern we have -- and I think it was echoed in
24 the GAO report or independently derived in the GAO report,
25 is that sometimes the NRC waits too long to take those

165

1 actions. I think the fact that the NRC actions are taken
2 means that you are not overstepping the bounds, and you
3 aren't going too far into the licensee's house, perhaps
4 waiting too long. And I think --

5 COMMISSIONER DIAZ: Well, that might be true, but
6 I want to disagree at the beginning when you said we can
7 control. That's the issue. I don't want to control. I
8 want to regulate. I want to regulate effectively and to
9 provide adequate protection of health and safety. This is
10 not a controlling society like the Soviet Union had. We do
11 not control. And the licensee manages the plant. We
12 provide the regulations. And anything that we can do in
13 making better regulations, I think we are all for it. We do
14 not control. There is a distinction.

15 MR. LOCHBAUM: Well, I think the issue in our
16 minds isn't so much better regulation; it's just enforcing
17 the existing regulation. That's been the case all along.

18 CHAIRMAN JACKSON: Commissioner McGaffigan?

19 COMMISSIONER MCGAFFIGAN: I'm going to ask just a
20 couple of questions maybe along the same lines. This issue
21 of whether there is ample circumstantial evidence that
22 suggests the NRC Staff in general and SPO in particular
23 isn't meeting the standard and won't close things down. Are
24 there plants in the United States today, in the opinion of
25 the Union of Concerned Scientists, that are operating that

166

1 shouldn't be operating?

2 MR. LOCHBAUM: We have very serious doubts about
3 the ice condenser plants, with the exception of D.C. Cook.

4 COMMISSIONER MCGAFFIGAN: Which is shut down.

5 MR. LOCHBAUM: Which is shut down. That's why we
6 accepted -- threw that one out. The ones that are
7 operating, we are not sure that they are safe, because the
8 concerns that were first raised to us by a whistleblower at
9 Watts Bar, and somehow D.C. Cook is paying Watts Bar's
10 problem, and I don't understand how that works.

11 COMMISSIONER MCGAFFIGAN: But the fact is that
12 D.C. Cook, not as a result of media attention or whatever,
13 but as a result of an NRC inspection, is shut down. Quad
14 Cities went through a long period where we were, again
15 without, I think, very many bright lights on it, looking at
16 the fire protection issues there, we recently allowed one of
17 the units to start up. Point Beach, Crystal River. I mean
18 there's a long history -- Clinton -- of the NRC in recent
19 years taking fairly tough regulatory action. Perhaps we
20 don't take the precise actions that you would like, but the
21 notion that the Staff has shown an unwillingness to close

22 plants down when they have evidence that that's required,
23 not through order, but through the, you know, oftentimes
24 it's the licensee. I assume that you would prefer,
25 especially given your experience in the industry, that

167

1 licensees make conservative decisions themselves on this,
2 and not have to be under an order from us. Is that correct?

3 MR. LOCHBAUM: That's correct. But I think from
4 our standpoint, when we see that the licensees aren't making
5 those conservative decisions, it's the NRC's job to step in
6 and do that proper decision, or order this, if it doesn't
7 come.

8 As far as D.C. Cook, we think it was media
9 attention that led to the ice condenser inspections because
10 we submitted a 2.206 petition, and without media attention,
11 we wouldn't have got a meeting to convey the ice condenser
12 problems. To its credit, the day after that public meeting
13 where we conveyed the ice condenser problems, the NRC had
14 resident inspectors at D.C. Cook the following day. But not
15 until. That plant was hours away from restarting with the
16 ice condenser busted until media attention brought about the
17 public meeting. So --

18 COMMISSIONER MCGAFFIGAN: Okay. I think -- again,
19 I respectfully disagree that there is ample circumstantial
20 evidence that the Staff isn't doing this. I think there's
21 ample direct evidence that they are doing the contrary, but
22 I'll --

23 MR. LOCHBAUM: I think it's an important point
24 because when there are concerns about corrective action in
25 the employee concerns programs at Millstone, where you had

168

1 doubts that they would be able to fix those, you had an
2 independent contractor, ordered an independent contractor to
3 come in and look at both those areas.

4 We contend that the NRC's effectiveness is maybe
5 challenged. But there hasn't been any independent
6 assessment of the changes that you have made in the last 26
7 months, to make sure that they also addressed all the
8 problems. So I think that kind of hearing would answer
9 this, whether there's ample circumstantial evidence or not.
10 But there hasn't been that venue.

11 CHAIRMAN JACKSON: Repeat what it is that you just
12 said.

13 MR. LOCHBAUM: The whole thing?
14 [Laughter.]

15 CHAIRMAN JACKSON: No. Just your last two
16 sentences.

17 MR. LOCHBAUM: Okay.

18 CHAIRMAN JACKSON: But to amplify.

19 MR. LOCHBAUM: In the last two years, NU has made
20 a lot of progress. If you tally that up, that's a huge long
21 list of ledger things. The NRC has made some changes in the
22 last two years. We would like to see some independent
23 assessment that the changes made by the NRC have addressed
24 all the problems that led up to Millstone and these other
25 plants. There hasn't been that kind of review. We think if

169

1 there was that opportunity, we could put this issue of
2 whether there's ample circumstantial evidence or just
3 opinion to bed.

4 CHAIRMAN JACKSON: So GAO reports and IG reports
5 notwithstanding, you don't feel that kind of review has
6 occurred?

7 MR. LOCHBAUM: We feel the GAO report identified
8 problems, but we don't think that the NRC's response was not
9 -- there's not --
10 CHAIRMAN JACKSON: Well, why don't you go and talk
11 with our authorizers?
12 [Laughter.]
13 CHAIRMAN JACKSON: And suggest that we have an
14 authorization hearing. And we would be happy to talk on the
15 record at a public forum about the changes and the efficacy
16 of them.

17 MR. LOCHBAUM: Okay.
18 CHAIRMAN JACKSON: But I do think that, if I can
19 paraphrase, that you have left two issues on the table: One
20 has to do with whether Northeast Utilities at this point is
21 ready to restart Millstone Unit 3, and your answer is no.

22 MR. LOCHBAUM: The answer is no.
23 CHAIRMAN JACKSON: And the second has to do with
24 the adequacy of the regulatory process in terms of having
25 clear criteria relative to adequate protection and related

170

1 to that, or following from that, whether NRC will have the
2 will to take the necessary action to address problems at the
3 appropriate point to ensure adequate protection.

4 MR. LOCHBAUM: That's correct.
5 CHAIRMAN JACKSON: Is that fair?
6 MR. LOCHBAUM: That's fair.
7 CHAIRMAN JACKSON: Okay. Thank you.
8 MR. LOCHBAUM: Thank you.
9 CHAIRMAN JACKSON: We will hear at this time from

10 Mr. Donald Del Core, Sr.

11 Good afternoon.

12 MR. DeLCORE: Good afternoon. Let me thank you
13 again for giving me the opportunity to address the
14 Commission. I have a few notes and a few comments, so I
15 would like to get with them here to try to get through them.

16 The recommendation by Little Harbor Consultants,
17 which is an old issue, and the NRC staff that the employee
18 concerns and safety conscience work environment were
19 acceptable to support a restart was an issue of May 1, and I
20 believe that it needs to be revisited, and there are an
21 additional ten pending items which I addressed in a May 4th
22 letter to you regarding that May 1 meeting which I haven't
23 had a response to.

24 I believe that a couple of areas, just to give you
25 an idea and give your audience here an idea of what areas

171

1 I'm talking about, OIG is currently conducting an
2 investigation into the Commission SPO and NRC staff response
3 to allegations of Little Harbor personnel involving
4 themselves and more than the prescribed oversight duties,
5 which effectively, as far as I'm concerned, in a complaint
6 to them created the appearance of an effective ECP in
7 workplace environment.

8 That was mostly through the efforts of Billie
9 Garde, who essentially, in my opinion and the opinion of a
10 number of witnesses that I talked to and directed towards
11 OIG, were simply outside the bounds of observations and
12 objective looking at what NU is doing and was much more
13 involved in actually giving consulting services, involving
14 themselves in negotiations and actually helping people out,
15 and I think giving heads-up notices to Northeast Utilities
16 regarding issues that were brought forward to her without
17 informing the public at the same time as required by the
18 agreement that she had.

19 Therefore, I had some serious questions regarding
20 that and I think you need to revisit that, and I think you
21 probably ought to at least get some preliminary report from
22 the inspector general prior to going forward with any
23 decision regarding the adequacy of at least that particular
24 portion of Northeast Utility's ability to operate unit 3.

25 I understand you just had a recent closed meeting

172

1 regarding isolating cynics. I think you understand my
2 serious objection to the use of cynics in any form at all in
3 any nuclear power plant, so I therefore think that that also
4 needs to be revisited.

5 The root cause investigation report by Northeast
6 Utilities dated April 13th, 1998 on the failure of the RSS
7 expansion joints, that report pretty much substantiates the
8 claims by Captain Mendenhal who sat here before you on May
9 1st regarding loss of design control, and I think if you
10 recall, he cited substantial problems with the design
11 control and implementation process from a report by the
12 Nuclear Oversight people dated April 22nd, and again, he
13 read that at the meeting.

14 I think it behooves everybody on this Commission
15 to review both of those reports before you put that
16 oversight engineering issue to bed.

17 The deferrals of deficiencies identified in the
18 ICAVP is, as far as I'm concerned, still unacceptable. The
19 ICAVP deals with safety and risk significant systems, and by
20 your order, specifically having the most safety and risk
21 significant systems be selected clearly delineates that any
22 deficiency in those systems is in and of itself a
23 significant and -- significant safety and risk issue. So
24 therefore, I can't understand how any deficiency identified
25 in those systems can be considered below regulatory concern.

173

1 Again, I've written a letter to you about that and raised
2 that issue. Again, no answer.

3 Level 4 items were described as minor
4 typographical and calculational errors; yet, what I was
5 able, by just cursory looking through about 50 of the total
6 of a thousand that I had in my office, I was able to pull up
7 25 in a very short period of time and fax them to Chairman
8 Jackson on February 8th.

9 I did get a response by the ICAVP deputy, which I
10 considered inadequate because he had basically changed the
11 original published criteria that the NRC had established.
12 There were not minor typographical errors and minor
13 calculational errors associated with the 25 that I
14 submitted; so by his identification of the category, they
15 absolutely couldn't have been level 4.

16 While they might not have met the severity level
17 of safety by the characterization of the criteria again that
18 SPO established, I think in July of 1997 as a result of an
19 OIG investigation, redid it, and it appeared to me that it
20 came out the same, but it comes up to the same issue that I
21 just heard the Union of Concerned Scientists say -- they're
22 not following their own objective requirements and they're
23 simply subjectively changing the criteria to meet the
24 situation, and that's unacceptable.

25 New issues. The lack of current NRC inspection

174

1 report issues from the ICAVP report, the 40,500 report,
2 inspection, the RC inspection, and the last two routine
3 inspection reports, they were published -- the last two

4 inspection reports, one was published -- the latest one was
5 published May 22nd and deals with a period between 2 and 31
6 March, and the one previous to that that deals with a period
7 ending February 28th was issued May 26th. And we don't know
8 about March 31st until June 2nd because we don't have any
9 report on that. We don't have the RC report, we don't have
10 the 40,500 report, we don't have the ICAVP report -- how can
11 we come up here and give you information to tell you whether
12 we think they're ready to start up? That's ridiculous and
13 it's very typical NRC to try to come and dump stuff.

14 I got a FOIA request that I made in March dumped
15 on me May 29th regarding the ex parte communication issue,
16 and I'll discuss that in a few minutes.

17 You have to provide information. You're telling
18 me that you're driving the schedule by not giving -- not
19 allowing all of the processes and all of the inspection
20 reports to come out, give people a chance to review them and
21 then come up here and be effective in requiring -- or at
22 least reading to you or bringing up issues that they feel
23 are inadequate with regard to the licensee. By you having a
24 meeting in June and giving me information at the end of May,
25 that's effectively what you're telling me, is you're going

175

1 to drive to me NU's schedule. You can tel me whatever you
2 want publicly, but privately, when I get all that stuff
3 dumped on me, like the policy issue that was FedExed to me
4 Saturday morning, is ridiculous. It's not the way to run a
5 ball game and it certainly is creating problems, and the
6 public can't inform itself on issues relevant to the
7 proceedings without the information.

8 It's disturbingly familiar to me, and I raised the
9 issue on August 6th, 1996, with Shirley Jackson -- Dr.
10 Shirley Jackson -- excuse me, Doctor -- in the public
11 meeting where I indicated that in late 1994 and early 1995,
12 unit 2 shut down voluntarily and agreed with the Commission
13 that it would not restart until it met the satisfactory
14 requirements of the 0350 agreement.

15 We couldn't get any information for the June
16 public hearing. I tried from Jack Durr a number of times to
17 get it, and it wasn't available and he wasn't going to do
18 anything to provide me with that information. So we had a
19 public hearing in June, and no new information came out.
20 Why does that surprise me?

21 They allowed the plant to restart in August of
22 1995, put it on the watch list in January of 1996, and then
23 shut it down in February of 1996 because of 50.54(f) issues.
24 How should I feel comfortable with the way that process
25 went, because there was a lack of information, there was a

176

1 rush to meet schedules, and I see a same parallel with this
2 policy issue that was just issued the other day. So I have
3 some real concerns about that.

4 If you look at -- if you take the time to read the
5 July 20th letter on the Unit 2 restart assessment by Thomas
6 D. Martin, who was then a regional administrator, it seems
7 to be a very -- strikingly close to the policy issue that I
8 just read from, Mr. Callan. So you need to maybe take a
9 look at that.

10 Incidentally, one issue that I wanted to bring out
11 to you about those graded deferral system reviews that NU
12 did on its ICAVP issues that gave it essentially no level 2,
13 no level 1 issues, very few level 3 issues and a whole bunch
14 of level 4 issues, you have to understand, if you're going
15 to put that in perspective, you ought to take a look at the

16 out of scope SSFI, which is the NRC ICAVP as we all know.
17 There were some pretty heavy level 1 and level 2 issues that
18 were found and magically taken away because they were either
19 previously determined by Northeast Utilities, by CRs
20 previous to the NRC's SSFI, that, you know, weren't found --
21 they were found by Northeast Utilities, but there wasn't
22 anything done with them. They were very, very serious
23 issues.

24 There were issues of back flow from safety systems
25 during a LOCA, which dumped coolant, very heavily

177

1 radioactive coolant. Of course, in the even of a large
2 break LOCA, you might have some fuel damaging pumping that
3 highly radioactive water back into areas like the IRWST,
4 which is vented right to the public. Unacceptable. Why was
5 that? Because there were check valves that weren't checked
6 as a part of a system requirement from information notices
7 both from the NRC and the industry to tell NU to do that.
8 So since 1986, they never checked those check valves. Major
9 problem.

10 I'm getting away from the issue here.

11 Corrective action program. Deficiencies continue
12 to plague Millstone and have been identified in the most
13 recent inspections. Again, I don't have the reports and I
14 happen to be a lucky individual that's retired from the Navy
15 and retired from NU, so I can go to exit meetings and I can
16 take notes and gather some information. So I've got one or
17 two up on most public that can't get that information.

18 Of the inspections, the 40,500, the IRWST, the
19 ICAVP, and the routine inspection report for the period up
20 to February 28th, some of the substantial issues that have
21 come out of there are back flow from a number of safety
22 systems into the IRWST and the design basis accident, which
23 is putting the public at substantial risk for twelve years.
24 NRC notifications about the problems didn't seem to help NU
25 off top, dead center on it.

178

1 You no doubt recall the RHR flow bypass valve
2 oscillation problem, that you raised issues with the
3 licensee on February 19th that had gone on since the
4 inception of unit 3 or at least the commercial operation of
5 unit 3, and they had deferred it and your team had come in
6 and found that it's a deferred item, a rather substantial
7 issue. Not impressed with that corrective action.

8 Your SPO will be quick to point out that there
9 were maybe 20,000 corrective actions and they have a few
10 that they missed, but they were pretty significant like back
11 flow into the IRWST and an RHR in a heat sink system --
12 that's your ultimate heat sink here we're talking about. So
13 I think that's a pretty significant problem.

14 The RSS valve problems, again identified by your
15 organization, not identified by Sargent & Lundy, not
16 identified by Northeast Utilities, and that occurred --
17 we're talking about late time frame stuff here, folks.
18 We're talking from September of '97 all the way to March or
19 April of 1998, because that's what I'm going to talk about
20 here for a couple of minutes, and that was the
21 January/February time frame.

22 Possibly the RSS flow modification debacle in
23 February and March of 1998 time frame, the more recent
24 non-conservative moves that were made by Millstone 3 dealing
25 with the packing leak on three RCS V132 -- that was an

179

1 amazing story -- the valves being consistently packed, from
2 what I could find in NU records, since 1985, before they
3 ever went commercial, and in February of 1986 they repacked
4 it again. So they repacked it in '85 and repacked it in
5 '86. They come up with a leak in May of '95, and they got
6 some information, and I can't quite get all of it out of
7 their report, but it talks about replacing the valve stem
8 and the disk because of separation, and they talked about
9 using a used stem and disk. I wonder if that's the one that
10 just failed. You think maybe? I think it might have been.

11 Again, May 12th, 1995, report of another packing
12 leak after they just got through working on it on May 1st,
13 and apparently they didn't repair that, they waited until
14 September of 1997, which they repacked that valve, they
15 cranked up for an OSTI, and in April, they had another leak.

16 So I think they got it all repacked and they got
17 this strong-back over the back of it, but I think that valve
18 is going to leak again because I think it's got a leak
19 problem and I think it's a design problem with that valve,
20 and I think you ought to -- if they're not going to use it
21 -- it's my understanding right now that they have committed
22 to not going into isolated loop situation's critical -- they
23 have an option, I guess, of isolating one loop by their
24 license -- and operating at some reduced power level
25 consistent with an approval by the Commission or by the

180

1 staff.

2 But they have committed somehow in their
3 procedures to not going into an isolated loop condition in
4 that, and therefore, the use of that valve is now moot. So
5 if the valve use is moot, and it's not required, then maybe
6 it's not in compliance with with the FSAR, and maybe we
7 ought to amend it or something. Maybe they ought to take
8 that valve out of there and that would solve this problem
9 about running right now with a leaky valve and a strong-back
10 in it, okay?

11 CHAIRMAN JACKSON: Mr. DelCore, could you --

12 MR. DelCORE: Yes?

13 CHAIRMAN JACKSON: -- move along?

14 MR. DelCORE: Yes, I can.

15 CHAIRMAN JACKSON: Thank you.

16 MR. DelCORE: I'm sure that NU would love for me
17 to move on right now with these problems.

18 There are a number of issues that you need to look
19 about in that valve. How could -- they had a procedure that
20 told them not to loosen the packing nut if there was stem
21 leakage. They had stem leakage by their own documents that
22 said they had stem leakage at 340 pounds, which they had
23 reduced to go to mode 5. They had stem leakage; they took
24 the nut off and got this three-and-a-half gallon leak.
25 Amazing. They did it. The procedure told them not to do

181

1 it; they did it anyway.

2 Now, in retrospect, they knew -- they took a
3 radiograph of the valve -- they knew there was stem and this
4 separation, so they knew they couldn't have had a back seat,
5 so they knew they were going to have stem leakage. They had
6 it up at all the other pressures. So why did they take it
7 apart?

8 Where was the free seal equipment? Where was
9 quality control requiring the free seal equipment? As it
10 turns out now, the free seal equipment couldn't even be done
11 in there because there's not enough room to put it in.

