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                       UNITED STATES OF AMERICA
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                     NUCLEAR REGULATORY COMMISSION
                  BRIEFING ON SELECTED ISSUES RELATED
 5
                TO PROPOSED RESTART OF MILLSTONE UNIT 3
6
                            PUBLIC MEETING
                                 ***
                              Nuclear Regulatory Commission
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                              Commission Briefing Room
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                              Room 1F-16
                              One White Flint North
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                              11555 Rockville Pike
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                              Rockville, Maryland
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                              Friday, May 1, 1998
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               The Commission met in open session, pursuant to
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     notice, at 8:30 a.m., the Honorable SHIRLEY A. JACKSON,
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     Chairman of the Commission, presiding.
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     COMMISSIONERS PRESENT:
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               SHIRLEY A. JACKSON, Chairman
               GRETA J. DICUS, Commissioner
               NILS J. DIAZ, Commissioner
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               EDWARD McGAFFIGAN, JR., Commissioner
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7
     STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE:
8
              MIKE MORRIS, Chairman, President and CEO,
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                Northeast Utilities
              BRUCE KENYON, President and CEO, Northeast Nuclear
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11
                Energy Company
12
               MIKE BROTHERS, Vice President, Nuclear Operations
               MARTIN BOWLING, Vice President, Technical Services
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14
               JOHN STREETER, Vice President, Nuclear Oversight
15
               DAVID AMERINE, Vice President, Human Services
16
               JOHN GRIFFIN, Deputy Team Leader, Little Harbor
17
                Consultants
18
               JOHN BECK, President, Little Harbor Consultants
19
               JOHN GRIFFIN, Deputy Team Leader
20
               BILLIE GARDE, Consultant
21
               THOMAS SHERIDAN, First Selectman
22
               JOHN MARKOWICZ, Vice Chairman
23
               KEVIN A. MCCARTHY, Director, Air Quality
                Monitoring and Radiation
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25
     STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE:
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2
     (continued)
3
               DEBORAH KATZ, President, Citizens' Awareness
 4
                Network
 5
               ROSEMARY BASSILAKIS
               SUSAN PERRY-LUXTON, Citizens Regulatory Commission
6
               CAPTAIN GUY MENDENHALL, Citizens Regulatory
                Commission
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               PAUL BLANCHE, Consultant
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L. JOSEPH CALLAN, EDO
               SAMUEL J. COLLINS, Director, NRR
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13
               DR. WILLIAM TRAVERS, Director, Special Projects
14
                 Office, NRR
              WAYNE LANNING, Deputy Director for Inspections,
15
                SPO, NRR
17
               PHILLIP McKEE, Deputy Director for Licensing and
18
                 Oversight, SPO, NRR
19
               EUGENE IMBRO, Deputy Director for ICAVP, SPO, NRR
20
               DAVID A. LOCHBAUM, Nuclear Safety Engineer
21
               HARRY BLANK, Millstone
22
               DAVE COLLINS, Millstone
               GARY F. VERDONE, Millstone
23
24
               MIKE MEEHAN, Millstone
25
               JOSEPH M. AMARELLO, Spokesperson
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     STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE:
     (continued)
               JERILYN M. DUEFRENE, Secretary
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               RICHARD L. DeBERNARDO, JR., Treasurer
               DONA L. HARRINGTON-BURNS, Member
               DONALD W. DEL CORE, SR., Millstone
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                         PROCEEDINGS
                                                     [8:30 a.m.]
              CHAIRMAN JACKSON: Good morning, ladies and
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      gentlemen.
               This meeting is the first of what is anticipated
     will be two Commission meetings to assess readiness for
6
     restart of the Millstone Unit 3 plant.
8
              The NRC staff has provided the Commission their
9
     assessment of three issues related to the restart assessment
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     plan for Millstone Unit 3. One is licensee progress to
11
     establish a safety-conscious work environment and an
     effective employee concerns program; two, licensee
12
13
      improvements to oversight and quality assurance; and three,
14
      licensee resolution of non-restart-related issues and items,
     commonly called backlog management. The staff has evaluated
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16
     these issues to be acceptable to support restart of Unit 3.
17
              The Commission will hear presentations today from
     Northeast Utilities or Northeast Nuclear. The contractor
18
19
      associated with the licensee's employee concerns program,
     Little Harbor Consultants, public officials, and interest
20
21
     groups and the NRC staff. This will be a long day and in
     the interest of maintaining our schedule, I will keep my
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23
      opening comments short, but to provide background, Millstone
     Unit 1 has been shutdown for over 29 months, Units 2 and 3
24
      for approximately 26 months. All three of the Millstone
25
     units were placed on the NRC's watchlist in January 1996.
1
2
     The units were recategorized as Category 3 plants in June
     1996. This action necessitates Commission approval for
      restart of each of the units.
 5
               This Commission meeting is the sixth quarterly
6
      meeting to assess the status of activities at the site. The
7
     Commission is interested in comments, evaluations and
      conclusions from all participants today to gage how the
      licensee has addressed these three areas. Let me reiterate
     them again: one, employee concerns and safety conscious
10
      work environment; two, oversight and quality assurance; and
11
12
     three, backlog management.
13
               I remind everyone that the NRC staff will be
      developing another Commission paper that will provide the
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15
     staff's assessment of the remaining major issues for restart
     readiness, and another Commission meeting will follow
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17
      shortly after that paper is completed.
               The Commission, with much help from the Office of
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19
     the Secretary, has planned a schedule to maximize discussion
      of the issues and to obtain a fair hearing from those on all
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      sides of these issues. We look forward to a lively and
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2.2
      informative meeting, and I ask for everyone's patience and
23
      goodwill today.
24
               Now, we have made, although this room is not
25
      filled, the NRC auditorium available as an overflow room
1
      where you can observe this meeting if you desire, but I ask
2
     to please maintain room in the aisles.
               Copies of the presentation material are available
3
4
      at the entrances to this meeting, and unless my colleagues
5
      have any opening comments, Mr. Morris, please proceed.
               MR. MORRIS: Thank you, Dr. Jackson. Good
     morning, fellow Commissioners. We are happy to be here
      today to address in a number of ways the issues that remain
      for us at Millstone station. Most importantly, we will
10
      focus in on the three issues that you have asked us to do,
11
      and hopefully bring closure to some of those issues. The
12
     first one, the safety conscious work environment, has been a
13
      very interesting journey, to say the least. We started out,
14
      I would say, without a clear definition in our own minds of
      what it was that we hoped that we could accomplish.
15
16
              You and your colleagues asked that we put date to
      that endeavor as best that we could, and we have tried to do
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     that and we continue to be very satisfied with the
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19
      statistics that we see.
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               As you know, there are a number of outside people
21
      who are also looking at the safety conscious work
22
      environment, including the consultant retained by a company
23
     at the Commission's direction, and today, we're very happy
     and somewhat humbled to tell you that our own employee
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25
     concerns oversight program has judged that the safety
     conscious work environment is there. At Millstone Station.
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2
     our oversight group has done the same, as has the Nuclear
     Safety Assessment Board, as, of course, has the Little
     Harbor Consultant Group, and the end and conclusion of the
 4
      40,001 inspection by the NRC Special Projects Staff said
      pretty much the same thing, and we're very encouraged by all
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of that.

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Most importantly, the data continues to support
      that, and we're pleased with that, and I think at the bottom
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      line, and I know those of you who have had an opportunity to
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      come to the station also understand very clearly that the
      people at the station believe it, which I think is
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      critically important for all of us if we're going to be
13
      successful in that environment.
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15
               We don't see that, however, as an issue that is
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             It's an issue where we will continue to learn,
17
      continue to grow, and continue, we hope, to set standards
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      for the rest of the industry in a very important working
19
      environment relationship between the management and the
20
     people at a nuclear station.
21
               On the management oversight and quality assurance,
22
      we, of course, have done a lot of work in that arena as
23
      well, trying to demonstrate that we have a solid team in
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      place, a well-trained team in place, and most importantly,
25
      an empowered team in place, and I think when I look at
      management oversight and I look at the quality assurance
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     program, I'm always interested in seeing the dedication of
      the management of the plant and the line organizations to
 3
      invite and encourage the participation of oversight, and
      we're beginning to see that in a very proactive way at the
     station and I think that that's a very positive indication.
 6
      And here, too, the data is beginning to indicate that there
8
      is substantial support for that. The NASB isn't the only
     outside organization that has evaluated our oversight
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10
      activity as being adequate and performing their job, and
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      again, we're satisfied with that.
12
               As to the deferred items management list, we have
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      taken your lead and categorized that list in every
      imaginable way that we could, most importantly, of course,
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      looking at safety, and then categorizing by age,
      categorizing those in an order, a sequential order that we
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     think we can continue to work off, and we do work off those
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18
     issues even though we believe that they are deferrable to a
      backlog kind of status as we go forward, and we'll continue
19
     to do that every day as we move forward.
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21
               As you know, in response to something that you had
22
      asked us to do, we have put together what we call the 1998
23
      2000 performance plan wherein we've made commitments to
24
      update the staff and the Commission as we work that backlog
25
      list down to get it in the kind of shape that we would all
1
      be very happy with. I think, as Mike Brothers goes through
      that list for us, you'll see that we have quite a bit of
     understanding of where we stand in that regard, and we
3
 4
      believe that the criteria that we've used to determine
5
      whether an item is deferrable or not is solid and we hope
      that your staff concurs with that as well.
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7
              So with that small backdrop, let me turn the
     program over to Bruce Kenyon and his team to take us through
8
     a very eventful and data-filled presentation.
9
10
               Thank you.
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               MR. KENYON: Good morning. I'm pleased to have
12
      the opportunity to speak to you in terms of the readiness of
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     Unit 3 --
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               CHAIRMAN JACKSON: Can you speak a little more
     into the microphone? Is it on?
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               MR. KENYON: With regard to the readiness of Unit
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     3 in terms of the selected issues that you've identified for
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     this morning.
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               The agenda for the meeting, our portion of the
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meeting is as shown on the slide. We are focusing on the
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21 issues, Chairman Jackson, that you identified in your

22 opening remarks.

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23 I do want to take this opportunity to introduce

John Streeter. John is the recovery officer of oversight

25 and the newest member of the senior leadership team.

Included in John's background are 14 years with the NRC,

- time at headquarters, Region I and primarily Region III.
- That has included managing inspection programs for several
- plants and the construction testing and operational phases.
- 5 He was director of quality assurance at Comanche Peak, and
- he was providing assistance to us in a very important way in
- the employee concerns program and we asked him to take on
- this assignment. I'm very pleased to have him as a part of
- 9 the leadership team.

10 Our effective ongoing performance requires high

standards, standards which are established by my leadership 11 12

and embraced by the entire workforce.

What I want to emphasize is that we have 13

repeatedly placed standards over schedule. A recent example

occurred in the days prior to the entry into Mode 4. An NRC 15

16 concern was expressed as to whether non-pressure retaining

parts for safety related equipment had been procured in 17

18 accordance with appropriate quality specifications, and

19 while we believed that they had, and this was not

20 established as a restraint item for Mode 4, we nevertheless

took the time -- and this was a delay of several days -- to

22 do a 100 percent review and found no significant problems.

23 Effective ongoing performance also requires strong

24 self-assessment. This is characterized by vigilant

management controls, and that will be addressed in Marty

Bowling's presentation, and it also requires effective

2

oversight mechanisms which are principally the nuclear

oversight organization, and John Streeter will be talking

about that, the NSAB, the Board of Trustees Nuclear 4

Committee and the Nuclear Committee Advisory Team, and I

will be talking about each of the last two shortly in my

7 presentation, but I would first like to address the issue of 8

leadership.

New leadership has established high standards at Millstone based on diverse expertise. This includes strong 1.0

11 backgrounds in operations, engineering, licensing, quality.

12 We're a fairly eclectic group. We have considerable

13 industry experience. This includes other utilities, DOE,

NRC, a track record of success which is based on a 14

combination of experience and having managed excellent

16 plants, construction, startup, operations.

We have placed a considerable emphasis on

communications, both in conveying the standard and in 18

listening to our employees to learn whether or not the

20 standard is understood and thus, to ascertain whether

21 performance is meeting expectations.

22 I believe we have set high standards, and in some 23

cases, one example being safety conscious work environment,

24 I believe our recovery standards and processes are setting

25 the standard for the industry.

Millstone's recovery is built on four leadership 1 values. The first is to do what is right. This embodies our commitment to high standards. It's intended to convey

the highest sense of personal integrity, and perhaps less

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The philosophy here is that we must believe in
6
      what we are doing. These must be our high standards.
     following the NRC requirements without a commitment to doing
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      what is right is not good enough.
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10
               The second is respect and care for the individual.
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     This means we value the individual, we value diversity, we
12
      care about each other, and I hope it's clear that this value
13
      has been the underpinning of our establishment of a safety
14
     conscious work environment.
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               CHAIRMAN JACKSON: Mr. Kenyon, can I get you to
     highlight for the Commission the extent of the management
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     changes at the various levels, if you could just speak to
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     that?
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               MR. KENYON: Yes.
               CHAIRMAN JACKSON: Thank you.
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               MR. KENYON: At an officer level, all but one
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      officer is new. The one officer who is not new had been in
     the position for about six months at the time I arrived. At
23
24
      the director level, approximately 85 percent and perhaps
25
      slightly higher than that now of the directors are new in
1
      their positions from the situation that existed when I
     arrived in September of 1996. I'm not sure I can quote
      statistics at the manager level and below, but there has
3
      been a huge change in who's doing what.
5
               The third value is teamwork, reconstructing a
6
      sense of teamwork in an organization whose culture had been
     significantly damaged, with the additional challenge of
7
     utilizing individuals from diverse backgrounds and
8
9
     companies. This has been a challenge, but it is a challenge
10
      we have met.
11
               I think one of the best examples of the resulting
12
      teamwork has been the willingness of various members of the
      leadership team, both at an officer level and at a director
13
     level, to take on other assignments as the changing needs of
14
15
      the organization have dictated.
16
               The fourth value is customer focus. In the case
     of a nuclear organization, what we mean by customer focus is
17
18
     focus on the internal customer, making sure that the
19
     services that are provided by an individual in the
     organization or an organizational unit are the right service
20
21
      and that they are properly performed.
22
               Now, living to these values has meant both the
23
     setting of high standards and the willingness to admit
24
      mistakes when the standards were not met. This is such as
25
      senior individuals apologizing for a poor choice of words,
1
     the reinstatement of a manager when it became clear that the
      action to remove him had not been well executed. But living
      to these values has also meant dealing with difficult
3
4
     situations, and in the process making some very strong
5
     statements regarding our commitment to high standards.
               Examples are the disciplining of a significant
 6
      number of individuals who in various ways did not exercise
     proper diligence in complying with or ensuring compliance
8
9
     with certain license operator training requirements; the
     prompt investigation and resulting reinstatement of two
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11
     motor operated valve contractors when it was concluded that
12
      their discharge had been retaliatory; a stand down of all
      training programs when it became apparent that there was not
13
14
      sufficient compliance with a systems approach to training; a
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      stand down of site work in order to emphasize the importance
      of procedural compliance; and the very prompt and strong
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obvious, a sense of ownership.

17 repudiation of the phrase "isolate the cynics" and the

independent investigation of its origin. 18

19 Living to these values greatly reduces the 20 likelihood of future problems, and it also provides assurance that when the problems occur, they will be 21

22 properly addressed.

23 The Millstone team effectively resolved key site issues for Unit 3 restart. The status of these site issues 2.4 25 has been addressed in each of the briefing books we have

1 sent you in conjunction with this and previous meetings.

- Fifteen of the 16 issues are now resolved, meaning
- satisfactory for startup. The remaining issue is work
- control, and with regard to work control, we have a good
- program, we are awaiting modestly higher success rates for
 - jobs started and jobs completed as scheduled. So it's a
- productivity issue rather than a standards issue. And we
- expect this to occur as we get fully implemented into a
- 12-week rolling schedule which we are now in the process of
- 1.0 doing and we also have certain backlogs which have not yet
- 11 met our goal.

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12 CHAIRMAN JACKSON: Mr. Kenyon, this isn't the main

13 agenda item for today, but since you have recently been

14 heating up the plant, can you comment a bit on your

assessment of operator performance in heating up the plant?

MR. KENYON: Yes. We have been in and out of --16

well, we went into Mode 4 and then subsequently we have been

in and out of Mode 3. The plant is currently in Mode 3 at

19 normal operating pressure and temperature.

20 In initially going into Mode 4 there were a series

21 of about five events where I was disappointed in how

22 operations handled things. Subsequently I've been very

23 pleased with what they've done and how they've done it.

We've done a lot of looking at those events and on

25 the surface there's no clear linkage of root causes, but

- frankly we weren't satisfied with that. We felt there had 1
- to be something more here. And ultimately what we concluded
 - is that even though what was going on it was easy for
- 4 operations to say, well, I've done this before and I know
 - how to do it, and, therefore, I'm going to do it. With the
- plant not having operated for two years, and that's really 6
- what we're doing when we go into Mode 4 and up, we're moving
- into a realm where the plant operations has not really
- 9 exercised the systems.

10 We're moving to an area where in spite of the fact

- they really thought they knew how to do it, they were rusty, 11
- and thus, we have taken steps which include much stronger --12
- I'll call it "job prebriefings". It's more like evolution 14 prebriefings and placing for key evolutions, placing
- 15 additional reactor operators or senior operators and/or
- 16 management individuals in the control room in order to
- 17 strengthen the management overview as we work through
- getting comfortable. So I think we've taken appropriate 18
- 19 actions. I was disappointed, but I think subsequent
- 20 performance has been good.
- 21 What was one of the key issues in the security
- 22 area, and I just note that that was on the list of your key
- 23 site issues. An example, we had problems where there were
- -- we would find instances of a vehicle inside the protected 24
 - area with keys in the vehicles and it took a lot of effort