12 You talk about researching a job -- they didn't

13 research it at all. Guess what one of the problems of your
14 OSTI found. Your OSTI inspection found work planning and
15 control was identified as having an inability to identify
16 the work scope. 3RCS V132 ought to attest to that. Here's
17 an OSTI that was run, somebody splashed some oily water, let
18 these guys go, and they got this big problem with V132 now.
19 Something is wrong here, folks. This ain't right, what
20 we're talking about right now.

21 SPO, after continuous public outcries, established
22 criteria with deficiencies discovered in the ICAVP. That
23 July, July of 1997, they decided to come up with criterion
24 as a result of an OIG complaint made by me and so identified
25 by your IC -- by your SPO in public chastising me. I didn't

182

1 like that very well.

2 CHAIRMAN JACKSON: Mr. DelCore.

3 MR. DelCORE: Yes.

4 CHAIRMAN JACKSON: I'm going to give you two more
5 minutes.

6 MR. DelCORE: All right. Chairman, I really
7 appreciate that, but I think you should take into
8 consideration the fact that the Northeast Utilities in the
9 May 1 meeting took an hour and a half past their scheduled
10 hour and a half, and I think your -- you know, I have some
11 important information --

12 CHAIRMAN JACKSON: No, and I --

13 MR. DelCORE: I understand --

14 CHAIRMAN JACKSON: I have given you actually more
15 time --

16 MR. DelCORE: I understand you have and I would
17 appreciate you giving me a few more minutes to finish.

18 CHAIRMAN JACKSON: I'm going to give you two more
19 minutes.

20 MR. DelCORE: At any rate, there are 600 level 4
21 issues. Two-hundred and forty of them are associated with
22 calculations and calculation controls. That's 40 percent of
23 all the deficiencies that were confirmed and not previously
24 identified by the ICAVP as dealing with calculation and
25 calculation control. We're not only talking about a trend

183

1 here; we're talking about a programmatic issue.

2 Additionally, there were 94 associated with
3 drawings -- that's 16 percent; 86 associated with component
4 data -- that's 14 percent; and 75 associated with
5 installation implementation -- that's 13 percent. Talk
6 about trends. No expansion of the ICAVP scope occurred.
7 Eighty-nine items of the calculation problems were
8 associated with RSS. That's 15 percent of them. That's
9 another trend.

10 They only reviewed 1,700 calculations, folks.
11 They only did 14 percent of the calculations, you know what
12 I'm saying? Something is wrong here. Excuse me. I mean
13 the number associated with calculation error, 14 percent of
14 the 1,700 they reviewed.

15 The out-of-scope ICAVP raised three substantial
16 issues, air binding in the charging and safety injection
17 pumps, IRWST back leakage, and a tech spec valve line-up for
18 the charging system where the valves weren't locked into
19 position. Guess what your OSTI found a few weeks later?
20 Valves not locked in position again. Son of a gun, okay?
21 So your SPO isn't doing a very good job.

22 The OSTI identified some other issues. They
23 identified issues of failure to follow procedures, they

24 found failures of not reporting heat up-rates on pressurizer
25 heat-ups and non-completion of surveillances that were

184

1 required.

2 Let me go through this. Ex parte communications.
3 Now, there's an issue for you. I raised an issue about Mr.
4 Blanch meeting with the Commissioners -- exempt Commissioner
5 Dicus because she wasn't there. I got a FOIA release. The
6 FOIA release gave me -- for Mr. Blanch's review with Dr.
7 Jackson gave me about a quarter of a page worth of
8 information. Everything else was redacted and the redaction
9 was an exemption for attorney-client privilege. So I have
10 some real concerns about a FOIA where I'm asking about ex
11 parte communication and now there's an attorney-client
12 relationship involved.

13 I also asked for OSTI information on a FOIA
14 request and I haven't been able to get that. So I filed
15 this --

16 CHAIRMAN JACKSON: Mr. DelCore --

17 MR. DelCORE: Oh, I'm sorry. I have to give that
18 to the secretary?

19 I filed this lawsuit against Dr. Jackson -- and
20 I'll give you four copies, one for yourself -- because I
21 think that somebody needs to send a message here that when
22 we ask for FOIA information so that we can comment at these
23 kind of meetings, we should be granted that information.

24 CHAIRMAN JACKSON: Mr. DelCore?

25 MR. DelCORE: Yes?

185

1 CHAIRMAN JACKSON: We have many other citizens
2 groups to speak and all must be given a chance.

3 MR. DelCORE: May I ask about --

4 CHAIRMAN JACKSON: Therefore, if you would like to
5 submit the balance of your statement for the record, we
6 would be happy to hear it. I have polled the members of the
7 Commission, and I think we're going to have to proceed.

8 MR. DelCORE: Okay. I think you're being unfair
9 with me, but if I could ask you one -- just one favor? The
10 past -- excuse me -- the past information, you did an
11 inspection in February, your people? They found that the
12 pass system hasn't successfully operated or been able to be
13 sampled since 1988, and that even if it was operable so they
14 could use it, that the people who were using it couldn't
15 operate it, that the training was inadequate, and that they
16 couldn't do the correct dose calculations for emergency
17 evacuation plans in February of 1998. My goodness. Don't
18 approve this vote. Don't vote yes.

19 CHAIRMAN JACKSON: Thank you, Mr. DelCore.

20 MR. DelCORE: If you do, you have more guts than
21 me.

22 CHAIRMAN JACKSON: Thank you very much.

23 We are now going to hear from a group of rehired
24 Millstone employees: Mr. Blank, Mr. Collins, Mr. Verdone
25 and Mr. Meehan.

186

1 MR. BLANK: Good afternoon, Chairman Jackson,
2 Commissioners. Thank you for inviting me to speak before
3 the Commission. My name is Harry Blank, and I am here today
4 on my own as an employee of Northeast Nuclear to hopefully
5 influence you to allow Millstone 3 to restart.

6 Two and a half years ago the NRC saw chaos at
7 Millstone. FSAR only occupied shelf space, maintenance was
8 haphazard, employees were commodities to be treated in
9 whatever way management saw fit. The old management rules

10 Millstone like a kingdom, question the king and an employee
11 was outside the gate. The plants had no choice but to go on
12 the watchlist, the NRC did the right thing. The old NU
13 kingdom had to be reined in.

14 A great deal has happened since then. Bruce
15 Kenyon has managed to turn a work force that was in total
16 disarray into a team. NU management has a new attitude.
17 People have begun to show their support for the new
18 management. This never would have happened for the old
19 kingdom.

20 I appreciate the difficulties of everyone trying
21 to measure such a qualitative quantity as work force
22 satisfaction, confidence and attitude. However, all the
23 charts, graphs and studies in the world can't convince me
24 personally to trust anyone, I judge them by how I am
25 treated. Like a mistreated animal, I have grown slowly to

187

1 trust the new NU management. It will take time, but I
2 haven't bitten them lately either.

3 NU management has changed. The NRC has changed.
4 The old NRC, like NU, simply didn't listen to or ignored the
5 people who had the most intimate knowledge of what was
6 wrong. But like the NU, the NRC still has room to improve
7 and needs to do so.

8 The Employee Concerns Program that was once a tool
9 of the old management has changed to where people are
10 beginning to trust its effectiveness. I believe this
11 program will eventually serve as a industry model. Will
12 mistakes be made? Yes. Will they be made in the future?
13 Yes. What has changed is the way they are handled. They
14 are openly discussed and communicated.

15 There are those today who would tell you that
16 Millstone is not ready to restart because it is not safe for
17 one reason or another. Some will tell you that Little
18 Harbor is merely an arm of NU. I know better. Little
19 Harbor, specifically Billie Guard, was involved with my
20 problem resolution with NU and stayed professional and
21 arm's-length throughout, she only offered advice.

22 The new NU -- the new attitude of NU is ready for
23 restart. The new management's attitude and style is 180
24 degrees away from the old method. It is revised, reworked
25 and, with time, will work like a finely tuned machine.

188

1 Employees and management no longer view each other as
2 adversaries but as a team. A safety conscious work
3 environment serves everyone's need and it now exists.

4 The decision is ultimately in your hands. Before
5 making your final decision, you have to ask yourself the
6 important question -- Has NU finally realized how to run
7 Millstone? The answer you will find is yes. Thank you.

8 CHAIRMAN JACKSON: Thank you.

9 Mr. Collins.

10 MR. COLLINS: Dr. Jackson, Commissioners,
11 representatives of NU, guests and members of the public. In
12 the 1980s, NU was considered one of the best nuclear
13 operators in the industry. During this time NU dedicated a
14 lot of resources to engineering operations and training. NU
15 built a world-class operator training facility at the
16 Millstone site and encouraged their engineers to be involved
17 in engineering organizations.

18 In the 1980s, in a number of important areas, NU
19 helped set the standards for the nuclear power industry. NU
20 Nuclear was good and people visited Millstone's site from

21 around the world to learn how NU did it. But it was no
22 secret, in the 1980s NU Nuclear had a commitment to
23 excellence and so did NU. In 1997, NU received an
24 environmental award from the U.S. Department of Interior.
25 In 1988, NU received a Malcolm Baldrige Award for

189

1 excellence in customer service.

2 So what happened at NU Nuclear that by June 1996
3 all three Millstone Units were on the NRC watchlist and NU
4 was considered not one of the best, but one of the worst
5 operators in the nuclear power industry?

6 In my view it was a change in leadership in the
7 late 1980s that changed a commitment to excellence to a
8 commitment to doing the minimum. The mission statement from
9 the nuclear leadership changed from "be the best" to "we
10 can't afford to be the best." The leadership at that time
11 believed that the only way NU Nuclear would survive was to
12 cut costs to the bone. The words rolled out at that time
13 were, "If it is not necessary to do, then it is necessary
14 not to do it."

15 Managers were paid 7 to 14 percent yearly salary
16 bonuses for reducing work and reducing budgets. If a
17 manager couldn't find a way to make the work way, he or she
18 did the business equivalent of sweeping it under the carpet,
19 the work was deferred and backloads of work grew and grew.
20 Team work was defined as supporting the goals of management,
21 which at that time involved a lot of sweeping.

22 Because the safety evaluation process was weaker
23 than it should have been, issues with some safety
24 significance were swept under the carpet with the others.
25 Employees who argued that these issues needed to be

190

1 addressed were considered not to be team players. Meanwhile
2 the lumps in the carpet grew until 1996 when the NRC said to
3 NU, clean your house and Millstone's site was shut down.

4 The reason I bring you this history is so that you
5 can know that Millstone today is not just new faces at the
6 top but a totally new organization with a new commitment to
7 quality, a new commitment to doing the right thing, a new
8 commitment to nuclear safety, and a new commitment to
9 people.

10 Bruce Kenyon, Mike Morris and others on the
11 leadership team were brought in because they have this
12 commitment and they have encouraged and empowered the
13 employees at Millstone to fulfill this commitment. Someone
14 at the May 1st NRC meeting asked, What will keep Millstone
15 from slipping back to the way things were? One strong
16 answer to that is the employees.

17 The employees were intimidated in the past into
18 believing that Millstone had to cut to the bone or the
19 company would fold and they might lose their jobs. I am
20 here to tell you that what just happened at Millstone, I
21 refer to the two-year shutdown, as far as losing the company
22 or losing jobs was scarier than anything the past leadership
23 had ever rolled out, and NU Nuclear employees have learned
24 that lesson to the bone.

25 The Millstone employees have been empowered to

191

1 vote harassing, intimidating, retaliating, discriminating
2 managers out of office. And once you give someone the vote,
3 it is not easy to take it away. The Millstone employees are
4 now the most empowered employees in the nuclear power
5 industry and we will not let what just happened happen
6 again. That is a promise you can take to the bank.

7 All safety concerns are now put on the table to be
8 addressed, not deferred into some stack of paper work in
9 some manager's file. Employees who bring forward concerns
10 are valued as problem solvers, not berated as troublemakers.
11 The lumps in the carpet are gone and a good feeling has
12 returned to working at Millstone. It is a new Millstone, a
13 company of which I am again proud to be a part. If you
14 believe in nuclear power, it is a company in which you can
15 again have confidence. Thank you.

16 CHAIRMAN JACKSON: Thank you.

17 Mr. Verdone.

18 MR. VERDONE: Commissioners, Northeast Utilities
19 representatives, members of the community, I am pleased to
20 be here today to speak to you about the progress that has
21 been made during the past two years in resolving problems at
22 Millstone Station.

23 My name is Gary Verdone, I work for Northeast
24 Utilities at the Millstone Nuclear Power Plant in Waterford,
25 Connecticut. I live on Pleasure Beach, which is about

192

1 one-half mile from Millstone. Almost every day my wife and
2 I take a walk on Pleasure Beach. We enjoy the wildlife, the
3 beauty of the ocean and the serenity. We swim in the clean
4 water at Pleasure Beach. I fish in Jordan Cove, go clamming
5 in Nyantic Bay and scuba dive for lobsters in the waters
6 adjacent to Millstone Station.

7 Needless to say, I am concerned about safety and
8 pollution and the potential impact that either could have on
9 the environment that I work in and I live in every day.
10 Today I believe Millstone is a good neighbor and a safe
11 place to work, but for a time I had my doubts.

12 Millstone Station has undergone a painful
13 experience, slipping from a recognized world leader in
14 nuclear power plant operation in the early to mid-'80s to
15 the dubious distinction as a Level 3 troubled plant. During
16 this time frame many people began to question the safety of
17 the station, and rightfully so. Based on declining trends
18 in performance, declining material condition, failure to
19 follow procedures, license and design basis non-compliance
20 issues, failure to maintain the FSAR, and the outrageous
21 treatment of employees who raised safety concerns.

22 During the past two and a half years considerable
23 work has been done to make improvements in all of these
24 areas. I am proud to be able to say, along with 5,000 other
25 dedicated workers, and numerous concerned numbers of the

193

1 community, that I had a part in driving this process
2 forward. I am also proud to say that for a time I had a
3 close association with the Citizens Regulatory Commission
4 who have provided valuable and in many cases scathing
5 criticism of breach of public trust resulting from
6 violations of federal and state laws by past management.

7 In October of 1996, I was not working in Millstone
8 Station because I had been terminated without cause in
9 January of 1996, along with 103 other people. Around that
10 time, in October of 1996, along came a man who said he knew
11 how to correct the problems at Millstone. My comment to
12 friends and relatives was that all the king's horses and all
13 the king's men couldn't put Millstone back together again.
14 At that time I thought the problems of Millstone were too
15 deeply ingrained in the culture of Millstone for anyone to
16 be able to correct them.

17 And then I watched as that man, Bruce Kenyon,

18 began the recovery process. It wasn't long before I
19 recognized that Mr. Kenyon meant business and he was going
20 to succeed. I wanted to be a part of the fix so I called
21 Mr. Kenyon and appealed for review of the circumstances of
22 the January 1996 terminations and asked that he consider me
23 and several other people for reinstatement. In February of
24 1997 I returned to Millstone as a contractor and worked
25 there until June of 1997. On August 14th, 1997, after an

194

1 extensive investigation at the direction of Mr. Kenyon, I
2 was reinstated to full employment at Millstone, along with
3 several other people.

4 Since returning to Millstone I have been treated
5 with dignity and respect. I have been given work
6 assignments. I am often asked for my opinions regarding our
7 progress and resolving problems, and I am treated as an
8 important member of the team. I feel that the things I have
9 to say are listened to, considered and used as input in the
10 decision making process.

11 I have noticed a dramatic change in attitude
12 regarding respect that workers show one another and the
13 mutual respect that workers and management have for one
14 another. It is a pleasure to be working for an organization
15 that has a mindset to do the right thing. It is impressive
16 to be working for an organization that holds each other
17 accountable for their actions regardless of their position.

18 Mr. Kenyon has stated his expectations of
19 excellence to the Millstone work force, and the Millstone
20 work force has met his expectations. We are an empowered
21 work force, we know the laws, we know the rights. We know
22 the expectations of the community. We are determined to do
23 the right thing and we demand accountability at all levels
24 of our organization.

25 In summary, we are all concerned about how these

195

1 plants will be operated in the future. We must all continue
2 to be vigilant in our insistence that they be run safely and
3 in strict accordance with federal, state and municipal laws
4 so that our lives, our health, our property, and our
5 environment are unaffected.

6 Our FSAR is now current. Our procedures are
7 better than every before. We have a safety conscious work
8 environment. We have a hostility-free work environment. We
9 have been subjected to numerous inspections by the NRC and
10 by independent contractors and we have met their criteria
11 regarding paper work, treatment of employees and the
12 physical condition of the plant.

13 We have a work force that is committed to doing
14 the right thing and we have a new management regime that is
15 committed to excellence.

16 Commissioners, ladies and gentlemen, in my
17 opinion, we are ready for restart. Thank you for the
18 opportunity to express my thoughts and views to you today.

19 CHAIRMAN JACKSON: Thank you very much.

20 Mr. Meehan.

21 MR. MEEHAN: Thank you, Dr. Jackson and
22 Commissioners and others gathered here today in the interest
23 of the restart of Millstone 3.

24 I will be brief. My other colleagues here have
25 expressed many of the same views that I have. I would just

196

1 like to, instead of reiterating theirs, the one I would like
2 to mention is that Bruce Kenyon is definitely one of the
3 driving forces, and the work that he has done and continues

4 to do will be one of the mainstays in Millstone 3 going
5 forward better than ever and not backsliding. He has made
6 the changes that are necessary along with the rest of the
7 new management team which is in place, and I feel even more
8 confident now that things will be done correctly and
9 continue to be done correctly.

10 I have been around Millstone and Northeast
11 Utilities since 1981. Like the rest of the gentlemen here,
12 I was also what we now refer to as a member of the class of
13 '96 that was laid off, and I am back. And after working
14 over 14 years in the engineering area of Northeast
15 Utilities, I now work in the Employee Concerns Program. So
16 I've seen both the people side and the technical side of the
17 workings of Millstone Station and all of the units. And
18 things have definitely improved.

19 I saw where we were when we were up, and I saw
20 what happened to us when we declined, and now we are back
21 near the top of our game, and we can get back to that again.

22 I would like to respond definitely and just
23 personally in my own observation working in Employee
24 Concerns that previous comments were made about Little
25 Harbor and specifically Billie Guard, that I have seen her

197

1 and her organization be purely oversight, that they have not
2 interfered -- definitely have not interfered in any
3 investigations that I have conducted, that they have been
4 completely within their realm of responsibility of oversight
5 and not interfering. So I think that any comments to the
6 contrary of that are unfounded. So I think I see Millstone
7 going forward, and all I can say is I highly recommend that
8 the Commission vote to allow us to do that.

9 Thank you.

10 CHAIRMAN JACKSON: Thank you very much.

11 Questions?

12 Thank you very much. We'll now hear from another
13 Millstone employees group, the Millstone employee ad hoc
14 group, Mr. Amarello and Ms. Duefrene, and Mr. Kennedy.

15 Thank you.

16 Good afternoon.

17 MR. AMARELLO: Good afternoon, Chairman Jackson
18 and NRC Commissioners. We appreciate the opportunity to
19 speak with you today.

20 My name is Joe Amarello, and I'm here with my
21 coworkers, Geri Duefrene and Mike Kennedy. We're members of
22 an ad hoc group of employees at Millstone Station that came
23 together back in February for the purpose of focusing on all
24 the positive activities that are happening at Millstone
25 Station. Today Geri will present to you a statement from

198

1 that ad hoc group, and then Mike and I will briefly discuss
2 a personal experience related to that statement.

3 Geri?

4 MS. DUEFRENE: Good afternoon. My name is Geri
5 Duefrene, and I am a resident of Nyantic, and I have been
6 for over 20 years. As I stated at the last meeting, I
7 haven't moved. I am a secretary for the ad hoc group of
8 workers at Millstone Station.