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absolutely not going to be allowed and subsequently --
               CHAIRMAN JACKSON: I understand.
 3
               MR. KENYON: -- that's an example.
 5
               CHAIRMAN JACKSON: Okay. I understand.
               MR. KENYON: Leadership assessment shows
6
      significant progress in all categories. Improving
7
     leadership has mean making a significant commitment to
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9
      leadership training, most first-line supervisors and above
10
      had been through a two-week program which is called "Forum
      for Leadership Excellence" as well as significant other
11
12
      training and we have taken concerted action to deal with
      those individuals whose leadership scores are in the bottom
13
14
     10 percent of the leadership assessment. And actions have
15
      ranged from an individual development program to, in many
16
      cases removing the individual from the position.
17
               In the interest of comparison, these leadership
18
      scores are only modestly less than the current scores
19
      achieved by B.C. Summer, a plant with excellent performance.
     My previous plant, it's where I first used a survey that's
20
21
      very similar to this.
22
               Beyond the direct actions of leadership it is
23
      essential that there be very capable independent checks and
24
      balances on the organization, and one of these is the
25
     Nuclear Safety Assessment Board, NSAB. This provides
      independent review both of line management and of the
1
     oversight function. The NSAB is effective, it's membership
     is strong and inquisitive, important issues are being
3
 4
     reviewed and addressed. It's focused on confirming and
      strengthening standard. It champions the effectiveness of
 6
      nuclear oversight and the NSAB effectiveness has been
      evaluated and affirmed by NCAT which has regularly observed
      it's meetings.
8
9
               CHAIRMAN JACKSON: How does the NSAB feed back to
10
     the plant safety review committee?
              MR. KENYON: Well, the plant safety review
11
12
      committees have products that come to the NSAB.
               CHAIRMAN JACKSON: Okay.
13
               MR. KENYON: And if the quality of the product is
14
15
     not appropriate, the NSAB tells the plant committees and the
16
     NSAB would identify it as inadequate performance if there
17
      was any significant frequency of inappropriate quality
18
      products coming to the NSAB.
19
               Examples of important actions by the NSAB, they
20
     help to precipitate the training stand down that I mentioned
21
      earlier. They have strongly promoted significant
22
     improvements in plant lay up status, they thoroughly review
     the effectiveness of oversight and they significantly
23
24
      contributed to the improvement of our safety evaluation
25
     process. So I'm quite comfortable that the NSAB is
1
      functioning well as an important safety advisory
2
     organization to me.
 3
               Now, independently overviewing the Millstone
      recovery and clearly future operations including the NSAB is
 4
      Northeast Utilities' Board of Trustees Nuclear Committee.
 6
     This committee is currently meeting twice a month, once in
     person and once by phone. Over the last 12 months the
     committee has met at Millstone for a full day four times.
8
     These full-day, on-site meetings include meetings where the
      nuclear committee meets with several groups of employees in
10
      order to get very direct and very independent feedback.
11
12
              The nuclear committee reviews a monthly
13
      comprehensive written report. There are approximately 30
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14
     pages of narrative and another 60 pages or so of key
     performance indicators. Gail de Planque and Bill Conway are
15
16
      two members whose names I think you will recognize. The
17
      committee receives strong support from the Nuclear Committee
     Advisory Team, NCAT.
18
19
               NCAT independently reports to the nuclear
20
      committee, has monthly, full-day, on-site meetings and its
      members include George Davis and Tom Murley and recently
21
22
      Phil Clark who is here is going to come on that group and to
23
     replace George Davis.
2.4
               As an aside, when I talked to others in the
25
      industry about lessons to be learned from the Millstone
      experience and what is different about our current situation
1
      such that a performance decline of this magnitude and
 3
      duration cannot happen again. I almost always point out the
4
      essential difference of the Board or its nuclear committee
      and the crucial need for this committee to have good
 5
      credible on-going information that is independent of line
     management. And I think this is very important for two
      reasons. First, so there is a good independent check on
9
     line management at a senior level. The Board should not be
1.0
      surprise, and I'm quite confident that the company's board
      will not be surprised again.
11
12
               The second reason is that I have found NCAT's
13
     monthly, full-day visits with a debrief to me at the end of
14
      the day to be quite valuable. Sometimes to simply confirm
     my own observations regarding organizational performance,
15
16
      sometimes as a very useful sounding board to discuss
17
      strategy, sometimes with insights and observations somewhat
18
     differing from my own and those needing to be checked out
19
      and sometimes with an idea or suggestion.
20
               My point is that the creation of the Nuclear
     Committee and NCAT in response to the Millstone problems.
21
22
     this did not exist before, are one more very important
23
     demonstration of the essential checks and balances which
     have been built into NU's nuclear operations and thus are a
24
25
      very important difference from the past.
1
               As we expect to shortly become a Millstone
2
      organization with one unit in operation, and one in
      recovery, and one in a safe shutdown maintenance mode, it's
3
4
      important that the organization clearly emphasize separation
      of operations from recovery, and that we ensure that
      sufficient resources are devoted to the operating unit.
6
7
               Mike Brothers is the vice president of operations
8
      and he's devoted to Unit 3.
               Jack McElwain is the recovery officer for Unit 2
10
      and thus is responsible for Unit 2 recovery as well as
      maintaining Unit 1 in a safe shutdown mode.
11
               Marty Bowling is the recovery officer for
12
13
     technical services and thus that primarily deals with
14
      regulatory and engineering services and for these important
      services which are common to the three units, it's his
15
16
      responsibility to ensure that the proper priority is given
17
      to operating units.
               Dave Amerine is the vice president of human
18
19
      services and I want to use this opportunity to emphasize the
20
     very significant organizational step that was taken when
     what we characterize as the various people-related
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22
     functions. I'm talking about human resources, the safety
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      conscious work environment staff, training, the employee
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concerns program, emergency planning, these considerable

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officer to provide strong focus on how we handle the people-related activities at Millstone. And we intend to keep these functions together under once officer for the indefinite future.

Now, in addition to ensuring a proper separation 6 of operations from recovery, organizational planning has been conducted to achieve the following objectives. A simplified long-term organization. We have an organization 8 9 that is sufficiently effective for recovery and startup. But because it is unitized, it is complex and somewhat 10 inefficient. So a simplified organization will also give us 11 12 improved economies of scale, and by doing succession 13 planning for this later, simplified organization, with fewer management positions, we are preparing for a systematic 14 15 phaseout of the recovery teams.

16 I'd like to make two points on this. First, we 17 have moved considerably away from the original concept of a 18 recovery team. Yes, there are a number of PECO and Virginia Power individuals in various positions in the organization. 19 But today they are much more in an individual contributor 20 21 role than functioning as a entire loan team. Consequently we are now in a much more reasonable position to eventually replace loan individuals on a very orderly and sequenced 23 basis, largely one at a time as their services are no longer 24 25 required.

24

The second point is that we will not make significant organizational changes or major staffing changes without very careful assessment and follow up to assure effectiveness. So we are planning for full implementation of the long-term organization when unit-specific recovery organizations are no longer required.

Now, going forward we must have a plan that will sustain and improve performance. The plan has been drafted, it's known as the 1998 to 2000 performance plan. It's based on strategic planning that's been completed by the nuclear officers and we are not involving the directors and others in refining the plan and building ownership.

The plan is organized around five strategic focus areas as listed on the slide. It emphasizes in the early stages in particular self-assessment and monitoring with numerous key performance indicators, and it contains the priority initiatives.

We are beginning the process to have the plan reviewed and refined by others in the organization in order to improve content and particularly volume. This plan will not be implemented until we complete the recovery of Unit 2.

Now, overarching the 16 site issues and introduced at the last Commission briefing are NU's eight restart affirmation criteria which I want to briefly review and indicate current status for Unit 3 restart.

25

1 The first is root causes for the decline in
2 Millstone's performance have been identified and corrected.
3 We believe this area is satisfactory. As I have
4 reviewed in previous presentations the causes for
5 performance decline have been well-established and

fundamentally it was leadership.

Second, compliance with the licensing and design
bases has been restored. We view this as tracking to
satisfactory while compliance has been substantially
restored. Remaining actions include completing the

```
11
     corrective actions for level 3 DRs and there's one license
      amendment that is in process.
12
13
               CHAIRMAN JACKSON: Is this area in any sense
14
               MR. KENYON: Well, we're expecting the license
15
16
      amendment around the 21st or 23rd and I don't really that as
17
     critical path. So I think these are tracking guite well.
     And we'll complete it later this month.
18
19
               CHAIRMAN JACKSON: Okay.
20
               MR. KENYON: The third is safety conscious work
     environment has been established. We believe that is
21
22
      satisfactory, a very significant accomplishment, this will
23
     be addressed in Dave Amerine's presentation. But I also
     want to comment from a personal perspective.
24
25
               The heart of the Millstone recovery effort and
1
      undoubtedly its most difficult challenge has been the
      establishment of a safety conscious work environment.
2
               In joining NU 20 months ago I found an environment
3
      where the reservoir of trust between employees and
4
      management that you find to varying degrees in most
      organizations was largely gone. And, thus, trust had to be
6
7
      rebuilt in a climate of distrust. And that's a difficult
8
      challenge.
               Extraordinary, and in many cases innovative
10
      actions were required, and I just want to quickly name a
11
      few: The removal and replacement of all incumbent officer,
      almost all of them; the new paradigm of recovery teams; the
12
13
      retention of a former whistle-blower as a consultant, Paul
14
      Blanche; the establishment of an employee volunteer team
15
     many of whom had had prior negative experiences in
16
      expressing concerns. And the function of this team was to
17
     design the new employee concerns program, so we turned it
     over to our employees; the establishment of ECOP, the
18
19
      employee concerns oversight panel, a committee of employees
20
      to be an ongoing assessor of management's safety-conscious
21
      work environment performance.
22
               The use of a leadership assessment as a means for
23
      employees to tell us who -- who was and was not functioning
24
      as a good leader, and along the way we frankly learned. We
25
      thought leadership had received sufficient training on what
1
      to do. It hadn't, we had to do a lot more. This involved
2
      taking the entire leadership team as a group, first-line
     supervisor and above, off site for several full-day
3
 4
      sessions. We learned that the process to handle employee
      concerns had to be made a lot better. We learned that
 5
      responses to employee concerns had to be much better
 6
      coordinated, and we learned that we had to communicate,
      communicate, and communicate. So a huge improvement has
     been achieved and in large measure has been built around the
10
     efforts to reestablish employee trust. I mean, that's been
11
     the foundation of what we've been trying to do.
12
               You are generally aware of our accomplishments.
13
      And, again, Dave Amerine will talk about this some more, but
14
      I want to share with you some recent examples of what
15
      employees have done on their own.
16
               -- actions which I think powerfully and
17
     meaningfully describe their current feelings.
               Our own employees have provided personal witness
18
19
      at public meetings, more recently at a Connecticut DPUC
20
     hearing on the Millstone rate base matters, with wonderful
21
      content and feeling, and some are here today on their own to
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share that with you.
               They formed their own grass roots organization.
23
     They collected over 1500 signatures on a petition. The
24
25
      petition states that they are committed to operating the
1
     station safely and also states their belief that management,
     and now I am quoting from the petition, "treats us with
 3
     respect and we are confident that any safety issue we find
      will be completely addressed in a timely manner."
               They held their own rally to celebrate achieving
 5
 6
     Mode 4 and they collected the necessary $4,000 to take out
      their own full-page ad in the local newspaper, which ran
     this past Sunday, so that is what the current work
8
9
      environment at Millstone is all about, and we, the
10
      leadership team, are proud to be a part of that.
               The fourth criterion, self-assessment and
11
12
     corrective action, processes identifying, resolve problems
13
      in a timely manner -- we believe this is satisfactory.
               The self-assessment portion will be addressed in
14
15
     Marty Bowen's presentation and corrective action will be
     addressed in our next briefing.
16
               Fifth, unit and support organizations are ready to
17
18
      resume operations. We believe this is tracking to
19
     satisfactory. Operations are assessed as ready with
     personnel properly trained and qualified. Yes, we had these
20
21
      events that we mentioned earlier. Programs, processes and
22
     procedures which comply with regulatory requirements are in
      place and are being effectively implemented. Plant systems
23
24
      are operable and in good material condition.
25
               As previously discussed, work control is the one
      key issue which is not yet satisfactory, but I do want to
      emphasize that we are doing work that is well-controlled.
 3
      We just haven't reached the desired level of productivity
      and this should be resolved in May and we are also working
 4
     down our backlogs and Mike Brothers will talk about that
5
 6
      more later.
               Sixth, the entire station is prepared to properly
      support unit operations. This is tracking to satisfactory.
8
9
     Overall, the organization is ready. The one significant
10
      exception is that our plan to ensure sustaining performance
     has been drafted but is not yet finalized.
11
12
               Seventh, management controls and oversight
13
     measures are in place to prevent significant performance
14
     declines. We believe this is satisfactory.
15
               Now I am not going to bother to repeat some
16
      obvious points on management controls, but I do want to make
     two important observations.
17
18
               First, as I have already stated, I strongly
19
     believe in an organization with good checks and balances.
     It is healthy. It is an essential ingredient to the
2.0
21
      achievement of excellence.
22
               When I think about what is substantially different
     between what I might characterize as the old Millstone and
2.3
24
      the Millstone that is before you today or the new Millstone,
25
      I would certainly identify leadership, as I have already
     discussed. I would identify the working environment and the
1
     level of trust as being substantially different, and I would
     also identify the capability and role of oversight as being
3
      substantially different.
               In the old Millstone, oversight was viewed by many
 6
     as a regulatory requirement -- not a strong organization and
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not an organization that was a strong contributor to

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excellence.
               In today's Millstone, the contrast is dramatic.
9
10
      Oversight is a partner in helping to define standards,
      standards which lead to excellence, and with better role and
11
      staffing oversight is a much stronger organization.
12
13
               As an example, some time ago I told the line
14
      organization that I wanted Oversight to sign off on our
     readiness for Mode 4. The line was somewhat surprised that
15
16
      Oversight hadn't historically done that, but it resulted in
17
      some very healthy interactions between the line and
18
     Oversight regarding standards and performance and how well
19
     performance was meeting those standards.
20
               Now naturally Oversight is involved in assessing
      our readiness for Mode 2, and what is interesting as we get
21
      ready for Mode 2 that is somewhat in contrast to getting
22
      ready for Mode 4, the line organization has gone to
23
24
     Oversight and said what are your standards? -- you know,
      what are the criteria -- let's sit down and talk about it,
25
      and that now has taken place. There has been just excellent
1
      interaction on where are we, are we ready, and so forth, so
      what we have today is an oversight organization and line
3
4
      management that are working very much in partnership, as
5
      opposed to what existed some time ago when oversight was
      simply something that had to be there.
6
               My second point on management controls and
      oversight goes beyond the importance of these controls --
     which I think is considerable -- to what I believe is
9
10
     Millstone's most important and fundamental barrier in
11
      response to the question how is a possible backslide in
12
     performance prevented.
13
               Certainly the controls and oversight are a key
14
     aspect, but fundamentally the most important and strongest
     barrier is our employees and they won't permit it, and let
15
16
      me explain why.
17
               Our employees have been through a rough
      experience, but as a result of that experience, they know
18
      more about their rights and responsibilities to raise
19
20
      concerns and how to get them resolved through various
21
      mechanisms than perhaps any other nuclear workforce in this
22
      country. They are knowledgeable. They are empowered. They
23
     know how to do it by various means and they know that it is
24
      their responsibility, so I can assure you because I
25
      absolutely believe this, they are vigilant and they won't
1
      allow a backslide, and that is how it should be.
               Eighth, restart readiness is affirmed, using a
2
      rigorous process. This is tracking to satisfactory.
3
               This means that we do have the rigorous
      affirmation process in place. Four of the previous seven
6
      criteria are now satisfactory. The rest are tracking. The
7
      important remaining affirmation steps are the Unit 3, Mode 2
      review and affirmation by line management, a Nuclear
     Oversight recommendation, NASB recommendation, and
10
     ultimately my recommendation and judgment.
11
               This concludes my presentation, unless there are
12
     questions for me.
13
               CHAIRMAN JACKSON: Please.
14
               COMMISSIONER McGAFFIGAN: Let me just ask a
      question, because Mr. Lochbaum is going to raise it later
15
16
      today and others perhaps.
17
               The RSS orifice modification issue, where
     Oversight apparently made some predictions that proved
18
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previous meeting talking about the need for his organization
20
      to build credibility with the plant and apparently it had
21
22
     not in the old Millstone been staffed with the best people.
               You have addressed that you think that they are
23
24
      being paid attention to as you forced it in Mode 4. They
     are doing it naturally in Mode 2, but that particular
25
      incident is the incident that people are going to raise
      questions about, whether Oversight is really being paid
 3
      attention to, so any comments you would want to make? Or if
 4
      that is going to come up later, I can --
               MR. KENYON: Well, let me make just a couple of
5
 6
      general comments, and then I would like John to add to it.
               Yes, Oversight raised the concern, but I don't
      think people have fully recognized -- certainly, we have at
8
9
     Millstone, but not necessarily outside -- is Oversight was
10
11
               I mean we went through evaluations to endeavor to
12
     determine whether or not this -- there was a real problem
      there or not. Oversight was fully involved in that process.
13
      We ultimately agreed that while the evaluations seemed to
14
15
      show it was okay, we would go through testing and we went
16
     and Oversight was very much involved in that, so it wasn't a
     case of Oversight over in one corner and line management
17
      over in another corner. It was a focus of both to try and
18
19
      understand what the situation was and whether or not there
20
      was really a problem.
21
               John, what would you add to that?
2.2
               MR. STREETER: If I had to pick an example to
23
     demonstrate to you about the value of Oversight and how it
24
      is performing, I would use this as an excellent example --
      it is recent -- and I will tell you why.
25
               We had initial discussions with the line on this,
1
      the possibility of this particular problem developing, the
2
3
      vibration in the expansion joints in the bellows back
      preceding December, November-December timeframe.
4
               Our initial discussions with the engineering
5
 6
     organizations in the line resulted in us not coming to
      agreement about the potential for that problem, so to
      elevate that and to assure that it was thoroughly evaluated.
8
      we initiated what we call a condition report, which is how
10
      we capture things that don't appear to be right to get
11
      resolution. As I said, that was initiated in December.
12
               We proceeded to having discussions with the line,
13
     trying to come up with a meeting of the minds. Now I want
      to express here, it wasn't a matter of something being in
14
15
      non-compliance. It was an area that I would call
16
     engineering judgment.
17
               Based on the data that we had, we had a view. The
18
     line had a different view of the matter.
19
               It proceeded along to where testing of the systems
     commenced. When the testing began we wanted to assure
2.0
21
     because the concern was vibration that the systems, the
22
      joints were adequately instrumented during the testing, so
2.3
      that we could demonstrate conclusively whether or not there
24
      was a vibration problem.
25
               We had continuing discussions in the January-March
      timeframe about where the instrumentation should be placed.
     Our interaction resulted in the enhancement of the location
```

of the transducers on the lines to assure that we looked at the potential vibration all three directions, what they call