9 For this meeting our focus is on accountability
10 and responsibility. We strongly believe that people are the
11 key to the safe restart and successful operation of
12 Millstone Unit 3 and Millstone Station.

13 Today I bring you the following message from these
14 people in the form of a letter signed by 1,657 workers at

15 Millstone Station. The letter reads as follows:
16 Dear Dr. Jackson, Dr. Diaz, Ms. Dicus, and Mr.
17 McGaffigan:
18 As workers at Millstone, we know that we are the
19 frontline people most responsible for public health and
20 safety, and we accept that responsibility. The changes at
21 the Millstone site go far beyond the restoration of plant
22 programs and processes. As employees, we have made a
23 fundamental shift in our attitudes and behaviors,
24 particularly with respect to our understanding of
25 accountability.

199

1 We hold ourselves accountable. As individuals we
2 hold ourselves accountable to fulfill our responsibilities
3 in such a way as to protect the public health and safety.
4 We hold each other accountable. While we are respectful of
5 differing opinions and defend each worker's right to raise
6 issues, we do not hesitate to challenge each other to
7 maintain high standards.

8 We hold the management of Millstone Station
9 accountable. We expect our management to maintain a
10 commitment to public health and safety, but fully recognize
11 that we provide an important check and balance system for
12 decisions with safety implications. We are an empowered
13 work force. We will never again tolerate a lowering of
14 standards, a compromise of safety, or a neglect of our
15 commitment to do the right thing.

16 In conclusion, we as the workers of Millstone
17 Station understand and accept our responsibility to protect
18 the public health and safety. We respectfully request that
19 you approve the restart of Millstone Unit 3.

20 Thank you for your time today. I do appreciate
21 it. And I would like to now turn this over to Mike Kennedy.

22 MR. KENNEDY: Before we shut down Unit 3, we had a
23 very good 54-day refueling outage. We'd gone through what
24 we thought was the debugging phase of Millstone 3. We were
25 looking forward to a future of a fairly smooth-running

200

1 plant.

2 But there were dark clouds on the horizon, as
3 other people have alluded to. There were issues out there,
4 and it seemed like every week was a question of whether or
5 not we were going to stay on line or whether these issues
6 were going to be addressed.

7 Well, on March 30, 1996, I was the reactor
8 operator on shift that started the downpower of the plant
9 due to design issues. The control rods moved in, and they
10 haven't moved back out since that time.

11 Events that were largely outside the control of
12 the average worker led to Millstone's being placed on the
13 watch list. Now over two very difficult and frustrating
14 years later we still have the same core of employees that
15 are still in place at Millstone. They're a strong,
16 professional group of individuals. They're a resilient
17 group of people. They're tough.

18 The principal credit for achieving a
19 safety-conscious work environment is with the employees.
20 They transform the culture. It's not us versus them
21 anymore. They've restored our licensing basis. The workers
22 are making corrective actions. And we're not going to let
23 any slippage happen. This has been too hard on everybody
24 for the last couple of years. We don't ever want to get in
25 this position again.

201

1 Many families have seen little of mom or dad
2 during many stretches of time in the Millstone 3 recovery,
3 but our families are holding together. I look to the
4 future. Millstone 3 has people in place to enable it to
5 become a top performer in the nuclear industry. The future
6 is squarely in the hands of the work force.

7 Top performance does not come from elaborate
8 processes, programs, and procedures in themselves. It
9 doesn't come from being able to repeat the right slogan or
10 buzzword to the right person. It doesn't even lie in the
11 plant design. Top performance is a function of human
12 performance, the ability of each individual and organization
13 to do their job at Millstone. And that job is ensuring the
14 safe and efficient use of nuclear power for electric power
15 generation.

16 Just as I was on shift when we shut down over two
17 years ago, I want to be on shift as part of the team that
18 brings Millstone back. That team is not just the Millstone
19 3 control room staff. It's all employees, including our
20 fellow employees in fossil, hydro, business, retail, and
21 distribution that have made great sacrifices to help recover
22 Millstone. We know our future performance is crucial to the
23 success of our entire company, and we know the public, the
24 NRC, and our coworkers are holding us accountable. That's
25 fine, because as experienced professionals in this industry,

202

1 we workers at Millstone hold ourselves accountable. It's
2 time once again to resume safe power operation at Millstone.
3 We are up to that task.

4 This probably will be the last public meeting I go
5 to in a long time. The next time I hope to see anybody here
6 is when we're getting a 1. And that's not a Category 1 on
7 the watch list but a SALP 1 score.

8 Thank you, and I'm going to return to Joe
9 Amarello.

10 MR. AMARELLO: Thanks, Mike.

11 A little background. I'm an instructor in the
12 Nuclear Training Department, and I live in southeastern
13 Connecticut with my wife and four young children. The next
14 comments I'm going to make are my own personal comments.

15 We've heard a lot of discussion today about RCS
16 132 valve. Mr. Brothers mentioned the stand-down that
17 occurred after the valve. Commissioner Diaz asked some good
18 questions about the engineering organizations' understanding
19 of their role in safety. And my comments address all of
20 those.

21 I attended a meeting for Unit 3 stand-down on May
22 18 concerning the 132 valve. I went to this meeting because
23 I was very interested in how the work force would respond to
24 this challenge. This meeting was primarily attended by
25 engineering and support staff personnel. It was their

203

1 scheduled time slot. To me it was a clear demonstration
2 that the Millstone Unit 3 workers and the workers at
3 Millstone Station are accountable, responsible, and know the
4 Millstone 3 plant is their plant.

5 At the meeting I heard the work force demonstrate
6 their accountability. They asked tough questions about how
7 this event happened and why it happened. And then I heard
8 the work force take responsibility -- responsibility for
9 their plant. I heard questions such as have we prepared the
10 procedures we'll need to come out of the maintenance
11 evolution once it's done? Have we looked at other similar

12 valves in the plant to see if we have the same problem in
13 other areas? The use of nondestructive testing can be very
14 helpful. Call us if you need us. INPO has guidance on free
15 sails. We need to take a look at it. We need to get ready.

16 The comments kept coming. The work force wanted
17 to be part of the solution to this problem. They knew it
18 was their plant. They knew it was their problem. They knew
19 it was their responsibility.

20 This meeting which I attended, just for your
21 information, when it was over, to me it was another example
22 of why the Millstone Unit 3 workers and the Millstone
23 Station workers are ready for the recovery and the restart
24 of Unit 3.

25 Thank you for the opportunity to speak to you
204

1 today.

2 CHAIRMAN JACKSON: Thank you very much.

3 Questions?

4 Thank you.

5 We will now hear from Mr. Dan Honan on behalf of
6 the Families of Southeastern Connecticut.

7 MR. HONAN: Thank you.

8 My name is Daniel Honan. On behalf of the
9 families of Southeastern Connecticut, I am here to deliver a
10 vote of no confidence in both Northeast Utilities and the
11 NRC. The term vote here has ironic undertones, of course,
12 because it implies that the democratic process hasn't been
13 undermined, circumvented, and ignored. But that is not the
14 main issue I wish to take up before you. I have been given
15 five minutes, after all, and I hope that I can use this
16 opportunity to present the view that I believe is
17 representative of the families of Southeastern Connecticut;
18 that is the shutdown of Millstone 3 should go on for an
19 indefinite term.

20 We the people have no faith in Northeast
21 Utilities. It has repeatedly shown its incompetence, even
22 under the high level of security it has been subjected to
23 recently. The plant hasn't even been running and yet it has
24 put the public at risk with each sloppy error it has made in
25 its haste to restart.

205

1 Why is there such a rush to restart? Well, it's
2 the July 1st deadline, when their corporate welfare check
3 stops coming in. When NU does go bankrupt, it will be a
4 crushing blow to an industry that is profitable only because
5 it is so heavily subsidized by the government. While
6 Millstone has not produced a watt of electricity in the last
7 two years, NU has been able to channel in electricity from
8 other sources at half price, while charging the same rates
9 to the consumers. Sounds like a pretty good scam to me.
10 Why the rush to restart?

11 Well, the July 1st deadline. And we didn't hear
12 much about that this morning. Instead we heard Northeast
13 Utilities announce that they have made their mistakes a
14 learning experience in their newfound commitment to safety.
15 Like demanding 70-hour weeks from their employees in a last
16 minute act of desperation to save their company. To them,
17 safety is a sand trap in front of the goal of profit.

18 Mr. Kenyon has a compelling interest for restart,
19 in the form of a \$500,000 bonus if the plant opens by July
20 1st. But under friendly examination this morning, Mr.
21 Kenyon seemed assured that safety consciousness and profit
22 consciousness management would meet.

23 We heard from him that commissions are

24 satisfactory. In school if you take a test and you get 25
25 percent wrong, you get a C, satisfactory. After Three Mile

206

1 Island, the NRC ordered plants across the country to make a
2 series of upgrades. Two decades later, the span of my
3 lifetime, Millstone has satisfied 75 percent of these
4 requirements with one quarter still undone, left blank,
5 marked wrong, endangering lives and the well being of
6 thousands.

7 Satisfactory? Maybe to Northeast Utilities.
8 Maybe to Mr. Kenyon. I'd take a C for that kind of money
9 any day. Maybe it's acceptable to the shareholders on Wall
10 Street. Maybe the United States Nuclear Regulatory
11 Commission. But not to the families of Southeastern
12 Connecticut.

13 If you want our support, you need not to merely
14 strive for it, but demonstrate sustained excellence before
15 you put our lives at risk.

16 Thank you.

17 CHAIRMAN JACKSON: Thank you very much.
18 Commissioners?

19 Thank you very much.

20 I'd like to call Ms. Nancy Burton, speaking on
21 behalf of the Alliance for Sustainable Connecticut.

22 MS. BURTON: Good afternoon.

23 CHAIRMAN JACKSON: Good afternoon.

24 MS. BURTON: Chairman and Dr. Jackson and
25 Commissioners. It is my pleasure and honor to be here in

207

1 behalf of the Alliance for Sustainable Connecticut. This is
2 an organization with a membership in the thousands in the
3 state of Connecticut, representing a coalition of many, many
4 public interest groups. I have a resolution from the
5 Alliance for Sustainable Connecticut which I will be
6 submitting to you.

7 There are 19 points in this resolution which the
8 Alliance insists be resolved before there be any restart of
9 Millstone, and this resolution does call for an action by
10 this agency not to allow restart until satisfactory
11 resolution of these points. And in connection with that, I
12 would like to follow up a point made by the last speaker
13 with respect to the cost of nonproduction of electricity by
14 Millstone station. The total revenues collected in the rate
15 case by Millstone since the shutdown amount to \$1.4 billion.
16 That compares with the cost of replacement power of \$625
17 million. And what that means is that there has been an
18 overcharge in the amount of \$775 million. This is not
19 acceptable to the Alliance for Sustainable Connecticut.

20 Now I and members of the Alliance are not
21 experienced in operating civilian commercial nuclear power
22 plants as is, for instance, Commissioner Diaz. However, we
23 are avid readers of the New London Day Newspaper and have
24 been for the past couple of years, and I would at this time
25 like to publicly recognize Mr. Paul Choiniere, who is

208

1 present in these proceedings, because of what he has done to
2 bring us here before you with our very, very significant
3 concerns. And it does seem that just as the NRC is getting
4 ready to have meetings down here, just before those meetings
5 something comes up that gives Paul good reason to dominate
6 the pages of the New London Day.

7 For instance, damage to Millstone 3 safety system
8 raises more questions. This was April 3rd, 1998. Dominated

9 a lot of consideration at the May 1 meeting.
10 Millstone 3 to operate with damaged valve. This
11 is from the May 27, 1998 New London Day. There are many
12 others. In conjunction with that, speaking of the media in
13 Connecticut, perhaps you haven't seen the New Haven Advocate
14 from last week's issue, an article about Millstone The Tumor
15 Generation. There are lots of health concerns among people
16 in Connecticut who are becoming informed.

17 I have brought with me today a little exhibit, not
18 to leave with you, but to look at, and this is an exhibit
19 that depicts two old-fashioned types of radiation monitors.
20 You have two human beings depicted in this photograph, and
21 as human beings they collect cumulatively radiation
22 emissions and if they happen to be near Millstone, they
23 collect radiation from Millstone. And I'm bringing this to
24 your attention because the NRC has recently, as recently as
25 last December, under letter that bears the signature of Mr.

209

1 Callen, who happens to be the fellow who wants to take
2 charge of the actual decision about restarting Millstone 3,
3 that the program of radiation monitoring that was adopted
4 and created by the NRC following the Three Mile Island
5 accident in 1979, has now been terminated as of last
6 December. And this was a system at Millstone that included
7 49 thermal luminescent dosimeters, little gadgets about this
8 size, that the state department of Environmental Protection
9 in Connecticut cooperated with in putting out on the poles
10 in the area and regularly, three or four times a year,
11 sending them to NRC to examine for radiation. And these are
12 devices that collected over time in order to establish
13 baselines criteria of radiation, and these dosimeters, put
14 49 of them all on Millstone by the NRC. Most of them within
15 10 miles of the plant. I have a map here that shows you
16 where they used to be and are no more, and will not be
17 because the state of Connecticut hasn't jumped into the
18 vacuum to mount its own program.

19 Now the dosimeters were ordered around each of the
20 civilian commercial nuclear power plants in 1979 because of
21 the lessons learned at Three Mile Island, and these were
22 important lessons, and I'm sure you have this, but until the
23 re-review, some excerpts from the records of the NRC that
24 explain why it is so important to have these radiation
25 monitors, not just to collect data, but to reassure the

210

1 public that somebody is looking out for them. And this
2 isn't being done now. Will it be done? And if you allow
3 Millstone to restart, there won't be any basis for the
4 public to have any faith that someone's looking out for
5 radioactive discharges other than Northeast Utilities.

6 I want to interject at this point, Commissioner
7 McGaffigan, you made the point that what has been happening
8 for the past two years has been unprecedented in the nuclear
9 power industry. I am not an expert, I think you're probably
10 right about that, but the root cause of that is not anything
11 healthy. It's overreactive to some things that went on for
12 too long that was very, very wrong. Most of the recovery
13 --this is a recovery from a very, very sick state brought
14 upon us by an unregulated, essentially unregulated utility.

15 I'm leaving you with these documents, by the way.
16 I also happen to have here, quickly, a letter from the
17 Fishers Island people. They are the people who occupy an
18 island that happens to be under New York State jurisdiction,
19 unfortunately within 10 miles of Millstone in Connecticut,
20 and so they are subject to an evacuation plan of Millstone

21 which the Governor of Connecticut would order into effect.
22 And what they'd have to do in the event of an evacuation
23 emergency on Fishers Island, which is, as I said, within 10
24 miles of -- it's a good deal closer, is collect at the ferry
25 dock, at the western end of the island, load onto the ferry,

211

1 and go where the ferry is taking it, which is to say up to
2 New London, that is to say to put the heads into the mouth
3 of the lion, because that's where the problem is emanating
4 from. So they would be evacuated to the scene of the
5 disaster. That is the plan that the NRC adopted and
6 approved and is still in effect today, and is troubling the
7 people who are aware of that.

8 I also want to leave with you today another
9 petition -- this is not a petition of the Alliance, although
10 members of the Alliance felt they agree with it -- this is a
11 petition that people across Connecticut, 300 of them here,
12 there are many other petitions that haven't been collected
13 yet -- but this is to mothball Millstone. And I want to
14 comment at this time on comments that were made with the
15 little collection of sand that was brought here today. I
16 was out at that beach area on Saturday with a lot of people
17 and many of the members of the Alliance, and the fact is
18 that on Saturday Millstone was not operating, hasn't been
19 operating, and to suggest that children are now playing in
20 sand because they believe Millston is safe, I don't think
21 that is quite correct.

22 Also I would suggest that it would be an
23 interesting exercise for the Commissioners to take a walk
24 around Main Street, Niantic. That is the lovely boulevard,
25 seaside, the resort area, beautiful view of the Sound,

212

1 Millstone right over there, and go in and out of shops and
2 see what people have to say about this petition. Because,
3 surprisingly, to you, perhaps, and to Northeast Utilities,
4 perhaps, people don't hesitate to sign this in downtown
5 Niantic, Connecticut, including -- the most likely suspects
6 are young mothers of young children in strollers. They are
7 afraid and they don't feel adequately protected.

8 I have two other points that I would like to make
9 here, and I many I would like to, but I will address myself
10 to two, and then I will be on my way.

11 The first has to do with why the people in
12 Connecticut don't trust Northeast Utilities and don't at
13 this time trust, with all respect, this agency, and I'll
14 give you one example.

15 If you want specifics, here's one -- Captain Guy
16 Mendenhal.

17 You may recall from May 1 Captain Guy Mendenhal, a
18 retired submarine Commander with an impeccable record and
19 five years with Millstone came here to advise you as to his
20 concerns and how his thinking differed from the thinking you
21 were hearing about from Northeast Utilities as to how safety
22 concerns are addressed and resolved at Millstone, and as you
23 recall, Dr. Mendenhal told you that he had to leave in
24 frustration after five years at Millstone because he found
25 it virtually impossible to raise a safety issue and have it

213

1 adequately resolved, not trivialized, and not to have it
2 simply dismissed.

3 Well, that leads us to not trust Northeast
4 Utilities, because we have to wonder why a person of such
5 obvious excellence found himself not to belong there.

6 Then why does that lead us to have mistrust of the
7 Nuclear Regulatory Commission? Well, with all due respect,
8 Dr. Jackson, the way Captain Mendenhal was treated here --
9 he was the only individual who was cut short other than a
10 little bit later Mr. Del Core, in his presentation, and the
11 questions that went to him were not please don't tell us
12 everything you know about these serious issues that you are
13 raising, but the question was have you ever worked anyplace
14 else, at another civilian nuclear power plant.

15 The questions were designed to do exactly what
16 Little Harbor has supposedly been checking into and
17 Northeast Utilities, which is to say, dash his credibility
18 so that you don't have to listen to the message. That point
19 came through loud and clear with all respect, Dr. Jackson,
20 and there was a chilling atmosphere in this room and it
21 wasn't the air conditioning.

22 The second point that I want to make here is a
23 very big point, and it has to do with a potential meltdown
24 of the democratic process, because what we are considering
25 here is we are assessing values and balancing societal

214

1 interests. One is the interest of the society in restarting
2 a nuclear power plant that has demonstrated itself not to be
3 able to be run competently and we have lots of recent
4 examples, as you have heard about that, versus the vitality
5 of the democracy.

6 Now you have heard from Mr. Sheridan. He was the
7 first speaker today. He spoke the last time. He is the
8 First Selectman of the Town of Waterford. Mr. Sheridan
9 didn't tell you that this past week he has received a
10 citizen's petition under an ancient, venerable law in the
11 State of Connecticut which requires the Town of Waterford to
12 conduct a public hearing, and the subject of this proposal,
13 citizens petition, is whether or not the town will notify
14 the NRC of its opposition to restart Millstone at this time,
15 and Mr. Sheridan told the newspaper, and I am going to
16 presume that what he said was accurately reported, that he
17 will be sure that there is no meeting that will take place
18 in the Town of Waterford although it legally is required.

19 I want to mention briefly the resolution that you
20 have heard was circulated by the Friends of a Safe
21 Millstone. There was a resolution that he circulated and I
22 will leave a copy of it with you. It has a lot of
23 signatures, but it is missing one -- it has a signature line
24 for the First Selectman of the Town of Lyme, Connecticut.
25 His name is there, but no signature, so I called him up and

215

1 I asked him why his name but no signature on it, and he said
2 I don't know -- I do not know -- because he said he had
3 never agreed to sign any resolution.