3

correct and I remember Dave Goebel, when he was here at a

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the axial and then the "x" and the "y" directions as well.
               When we were satisfied that we had them properly
 6
     instrumented and were getting the data, we proceeded through
      the line proceeded testing the pumps, which we were
      intimately involved with witnessing the test results and
9
10
      looking at the test results and witnessing the testing.
11
               We proceeded to the point to where we were
      gathering data. It still didn't look good to us from our
12
13
     visual observations and for looking at the data, so we chose
14
      to proceed, and Oversight chose to proceed with the vendor
15
      to get their, what they call their calculation -- what their
     basis was for the acceptability of the displacements we were
16
17
      seeing.
               The vendor responded initially in a manner that we
18
      didn't feel or thought was rigorous enough as far as the
19
      quality of their calculation, so we proceeded with that
20
21
      until we got a calculation that we thought had the proper
22
      controls and it was a good calculation.
23
              At that point then, the line organization received
      the information at the same time we did. They took the
24
      information that had been gathered from the instruments that
25
1
      we had an impact as far as to ensure its adequacy -- they
     took that information, looked at the calculation and the
2
      assumptions in those calculations and they found that the
      calculation assumed only lateral movement in one direction
      and it didn't take into account the "x" and the "y"
     displacements in there.
 6
7
               Once that was discovered, combined with the test
      results that was obtained from the instruments that we again
     influenced having in place, it became obvious to the
10
      engineering organization that the orientation of those
11
      orifices relative to the bellows -- they should have been
     placed in the opposite. Rather than being before the
12
13
      expansion bellows, the conclusion was it should have been
14
15
               So it was at that point when the conclusion was
      reached, it was decided to disconnect the piping so that the
16
17
     orifice could be -- the orientation of it could be changed.
18
      That point in time is when the internal damage was
19
     discovered at that point, and I can tell you that if
20
     Engineering had not discovered the calculational error I am
21
      absolutely positive that Oversight would have. We were the
22
      reasons it went the direction it did, that we identified and
23
     determined the extent of the problem, and additionally, and
2.4
      I will say more about this later, it was on what we called
     our Mode 4 checklist, the same checklist that Bruce was
25
1
      referring to earlier.
 2
               We would not have proceeded at that point without
3
      complete resolution of that issue, so I use that as a very
 4
      positive example in my mind of the influence of the
     Oversight organization.
              COMMISSIONER DIAZ: Well, I was just on the
6
7
      question or issue.
8
               You just told me something I did not know. The
9
     testing did not discover excessive vibration or noise. It
10
     was that you discovered that the calculation was one
11
     dimensional instead of being two-dimensional, and that is
     what led you back to the -- or we'll say the action testing
12
13
      that shows that there was some unacceptable vibrations?
               MR. STREETER: The testing, Commissioner,
14
15
      indicated to us that it looked like it was excessive
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vibration. It met the criteria that was in the calculation
      in the first place, but that was suspect to us. It also
17
      satisfied the flow requirements in the testing. So it
18
      wasn't something that was in the test results that caused or
19
     something that revealed internal damage, rather it was
20
21
     putting these pieces together, the instrumentation, the
22
     results of the vibration, plugging it, so to speak, into the
23
      calculation where it hadn't been before, saying this is not
24
      right, the orientation has to be changed.
25
               It wasn't anything dramatic like a test failure or
1
      something.
2
               COMMISSIONER DIAZ: There was no sound transducers
3
      installed during the testing?
4
               MR. STREETER: The transducers were -- that's
5
      where we were getting the data for the --
 6
               COMMISSIONER DIAZ: Sound?
               MR. STREETER: No, not to my knowledge.
               CHAIRMAN JACKSON: Well, let me ask you this
8
9
      question, let's extract and abstract from what you just
      said. Two questions. One, what then do you feel is the
10
      appropriate metric for effectiveness of Oversight, given the
11
12
     litany that you just went through? And, second, did this
13
     reveal some engineering inadequacies in terms of its
     analysis and ability to get to the root of the problem?
14
               MR. STREETER: The appropriate metric here would
15
16
     be, in my opinion, the identification and resolution of the
      problem. That's -- that's how I would view the metric. We
17
18
     identified --
19
               CHAIRMAN JACKSON: So you are saying that the
20
      metric should not -- it's not that the Oversight
21
      organization and the line organization did or did not
22
      initially agree, but that Oversight was able to push the
2.3
      issue to the point of resolution? Is that what you are
24
25
               MR. STREETER: That's correct. It is not uncommon
      for Oversight organizations to have different views than
1
     line organization, and have to resolve them through this
2
3
      process. It is in one of those areas, Dr. Jackson, where it
      is not -- it is not cut and dried, as far as this is a
      requirement and you are not meeting it versus you are
5
      meeting it. Rather, it is in the area that I was calling
      about, this particular one area of engineering judgment,
8
     where we had two different views.
9
               That's why it is vitally important, and I'll talk
10
     more abut this later, about us having the calibre of people
     that we have, that are able to look at those and render
11
12
      those technical judgments and being able to discuss, and
13
     then coming out with the right conclusions with those.
               CHAIRMAN JACKSON: Is there any statement that you
14
15
      would make or not with respect to the robustness of the root
     cause analysis and/or the engineering depth that -- what
16
17
      would you say in this regard?
               MR. STREETER: I would say that the engineering
18
19
      depth in this one, that led to the installation of the
2.0
      system the way it was, was not what I would have expected.
21
               CHAIRMAN JACKSON: Has there been improvement
22
      since that time?
2.3
               MR. STREETER: There is continual improvement
     going on in the engineering area. And I hate to keep saying
24
     this again and again, but I am going to talk to some areas
25
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be, not where Oversight wants it to be. But then again, I
     would have to say that many areas aren't to the -- do not
     reach the high standards that we have now.
 4
               CHAIRMAN JACKSON: Commissioner Dicus
               COMMISSIONER DICUS: I'll ask the question now,
6
7
      you may, if you wish, choose to answer it when you do your
     formal presentation. But given this situation, have you
      identified now, in the process that you are in, other areas
10
      where Oversight is disagreeing with line management or vice
11
12
               MR. STREETER: Let me say again, and this is
13
      really important, it is not uncommon to have different views
14
     on standards, and that's what we are talking about here.
     And what I will speak to a little while is that one of the
15
      critical pieces of why Oversight is effective -- is as
16
17
      effective as it is today, is because it has been empowered
18
      to raise the standards that are in place at Millstone now.
19
      In other words, in just going by the bare minimum, Bruce
20
     Kenyon has sent out expectations to the entire work force
21
     that he is using Oversight and expects Oversight to go
22
     beyond that, to elevate those and to raise our standards of
23
     performance.
24
               COMMISSIONER DICUS: Okay. To follow up on that
      then, and I agree, that is a good response. But in
25
1
      situations where Oversight is identifying something, or
      indeed line management has identified something, is there a
      good working relationship between the two to work toward
3
 4
     resolution?
               MR. STREETER: There is a good working
     relationship and it is approaching excellent.
6
               CHAIRMAN JACKSON: My only comment/question really
8
     has to do with the fact that the Oversight organization in
     the end is not the line organization, even though we are
9
10
      obviously interested in the effectiveness and quality of
11
      Oversight. And so -- but it is a barrier, and that is an
     important one to have. But it does reflect back to the
12
      question of, and then I guess I will put the question to Mr.
13
      Kenyon, in terms of the first line is in the line, and in
14
15
     that sense, it tracks back to engineering. And so what is
16
     your judgment relative to whether engineering is where you
17
      would like to see it be? And what steps are you taking if
18
      it doesn't meet vour expectations?
19
               MR. KENYON: Engineering is satisfactory.
20
               CHAIRMAN JACKSON: Okay.
21
               MR. KENYON: And any engineering organization.
22
     This particular issue was one where there is a fair amount
     of judgment. It isn't a simple little black and white kind
23
2.4
      of question. So there was judgment -- and really to go back
      to where Commissioner McGaffigan started, this was not line
25
1
      management in one corner arguing one position, and Oversight
2
      in another corner arguing an entirely different position.
     These were two professional organizations that, when there
3
      was a question, they went to get further calculations, they
      went back to the designer of the system, they went to some
6
      experts beyond that to try and get calculations done. So it
7
     was not the easiest engineering problem.
              But what was going on here was Oversight raising a
      concern and line management not so much arguing with it as.
9
10
      all right, let's work through it. Let's see -- let's see
11
      what's there.
12
               So would I have liked the conclusions through the
```

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engineering process to have identified the problem rather
     than testing having identified the problem? In other words,
14
      would I have liked engineering to have caught it and we not
15
     had even gone to the testing step? Certainly, I would. But
16
     the whole point of testing is that occasionally you can't
17
18
     prove everything up front, so you do do some testing. And
19
     Oversight was involved in the testing, engineering was
20
      involved in the testing, and it resulted in a satisfactory
21
22
               CHAIRMAN JACKSON: But it really wasn't until you
23
      dismantled it that you found the internal damage?
               MR. KENYON: We didn't know that we had internal
24
     damage until we took it apart. But the testing,
25
     particularly on the fourth pump, where we did some more
      sophisticated testing, and was looking at vibration in all
2
3
     three directions, because we just weren't that satisfied
      with what had happened up to that point, it was as a result
      of that that we decided the prudent thing to do was drop the
5
      expansion joint out and look inside. So, yes, we were on a
      trial here to ultimately get to the bottom of it.
               You know, you ask the basic question, am I
8
9
      satisfied with the performance of the engineering
10
     organization? Yes, I am. Can they do some things better
     and are they working to do some things better? Yes, they
11
12
13
               CHAIRMAN JACKSON: Commissioner Diaz.
               COMMISSIONER DIAZ: Yes, if I may follow up on
14
15
     Commissioner Dicus' question. I think there is a bottom
     line in here which is the overlying issue, how this impacts
16
17
     or does not on potential restart. And that is, is this an
18
      isolated issue, or is this -- I mean have you actually gone
      and checked further that similar systems with safety
19
2.0
     significant has gone through a thorough process, so this is
      an isolated case and not an indication that there might be a
21
     few of those?
22
               MR. KENYON: We have done that.
2.3
               COMMISSIONER DIAZ: Okay.
24
               MR. KENYON: And Marty Bowling will talk more
25
      about that.
               CHAIRMAN JACKSON: Commissioner.
2
               COMMISSIONER McGAFFIGAN: Mr. Lochbaum also, in
 3
 4
      his presentation, is going to make a recommendation that
5
     there be round the clock NRC or mentor presence during and
 6
     after restart that would help guard against schedule over
      safety mistakes. And he believes that one element of this
      was a desire to keep on schedule on the part of the line.
8
               Any comments you would want to make on that
9
10
     recommendation? He says that we have done something similar
     at Grand Gulf previously. But that clearly is Mr. Lochbaum
11
12
     having a lack of confidence in I suppose Oversight or
13
      whatever. So how do you respond to that recommendation?
               MR. KENYON: Well. I would first like to comment
14
15
      on the underlying premise and then comment on the
      recommendation. I do not at all agree that schedule
16
17
     pressures are what is causing. We have taken -- you know,
     there is just example after example where we have stopped
18
19
     what we are doing, looked at it, gone back, come out of Mode
      3 to go into Mode 4. There are just example after example
2.0
21
     of where we have -- I mean all of my discussions with
22
      employees, almost every one, emphasizes the importance of
23
      standards first and schedule second, so I do not agree with
     the underlying premise.
```

```
25
               Now, having said that, I have no objection to
      another person in the control room. We are putting extra
 1
      individuals in the control room ourselves. And if the NRC
      wants to do that, that's fine. Whether it is necessary or
 3
 4
      not, I am not really going to comment on. We are doing --
      it is our responsibility to operate the plant. We are doing
 6
      what we think is necessary to ensure that it is properly
 7
      operated.
 8
               CHAIRMAN JACKSON: Okay. Let me hear from Mr.
 9
      Amerine.
10
               MR. AMERINE: Good morning.
11
               CHAIRMAN JACKSON: Good morning.
               MR. AMERINE: My name is Dave Amerine, and I am
12
      the vice president of Human Services at Millstone. As such,
13
      I have the lead for the area of safety conscious work
14
15
      environment, which all employees are responsible for.
               May I have the first slide, please?
16
17
               We have achieved our six high level success
      criteria that demonstrate to us that we have successfully
18
19
      established a safety conscious work environment at Millstone
      Station. We will continue to monitor and to evaluate these
20
21
      criteria to assure that we sustain and continue to improve
22
      our environment at Millstone.
23
               We have measured our progress by the first four
24
      criteria, and the fifth criteria, Employee Concern Oversight
25
      Panel, was our independent internal review, particularly of
                                                            46
 1
      the efficacy of the Employee Concerns Program. The last
 2
      criteria, Little Harbor Consultant Concurrence, is the
      independent external verification of our evaluation.
 3
               Although Little Harbor has recently said that we
 5
      have met their criteria for establishing a safety conscious
      work environment, they did emphasize the tenuousness of that
 6
 7
      achievement. Further, Little Harbor said that Millstone
      will have truly arrived at a firmly established safety
      conscious work environment when the extraordinary resources
 9
      presently required to nurture that climate are no longer
10
11
      necessary. Until then, and even after that time, we will be
12
      ever vigilant to assure there is no let up in our safety
13
      conscious work environment commitment.
14
               On March 31st, we submitted our safety conscious
15
      work environment readiness letter to the NRC. In it we
16
      stated that we have established a safety conscious work
17
      environment at Millstone Station. This conclusion was
18
      arrived at based on several factors, including performance
19
      indicators we have been using for the last eight months to
      assess our performance. We have also presented these
20
21
      determinations to three internal bodies, Nuclear Oversight,
22
      the Employee Concerns Oversight Panel, and the Nuclear
      Safety Assessment Board. Following their own assessment,
23
2.4
      they concurred that the safety conscious work environment
25
      can support a return to operations at Unit 3. We have also
 1
      responded to all the recommendations provided by Little
 2
      Harbor Consultants.
 3
               This slide shows a rollup of our first criteria.
 4
      which is employee willingness to raise concerns. The last
      leadership survey showed that greater than 97 percent of the
      leaders were rated as effective in resolving employee
 6
      issues. In addition, the recent Employee Concerns Oversight
      Panel survey data showed that 95 percent of the employees
```