4 So it looks like somebody misappropriated his name
5 and on that point I want to mention that I did go through
6 the exercise of calling each of the members, each of the
7 representatives who signed that petition to determine what
8 process, what democratic process they went through in order
9 to obtain the authorization of their town to sign this
10 document at this time. It was being circulated by Friends
11 of Millstone, which is essentially a Northeast Utilities
12 organization and without exception I was told that not a
13 single one of them did go through the process -- acted on
14 their own, didn't go through a town meeting, didn't tap into
15 the pulse of the community -- felt that they could sign on
16 to the resolution.

17 Well, I want to let you know that at this time

18 including in the Town of Haddam as well as other communities
19 in southeastern Connecticut there is an effort out there to
20 revitalize the democratic process and there are going to be
21 lots of meetings that will be compelled to be held even
22 though perhaps one elected representative would rather not
23 see it be held.

24 We are going to through that process revitalize
25 the democratic process, which is through this process of

216

1 Millstone apparently in grave danger.

2 So I will close with the statement that it is
3 critical to the function of this agency that it have the
4 confidence of the public. You have heard this before and I
5 can't be more eloquent than the speakers who have proceeded
6 me, but in order to do that, we are looking to you to impose
7 a standard that will protect us, and we don't believe that
8 it is a standard of adequacy, mere adequacy or mere
9 sufficiency, or the standard of maybe excellence in the
10 future.

11 That is not good enough. That is not going to
12 satisfy us after what we have seen and read for two years,
13 day after day after day, in the New London Day about how
14 things can't get fixed properly at Millstone. We don't
15 accept that.

16 We want you to be able to assure us that they can
17 do things in a way that meets a standard of excellence so we
18 don't have to worry about it, because we are all very
19 worried about it all the time, and I don't just mean the
20 Saturdays at the end of the month when the emergency alarm
21 goes off in these times and other alarms go off at other
22 times and we all have to wonder where did that come from?

23 People are tired of living in a panic mode because
24 of Millstone and you are considering the erosion of the
25 concrete underneath the containment building. I would

217

1 suggest you consider the erosion of the public trust in this
2 agency. We look to you for reassurance and we look for a
3 continuing shutdown of Millstone for an indefinite term
4 until you can assure us that our health and safety are
5 paramount and that Millstone has achieved a standard of
6 enduring excellence. Thank you.

7 CHAIRMAN JACKSON: Thank you very much.

8 COMMISSIONER DICUS: No questions.

9 CHAIRMAN JACKSON: Commissioners?

10 [No response.]

11 CHAIRMAN JACKSON: Thank you. I would now like to
12 call forward Mr. Scott Cullen, representing Standing for
13 Truth about Radiation.

14 MR. CULLEN: Thank you.

15 CHAIRMAN JACKSON: Good afternoon.

16 MR. CULLEN: My name is Scott Cullen and I am
17 counsel for STAR, and to understand what brings me here I
18 think you have to understand a little bit about our
19 organization.

20 We only incorporated a year ago, and we
21 incorporated out of concerns arising out of health and
22 safety problems surrounding Brookhaven National Laboratory,
23 which is a Department of Energy facility -- so I bet you are
24 asking what I am doing here at an NRC hearing.

25 Basically, within the very recent past, Long

218

1 Islanders have become aware of the Millstone problems and
2 have become very concerned. Our members and the Long Island

3 public turn to us to pay attention to this issue because we
4 are working on other issues surrounding the Department of
5 Energy facilities. These Long Island concerns basically are
6 evacuation concerns.

7 It was mentioned before by one of the
8 Commissioners that the Citizens' Awareness Network -- they
9 were told that they need to raise new issues worthy of
10 consideration, and maybe the Long Island evacuation concerns
11 are not historical but they are very real, leading to our
12 Congressman, Congressman Michael Forbes, to ask you to delay
13 this restart decision 90 days to consider those concerns.

14 We believe that these concerns are not unfounded.
15 Evacuation planning at the Three Mile Island facility took
16 place during the accident, and prior to 1979 a major reactor
17 accident with offsite consequences was assumed to be highly
18 unlikely.

19 However, after 1979 you implemented new
20 regulations to ensure adequate protective measures can and
21 will be undertaken in the event of an emergency. We don't
22 believe that present regulations will do that for Long
23 Island members and Long Island public, and basically what
24 has happened is since this issue has gotten attention in the
25 Long Island media, our office has been swamped with calls

219

1 and that is what led to me coming down here, because
2 basically the Long Island public does not believe that they
3 will be adequately protected and at a hearing that the NRC
4 held in Long Island very recently it became clear to them,
5 members of FEMA and the State Emergency Planning Office made
6 it very clear that there wasn't really going to be any kind
7 of evacuation planning for eastern Long Island and Dr.
8 Travers said so himself.

9 You have the power to redo this emergency planning
10 zone. It was mentioned before by another Commissioner that
11 we go beyond regulations to be protective. Well, this is
12 one such instance where I think that that was the case, and
13 I will draw a very simple analogy here.

14 If a policeman stops a man driving his pregnant
15 wife to the hospital to give labor, would he give her a
16 ticket? No, I don't think so. Basically, you have the same
17 opportunity. Certain situations require special attention
18 and the situation in eastern Long Island and the concerns
19 require such attention and we urge you to do so.

20 Right now evacuation for eastern Long Island would
21 be impossible and there is no planning for that unlikely
22 possibility.

23 You may think an accident will not occur at
24 Millstone, however prudence and good conscience require
25 restart to be delayed until Federal, State and county

220

1 officials have safe evacuation plans in place. Thank you.

2 CHAIRMAN JACKSON: Thank you very much.
3 Questions?

4 [No response.]

5 CHAIRMAN JACKSON: We will now here from Mr.
6 Thomas J. Mastrianna.

7 MR. MASTRIANNA: Good afternoon.

8 CHAIRMAN JACKSON: Good afternoon.

9 MR. MASTRIANNA: We appreciate your time. I think
10 I am last on the public comment. Am I? It's kind of ironic
11 and kind of sad because of some of the treatment I have
12 received by Northeast Utilities.

13 CHAIRMAN JACKSON: It turns out that everybody
14 says that who ends up at the end.

15 [Laughter.]
16 CHAIRMAN JACKSON: It was not a plot.
17 MR. MASTRIANNA: All right. I started to work for
18 NU in '76 and my initial fitness for duty, which they
19 examine you in depth, was from the psychiatrist who said, "I
20 have examined Mr. Thomas Mastrianna and that I have found
21 that he is a bright, capable young man who shows no evidence
22 of any acute or chronic emotional difficulties. In
23 addition, Mr. Mastrianna has developed a personality style
24 which has led to his using good judgment, making a good life
25 adjustment in the past, and he should do well in the future.

221

1 He shows no evidence of any emotion or mental problems and
2 is an intelligent, and in summary is a competent, ethical,
3 psychologically healthy young man and is suitable for
4 fitness for duty."

5 But things changed, again I hear from the NRC, Mr.
6 Morris, and others, that the health and safety and welfare
7 of the employees is the number one priority and I hope the
8 people saying that are sincere, because again I was a long,
9 loyal long-time employee in good standing with NU since 1976
10 and I went to work in Nuclear in about 1978.

11 I was a Nuclear employee with all maximum nuclear
12 clearances at NU more than 10 years and I worked at Berlin,
13 Millstone 1, 2, 3, Connecticut Yankee and various other
14 sites. I have seen it all, the good and the bad.

15 In December, 1988 to the present and due to my
16 raising personnel questions and then nuclear safety
17 questions and concerns to my management and Human Resources,
18 I have been given the run-around, pushed around, and subject
19 to severe emotional intimidation and harassment.

20 About that time my nuclear access was denied, then
21 reinstated, then again denied, then reinstated, and I can go
22 on. It's sad. I have had many grievances pending through
23 my unit and different agencies going back to that time.
24 Northeast Utilities through its medical unit, its senior
25 management and attorneys has denied me due process on my

222

1 grievances and has not properly addressed my questions and
2 concerns, which I am going to give to you today,
3 technically, a quick overview of them, and I hope and I feel
4 it is your job to address those questions and concerns.

5 I hope you are sincere about your efforts.
6 As a result of my unfair treatment at the hands of
7 Millstone and NU management, I have suffered a major
8 depressive disorder with some related physical problems
9 which resulted in an unwarranted and unjust job dismissal in
10 1997. As one would guess these matters have caused me great
11 emotional and financial stress including my exhausting my
12 personal finances resulting in foreclosures of my home and
13 bankruptcy.

14 [Pause.]

15 MR. MASTRIANNA: Excuse me. Also these matters
16 and resulting ramifications -- as a result I lost my wife
17 and I lost some of my dignity.

18 You are the NRC Commissioners which has seen these
19 many years of nuclear problems and my personal disaster,
20 which has greatly affected me, my children, my family and
21 other employees at Millstone and the public. You, the NRC,
22 must not let NU management continue this conduct and help
23 guide and demand that NU correct any deficiencies in Unit 3
24 including employee and technical issues before restart.

25 To refer to some of the technical things, I have

1 given an overview to the NRC Staff some of the problems with
2 some of the things I have seen in my working there -- the
3 post-accident sampling system, the tubing is bad -- it's
4 crimped. There would be no flow. I personally was on the
5 crew that did that, wasn't trained properly, and installed
6 the tubing. The seismic and nonseismic hangars are not done
7 according to QC specifications. I can get into very
8 detailed here but I am trying to give it to you quick.

9 The fire seal protection program at all units
10 including Unit 3 is not done properly. There is improper
11 installation of the damming material and caulking, improper
12 mixture of black A-base and the B catalyst -- improper cure,
13 snap and rise. Some of the material used was outdated, not
14 coming from the proper hold area. The material was diluted.

15 I unequivocally feel that upon inspection you will
16 find voids, major voids. If you just look at a wall through
17 a penetration and just see the black material, and see it on
18 the other end, it might be three foot thick. I guarantee on
19 my children's head you will find many voids. It's not full.
20 That could cause a fire.

21 I don't know if -- we have to remind the NRC but
22 in the '70s there was a reactor, catastrophic reactor
23 building fire at the Browns Ferry Nuclear Generating
24 Station. I am recommending that the fire -- it is called
25 fire foam -- be inspected, pulled out where necessary,

1 reapplied. I worked on that. I have done that at all three
2 units and Connecticut Yankee and much of it was done
3 improperly. I have successfully completed the ACMS fire
4 barrier penetration seal maintenance training program and
5 testing.

6 Now another thing I had was that the -- I have
7 worked at all control rooms, all cables -- cable rooms, the
8 control access security rooms. I have worked in the
9 switchgear room. I had all clearances to all plants.

10 The control room ceiling is not installed properly
11 at some of the plants. It is supposed to be hilty-ed in and
12 threaded rod and it's supposed to be inspected and torqued.
13 It has not done that. I was on the crew that it was not
14 done. The ceiling could fall down and God forbid if it
15 falls down when someone is trying to -- an operator is
16 trying to work on that. That would be unbelievable for the
17 utility and the NRC.

18 I feel that the -- as you know and according to
19 the book, the training manual approved by Mr. Opeka and
20 others, and again -- one other quick thing.

21 I have met, me and my family, mostly me, and/or
22 talked or corresponded with over these problems and my
23 questions and concerns with Bill Ellis, Ernie Fox, John
24 Opeka, Walter Fee, Eric De Barber, casually honestly with
25 Mr. Bruce Kenyon, Cheryl Grise, correspondence, Mike

1 Morris's assistant Mandy Scheyed, and just recently
2 yesterday Mandy Scheyed and Barry Ilberman. It is my
3 understanding I will have a future meeting, but their
4 training manual that you get, and I would remind the NRC
5 that in the United States as probably elsewhere a nuclear
6 power plant is an excellent example of the problems that
7 arise with pipe and cable penetrations.

8 The extensive cable and piping system in these
9 plants along with the use of fire barrier walls and floors
10 that divide buildings, equipment and operation into fire
11 zones create a major problem with sealing these holes or

12 penetrations in a manner that will be consistent with the
13 fire rating of each fire barrier, so I believe as a layman
14 we're saying that if it's not done properly it would create
15 a major problem.

16 I remember when there was a voided area and I
17 recommended to the QC inspector to rip it out, it wasn't
18 done properly, and he says who gives a damn -- there's not
19 going to be a fire, but that isn't the attitude to take, and
20 I don't want to hurt someone, but that person is still an
21 employee and it's time for NU and the people to come clean
22 on this, and I hear a lot from the people today -- Mr.
23 Morris and others -- that NU has made a lot of mistakes.

24 It is time to start correcting those mistakes
25 because the public and everyone is counting on that.

226

1 I recently started an overview with the NRC Staff
2 and we will work with them to correct any and all these
3 problems, but I can't -- I don't know that the people
4 here -- there is no one -- I have been to many, many, many
5 psychiatrists, forced to by NU -- unfit for duty, put back
6 in by Mr. Opeka. Went back to the plant, pulled my badge --
7 Mr. Fox -- put back in. Pulled the badge by Mr. Ellis, put
8 back in. Pulled my badge. I told senior management I don't
9 care about the questions no more, I have to feed my family.

10 That is not good conduct. I know they say that's
11 under the old watch but the old watch set the precedent and
12 I am trying to address it with the new watch and it doesn't
13 seem -- I was willing to meet with them yesterday, before
14 this meeting, any time. They don't call me back. I
15 addressed Mr. Morris publicly at the shareholders meeting.
16 I was told by his assistant, Mandy Scheyed, that I would
17 personally get a call. I left numbers. I never heard back.

18 I wonder if they really care about the health,
19 safety and welfare of the employees and citizens and I
20 question the sincerity and the diligence and I have seen it
21 all. I have worked there for many years and I had an
22 impeccable work record until I questioned my Nuclear
23 personnel Manager in the late '80s and then it was 10
24 year -- I heard they were systematic -- I believe that
25 applies to me -- of harassment, intimidation and

227

1 retaliation, and it's ruined me. Thank you.

2 CHAIRMAN JACKSON: Thank you very much, Mr.
3 Mastrianna.

4 Let me ask you a couple of questions.

5 One, when did you last work at the plant?

6 MR. MASTRIANNA: Well, let me -- I have a letter
7 addressed from an NU attorney dated in May which is not even
8 correct. Maybe the NU legal counsel should tell me. I
9 physically --

10 CHAIRMAN JACKSON: When were you physically last
11 present in the plant?

12 MR. MASTRIANNA: In the early '90s, around '91,
13 but it says here, "You mention in your letter that Mr.
14 Mastrianna intends to file a complaint with the Nuclear
15 Regulatory Commission. As attorney Heagney is well aware,
16 it is the policy of Northeast Utilities and Northeast
17 Nuclear Energy Company to encourage the reporting of any
18 nuclear safety concerns, whether with the company, the NRC
19 or otherwise. This notwithstanding the fact that Mr.
20 Mastrianna hasn't worked in the Company's northeast region
21 since 1994, if Mr. Mastrianna does in fact have a nuclear
22 safety concern, then he is encouraged to bring it forward.

23 I trust the Company's position is quite clear on this
24 matter, however feel free to --"
25 It is from a senior counsel in care of different

228

1 people of Northeast Utilities and it is dated on May 5th,
2 1998.

3 I feel that I've talked to people who worked there
4 and they know that the fire foaming has not been corrected;
5 that the foaming I put in, the post-op sampling system has
6 not been corrected. I personally worked on it. I worked on
7 the Unit 1 control rod drive. I can give you the control
8 drive number. I gave it to Mr. Lanning. I was on the team
9 that did not put the O-ring back on it, and was installed,
10 and it was used later. It's my understanding that they had
11 to pull it out. I told it to my supervisor at that time,
12 and I was told to shut up, and I was brought out to the
13 Millstone substation and physically -- and told to shut up,
14 and I have a witness to that, about that incident.

15 It's been a while, but I don't think the problems
16 have been corrected. They pulled my access, ma'am, I can't
17 just -- I'm not just going to go there.

18 CHAIRMAN JACKSON: I understand. Okay. Thank you
19 very much.

20 You did say you recently started an overview of
21 some of these issues with the NRC Staff?

22 MR. MASTRIANNA: Yes, and I got a reply -- just
23 quickly, it's one letter. It says this refers to your
24 telephone conversation with Mr. Jacques Durr, Branch Chief
25 of the Special Project Office, on March 13, 1998, and your

229

1 meeting at the information center with Mr. Wayne Lanning,
2 Deputy Director of SPO, on March 31, 1998. Specifically you
3 indicated that you were harassed, intimidated by your
4 supervisors in 1998 and/or while working at Millstone and
5 Haddam Neck facilities. It goes on. On March 31, 1998, you
6 met with Mr. Lanning to provide specifics regarding safety
7 concerns you raised to management in the '80s and '90s. Mr.
8 Lanning is attempting to set up another meeting, and had a
9 telephone conversation with you so that we could provide
10 more details regarding your technical concerns of these
11 matters. And then it goes on to rules and regulations.

12 Mr. Lanning has called me; I returned his call;
13 it's been hard to touch base with -- it's only been
14 recently, this letter is dated April 19, 1998, fairly
15 recently.

16 CHAIRMAN JACKSON: Okay. Thank you very much.
17 Anything, Commissioners? Thank you for coming.

18 We are going to take a two-minute break and then
19 we are going to have the NRC Staff.

20 [Recess.]

21 CHAIRMAN JACKSON: The meeting will now come back
22 to order. We will now hear from the NRC Staff in terms of
23 its assessment of the issues on the table for the meeting
24 today.

25 Mr. Thompson.

230

1 MR. THOMPSON: Thank you, Chairman Jackson.
2 Commissioners.

3 Is this on?

4 CHAIRMAN JACKSON: You just have to talk into it
5 more directly.

6 MR. THOMPSON: This briefing represents an
7 important step in what has been one of the most intensive
8 reviews this agency has performed at a facility since the

9 accident at the Three Mile Island Unit 2.

10 During the last two years we have devoted
11 significant resources to making sure that all relevant
12 issues have been thoroughly and adequately addressed. The
13 Staff has done a commendable job in addressing the complex
14 issues at Millstone Unit 3.

15 Moreover, their efforts in soliciting public
16 comments and keeping the public informed have been and will
17 continue to be an important part of our oversight process at
18 Millstone.

19 I would also like to extend my recognition to the
20 members of the Millstone staff who raised safety concerns
21 and shared them with us. Their willingness to come forward
22 with these safety concerns was a very important contribution
23 to the establishment of the improved safety conscious work
24 environment that exists at Millstone today.

25 You have received a wide range of views about

231

1 Millstone Unit 3. This afternoon the Staff will provide its
2 conclusion that Northeast Utilities has made appropriate
3 improvements and has adequately established the programs
4 needed to support the restart of Millstone Unit 3.

5 Our presentation will focus on the conclusions
6 associated with the remaining three key areas that were the
7 subject of our restart assessment plan. These are, one, the
8 ICAVP; two, the corrective action program; and three, the
9 operational safety team inspection.

10 With me today is Sam Collins, the director of NRR,
11 and the key managers with the Special Projects Office, Bill
12 Travers, the director, his deputies Phil McKee, Gene Imbro,
13 and Wayne Lanning.

14 CHAIRMAN JACKSON: You lined them up to confuse
15 everybody.

16 MR. THOMPSON: I could never confuse the
17 Commission. I think SECY always helps me on the line-up,
18 after consultation with the General Counsel.

19 [Laughter.]

20 MR. THOMPSON: Also in attendance today are
21 several of the key NRC Staff members who had a major role in
22 carrying out the oversight program at Millstone. Tony
23 Cherney, the senior resident inspector at Millstone; and
24 Beth Corona.

25 CHAIRMAN JACKSON: She's the resident inspector?

232

1 MR. THOMPSON: The resident inspector, right. Jim
2 Trapp, a senior reactor analyst from Region I who served as
3 the team leader for the operational safety team inspection;
4 Jim Anderson, the project manager for Unit 3; and Bill
5 Jones, a senior reactor analyst from Region IV, who recently
6 conducted an independent review of the ICAVP results at the
7 request of the EDO. All of these individuals would be
8 prepared to respond to any questions that you may have about
9 their review, but the primary presentations will be the key
10 team here today at the table.

11 CHAIRMAN JACKSON: Well, it might be useful to
12 have the gentleman be able to speak succinctly at the end
13 about the results of the independent EDO.

14 MR. THOMPSON: Okay, Bill, you might be prepared
15 to do that. If you do that, you'll come to the --

16 CHAIRMAN JACKSON: The microphone.

17 MR. THOMPSON: The microphone over there.

18 With that, I would like to turn to Gene Imbro who
19 will discuss the ICAVP.

20 CHAIRMAN JACKSON: Okay.
21 MR. IMBRO: Thank you. Thank you, Jim.
22 First slide, please.
23 I would like to briefly review some of the purpose
24 of the ICAVP. In response to the configuration of the
25 management issues identified by the NRC and Northeast

233

1 Utilities, Northeast Utilities initiated a configuration
2 management plan to reestablish conformance with their design
3 and licensing bases.

4 As a part of this CMP, Northeast Utilities
5 reviewed the 88 group 1 and group 2 systems defined by the
6 maintenance rule to verify conformance with the design and
7 licensing bases and correct and identify nonconformances.
8 The NRC order, issued in August 1996, required Northeast
9 Utilities to obtain the services of an independent
10 organization to conduct a review of all three Millstone
11 units to verify that the licensee's CMP was effective in
12 identifying and resolving existing problems, documenting and
13 utilizing the licensing and design bases and establishing
14 programs, processes and procedures for effective
15 configuration management in the future.

16 Next slide.

17 The SPO staff has been extensively involved in the
18 development and implementation of the ICAVP from its
19 inception. Some of the Staff's ICAVP oversight activities
20 are listed on this slide. They are rather extensive.

21 In addition to specifying the ICAVP scope and
22 depth of review, the SPO staff provided guidance to Sargent
23 & Lundy during program implementation. An example of Staff
24 guidance provided to Sargent & Lundy was the use of four
25 ICAVP significance levels to provide a measure of safety

234

1 significance for the S&L/ discrepancy reports.

2 During implementation of the ICAVP, the Staff
3 involvement focused on assuring that the independence of
4 Sargent & Lundy was maintained throughout the process, and
5 that the review performed by Sargent & Lundy was technically
6 comprehensive, critical in nature, and in conformance with
7 the NRC-approved audit plan and communications protocol.

8 The SPO Staff also interacted frequently with
9 members of the NEAC to keep them apprised of ICAVP
10 activities and to extend to NEAC the opportunity to observe
11 the NRC's ICAVP oversight activities, including the numerous
12 NRC monitored interactions between Sargent & Lundy and
13 Northeast Utilities to discuss technical issues.

14 The Energy Advisory Council observed the large
15 majority of these interactions and observed most, if not
16 all, of the ICAVP oversight inspections. They had quite a
17 presence in looking at what we did.

18 CHAIRMAN JACKSON: Let me ask you a couple of
19 quick questions. Your next slide, I think, if it's still
20 the next slide, states that there were 230 design
21 characteristics for the tier 2 critical design.

22 MR. IMBRO: Yes.

23 CHAIRMAN JACKSON: How readily available was that
24 information?

25 MR. IMBRO: Chairman Jackson, those were readily

235

1 available and, in fact, they came largely out of Chapter 15
2 of the FSAR. So they were all on the record.

3 CHAIRMAN JACKSON: And then you mentioned that you
4 assured adherence to the communications protocol.

5 MR. IMBRO: Yes.

6 CHAIRMAN JACKSON: And the question then is did
7 that protocol change at all over the life of the ICAVP?

8 MR. IMBRO: No, the protocol was constant
9 throughout the plant -- the ICAVP implementation. It didn't
10 change at all.

11 CHAIRMAN JACKSON: And at the last Commission
12 meeting, Mr. Lochbaum, for one, commented that even with the
13 quote, unquote arm's length protocol, that there was -- that
14 the number of deficient corrective actions was too high. I
15 mean do you have any comment on that at all?

16 MR. IMBRO: Actually, I have a back-up slide I'd
17 like to use to address that, and that would be back-up slide
18 No. 7.

19 CHAIRMAN JACKSON: Why don't you start talking?

20 MR. IMBRO: Okay.

21 A concern was raised that the number of
22 interactions between the licensee and Sargent & Lundy on DRs
23 was an indication that the licensee's Corrective Action
24 Program was ineffective. The staff does not agree that the
25 need for multiple interactions on DRs provides any insights

236

1 on the effectiveness of the licensee's Corrective Action
2 Program. The staff has observed these many interactions as
3 required by the communications protocol. NEAC has also
4 observed the high percentages of these interactions.

5 The principal reason for the interactions was for
6 the licensee to gain a precise understanding of the S&L;
7 issues raised in the written DRs. The communications
8 protocol is similar to that used during the Independent
9 Design Verification Program that was performed in the 1980s
10 for NTOLs. The protocol by its nature inhibits effective
11 communication, and the purpose is to try to maintain an
12 arm's-length distance between the reviewer and the review
13 organization.

14 It is difficult to communicate complex technical
15 issues in writing without personal interaction between the
16 parties. The staff has observed that communication of
17 complex technical issues was sometimes difficult even during
18 face-to-face meetings. This is no reflection on the
19 competence or technical capability of the involved
20 organizations or individuals. In this regard, the
21 restrictions imposed by the communications protocol,
22 interactions to gain an understanding of the technical issue
23 are not viewed as a part of the corrective action process.

24 The staff used the corrective action process as a
25 beginning when there is agreement on the issue to be

237

1 resolved. Therefore, a more meaningful measure of the
2 effectiveness of corrective actions would be the number of
3 interactions between S&L; and Northeast Utilities regarding
4 the licensee's proposed corrective action.

5 Of 977 evaluated preliminary discrepancy reports,
6 Northeast's initial response to 204 DRs was not accepted by
7 S&L;. For more than 140 of these discrepancy reports,
8 Sargent & Lundy did not accept the response because they
9 needed additional information to complete their review, for
10 example, information referenced in the documents that were
11 provided by Northeast Utilities. For more than 20 of the
12 DRs, the response was not accepted by S&L; because the
13 Northeast Utilities response triggered them to explore other
14 issues, which had not been raised in the initial DR. For 37
15 DRs, however, Northeast was requested to supplement the
16 proposed corrective action.

17 During the staff's ICAVP corrective action
18 inspection, each of these 37 DRs was reviewed in detail.
19 The team concluded that the licensee had adequately
20 addressed technical issues by Sargent & Lundy, and the
21 additional corrective actions required by Sargent & Lundy
22 were confirmatory in nature or involved a need for
23 additional documentation.

24 And just as an example of that, in one discrepancy
25 report, Sargent & Lundy indicated that the stress evaluation

238

1 for a particular containment liner plate was inaccurate with
2 regard to plate size and location of applied load. And
3 Northeast came back and said well, there's a lot of margin
4 in here. We don't think it's an issue with compliance with
5 design and licensing bases based on their engineering
6 judgment.

7 Now Sargent & Lundy looked at that, and they
8 agreed with the judgment of the licensee. However, the
9 corrective action that was asked for by Sargent & Lundy was
10 that that engineering judgment needs to be documented in the
11 stress analysis report. So it's these kinds of
12 documentation-type issues that -- and this is using
13 corrective action in a very broad sense, I believe.

14 But to continue, based on its ICAVP corrective
15 actions, our inspection of the ICAVP corrective actions, and
16 through the observation of the actual technical discussions
17 between Sargent & Lundy and Northeast Utilities, the staff
18 concluded that neither the need for additional corrective
19 action for the 37 discrepancy reports we just talked about
20 and which were largely documentation issues, nor the fact
21 that Sargent & Lundy did not accept the initial Northeast DR
22 response, was an indication of an ineffective Northeast
23 Utilities Corrective Management Program. And I guess that's
24 a long answer to a short question.

25 CHAIRMAN JACKSON: But all the questions I ask are
239

1 complex.

2 DR. TRAVERS: If I could just add one point,
3 because, as Mr. Lochbaum mentioned, he and I had a discourse
4 on this very topic, and when I got his letter, I wanted to
5 understand it as well as I could, so I called him.
6 Fundamentally we did consider his issue. We disagreed, but
7 we did consider it.

8 Our view, frankly, is that a better measure of
9 Corrective Action Program effectiveness is looking at the
10 Corrective Action Program rather than iterations in a very
11 special process, one that's ad hoc and temporary and set up
12 under order for a specific purpose for a short period of
13 time. And as you'll hear in my presentation, we took and
14 had the opportunity to take quite a look at the Corrective
15 Action Program at Millstone directly, rather than in any
16 indirect fashion by looking at the numbers of iterations,
17 for example, between Sargent & Lundy.

18 CHAIRMAN JACKSON: So what did you feel is a
19 better measure?

20 DR. TRAVERS: Actually looking at the Corrective
21 Action Program as it relates to the identification of
22 problems, as it relates to the production of resolution
23 plans, as it relates to actually implementing those plans,
24 and as it relates to developing assessment techniques for
25 assuring against recurrence.

240

1 CHAIRMAN JACKSON: Okay. So you covered me. So
2 you must have read my mind, because basically I'm interested

3 in what I all the four R's -- recognition, or what you might
4 call identification of the problems; risk -- that is,
5 assessment of the risk significance; resolution of the
6 problem; and lack of repetition. And you're telling me that
7 you looked at all of those.

8 DR. TRAVERS: Yes, and I'm going to cover that.
9 Sure.

10 CHAIRMAN JACKSON: Okay.

11 MR. IMBRO: Okay. If we can continue with slide
12 5, please.

13 This deals with the scope of the Sargent & Lundy
14 ICAVP. The ICAVP was developed by the staff to be a
15 comprehensive review of the effectiveness of the licensee's
16 programs to identify and correct nonconformances with their
17 design and licensing bases.

18 In SECY-97-003 the staff proposed a three-tier
19 approach to verify configuration control from several
20 vantage points. Tier 1 was an in-depth vertical slide
21 design review of 15 of 88 Group 1 and Group 2 systems to
22 verify clients with their design and licensing bases. Tier
23 2, and you've heard this before, and so I'll go through this
24 quickly, Tier 2 was a review of 230 critical design
25 characteristics to verify the 22 accident mitigation systems

241

1 were able to perform as credited in the accident analyses
2 described in the FSAR. And again, Tier 3 was a review of
3 change processes other than the principal design change
4 process to verify the changes made through these processes
5 did not result in the unit being in noncompliance with its
6 design and licensing bases.

7 S&L; expended approximately 160,000 hours of
8 engineering review in this effort, and that's not counting
9 clerical support. So it was a very major effort.

10 CHAIRMAN JACKSON: In your assessment, what did
11 you think the greatest weakness was? I mean, you know,
12 recognizing what S&L; has already told us.

13 MR. IMBRO: I think that most of the findings were
14 in Tier 1. I think of the discrepancy reports probably
15 about 800 of the 977 or thereabouts were in Tier 1, and 150
16 spread throughout the other, Tier 2 and Tier 3. So I think
17 if you're going to say any area was a weakness, it was Tier
18 1. But again, I think I'll point out though that only 18 of
19 600 approximately confirmed DRs rose to the level where they
20 impact the design and licensing bases but would not affect
21 the system functionality.

22 So you have to use weakness I guess in a relative
23 sense.

24 I'm going to go through briefly, because as I said
25 there was a question before on the numbers of systems, the 4

242

1 versus 15, and let me just address that quickly.

2 There has been some confusion regarding the number
3 of systems, 4 versus 15, reviewed by Sargent & Lundy. As a
4 point of clarification, SECY-97-003 stated that a minimum of
5 four systems would be selected for the Tier 1 review. Staff
6 views systems on a functional basis. Systems is viewed in
7 the context of the maintenance rule and more narrowly
8 focused, and that's just by the nature of the maintenance
9 rule. And it's based primarily on the requirement to
10 monitor performance and condition of structures, systems,
11 and components, and the evaluation of preventive maintenance
12 activities.

13 Therefore, as specified in SECY-97-0034, systems

14 as viewed by the staff on a functional basis only translates
15 to 15 systems on a maintenance rule basis. In the
16 maintenance rule we define systems very, very narrowly.
17 They would call a cooling water storage tank, for example,
18 as a system. We would say that's part of a larger system
19 like recirculation spray.

20 The scope of the ICAVP, while extraordinarily
21 large, did not review all aspects of all systems.
22 Therefore, it is reasonable to assume that similar types of
23 findings may exist in other systems. However, the extent of
24 the ICAVP reviews, the low safety significance of the
25 findings identified by Sargent & Lundy and the NRC staff and

243

1 the corrective action implemented by the licensee provides
2 confidence that any other issues would likely be of low
3 safety significance.

4 Now I'll go on to the ICAVP results, and that
5 would be slide 6.

6 The Commission has already heard the results and
7 conclusions of Sargent & Lundy's ICAVP review. However, I
8 would like to make two points to give the Commission a
9 perspective on a number of discrepancy reports prepared by
10 Sargent & Lundy. First, they were on the order of 1,100
11 preliminary discrepancy reports written by Sargent & Lundy.
12 Approximately 500 of these 1,100 were determined to be
13 either nondiscrepant conditions, areas that had been
14 previously discovered by the licensee's configuration
15 management plan, or DRs -- discrepancy reports -- that were
16 determined to be invalid by Sargent & Lundy on further
17 looking.

18 The second and more important point is out of the
19 approximately 600 confirmed discrepancies, only 18
20 identified noncompliances with the U.S. design and licensing
21 bases, and none of these noncompliances affected the
22 functionality of safety systems.

23 The absence of Level 1 or Level 2 DR's and the
24 relatively small number of identified noncompliances with
25 the design and licensing bases considering the large

244

1 technical review effort expended by Sargent & Lundy I think
2 is an important perspective to use to judge the
3 effectiveness of CMP.

4 CHAIRMAN JACKSON: Let me ask you this question.
5 In an earlier Commission meeting, you know, we discussed the
6 difference between Unit 3 and Unit 2, which is being --
7 where the independent contractor is Parsons Power.

8 MR. IMBRO: Yes.

9 CHAIRMAN JACKSON: And we discussed the difference
10 in the results in categorizing the issues. Is it that the
11 data is different, or did you look at all at this issue of
12 consistency in categorization of the issues?

13 MR. IMBRO: Well, I think there is -- I wouldn't
14 say there's a difference in process, maybe a difference in
15 the way it's implemented, as Mr. Schopfer mentioned before,
16 if Sargent & Lundy didn't have a particular piece of
17 information to demonstrate or could find a particular piece
18 of information to demonstrate that something was
19 satisfactory, they'd start with it as a Level 3, indicating
20 it was a potential noncompliance. Now if the information
21 provided by NU reestablished that confidence that license
22 and design basis was being met, or that if the licensing and
23 design basis was not met it wouldn't -- the effect was not
24 detrimental to system functionality, then that would be made
25 as a Level 3 or possibly go to a Level 4.

1 Parsons is done a little bit differently. If they
2 don't have information to substantiate a particular
3 conclusion versus system operability or functionality, and
4 they have at least engineering intuition to lead them to
5 believe that this is a possible Level 1 or Level 2, they'll
6 write it at the higher level. But I think the key to
7 judging this is again, and these -- we're only talking now
8 about preliminary discrepancy reports. I think the final
9 proof of this is when they get resolved and the final -- all
10 the facts are available and the final significance level
11 gets determined.

12 Now currently, and my date is a little bit, maybe
13 about a week or so old on Unit 2, right now there are
14 probably several Level 1's and Level 2's that are
15 preliminary, but none have been confirmed, and I was
16 understanding the other day in talking with Parsons that one
17 of the initially proposed Level 1's on a preliminary basis
18 may be a Level 3 because of initial information they got.

19 So I think it's really a question of how it's
20 implemented, and I think you really -- it's really not fair
21 to judge the preliminary data, but we need to really wait
22 and see where all the information is available if there is
23 really a problem and then make sure that the categories are
24 approximately used.

25 Did I answer the question?

1 CHAIRMAN JACKSON: Some. Go ahead.

2 MR. IMBRO: Okay.

3 Slide No. 7. In addition to the Sargent & Lundy
4 effort, the staff has conducted an extensive five-inspection
5 effort in its oversight of the ICAVP. The level of
6 inspection effort expended in the oversight of the Millstone
7 Unit 3 ICAVP alone was approximately twice the average
8 entire inspection effort expended at a single unit site.

9 The NRC's oversight was planned to provide
10 confidence that the licensee's configuration and management
11 and Corrective Action Programs have been effective and to
12 assure that the review conducted by Sargent & Lundy was
13 performed in a critical manner in accordance with the
14 NRC-approved plan and in a manner independent of the
15 licensee and its design contractors.

16 The NRC inspections included a vertical slice
17 inspection of systems out of ICAVP scope to assess the
18 effectiveness of CMP independent of Sargent & Lundy, and an
19 inspection of in-scope systems. Those would be systems
20 included within the 15 scope -- scope of Sargent & Lundy --
21 15 system scope of Sargent & Lundy -- to provide a level of
22 confidence in the results of the S&L; Tier 1 reviews. The
23 NRC's ICAVP oversight inspections also included an
24 evaluation of accident mitigation systems, critical design
25 characteristics reviewed by S&L; in their Tier 2 review, and

1 an evaluation of change processes to provide confidence in
2 the results of the S&L; Tier 3 review.

3 The NRC inspection findings were similar to those
4 found by Sargent & Lundy, although in several instances
5 based on the teams findings Sargent & Lundy was asked to
6 expand their scope to a limited extent. The additional
7 reviews performed by Sargent & Lundy did not identify any
8 other discrepancies.

9 The corrective action inspection is substantially
10 complete at this time. Prior to restart, NRC will inspect

11 all corrective actions resulting from the NRC and Sargent &
12 Lundy identified nonconformances with the design and
13 licensing bases to assure that the implemented corrective
14 actions are appropriate to correct the identified
15 nonconformance and to identify and correct similar issues in
16 other systems.

17 To date the staff has inspected the corrective
18 actions implemented to restore compliance with the unit's
19 design and licensing bases for 16 of 20 Level 3 discrepancy
20 reports, and most of the NRC-identified violations.

21 The staff determined that the licensee's
22 corrective actions have been effective, have restored
23 compliance with the unit's design and licensing bases, and
24 have been sufficiently broad to identify and correct similar
25 issues in other systems.

248

1 Next slide.

2 The NRC's ICAVP oversight inspections identified
3 28 violations of NRC regulations. For the purposes of
4 comparison with Sargent & Lundy's results, the staff defined
5 violations of NRC requirements that did affect system
6 functionality as equivalent to ICAVP Significance Level 3
7 Discrepancy Reports. Twenty-seven of the 28 violations were
8 cited as Severity Level 4 in accordance with the NRC's
9 Enforcement Policy Statement. Although the safety
10 significance of Severity Level 4 violations is low, Severity
11 Level 4 violations represent a regulatory concern because if
12 left uncorrected, they could lead to a more serious concern.

13 The principal areas addressed by the violations
14 include plant procedures, design related issues and
15 corrective actions. It is important to note that five of
16 the 27 Severity Level 4 violations were non-cited because,
17 according to the provisions of the NRC Enforcement Policy,
18 the violations were identified by the licensee under
19 self-identification and were corrected by the licensee in a
20 reasonable time.