surveyed would raise issues through their leadership.

```
percent of the employees interviewed would raise issues to
11
12
      their management.
13
               CHAIRMAN JACKSON: How large a survey -- how large
14
     were these surveys?
              MR. AMERINE: Well, for example, the first survey
15
     of the leaders including approximately 85 percent of the
16
17
     leaders who qualified to have that survey done, which was
18
     determined by the number of people they had reporting
     directly to them. I might add that, as I say down later --
19
20
               CHAIRMAN JACKSON: I mean who did you ask the
21
      questions of, about leadership?
              MR. AMERINE: The employees.
22
               CHAIRMAN JACKSON: The employees.
2.3
24
               MR. AMERINE: Yes.
25
               CHAIRMAN JACKSON: And I am saving how large a
     sample of employees did you have?
2
              MR. AMERINE: Population-wise?
               CHAIRMAN JACKSON: Yes. Population-wise. So you
4
      surveyed for each leader, those who work for that leader, is
     that the point?
5
               MR. AMERINE: That's correct. Now, at the end of
 6
     this month, May, we will have another leadership assessment.
     But this will not only include the leader to whom the
8
      employees report directly but also include a skip survey.
10
     So it will actually be a larger survey of the leadership
      nonulation
11
12
               CHAIRMAN JACKSON: And what about the culture
13
      survey and the Employee Concerns Oversight Panel survey, how
14
      large a population did they sample?
15
               MR. AMERINE: I can't speak to the Employee
     Concerns Oversight Panel survey. I am not sure I know that.
16
17
     Mike Quinn is here, if he has -- knows that population size.
               MR. QUINN: Typically, about 300-plus employees.
18
               MR. AMERINE: Did you hear that? About 300-plus
19
20
      employees.
21
               MR. KENYON: And going back to the leadership
22
     assessment, it's a very high percentage of our employees and
23
      contractors. I don't know whether it's 95 percent, but it
24
     is basically, you know, on a given morning, for a given work
      group. Everybody is there before they go to the work, the
25
     survey forms are passed out, the survey forms are passed in.
2
     Somebody has the right not to do it, but it is relatively
3
      few individuals who choose not to fill out the survey.
               MR. AMERINE: One important segment of the
      population that, since I have been in this position, I have
5
      tried to make sure we are always mindful of are the shift
 6
      workers. My experience at a number of other facilities, it
8
      is just too easy to forget about them, which is a
9
      significant portion of your population.
10
               Going back to the last survey that we mentioned,
      the small percentage who said they would not use management,
11
12
      would nevertheless avail themselves of some other avenue to
13
      raise concerns. These indications confirm that the work
14
     force not only possesses the willingness to raise concerns,
     but it has the confidence that the concerns will be
15
16
     addressed and the knowledge that raising of concerns will
17
     not be met with retaliation.
              I mentioned the next leadership assessment and the
18
     fact that it will be what we call a skip level as well as
19
20
     immediate level. At the end of June we will do another
     culture survey as well.
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Little Harbor Consultant targeted interviews showed 99

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22
               CHAIRMAN JACKSON: Is this something you plan to
23
      continue doing on a periodic basis?
24
               MR. AMERINE: Yes, ma'am. It's part of our
      performance plan that I will speak to a little bit later
25
1
      going forward.
2
               The next slide, please.
               This performance indicator addresses
3
 4
      confidentiality and anonymous concerns. After an increase
5
      in November and December, the number of concerns received
 6
      anonymously or requesting confidentiality has steadily
7
     decreased, although April's number went up slightly. The
      December increase was most likely influenced by the sitewide
8
      education process completed in November of 1997.
9
               So far in 1998 the average percent of concerns
10
      requesting confidentiality or submitted anonymously is 36
11
     percent, down from the 1997 average of 40 percent. As of
12
     April 29, we had received 20 concerns in the month of April.
13
14
     Six of these were received anonymously, and two requested
     confidentiality. So we're up to a total of eight there,
15
16
      whereas last month it was six. So this KPI or key
     performance indicator will be watched closely due to that
17
18
      slight increase.
               Now there's an interesting point I'd like to bring
19
20
     out that there's been a shift in the number of concerns that
21
      have been received anonymously and those that are received
22
      requesting confidentiality. The number received requesting
23
      confidentiality, as I just said, in the April statistics as
2.4
      of the 29th have gone down, and the number therefore
      proportionately have gone up that were received anonymously.
1
      And what that tells me is those employees who want personal
      closure with their concern are not requesting
      confidentiality as much as they had been in the past, and
3
      that tells me that any fear of retaliation has subsided
     quite a bit in the work force. So I think that's important
     to note, because we lump those two together, but there's
 6
      something telling in those -- the relationship of those two.
8
               CHAIRMAN JACKSON: What do anonymous concerns tell
     you?
9
10
               MR. AMERINE: Anonymous concerns are concerns that
11
     people have, you know, taken the time to write out, perhaps
12
      put in a drop box or sent in, but that their concern for
13
      closure is not as intense, let's say, as someone who's
      submitted it and signed it or submitted it, request --
14
15
      signed it and requested confidentiality, meaning they would
16
      like an answer back.
17
              CHAIRMAN JACKSON: So you link anonymity to desire
18
      for closure as opposed to anonymity to concern about
19
      retaliation.
               MR. AMERINE: I think the fact that the person has
20
21
      signed the concern means that they personally want some
22
     closure. The fact that a few of them are requesting --
23
     fewer are requesting confidentiality now than before tells
24
     me that the work force has a lot more confidence in their
25
      management.
1
               CHAIRMAN JACKSON: Statistics can be read many
2
      ways.
               MR. AMERINE: I think I received that advice from
 3
 4
      you last time.
               [Laughter.]
               CHAIRMAN JACKSON: I'm consistent.
 6
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```
MR. AMERINE: If I could have the next slide,
8
     please.
               There are actually three slides here, and these
9
10
      following three slides demonstrate how the second criterion,
     which is line management handling issues effectively, has
11
      been met. The statistics reflect management's belief that
12
13
     the reestablishment of a safety-conscious work environment
14
      requires effective resolution of all concerns, not just
15
      those that may have safety implications. Employees who have
      no fear of retaliation for any reason will necessarily be
16
17
      more willing to raise issues having an impact on safe
      operation of the plant. And the fair treatment of employees
18
19
     necessarily enhances employee morale and pride in the
20
      organization.
21
               Now speaking to this performance indicator, the
22
     percent of overdue assignments had increased at the
23
     beginning of April, which we believe is due to the efforts
24
      to close the necessary items for Mode 4. As you can see,
     due to management attention, the numbers have been brought
25
1
      back down.
               CHAIRMAN JACKSON: How many additional resources
2
      were applied to get under your three-percent goal?
 3
               MR. AMERINE: It wasn't so much an additional
      resource as it was management attention and allocation to
5
 6
               CHAIRMAN JACKSON: Okay. So what might we expect
     as -- if Unit 3 is allowed to restart and attention is
8
9
      shifted to Unit 2, how do we ensure that you stay under your
10
      three-percent goal?
11
               MR. AMERINE: You're going to see one KPI -- I'm
12
      sorry -- key performance indicator. In just a few minutes I
13
      will address that question.
14
               The next performance indicator, please.
               Okay. The quality of evaluations remains above
15
     our goal. The evaluation of quality is determined by the
16
17
      management review team reviewing the condition report
      evaluations and assigning a value by -- if they review it
18
      without any comment and approve it without comment, that
19
20
     gets a 4. If they approve it but they have comments that
21
     have to be incorporated, that gets a 2. And if they
     disapprove it the first time -- in other words, it's got to
22
23
      go back for improvement -- then it gets a zero. And you can
24
      see that we're staying above our goal of 3.
25
               The next performance indicator is the average age
1
      of the condition report evaluations, and that has been below
      30 for the last six weeks, which have been our internal
2
      goal, in addition to having no adverse trend. Again, these
 4
      last three performance indicators demonstrate management's
5
     effectiveness at handling concerns. And I will get back to
6
      your question, Chairman.
               CHAIRMAN JACKSON: You know, all of these have
      implicit -- either explicit or implicit thresholds. How do
8
      you arrive at those? What do you decide what's good enough?
9
10
               MR. AMERINE: Well, one of the things we do is we
11
     look for -- most of these are looking at a trend to make
      sure that we are either holding our own or getting better.
12
13
     Some of the indicators we also look to see how is the
14
     industry doing, what are -- we benchmark against the
      industry to see what the good plants or the average plants
15
      are doing.
16
17
               Okay, if I could have the next one, please.
18
               The Employee Concerns Program is effective and an
```

```
active contributor to our safety-conscious work environment
      at Millstone. The age of concerns under investigation is
20
21
      improving. It has been averaging approximately 50 days over
22
      the past several months. This average is reflective, I
     believe, of the large increase we saw in December and
23
24
      January, and I've already talked to the cause for that
25
      influx or what I believe to be the cause. People who would
1
      use the program again have significantly increased to 90
      percent for recent users. Employee concerns oversight
     panel, Little Harbor, and the NRC 4001 evaluation judged the
3
      Employee Concerns Program as effective.
               Now before leaving this slide, let me add that at
5
      Millstone visible senior management support for the Employee
6
      Concerns Program has provided substantial manpower and
     logistical resources and direct access to Bruce Kenyon, the
8
9
      president and CEO. Corrective actions which arise out of
10
     the Employee Concerns Program investigations are tracked
11
     through a formal action tracking system.
               In addition to the ECP staffing augmentation and
12
13
      level of senior management support, the Employee Concerns
      Program's effectiveness has been enhanced by the development
14
15
      of a comprehensive manual. This manual formalizes the
      recent improvements in the ECP processes, practices, and
16
17
      consistency of performance. Notably the ECP process now
18
      requires the conduct of an immediate assessment of the
19
      concern to determine its safety significance and the need
      for an operability or reportability determination, and also
20
21
      the assessment for any chilling effect. The manual also
22
     provides the process which governs the conduct of the
23
     investigation, communication with the concernee, corrective
24
      action, and feedback to the Employee Concerns Program from
25
      the concernee on how he or she viewed the process.
1
               If I could have the next slide, please.
 2
               This is the performance indicator that shows that
      the number of people who would use the Employee Concerns
3
      Program has increased significantly, which I mentioned
     before. In June of last year both the employee concerns
 6
      oversight panel and the Little Harbor survey showed 50 to 60
      percent willingness to use the ECP program. The present
     data shows greater than 90 percent of those interviewed by
8
      the Employee Concerns Oversight Program would use the ECP
10
      again. This is particularly significant considering that
     the survey was almost completely personnel who had used the
11
12
      ECP since last September. This is a particularly strong
13
      endorsement of Employee Concerns Program.
               The average age of the ECP concerns is going up
14
      and down over the period of a month. As I said before, it's
15
      averaging between 50 and 55 days. While this is adequate
17
     and no adverse trend exists, we have an internal target of
18
      45 days, and I expect that this will be achieved after Unit
19
      3 is back in service, to speak to your earlier question.
     And again that's a function of staffing, workload, and
20
     priority.
21
22
               Okay. We have developed a classification protocol
23
     which is a formal process providing logic and criteria for
24
      determining whether ECP cases involve 50.7 or
25
     chilling-effect activities. Applying this process to 228
1
      competed files going back to December of 1996 yielded the
      following results: 56 alleged potential 10 CFR 50.7
      concerns; of those, 36 were unsubstantiated, three were
```

```
fell into the indeterminate category, which 7 of those are
5
      over a year old. And then we notice that in nine of them
      during this review require a little bit of additional
      information to complete their closure.
8
9
               With respect to the chilling effect, 23 were
10
     unsubstantiated, 16 were substantiated, eight fell into
11
     the -- the same eight into that indeterminate category, and
12
      also the same nine requiring just a little bit of additional
13
      information to complete their closure.
14
               CHAIRMAN JACKSON: So the 101 is different than
15
     the 256.
               MR. AMERINE: The 101 --
16
17
               CHAIRMAN JACKSON: Alleged harassment,
18
      intimidation, retaliation, discrimination. All bound up in
     the 50.7. or are they completely separate?
19
20
              MR. AMERINE: Of the 228, there was a subset that
21
      were 101 cases alleging harassment, intimidation,
22
     retaliation, discrimination. Of those, 56 --
23
               CHAIRMAN JACKSON: Okay. I just wanted to
24
     understand.
25
               MR. AMERINE: Had potential 10 CFR 50.7 overtones.
1
               CHAIRMAN JACKSON: Okay. I just wanted to be
2
      sure.
               MR. AMERINE: Next slide, please.
 3
 4
               CHAIRMAN JACKSON: So the infrequent means the
     number that -- you're baselining that to the number of
5
      substantiated --
6
               MR. AMERINE: Yes.
8
               CHAIRMAN JACKSON: Cases. Okay.
 9
               MR. AMERINE: And this slide, this next slide I
     think talks to that as well. The number of cases alleging
10
11
     harassment, intimidation, retaliation, discrimination does
     not indicate an adverse trend. Now as of April 29, the
12
     number of concerns received in the month alleging 50.7 HIRD
13
14
      was two. So you can see that trend, downward trend
15
      continues.
               The -- so far the review mentioned before showed
16
17
     three cases from the MOV event in last August that were
18
     classified as substantiated potential 10 CFR 50.7
19
     violations.
20
               Okay. Go to the next slide please.
21
               Most of the leadership team which includes all of
22
     the management from the vice-presidents to first-line
23
     supervisors and even personnel now designated as leads have
24
     been through the safety conscious work environment training.
               CHAIRMAN JACKSON: Everybody at the table.
25
1
               MR. AMERINE: Everybody at the table.
2
               [Laughter.]
 3
               Now if you go to the second bullet, simply stated,
      a manager who creates a workplace which is receptive to
 4
      raising concerns, and that's captured in the management for
 5
      nuclear safety module, one who treats employees with
     respect, that's in the civil treatment course, and one who
8
     understands the requirements of the law, which is provided
      in the employee relations or the 50.7 training, will have
10
     the fundamental skills necessary to establish and maintain a
11
      safety-conscious work environment and thereby avoid any
12
     retaliation against those employees engaged in a protected
     activity.
13
14
              Now the last item on that page for recent
      supervisors hired, promoted or appointed, a Quick Start
```