21 One of the violations that has been previously
22 discussed with the Commission was an Enforcement Severity
23 Level 3 for adequate -- inadequate corrective action.
24 Severity Level 3 issues are defined as issues of significant
25 regulatory concern. In this case the Severity Level 3

249

1 violation resulted from the licensee not identifying the
2 potential for air-binding of the charging and safety
3 injection pumps. Although the licensee demonstrated to the
4 satisfaction of the NRC that the trapped air would not
5 affect the functionality of the pumps, the licensee was
6 expected to have identified and resolved this concern during
7 the configuration management plan implementation,
8 particularly since the subject of air and gas-binding of
9 pumps had been addressed in previous information notices.

10 In summary, the issues identified by the NRC ICAVP
11 did not affect system functionality and the number of issues
12 identified were relatively few considering the extensive
13 12,000 hour inspection effort. It supports the staff's
14 conclusions regarding the effectiveness of the CMP.
15 Further, the types of issues identified by the NRC were
16 similar to the issues identified by Sargent & Lundy during
17 their ICAVP review. This provides confidence that the NRC
18 -- that the ICAVP review conducted by Sargent & Lundy was
19 thorough and at the appropriate level of technical detail.

20 Based on our ICAVP oversight inspections, the
21 staff has confidence in the Sargent & Lundy results and
22 conclusions.

23 And the last slide. The staff concludes that
24 Sargent & Lundy's review was comprehensive and that the
25 staff has confidence in their results. NNECO's

250

1 configuration management plan was effective in establishing
2 confidence that the Unit 3 conforms with its design and
3 licensing bases and, thirdly, Northeast's configuration
4 management process is adequate to maintain conformance with
5 the design and licensing bases going forward.

6 CHAIRMAN JACKSON: Thank you.

7 DR. TRAVERS: Chairman Jackson, this might be a
8 good time to have Bill Jones, since he did the independent
9 assessment --

10 CHAIRMAN JACKSON: Right.

11 DR. TRAVERS: -- of the ICAVP process, and Bill, I
12 think as he is getting to the podium over there, I will just
13 give a little bit of his background. He is a certified
14 senior reactor analyst from Region IV who is totally
15 independent from the Special Project Office and he has had
16 extensive experience both as a senior resident inspector and
17 he has completed the formal probabalistic risk assessment
18 training.

19 CHAIRMAN JACKSON: Connect those dots, since this
20 is a public meeting, and say what a senior reactor analyst
21 is.

22 DR. TRAVERS: That's an individual who has both
23 the operational experience and training with NRC to look at
24 how to analyze the operations activities at a plant in a
25 risk environment. That is, we have had special training in

251

1 probabalistic risk assessment, and I guess I'll let Sam add
2 anything to that. In the program -- it has been, the
3 program has been in place about two and a half year, and
4 Bill has been involved in that process since that time.

5 CHAIRMAN JACKSON: And they are specifically
6 assigned to the Regions?

7 DR. TRAVERS: I'm sorry, that's right.

8 CHAIRMAN JACKSON: In order to bring that ability,
9 training and insight to --

10 DR. TRAVERS: To regional activities.

11 CHAIRMAN JACKSON: No, activities in our
12 operational inspection programs. Is that correct?

13 MR. COLLINS: That is correct. Also, just to
14 elaborate, they also add that perspective to the routine
15 inspection program.

16 CHAIRMAN JACKSON: That's what I am --

17 MR. COLLINS: As well as our reactor program. Bill
18 is also, if I recall correctly, a product of our original
19 intern program -- co-op program.

20 CHAIRMAN JACKSON: And now that we have finished.

21 MR. COLLINS: He is also part of the team for
22 Region IV, which Bill and I are quite proud of.

23 CHAIRMAN JACKSON: Yes. Before you begin, let me
24 just ask Mr. Imbro one question.

25 To what extent is the configuration management

252

1 program, as far as you can discern at this point,
2 station-wide? I mean is it similar at Unit 2?

3 MR. IMBRO: No. No, it's not. I don't know that
4 I can articulate the differences, but there was a
5 substantial difference in level of effort. For level of
6 effort on CMP for Unit 3, it was on the order, I believe, of
7 700,000 man hours.

8 CHAIRMAN JACKSON: Okay. But I am talking about
9 how the CMP is structured. And I realize that they may not
10 have put the number of hours in at this point. The real
11 question is one of, you know, in terms of how the program is
12 structured.

13 MR. IMBRO: Well, I think it is substantially the
14 same. I mean, clearly, it has the same effect.

15 CHAIRMAN JACKSON: But at this point it is
16 premature to say whether the confidence you are expressing
17 vis-a-vis Unit 3 is translatable.

18 MR. IMBRO: Oh, absolutely. No, we could not make
19 that extrapolation at this point.

20 CHAIRMAN JACKSON: Okay. Fine. Now, we will hear
21 from this gentleman. Thank you for your patience.

22 MR. JONES: My name is Bill Jones.

23 CHAIRMAN JACKSON: Speak more into the microphone.
24 Thank you.

25 MR. JONES: My name is Bill Jones. Good evening,

253

1 Chairman Jackson and Commissioners. What I wanted to add
2 about the SRO program is all the SR, senior reactor analysts
3 have extensive inspection experience, very strong,
4 deterministic backgrounds and we went through a formal PRA
5 training program. It took on the order of about 18 months,
6 including rotations, in order to become certified as the
7 senior reactor analyst.

8 EDO asked that I perform an independent review of
9 the ICAVP process and, in particular, through the review of
10 discrepancy reports. I had had no previous interactions
11 with the Special Projects organization or with Millstone in
12 any fashion. The purpose of this independent review was to
13 evaluate the appropriateness of the significance levels
14 assigned to discrepancy reports, the adequacy of the
15 corrective actions associated with the discrepancy reports,
16 the acceptability of issues deferred past start-up, the
17 effectiveness of back and forth process between Sargent &
18 Lundy and Northeast Utilities in addressing the issues, and,
19 lastly, to provide a general assessment of the issues within
20 the scope of the review from a risk perspective.

21 I reviewed approximately 170 discrepancy reports
22 involving Level 3's and Level 4's confirmed, those that were
23 still pending, those that remained unresolved, and an
24 additional set of those that were N/A. Just a general
25 discussion, there were about 17 confirmed Level 3's, 38 of

254

1 the 45 open Level 3 discrepancies, 90 of the -- or
2 approximately 20 percent of the confirmed Level 4, and about
3 30 of the 313 discrepancy reports designated as not
4 applicable. This is based on the information that was
5 available to me about May 19th when I performed the review.

6 As a result of my review, I concluded that the
7 ICAVP process, as assessed through the DR process, provided
8 an effective means for identifying problems, establishing
9 their significance and associate corrective actions.

10 I would like to go through each of these areas and
11 see how I addressed each of those. With the appropriateness
12 of the significance levels, I found none that were
13 identified inappropriately. In other words, the guidance
14 that was provided to me as far as Level 3 and Level 4
15 designations had been followed looking at the design basis
16 definition in 50.2, also looking at the guidance provided in
17 our NUREGs for 50.73 reporting. That was all consistent as
18 far as Level 3's and Level 4's.

19 There are several DRs, Level 3's, which are still

20 open and had not been resolved between NU and Sargent &
21 Lundy. In the cases that I reviewed, all examples that were
22 open remained open until the issues were properly resolved.
23 In other words, a Level 3 issue remained at a Level 3 issue
24 until appropriate corrective -- or not corrective actions,
25 but a basis was provided to downgrade to a Level 4 in those

255

1 cases.

2 One question that I did have involved the
3 heightened sensitivity to design basis definition with
4 regard to both the Level 3 definition and how it applied to
5 our regulations and the definitions in our regulations. At
6 the time of the review only one licensee event report had
7 been identified for all the Level 3's that had been
8 confirmed. The question was whether or not the design basis
9 definitions were being appropriately considered and this
10 review was still ongoing and the staff was looking at
11 whether or not all the design basis issues had been properly
12 reported.

13 MR. COLLINS: Excuse me, Chairman. Just to
14 elaborate on that, Hugh Thompson assigned an action to
15 office of NRR in the area of reporting review. We have
16 taken that on board as a specific action for the NRR staff
17 and that review is being conducted by our events assessment
18 group in conjunction with SPO, that's a separate action.

19 CHAIRMAN JACKSON: Thank you.

20 MR. JONES: We are just looking for consistency
21 between the definition used to identify Level 3's and our
22 regulatory requirements.

23 As far as the adequacy of corrective actions, I
24 did not attempt to determine whether or not the actual
25 corrective actions implemented were appropriate, rather to

256

1 see that each of the issues identified in the discrepancy
2 reports were properly addressed and resolved by Northeast
3 Utilities and subsequently reviewed by Sargent & Lundy.
4 This included issues that came up as a result of the
5 iterative process between Sargent & Lundy and Northeast
6 Utilities and to ensure that those type of issues that
7 subsequently came up were also included in there. I
8 identified no cases where the issues were not being
9 addressed through the discrepancy report and, subsequent,
10 either a response by NU or through corrective actions.

11 Part of the process did allow for corrective
12 actions associated with DRs to remain open after the DRs
13 were closed. This is apparently consistent with the DR
14 process and the ICAVP process. Any issues -- this, for
15 example, would involve surveillance testing of systems. The
16 process did provide for the subsequent reopening of -- or
17 not reopening but reissuance of DRs or corrective action if
18 new issues did come out as a result of that testing.

19 I looked at the acceptability of issues deferred
20 plus past start-up. These involved Level 4's. I found no
21 examples of improperly deferred DRs, although several issues
22 involving Level 4's and Level 3's were still ongoing.

23 Regarding the effectiveness of the Sargent and
24 Lundy and NU communications, I found that each of the issues
25 was being addressed through the DR process. In some cases

257

1 it did involve an iterative process, in some cases several
2 times, but in each case I found that the issues were
3 ultimately being addressed.

4 Lastly, it involved a general assessment of the

5 issues from the risk perspective. I did not attempt to
6 perform a quantitative analysis. That would be an
7 inappropriate use of PRA in this case. Had there been
8 issues involving Level 1 and Level 2 issues, Level 2
9 significance, those I could have addressed. But in looking
10 at Level 3 and Level 4, we are looking at the type of
11 considerations that go into the building of the
12 probabilistic risk assessment models. In this case, I
13 looked at the challenges to the design basis issues and the
14 PRA model and found that there were no significant
15 challenges to the success criteria assumptions in the PRA.

16 CHAIRMAN JACKSON: Thank you very much for a
17 comprehensive statement on short notice.

18 MR. THOMPSON: There was one issue I think about
19 expanding the scope and I think I would like to have Dr.
20 Travers address that issue.

21 DR. TRAVERS: Thanks, Hugh. I wanted to take the
22 opportunity, given some of the concerns that have been
23 raised about how we implemented our program in one
24 particular area, and that has to do with Level 4 DRs that
25 were identified. And, as you have heard, there were several

258

1 hundreds of these issues that were identified.

2 Fundamentally, the purpose of the ICAVP was to
3 confirm that the design basis and licensing basis was in
4 conformance at Millstone. Nevertheless when we set up the
5 program, we recognized that we were going to be looking very
6 deeply in the selected systems. As a result, we wanted to
7 capture in our findings any errors that we did identify that
8 went below the design and licensing basis. In so doing, we
9 recognized that the fundamental focus was at Level 3 and
10 above, but, nevertheless, we would identify and characterize
11 at Level 4 the errors that were identified.

12 Rather than simply looking at the numbers and,
13 certainly, that is suggested by the very cryptic designation
14 of how we would react or potentially react, we provided
15 guidance, and we have been talking about this at public
16 meetings and as often as we can to provide some insight as
17 to how we would carry out our review and under what
18 circumstances we might expand the scope of the ICAVP in the
19 face of Level 4 findings.

20 And what we said and what we did was to trend the
21 identified findings at Level 4 to see if we could identify
22 issues that either by the numerics fell in particular areas.
23 But the fundamental concern was to identify trends that
24 might lead us to a question about licensing and design basis
25 issues in areas where we had not looked. And we actually

259

1 have been doing that. We did that in connection with the
2 ICAVP review.

3 And so rather than merely looking at the numbers
4 of the identified findings, what we were looking at is the
5 number of calculational errors, for example, in different
6 disciplines, whether they indicated or implicated a
7 suspicion that we should expand the scope to cover this
8 issue in other systems. We determined that that wasn't the
9 case. Nevertheless, we did identify calculational control
10 issues that we brought to the attention of NU, and in their
11 presentation you heard that they are taking this on. We
12 think that's appropriate, but we don't think fundamentally
13 that is an issue that bears directly on the adequacy of what
14 they accomplished.

15 So in brief, that is our take on this question of
16 expansion of scope and was it appropriately considered in

17 our program.
18 CHAIRMAN JACKSON: Okay. Thank you.
19 Commissioner?
20 COMMISSIONER DIAZ: And so there is no safety
21 significance to compiling a bunch of those things? You have
22 looked at them; they're essentially independent issues,
23 although they might be the same type of calculation, but
24 from the safety view point of the functionality of the
25 system that has to perform a function, you did not see that

260

1 the aggregate was detrimental to the --
2 DR. TRAVERS: That's exactly right. Certainly
3 individually, these things which fall below the licensing
4 design basis threshold were ones that additionally did not
5 affect functionality or operability in these systems. We
6 attempted, though, as I said, to try to trend this aggregate
7 that you speak of and see if we felt uncomfortable enough to
8 cause us to enhance what we were already about, and we think
9 that improvements can be made in calculation of control. We
10 have identified those in the course of doing our program.
11 The licensee has taken up the issue. But we feel in sum
12 that it can be addressed on an ongoing basis as opposed to
13 --

14 CHAIRMAN JACKSON: Right. So you're really saying
15 you did two things, I mean a couple of things. One is
16 there's a risk significance which was low of the particular
17 issues. The second is whether there was any functionality.
18 But by definition, from my understanding, it wouldn't be
19 level 4s if they were functionality related. The third, you
20 actually trended to see if there were any disturbing
21 patterns. Is that what you're saying?

22 DR. TRAVERS: Yes. There was a suggestion that
23 just by their very definition, we couldn't get there from
24 here.

25 CHAIRMAN JACKSON: But you could if it was a

261

1 cumulative effect.

2 DR. TRAVERS: It was a trend that gave us pause to
3 look --

4 CHAIRMAN JACKSON: That's right.

5 DR. TRAVERS: -- in areas we were running multiple
6 --

7 CHAIRMAN JACKSON: I understand. Right. Okay.
8 Thank you.

9 Who is going to talk about corrective action?

10 DR. TRAVERS: I'm going to talk about corrective
11 action. Thank you. And certainly, --

12 CHAIRMAN JACKSON: Thank you, Mr. Imbro.

13 DR. TRAVERS: Certainly one of the most
14 fundamental and important programs established at all
15 nuclear power plants is the corrective action program.
16 Chairman, as you indicated, the principal elements of a
17 corrective action program include problem identification,
18 problem evaluation, problem resolution, and the assessment
19 of corrective action effectiveness to prevent recurrence.
20 And all of these really are relied upon to ensure that
21 problems, including those that bear on safe operation, are
22 addressed effectively.

23 The importance of having an effective corrective
24 action program is underscored by the broad range of programs
25 and activities which are directly affected by the quality of

262

1 both the corrective action processes and their practical

2 implementation.

3 As we have seen at Millstone, the historical
4 problems encompassing weaknesses in problem identification,
5 evaluation and particularly in corrective action
6 implementation have had a significant and pervasive negative
7 impact on programs ranging from configuration management to
8 the willingness of workers to raise important safety
9 concerns.

10 I think the licensee's own assessment that
11 ineffective management leadership was the principal cause of
12 these past corrective action program weaknesses is correct.
13 The manifestation of these earlier management weaknesses has
14 been significant and resulted in the NRC staff including
15 this issue of corrective action program effectiveness at
16 Millstone as a key area of our restart assessment program.

17 CHAIRMAN JACKSON: And you would say that the
18 licensee's own self-assessments agree with these historical
19 --

20 DR. TRAVERS: In fact, that's correct. A number
21 of the self-assessments that were carried out early on when
22 these -- when the problems at Millstone were first being
23 identified highlight and point to the corrective action
24 program and management leadership in particular as the sort
25 of genesis for many of the problems because of the broad

263

1 impact that corrective action program and effectiveness
2 would have across the board.

3 Before I turn to what we did to assess corrective
4 action program effectiveness, let me just mention briefly
5 what the licensee has done, and you have heard from them,
6 but most importantly, this new management team that's been
7 established was put into place to facilitate recovery in the
8 fall of 1996 and they began a broad-based program designed
9 to raise standards at Millstone.

10 Included in this effort have been communications
11 of management expectations regarding the corrective action
12 program, particularly the expectation that all employees
13 should identify and raise safety issues without the fear of
14 retaliation.

15 Program identification and the willingness of the
16 entire work force to participate in the raising of issues
17 for resolution was correctly recognized as a fundamental
18 element of an effective corrective action program, and more
19 broadly, in my estimation, as essentially to a healthy
20 safety culture.

21 More narrowly, the licensee also overhauled its
22 formal corrective action program in a new site-wide
23 procedure labelled RP4. This new program, which is based on
24 industry standards and processes, included fundamental
25 changes which emphasized a lower threshold for reportable

264

1 problems, prioritization and timely processing of issues,
2 greater management involvement in the process, enhanced use
3 of performance indicators to track and trend program
4 effectiveness, and training for individuals, particularly
5 those performing root cause analyses.

6 May I have the next slide, please.

7 For our part, and in order to evaluate the
8 effectiveness of the licensee's actions, the NRC has carried
9 out an extensive evaluation which included focused
10 assessment of the licensee's identification and processing
11 problems, conduct of root cause evaluations, development of
12 corrective action proposals and plans, and most importantly,
13 the actual implementation of the corrective actions.

14 We also inspected the licensee's efforts to
15 improve its self-assessment capabilities.

16 In recognition of both the importance of this
17 issue and the broad-scope impact of the corrective action
18 program, the NRC staff has included an assessment of
19 corrective actions in nearly every aspect of its oversight
20 activities at Millstone.

21 In addition to inspecting corrective actions
22 related to ECP or employee concerns program, and safety
23 conscious work environment, and ICAVP, those two orders, as
24 has been previously discussed, the staff carried out
25 additional inspections which are listed here on this slide.

265

1 Additionally, a significant input to our
2 evaluation was derived from the normal inspection program
3 where valuable insights regarding the effectiveness of
4 corrective actions were routinely collected from our
5 technical safety inspections.

6 The most intensive inspection of the licensee's
7 corrective action program was carried out by a team of NRC
8 inspectors using the inspection procedure 40500 titled
9 Effectiveness of Licensee's Controls in Identifying,
10 Resolving and Preventing Programs.

11 Except for inspection activities related to design
12 and licensing basis conformance, no other issue was examined
13 as extensively over the past two years.

14 Next slide, please.

15 Our overall conclusion is that the licensee's
16 corrective action program is comprehensive and is acceptable
17 to support restart of Unit 3.

18 Specifically, we found that the program has a low
19 threshold for identifying problems and for including those
20 problems in the formalized corrective action processes. The
21 current situation which has been identifying problems at a
22 rate of about 4,000 per year differs markedly from earlier
23 years, when only about 300 or so issues per year were being
24 identified.

25 Additionally, our inspections indicate that new

266

1 standards in expectations for the handling and resolution of
2 problems have been effectively communicated by licensee
3 management.

4 Management is meaningfully involved in the
5 corrective action program and workers understand the
6 importance of their role in identifying and resolving
7 problems which can affect safety.

8 Although our inspections did identify instances
9 where some root cause evaluations, for example, were not
10 fully effective, our overall determination is that root
11 cause evaluations are being carried out adequately to permit
12 comprehensive resolution and to help preclude recurrence.

13 CHAIRMAN JACKSON: So let me just make sure I
14 understand that. Would you say that in the category of
15 identification and evaluation, that it's more than adequate
16 but that when it comes to -- well, I'm sorry --
17 identification and -- that it's more than adequate, but when
18 it actually comes to evaluation and implementation of the
19 actual corrective action, it's adequate? Is that what you
20 would say?

21 DR. TRAVERS: The licensee at Millstone over these
22 past two years has probably carried out thousands if not
23 maybe more than 10,000 corrective actions. We have looked
24 at hundreds, perhaps, in our program, and while I could

25 probably point to issues that we have identified in all of

267

1 these areas, I wanted to point out that we didn't find
2 perfection, that we did, in fact, find issues, some of which
3 resulted in violations, frankly. But on the whole, against
4 the backdrop of all of what we looked at, we had to make a
5 conclusion about the adequacy of this program, and our
6 conclusion is that it's working. It can be improved.

7 I'm going to point out in a moment that management
8 really needs to keep its eye on the workings of the
9 corrective action program. Simply -- not just simply
10 because of the findings that we have identified over the
11 past two years, but because of the obvious historical
12 implications of their failure, frankly, in the past to
13 sustain an effective corrective action program. So we think
14 it's going to be important to do that.

15 The second piece of what I wanted to make mention
16 and caveat just a bit is that we did effectively look at
17 numerous instances of corrective action implementation. Did
18 it get done right? And our conclusion there is that again,
19 while we found some instances where we didn't view the
20 corrective actions as fully appropriate or timely -- Pass is
21 a good example; we can talk about that in a moment, if you
22 would like -- on the overall, our assessment of the
23 implementation efforts and the corrective action program
24 have, in fact, largely been effective.

25 So management needs to keep its attention focused

268

1 on a corrective action program. We think that's appropriate
2 and we intend for our part, in the face of not only the
3 historical issue, but the fact that we haven't identified
4 perfection, that we have identified issues and corrective
5 actions as we've gone along, to carry out a 40500 team
6 inspection within about a year.

7 This is the same inspection that we indicated to
8 the Commission that we would employ to assess the
9 effectiveness of their working off the backlog. Inclusive
10 in such a team inspection within about a year will be our
11 important, in our view, observation of the sustained or not
12 corrective action program at Millstone Unit 3.

13 MR. THOMPSON: I think the next issue deals with
14 the operational safety team inspections, and Wayne Lanning
15 will lead us on that presentation.

16 MR. LANNING: Good afternoon.

17 First slide.

18 What I will refer to as an OSTI is an important
19 activity because we're performing the conclusion of the
20 recovery process and provide a current assessment of the
21 operational readiness to transition from an extended outage
22 to operations.

23 The purpose of the OSTI was to provide input to
24 the restart assessment panel regarding the readiness of
25 plant hardware, staff and the management programs to support

269

1 restart and continued operation.

2 This activity began in February and included an
3 intensive two-week on-site observation of licensee
4 activities and concluded with a public exit on May the 5th.

5 The 14-person team was made up of representatives
6 from four of the NRC's regional offices, the Office of
7 Nuclear Reactor Regulations, the Special Projects Office,
8 and the Office for Analysis and Evaluation of Operational
9 Data. Two contractors were also on this team.

10 This OSTI required more than 2,000 hours of

11 effort. The team leader was Mr. Jim Trapp, who was
12 introduced to you previously by Mr. Thompson.

13 Next slide, please.

14 The OSTI focused its inspection activities on four
15 areas: assessing the performance of management programs and
16 independent oversight, operations, engineering and technical
17 support, and maintenance and surveillance. The inspection
18 focused indirectly on programs, with the primary emphasis on
19 the direct observations of plant equipment and activities,
20 selected examination of documents, and interviews with
21 management and plant staff.

22 The OSTI was also responsible for inspecting some
23 of the items on the significant items list on the restart
24 assessment plan.

25 As you can see from the next slide, the OSTI

270

1 concluded that management programs and the independent
2 oversight are adequate to support restart. The OSTI found
3 key management processes were in place and effective.

4 Senior management had established appropriate
5 standards and expectations for performance which advocated a
6 strong safety ethic. The effective vertical and horizontal
7 communications contributed to ensuring the plant staff
8 understood management's expectations.

9 Management support for and involvement in the
10 recovery process were evidence by the oversight of
11 activities.

12 In his presentation of the corrective action
13 program, Dr. Travers noted that the findings from the OSTI
14 were included in our overall assessment of the program. For
15 completeness, the OSTI confirmed that the corrective action
16 program was adequate to support restart. Deficiencies are
17 identified at a low threshold, evaluated for significance,
18 prioritized for completion, and completed in a comprehensive
19 and timely manner.

20 At the last Commission briefing, I noted that the
21 results from the OSTI were included in the staff's
22 assessment of oversight. But to briefly summarize, the OSTI
23 found that oversight was effective in providing meaningful
24 independent assessment and performance measures to line
25 management during the recovery process and was ready to

271

1 support restart.

2 The OSTI assessed the backlog of open condition
3 reports and action items and did not identify any deferred
4 items that could adversely impact a safe restart. Again,
5 the staff discussed the backlog management plan at the last
6 Commission briefing, and we included the OSTI results in
7 that assessment.

8 The OSTI also assessed the technical training
9 programs and found those programs have improved and are
10 adequate to ensure continued qualification of technical and
11 non-licensed personnel. These include systems engineers,
12 unlicensed operators, shift technical advisors and
13 maintenance personnel. I'll address licensed operator
14 training on the next slide.

15 The OSTI concluded that plant operations are
16 adequate to support restart based primarily on direct
17 observations of operator performance in the control room.
18 The OSTI found that the operators controlled and handled
19 plant evolutions and mode changes safely. However, the OSTI
20 identified some performance issues regarding operator
21 knowledge and procedure adherence that required resolution

22 before restart. You heard this --
23 CHAIRMAN JACKSON: Can you -- I'm sorry, go ahead,
24 let me let you finish your sentence.
25 MR. LANNING: You heard this morning the

272

1 discussions of corrective actions for some of those
2 operational events that took place.

3 CHAIRMAN JACKSON: Yes. But let's hear you talk
4 about the power operated relief valves lifting and the valve
5 line-up discrepancies, you know, and whether any of these
6 were in tier 1 systems and how you would assess the
7 significance of these.

8 MR. LANNING: Well, the operational events that
9 occurred during the initial heat-up, the opening of the
10 pressurizer relief valve was significant because it
11 represented an opening of the primary pressure boundary.

12 The other events involving valve misalignments by
13 themselves were minor. I do not believe they involve tier 1
14 systems, but they did represent an issue that OSTI felt
15 needed to be resolved before restart.

16 CHAIRMAN JACKSON: You had a comment?

17 But you believe that even with the PORVs lifting
18 event, that the operator performance was acceptable?

19 MR. LANNING: Overall, yes.

20 CHAIRMAN JACKSON: Okay.

21 MR. LANNING: In addition, overall operating
22 procedure quality and procedure adherence was acceptable
23 with few exceptions.

24 The OSTI identified equipment control issues
25 involving valve alignments and verification of locked

273

1 valves. We will inspect the corrective actions for these
2 and the operator performance issues before restart.

3 Staffing levels met technical specification
4 requirements. The OSTI judged operator training acceptable,
5 including the team leader training, with many modifications
6 that were completed during this outage. Operator
7 qualification training was current and acceptable.

8 The next slide shows that engineering and
9 technical support are adequate to support restart. The OSTI
10 concluded that the engineering department and the technical
11 support organization were providing timely and effective
12 support through operations, including their response to
13 emergent plant issues. Plant modifications and the design
14 control process was effective for carrying out design
15 changes.

16 Risk insights were used to prioritize
17 modifications. Imposed modification testing verified
18 important design change attributes. The number of existing
19 temporary modifications was low and adequate consideration
20 was given to ensure that temporary modifications did not
21 adversely impact safety.

22 The system readiness reviews were comprehensive
23 and identified issues that were resolved before plant
24 heat-up. System engineers were qualified and knowledgeable
25 regarding their assigned systems. The OSTI reviewed all

274

1 operability determinations and validated the licensee's
2 justifications for continued operation.

3 Finally, the OSTI audited the results of some of
4 the engineering programs. For example, the OSTI
5 independently checked some set points, operational
6 experience lessons learned, and vendor recommendations and
7 concluded that these programs were acceptable to support

8 restart and operations.

9 The next slide shows that the OSTI concluded that
10 the maintenance and surveillance areas are adequate to
11 support restart. The overall plant material condition was
12 good. The backlog of open maintenance work activities was
13 trending down, had been prioritized, and the impact on
14 operations was assessed and found to be acceptable.

15 The OSTI found that the results from the
16 preventative maintenance program were good. The
17 preventative maintenance backlog was small, and only a few
18 minor deficiencies were identified in the performance of
19 preventive maintenance.

20 The scheduling and conduct of surveillance tests
21 were also good. The surveillance test procedures were
22 adequate to support restart.

23 Overall, work planning and scheduling were found
24 to be acceptable. The OSTI reviewed work packages and found
25 them to be satisfactory, and that changes to them were

275

1 controlled. The establishment of work boundaries through
2 tagging was very good. The OSTI identified some instances
3 of ineffective planning for which the licensee had initiated
4 improvements.

5 Overall, the conduct of maintenance activities was
6 acceptable.

7 CHAIRMAN JACKSON: Are there a large number of
8 post-maintenance checks that are going to have to be
9 accomplished during start-up?

10 MR. LANNING: Not post-maintenance. There are
11 several -- in the teens -- post-modification testing --

12 CHAIRMAN JACKSON: Post-modification testing?

13 MR. LANNING: -- that will have to be completed of
14 our operating pressures and temperatures.

15 CHAIRMAN JACKSON: Okay. Thank you.

16 MR. LANNING: I just said that conduct of
17 maintenance activity was acceptable. For example, the
18 rework rate for mechanical maintenance was very low, and
19 also the effective use of a fix-it-now team for minor
20 maintenance contributed to backlog reduction and reduced
21 planning and scheduling workload. The OSTI observed good
22 procedure adherence by the maintenance staff.

23 The conclusion is on the next slide.

24 The OSTI recommendation to the restart assessment
25 panel was that the plant hardware, staff and management

276

1 programs are ready to support restart and continue
2 operations.

3 CHAIRMAN JACKSON: Thank you.

4 MR. THOMPSON: Bill, do you want to address the
5 status of licensing and significant items?

6 DR. TRAVERS: Yes. Some quick slides.

7 We have been updating the Commission on the status
8 of our significant items list and licensing issues. On the
9 first slide, as you know, just very quickly -- you know what
10 a SIL is -- it's our way of tracking within our restart
11 system plan the issues that we have identified as required
12 to be resolved prior to restart. The total SIL package is
13 numbering 216. Well, all of those have been submitted.
14 We're currently reviewing six of those and they're in the
15 relative near-term in terms of our conclusion. But these
16 are items that we would need to complete prior to any --

17 CHAIRMAN JACKSON: Are there any showstoppers or
18 any, you know, particular --

19 DR. TRAVERS: No, but you've heard quite a lot
20 about the post-accident sampling system.
21 CHAIRMAN JACKSON: Right.
22 DR. TRAVERS: That's a system that's on this list.
23 It was identified originally in our restart assessment plan.
24 It's a system for which we carried out an inspection for
25 which we could not conclude that all of the corrective

277

1 actions had been completed, and we will have to do that.
2 We're waiting now for the licensee to give us an indication
3 that they believe they have now completed those corrective
4 actions.

5 So we need to complete our evaluation and
6 assessment of --

7 CHAIRMAN JACKSON: So you're going to verify
8 before restart --

9 DR. TRAVERS: That's correct.

10 CHAIRMAN JACKSON: -- that all of the corrective
11 actions in this system have been --

12 DR. TRAVERS: That's correct.

13 COMMISSIONER DIAZ: What about fire prevention and
14 seals?

15 DR. TRAVERS: I don't believe fire protection is
16 on the -- it was -- is it closed?

17 MR. CERNE: Yes.

18 DR. TRAVERS: It's closed.

19 CHAIRMAN JACKSON: Relative to the particular
20 issue that was raised today?

21 MR. CERNE: Chairman, there were some samples of
22 seals inspected. I can't say specifically that these were
23 raised.

24 DR. TRAVERS: But in the context of the specific
25 information you had which, of course, falls into our

278

1 process, that's being handled in a different track.

2 COMMISSIONER DIAZ: No, we understand, but
3 regarding the significant items list, when you went through
4 it --

5 DR. TRAVERS: We had fire protection as an issue
6 and we had a fire protection inspection that judged adequacy
7 of the program.

8 CHAIRMAN JACKSON: But when you're saying this is
9 handled through a different track, you mean --

10 DR. TRAVERS: The allegations.

11 CHAIRMAN JACKSON: -- the allegation management
12 process. I just wanted to have clarity for the record.
13 Okay. Thank you.

14 DR. TRAVERS: The second slide, very quickly, is a
15 summary of the current status of the licensing issues.
16 There is only -- in terms of tech spec amended requests,
17 there's one remaining under NRC review. It's very close to
18 being issued. It has to do with inadvertent safety
19 injection and the qualification of the PORVs, and you have
20 heard some discussion of that earlier.

21 In terms of some other licensing issues, we've got
22 three. These are related to a code exemption, and two
23 others, including an emergency plan revision, are
24 essentially complete and just awaiting issuance. So in
25 terms of essentially all of these issues, while not

279

1 complete, they are very close to being complete.

2 CHAIRMAN JACKSON: Since you brought up the
3 emergency plan issue and you heard the gentleman from
4 Eastern Long Island and, you know, he quoted to us that you

5 made certain statements, would you like to clarify?

6 DR. TRAVERS: I would love to have that
7 opportunity, actually.

8 I was asked a lot of -- a number of questions on
9 Long Island, and certainly people, as expressed here today,
10 have concerns, and they wanted information about emergency
11 planning, and what I tried to answer directly was a question
12 about its relevancy to our program in judging the adequacy
13 of Millstone Unit 3 restart. And what I pointed out in that
14 meeting was that emergency planning per se was not one of
15 the key issues involving problems that caused the shutdown.

16 Nevertheless, emergency preparedness has been
17 assessed during the period of shutdown, as we would
18 typically do, and I pointed out, rather than say evacuation
19 planning and emergency planning would not be conducted on
20 Long Island, what I tried to indicate was what the
21 Commission's regulations are regarding the 10 mile EPZ or
22 about 10 mile EPZ, and the fact that -- and the basis for
23 those regulations, including our view that that 10 mile or
24 so emergency planning zone provides a basis from which
25 action, should they be needed to be expanded, including

280

1 those perhaps on Long Island, could be used. But 10 miles
2 forms the basis of the most detailed planning that is
3 currently required by the Commission.

4 Outside of our requirements, local and state
5 authorities can certainly plan for -- in fact, very often do
6 -- in response to natural emergencies and so forth. But the
7 key -- what I was trying to get across at that meeting was
8 what are our requirements, how do they bear on the current
9 situation at Millstone, and what is fundamentally the basis
10 for those requirements, and try to provide some
11 understanding as to how we viewed the situation on Long
12 Island.

13 MR. SAM COLLINS: Chairman, typically as a result
14 of the process, we would notify FEMA prior to the restart of
15 a plant, after an extended shutdown, and obtain FEMA's
16 concurrence about any outstanding issues prior to plant
17 restart.

18 DR. TRAVERS: And we have actually done that with
19 FEMA. In fact, FEMA was represented at this meeting because
20 we recognized going in that there were probably a lot of
21 offsite issues for which FEMA has principal concern, or a
22 principal role.

23 CHAIRMAN JACKSON: In terms of licensing issue
24 status, are there any unreviewed safety -- how many
25 unreviewed safety question license amendments were there?

281

1 DR. TRAVERS: Yes, there are currently four.

2 CHAIRMAN JACKSON: Four.

3 DR. TRAVERS: And I think the licensee indicated
4 that there may be as many as two or three additional ones
5 that they are considering submitting to us. If I can quickly
6 tick off what those are, the R core coating and service
7 water system is one; the recirculation spray system
8 modifications of 1986 is another; and I think on that one
9 --in fact, I know we have intervention petition filed.

10 MR. BURNS: That's correct.

11 DR. TRAVERS: We also have another one that has to
12 do with the ESF, or engineered safeguards feature sump.
13 What they have done basically is installed safety-related
14 pumps instead of relying on a membrane that has been used,
15 so this is actually an improvement. Nevertheless, it

16 triggers a USQ and an amendment is required.
17 The last one has to do with refueling water
18 storage tank back leakage dose calculations, and how they
19 are done.
20 CHAIRMAN JACKSON: And so that relates to an issue
21 that has been brought up earlier in the meeting?
22 DR. TRAVERS: And I think on the ESF sump, we also
23 had intervention filed.
24 MR. BURNS: That's also correct. Both of those
25 have been referred to the Atomic Safety & Licensing Board.

282

1 Both of them were noticed as no significant hazards
2 amendments.
3 CHAIRMAN JACKSON: And so are there any other
4 significant technical issues remaining? Okay.
5 MR. THOMPSON: I just want it to be clarified for
6 the record, as I understand the issues dealing with the fire
7 protection issues that were raised at the Commission
8 meeting, those are -- we are still trying to get detailed
9 information about those. I think Wayne has made some
10 attempts to get more details. Those will be processed
11 through our system of dealing with allegations. We don't
12 have all of that information.
13 CHAIRMAN JACKSON: But you are going to follow up
14 on the technical safety issues?
15 MR. THOMPSON: We are following up on that, and
16 Wayne is working with them on that.
17 MR. LANNING: We have a process by which
18 allegations received late, if you will, into a process are
19 dispositioned on a priority basis and we will follow that
20 adherence as soon as we receive the information.
21 CHAIRMAN JACKSON: Okay.
22 MR. THOMPSON: Well, I think that brings us to our
23 last slide, which is the Staff's conclusions and
24 recommendations, and our conclusion is that Northeast
25 Utilities has made appropriate improvements and has

283

1 established adequate programs needed to support the restart
2 of Millstone Unit 3.
3 This conclusion is based on the results of our
4 oversight efforts summarized during the Commission meeting
5 today, as well as the results presented at the May 1st
6 Commission meeting, through our observation of Sargent &
7 Lundy's execution of the independent corrective action
8 verification program, and our own independent inspection
9 efforts. The Staff has confidence that the Unit 3 licensing
10 and design basis have been reestablished.
11 And continuing our close day-to-day observation of
12 activities at Millstone by the resident inspectors, the
13 Staff has determined that an adequate corrective action
14 program has been established.
15 Finally, the operational safety team inspection
16 found that the conduct of operations, procedure quality and
17 adherence, and operator training were acceptable to support
18 plant restart. The results from the OSTI provides the Staff
19 confidence that the licensee has demonstrated its readiness
20 to transition into an operational mode and begin restart
21 activities.
22 The Commission, in its Staff Requirements
23 Memorandum, following the May 1st meeting, asked that the
24 Staff provide you with any significant new information
25 regarding the three issues that were the subject of the May

284

1 1st meeting. Since that meeting, there has been no new

2 information that would call into question the Staff's
3 recommendations that those areas are acceptable to support
4 restart.

5 Therefore, the Staff recommends that the
6 Commission provide its restart authorization for Millstone
7 Unit 3. However, as you have heard, we are not asserting
8 that the facility is ready for restart today. As described
9 in the SRM from the May 1st meeting, it's our understanding
10 that if the Commission agrees with the Staff's assessment
11 and provides its restart authorization, this would result in
12 changing Millstone Unit 3 to a watch list category 2.