substantiated, which I'll speak to a little bit later, 8

```
16
     program has been developed, and it includes a video
17
      stressing the important aspects of a safety-conscious work
18
      environment, a reading of the safety-conscious work
19
      environment handbook, and also being assigned a mentor.
               This must be accomplished within the first week of
20
21
      the new management assignment. The full scope of training
22
     that I just reviewed must be done in the first 90 days after
2.3
      a new supervisor assumes his or her new assignment.
24
               Next slide.
25
               We have become much more sensitive to recognition
1
      of challenges to the safety-conscious work environment in
     their beginning stages. Early intervention by line
     management and the various support groups results in
3
      resolution if these four significant problems develop.
               With respect to the second bullet, many different
5
6
      work groups across the site have independently formed
      assessment groups, organized meetings, solicited assistance,
7
      or taken other steps to monitor their actions and to enhance
8
     their work environments. These efforts, although less
9
     visible and at a smaller scale than the formal program, are
10
     extraordinarily important. Such efforts, voluntarily
11
12
     initiated, confirm that the culture has changed and that the
      message of a safety-conscious work environment has not only
13
14
      been received, but accepted.
15
               The people team consists of the Millstone Human
16
      Resource Group, Employee Concerns Program Group,
17
      Safety-Conscious Work Environment Group, and the Legal Group
18
      presently assigned to the site, and with the oversight of
19
      Employee Concerns Oversight Panel.
20
              As refined, the process is to assist line
21
      management in nurturing the safety-conscious work
22
      environment, and resolving challenges to it. Performance in
23
      the remaining focus area supports restart, and I will
24
      discuss that in later slides.
25
               CHAIRMAN JACKSON: How were the success stories
               MR. AMERINE: Various ways. For example, I
     received an e-mail from an employee who just wanted to let
3
4
     me know that that person's concern which was raised over a
      weekend was responded to by the unit director coming in off
 6
      of vacation to address that concern, and then that person's
      operations manager coming in on a Sunday to help follow up
8
      on that concern.
9
               CHAIRMAN JACKSON: So this is a compilation of
      feedback items you received in different ways?
10
              MR. AMERINE: Yes, ma'am, anecdotal feedback in
11
12
      from the employees that is saying that it's working.
               CHAIRMAN JACKSON: Okay.
13
               MR. AMERINE: This slide shows the key performance
14
15
      indicator for focus areas, and that number has steadily
16
     decreased from the -- particularly if you consider the 33 at
     the end of 1997 to the eight at this time.
17
18
               Let me just define a focus area so we are all on
19
      the same page. It's a group or event where those involved
20
      are either unable or unwilling to raise and/or resolve
21
     issues important to some stakeholder.
22
              Recently several active focus areas were assessed
      to have successfully completed their action plans. However,
23
24
      during the same time frame some safety-conscious work
```