13 This Commission decision would result in Executive
14 Director for Operations being designated as the responsible
15 agency senior manager for verifying that the appropriate
16 aspects of inspection manual chapter 0350 are completed and
17 for approving commencement of actions to restart Unit 3.

18 This approach recognizes that there are still some
19 licensee work activities and NRC inspection effort and
20 licensing actions to be completed before the plant can
21 actually restart.

22 Likewise, there are a number of programs on which
23 continued improvements are planned after restart. If Unit 3
24 restarts, the Staff has developed its plan to closely
25 monitor the restart activities and power ascension process.

285

1 This is consistent with the approach taken at other
2 facilities that have been shut down for an extended period
3 of time.

4 This plan includes around-the-clock coverage in
5 the control room during key evolutions and identifies
6 several hold points at which the Staff and Northeast
7 Utilities will compare the results of our ongoing
8 assessments and determine the licensee's readiness to
9 continue the power ascension process.

10 This concludes the Staff's presentation and we are
11 prepared to answer or respond to any questions.

12 CHAIRMAN JACKSON: Thank you.

13 You mentioned during a 4500 inspection after a
14 year. Now are you then saying that other than that, there
15 are no specific actions that need to be taken, or follow-on,
16 and that things are ready to go back over to routine
17 regional oversight?

18 DR. TRAVERS: We haven't identified anything that
19 would lead us to propose that, so I guess the answer is no.
20 But we do recognize that in the course of our evaluations at
21 Unit 2, there will still be a fairly large presence, you
22 know, special projects, and we will be there. But in terms
23 of actually recommending a particular inspection or a
24 particular special effort, we have not identified the need
25 for it.

286

1 MR. THOMPSON: As you recall, we have Little
2 Harbor, you know, for a period of time.

3 CHAIRMAN JACKSON: I know, I realize. But I mean
4 in these particular areas.

5 DR. TRAVERS: In response to a question I was
6 asked earlier about Sargent & Lundy, for example, we have
7 not identified the need in the configuration management area
8 to recommend to the Commission that Sargent & Lundy
9 continue. If it did, it would be in a fundamentally
10 different role than the one that was prescribed by the
11 order. Nevertheless, given the fact that Sargent & Lundy's
12 review included an assessment of the licensee's

13 configuration management processes designed to look forward
14 and keep them in conformance, we would not recommend the
15 need for such an action.

16 CHAIRMAN JACKSON: Now I have to ask you this.
17 Relative to the issue that Mr. Lochbaum raised, how do we
18 have the assurance that the NRC Staff is willing to do what
19 it has to do, and that we won't end up back in this position
20 again?

21 MR. SAM COLLINS: Chairman, I think that probably
22 you and I -- in fact, I have a response written out here, as
23 Mr. Lochbaum was speaking. It's the role, I think, not only
24 of Bill and his oversight responsibilities as the director
25 of the Special Projects Office, but also as the director of

287

1 NRR, to maintain day-to-day, if not week-by-week oversight,
2 depending on where the process is at any point in time.

3 We have to rely primarily on the integrity of the
4 individuals and on the oversight process. I think it's
5 unfortunate, perhaps, that during the course of the
6 presentations we got into individuals and individual
7 performance, because I don't think that's what the NRC is
8 about. The NRC is about its processes and its procedures
9 and its programs.

10 CHAIRMAN JACKSON: And its requirements.

11 MR. SAM COLLINS: And its requirements. I think
12 perhaps all of the individuals who spoke know full well that
13 the agency has an independent Office of Investigation, OIG.
14 They can be used. If -- and they are certainly receptive as
15 part of the agency's process. If necessary, then those
16 issues can be referred to that office for independent
17 review. And I hope that that process will be used
18 forthrightly.

19 I have no doubt of the integrity of the Staff. I
20 think the amount of public participation that's been
21 involved in the process, the willingness to share findings
22 in the short term, their willingness to provide an
23 extraordinary amount of documentation, although it was
24 mentioned, and appropriately so, that some of that
25 documentation has a need to catch up with the process, but

288

1 the findings of those specific inspections have been made
2 public in public exits. I think the process is more
3 scrutable than most of our routine processes, and certainly
4 more scrutable than any recovery process I have been
5 involved in in the past, and that's included Pilgrim, that's
6 included --

7 CHAIRMAN JACKSON: Let me just stop you. This is
8 the process to date. The issue has to do with the
9 go-forward.

10 MR. THOMPSON: As you well recall, as you know,
11 Joe, I, Sam get briefings every morning on the status of
12 what's happening, in addition to the activities that Bill
13 and his staff do. We monitor the results. There is no
14 question in my mind that for myself, for Joe or Sam, or
15 Bill, that any of us would hesitate one moment to take any
16 action to ensure the public health and safety; if it's
17 shutdown, there will be no question in our mind to do that.

18 CHAIRMAN JACKSON: Do you believe that the
19 regional staff and the regional management has been
20 appropriately sensitized through this process?

21 MR. THOMPSON: There's no question in my mind. As
22 you know, Joe, myself, Sam and Bill --

23 CHAIRMAN JACKSON: Yes, but you yourself know
24 yourself and Sam, and will not be sitting in King of

1 MR. THOMPSON: That's right.

2 CHAIRMAN JACKSON: And will not be in Waterford.
3 So that's why I've asked the question of your judgment of
4 the regional orientation.

5 MR. THOMPSON: As you recall, the initial start-up
6 is our responsibility, not the regional responsibility.

7 CHAIRMAN JACKSON: Yes, but the continuing
8 oversight. This is the go-forward position.

9 MR. THOMPSON: And once we go forward, we will not
10 go forward, and there is no question in my mind when we do
11 go forward, that that will be absolute assurance that they
12 are sensitized to this issue, and that their continuation of
13 the issues and sensitivities that we have will be monitored
14 very appropriately.

15 MR. SAM COLLINS: Chairman, two weeks ago I was at
16 Region I, and as Tony certainly well knows, I spoke at the
17 resident counterpart meeting, although there were many other
18 employees in attendance. We talked about these types of
19 issues.

20 Additionally, it is fairly rarely when I don't
21 speak to Hub Miller, the regional administrator of Region I
22 on any issue that he believes needs to be coordinated with
23 the program office, and that includes a very low level of
24 plant performance. So I think we are very closely aligned,
25 and I see no hesitancy with Region I.

1 CHAIRMAN JACKSON: Commissioner Diaz? Excuse me,
2 no, you had a specific question. Go on.

3 COMMISSIONER DIAZ: Well, it's just a piggyback on
4 this one here for the time being. I want to go away from
5 Hugh and Sam and Joe and so forth and really look at
6 processes, because I do agree that we have established this
7 very dependable and integral. I think the question goes a
8 little farther. Do we have in place now, not two years ago,
9 now, the processes that are fully accountable, that are
10 fully followed by the region, that would be able to detect a
11 significant deficiency in the operation of Millstone Unit 3
12 such that the margins of safety that we count on could be
13 decreased?

14 Do we have processes in place? Because I think
15 that goes to the heart of what Mr. Lochbaum was saying.

16 CHAIRMAN JACKSON: And do our management -- our
17 management processes -- do they have built into them
18 accountability relative to adhering to them?

19 MR. THOMPSON: Let me turn to Bill and to Wayne to
20 do that in particular, but, you know, this is obviously one
21 of the most important elements that we have, and I know you
22 are looking to the others, but let me assure you that it's
23 going to have Joe and my and Sam's personal process.

24 CHAIRMAN JACKSON: Yes, but we're just saying if
25 you cross Rockville Pike and, you know --

1 MR. THOMPSON: We don't all three cross Rockville
2 Pike at the same time. We don't even ride in the same car.

3 CHAIRMAN JACKSON: Let's hear you.

4 MR. LANNING: Well, I think, and the reason we
5 have a number of processes, the point review process
6 certainly brings to bear a very periodic review of licensee
7 performance.

8 CHAIRMAN JACKSON: Did the point review process
9 exist two years ago?

10 MR. LANNING: Two years ago? Some form of it
11 existed.

12 CHAIRMAN JACKSON: Okay. So what's different? I
13 mean --

14 MR. LANNING: It's more frequent; the data that's
15 used for the assessment is more rigorous in developing
16 assessment of licensee performance.

17 COMMISSIONER DIAZ: In other words, we have
18 according to you a fair, equitable, accountable,
19 transparent, reasonably implemented process or processes
20 that will provide us with the assurance that we are
21 monitoring these activities to provide adequate protection
22 of health and safety.

23 MR. LANNING: I think the answer to that is
24 definitely yes.

25 CHAIRMAN JACKSON: Let me just ask Mr. Cerne. I
292

1 don't want to put you on the spot, but you are the senior
2 resident inspector. How would you answer that question?
3 Because what you're basically talking about, and we need to
4 sit here and listen to you, but you're basically talking
5 about a transition in the oversight back to the region, and
6 so -- and since Mr. Miller is not here, I want to hear from
7 the man and the young lady who are on the line every day.

8 MR. CERNE: Mr. Chairman, I think as we transition
9 back we have our normal inspection processes which I think
10 both Millstone and hope we can get back into some normalcy.

11 I think the heightened awareness of what has
12 happened at Millstone and the processes we're overseeing
13 there in terms of inspection won't allow it to occur again.
14 I think the new requirements in terms of guidance on FSAR
15 compliance, on engineering issues, the heightened awareness
16 of risk, operational safety from the standpoint of risk, I
17 think all those provide a better perspective of which we can
18 analyze the plan as it goes forward, and I believe in our
19 assessment we also are judging that the licensee themselves
20 and giving credit to the workers there and their ability to
21 communicate with us will provide some of that input that
22 won't allow that backslide to happen without us recognizing
23 it.

24 CHAIRMAN JACKSON: Okay. Commissioner.

25 COMMISSIONER DIAZ: I just wanted to add a little
293

1 bit to it. We realize that you guys had a microscope at
2 your hands all of this time, and so the question goes a
3 little farther. The microscope is going to go away. You
4 might have a magnifying glass occasionally. But we need to
5 be sure that you have processes that are normal, routine,
6 that are able to provide us with that information that is
7 needed so we can assure the people that live in there that
8 yes, there is a process that we can put in place that is
9 accountable and that will prevent this situation from
10 occurring.

11 MR. DURR: May I?

12 CHAIRMAN JACKSON: Yes, please.

13 MR. DURR: The buck stops here. I'm the Branch
14 Chief for the Inspection Program.

15 CHAIRMAN JACKSON: Why don't you just go to the
16 podium then.

17 MR. DURR: I am Jacques Durr.

18 I am Chief of the Inspection Branch. I am where
19 you will end up, and Tony Serny and the Resident Inspectors
20 work for me.

21 There is a process in place -- I have already set

22 it in motion.
23 We are now developing the -- I don't know if you
24 are familiar with the PIM, which is the Plant Information
25 Matrix which stems from the inspection reports.

294

1 COMMISSIONER DIAZ: We have eaten, drank,
2 swallowed --

3 [Laughter.]

4 MR. DURR: Sorry.

5 COMMISSIONER DIAZ: -- PIM last year.

6 MR. DURR: I apologize. Just want to make sure
7 you recall it -- so we were putting the PIM together. We
8 have currently updated the Millstone PIM. It is being
9 prepared for the Senior Management Meeting coming up so it
10 will be part of what goes to the Senior Managers. The
11 current PIM is in place.

12 We are developing the inspection program
13 post-startup because we recognize that Millstone 3, once the
14 SIL is done, our inspection program is kind of dissolved and
15 we will be back in 2515 and the core inspection program,
16 which makes allowances for special plants that need some
17 additional watching, so the resources will be shifted
18 accordingly to meet the 2515 inspection program, so you will
19 have the core, plus we'll be putting in additional
20 inspections from our perspective anyway. I will certainly
21 promote inspections in those areas where we feel that there
22 have been previous weaknesses.

23 The Corrective Action Program is near and dear to
24 my heart. We will be following that very closely because I
25 perceive that to be as part of the root cause of why

295

1 Millstone is where it was. They didn't have an effective
2 Corrective Action Program. The people outside had to go
3 outside the system to get things fixed, so if you have an
4 effective Corrective Action Program with a low threshold, it
5 will take care of it.

6 CHAIRMAN JACKSON: Okay, thank you. Dr. Travers?

7 DR. TRAVERS: I just very briefly would add that I
8 do have confidence in the process, but I don't look at it as
9 a stationary or a stagnant one.

10 I think we are continually in the mode of
11 self-assessing. I think Millstone has caused this agency to
12 introspectively consider how it goes about identifying these
13 kinds of problems, how it does it in time, and we are about
14 the business -- you know better than I -- of improving and
15 refining our capabilities in terms of Senior Management
16 Meeting process and other things that the Commission is well
17 into.

18 So I look at where we're at as satisfactory, but
19 recognize that we are always in the mode of trying to do
20 better and so I would point to that kind of future as the
21 appropriate one where we learn from Millstone and other
22 things as they pop up but I think today we have processes
23 that we can use effectively. It takes people to implement
24 them and so I agree with Sam and Hugh in the sense that we
25 have to look on the people who are implementing that

296

1 fundamentally as the agents of the process.

2 CHAIRMAN JACKSON: Are you prepared to make the
3 hard judgments, assuming they are the right judgments?

4 DR. TRAVERS: I certainly am.

5 CHAIRMAN JACKSON: Okay. Commissioner Dicus.

6 COMMISSIONER DICUS: Okay. Throughout your

7 recommendations, which you have been making to us,
8 particularly here on the last page, on occasion you have
9 addressed some -- if the microphone is turned on, it
10 helps --

11 [Laughter.]

12 COMMISSIONER DICUS: -- but you have made
13 occasional qualifications or stipulations with some of the
14 recommendations, perhaps even some uncertainties.

15 Can the Commission rest assured that with these
16 recommendations we do have all of your stipulations or
17 important stipulations, uncertainties and/or uncertainties
18 or qualifications to those recommendations?

19 MR. CALLAN: I'm going to answer yes, but since we
20 have got everybody here, why don't we just go down --
21 everybody -- we'll start with Phil and just work our way
22 through down.

23 I have no reservations whatsoever with that
24 aspect.

25 CHAIRMAN JACKSON: Okay.

297

1 MR. McKEE: I agree. I think we have covered
2 everything.

3 CHAIRMAN JACKSON: You have covered all of your
4 reservations and stipulations? We have heard all there is
5 to hear from your perspective?

6 MR. McKEE: Yes.

7 CHAIRMAN JACKSON: Mr. Imbro?

8 MR. IMBRO: Yes, I agree.

9 CHAIRMAN JACKSON: Mr. Collins?

10 MR. COLLINS: Yes.

11 CHAIRMAN JACKSON: Mr. Travers?

12 DR. TRAVERS: I feel accountable. Yes.

13 CHAIRMAN JACKSON: Mr. Lanning?

14 MR. LANNING: Yes.

15 CHAIRMAN JACKSON: Good.

16 COMMISSIONER DICUS: Thank you.

17 CHAIRMAN JACKSON: We have to wrap it up here.

18 COMMISSIONER DIAZ: But this is a question that I
19 think is important, and I hate that it's so late, but it was
20 raised in different words by four of the speakers for the
21 public interest groups and I think for the record it's a
22 question that bears answering.

23 It essentially stated that at different times or
24 different occasions or different incidents or different
25 configurations that, and I quote, that "place the public at

298

1 substantial risk" -- and I just had my staff go and look at
2 the record of Millstone units and there were five releases
3 of radioactivity since 1986 or 1987, all of them below Part
4 20, either had no safety significance and so forth.

5 From your perspective, Dr. Travers, and you have
6 spent more time than anybody looking at this, is this a
7 perception that the public is getting, that they have been
8 placed at substantial risk or that the public has some
9 reason to believe that they have been placed at substantial
10 risk?

11 DR. TRAVERS: I want to make sure I understand.

12 You are talking about our program we are
13 completing versus this historical -- because I am not
14 familiar --

15 COMMISSIONER DIAZ: I am talking about the
16 assessment and especially the assessment that you have made
17 on the safety of the Millstone unit.

18 DR. TRAVERS: Everything that we are trying to

19 convey that -- is a result of program outcome.
20 Our program points to and supports in my
21 estimation at least the recommendation for your
22 consideration of restart authorization, and that simply
23 means, because it is our principal responsibility, that we
24 are arguing today that this plant, this management, this
25 workforce can operate the facility and we have to rely on

299

1 that to an extent.

2 We can only do so much. But our program
3 indicates, and it has been substantial, that they can in
4 fact operate it safely without occurrence of risk to public
5 health and safety. That is the bottom line. It has to be
6 and we recognize it as such.

7 COMMISSIONER DIAZ: That is the bottom line.
8 Thank you so much.

9 DR. TRAVERS: Thank you.

10 CHAIRMAN JACKSON: Thank you very much.

11 I would like to thank Northeast Utilities, Sargent
12 & Lundy, the public officials, members of interest groups,
13 and the NRC Staff for briefing the Commission on the
14 progress and assessing the readiness for restart of
15 Millstone Unit 3.

16 I would actually like to make a parenthetical
17 remark in response -- I believe it's from the Citizens for a
18 Sustainable -- Alliance for Sustainable Connecticut.

19 I think the Commission needs to take ownership
20 where the Commission has the ownership. There was an issue
21 that came up relative to having radiation monitors in the
22 vicinity and around the plants and the letter went out under
23 the EDO's signature.

24 That was a decision the Commission made or at
25 least approved, and so I think the Commission needs to take

300

1 ownership for that.

2 Once again, I will state on behalf of the
3 Commission that we recognize how difficult it is to condense
4 the substance of either the reviews performed by each of you
5 or in the case of the public your comments and evaluations,
6 into briefings like this, and that is the primary reason
7 that we in November of 1996 established the Special Projects
8 Office to provide for the direct oversight of all the
9 licensing and inspection activities and to tailor the NRC
10 Staff guidelines for restart approval to specifically assess
11 deficiencies at the Millstone units.

12 As I did at last month's meeting, I want to
13 reassure the public especially that the Commission as a
14 consequence of making the Millstone units Category 3 plants
15 in June of 1996 took on the responsibility to itself of more
16 careful monitoring of these plants, but again to that end we
17 have relied on the Special Projects Office but we do receive
18 and read your personal correspondence to our offices, and we
19 consider it all a part of the Millstone record in our
20 evaluations for restart readiness and we do appreciate your
21 input.

22 Today the Commission is faced with evaluating the
23 recommendation from the NRC Staff and weighing that with the
24 various comments that we have gotten and that recommendation
25 is that the Commission provide its restart authorization for

301

1 Millstone Unit 3.

2 You have heard that the plant is actually not
3 ready to restart tomorrow. However, the Commission will

4 deliberate and decide whether the licensee is close enough
5 and whether adequate progress has been made to turn the
6 final approval for authorization over to the Executive
7 Director for Operations.

8 Should the Commission make that decision, it is
9 important that the lessons learned from this whole episode
10 be appropriately inculcated and propagated and that the
11 appropriate oversight remains and all that that implies.

12 I assure you all that on behalf of the Commission
13 we will decide on the restart authorization of Unit 3 with
14 one primary thought in our minds, not that they have been
15 shut down long enough, and not with a consideration of
16 maintaining the licensee's restart schedule, but the
17 question that we will have addressed is if in the collective
18 opinion of the Commission the Millstone station a safe
19 station with an effective corrective action program and an
20 environment supportive of raising and resolving safety
21 concerns.

22 If there are any issues that have related to the
23 potential restart of Unit 3 that have come before us today,
24 the Staff should promptly -- promptly -- forward its
25 assessment of any of those issues.

302

1 Unless any of my colleagues have any closing
2 comments, we are adjourned.

3 Thank you.

4 [Whereupon, at 6:02 p.m., the public meeting was
5 concluded.]

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