environment cases that were brought to our attention were

determined to meet the criteria to become a focus area. So that number, although it's holding constant, really there is 2 some fluctuation there. The safety-conscious work environment organization 4 5 has evaluated the current focus areas to ensure that there are no issues within those work groups which would jeopardize restart. 8 In fact, all active focus areas are still 9 accomplishing their duties and responsibilities at an acceptable level, and improvement is happening in all areas. 10 11 Our most recent focus area action -- plans of actions and closure documentation have been improved 12 13 significantly as we have learned and refined the process. 14 We have revisited and updated older focus area 15 determinations to make sure their documentation also is acceptable. 16 17 Next slide, please. 18 As Bruce said, the work force at Millstone is 19 empowered and is educated, and that will be the best 20 insurance to make sure there's no deterioration in the 21 safety-conscious work environment. They know their rights and the responsibilities of management. 22 23 With respect to the second bullet, as part of the 24 safety-conscious work environment readiness letter, we committed to maintaining the infrastructure that we have in 25 1 place under the Human Services Organization to ensure that 2 we continue the momentum we feel we have established. This includes the present safety-conscious work 3 environment group, the human resources group, the employee concerns program groups. Employee concerns oversight panel 5 is also included in this statement, although it functionally reports to Mr. Kenyon. 8 This internal structure will continue beyond the Unit 2 restart. This group has daily coordination meetings and they will continue. Issues will continue to receive 10 real-time senior management attention. The organization 11 12 will continue to respond to urgent events affecting the work 13 environment consistent with the established rapid response 14 protocol that we have developed. 15 Events will continue to be analyzed to extract lessons learned and the results factored in remedial 16 17 efforts. 18 Training on the safety-conscious work environment 19 related matters will continue with emphasis on refresher 20 training and training of new arrivals. 21 Speaking to the third bullet, safety-conscious work environment part of our 1998 to 2000 performance plan 22 23 which John mentioned earlier, is called the work environment 24 section. This section was attached to the safety-conscious work environment readiness letter that we submitted earlier 2.5 1 and has been augmented by a recent submittal. 2 The work environment performance plan consists of three disciplines which are leadership, safety-conscious work environment itself, and human resources. The 5 performance plan consisting of objective performance measures, performance targets, and related action items has been developed. Performance against this plan will 8 determine when, after Unit 2 restart, the human services can begin to evolve into the projected mature organization. 9 10 As line management gets better and better at 11 nurturing the safety-conscious work environment and

recognizing lapses as soon as they occur and taking

13 appropriate preventative or restorative actions, the present 14 extraordinary human services resources can be combined or 15 Our submittal details the logic and criteria we 17 will use to preclude backsliding and to determine when we 18 can realign the elements of the human services organization. 19 CHAIRMAN JACKSON: But to the end of early detection, you intend to continue to use the performance 2.0 21 indicators? 22 MR. AMERINE: Yes, ma'am, we do. 2.3 CHAIRMAN JACKSON: Okay. 24 MR. AMERINE: The fourth bullet speaks to using performance indicators, to answer your question. We are 25 determined that, having made a fundamental change in the conduct of our Millstone environment, we will not tolerate 2 any backsliding or complacency. 3 Consequently, the efforts to enhance the work 5 climate and to instill the attitudes and attributes of a safety-conscious work environment will continue as part of 6 our ongoing longer-term performance plan. 8 Next slide, please. 9 The safety-conscious work environment processes will continue to be improved as we mature. These processes 10 11 have been formalized in handbooks and flow-charted for ease 12 of use. Lessons learned are factored in. 13 The plan I mentioned before contains provision for initial and follow-up training on safety-conscious work 14 15 environment matters. We will measure and sustain 16 performance by the conduct of leadership assessments that we 17 mentioned earlier, the conduct of culture surveys, 18 establishment and communication of safety goals, and the 19 development and implementation of safety-conscious work environment guidebook for supervisors. 20 21 Regarding the organization transition, the plan 22 has established performance measures and targets. Among the relevant targets are the absence of any safety-conscious 23 work environment focus areas by 1999. A 5 percent 24 25 improvement in the leadership assessment scores when 1 compared to the November 1997 results. And a continuous 2 positive trend in the culture survey results. 3 These performance measures will quide our 4 transitioning from the extraordinary support functions we 5 have today to the permanent human services organization. 6 Organization adjustments over time will be based on performance demonstrated and results achieved against 7 those parameters I just mentioned; increased line management 8 9 effectiveness resulting in less HR demands, and the ability 10 of employee concerns program to focus primarily on the nuclear safety-significant issues, and self assessments 11 12 verifying the performance expectations are being met. 13 Speaking of human resources, a survey taken about 14 eight months ago and one taken very recently showed about a 15 factor of two gain in confidence in the human resources 16 organization that we have on site now. 17 And this was demonstrated most recently when there 18 was an issue regarding the appropriate calibration of an 19 instrument, and the line organization when they ran into that problem -- and this was just two nights ago --20 21 immediately called the human resource group, which responded 22 right away, and then the plan of action was brought to the 23 executive review board the very next day. We convened a

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special board. So that demonstrates two things:
               One, the confidence that the line management now
25
1
      has in those support organizations; and two, the
      responsiveness of those organizations to make sure matters
2
     like that are dealt with efficiently, effectively, and very
      fairly, because there was a concern through all of that for
      an employee involved as well as for the technical aspect.
5
               Next slide, please.
               These are our criteria for establishing a
8
      safety-conscious work environment, and we have demonstrated
      that they are met. With a clear understanding of the past
10
     and a full appreciation for the challenges of the future,
      and a firm commitment to sustained excellence, we report
11
12
      that we have achieved a safety-conscious work environment at
     Millstone station which will support the restart of Unit 3.
13
14
              The advancements we have made are significant and
15
     reflect a fundamental change in business practices at
     Millstone. By no means, however, do we consider the full
16
17
      objective reached or the goal of excellence attained. The
      objective is to create a healthy and safe working
18
     environment which thrives in the long run during periods of
19
20
      sustained power operations, not just in times of intense
21
     regulatory scrutiny.
              Despite the best efforts of well-intended managers
22
23
      and employees, missteps will occur. However, when these
24
      problems arise in the future, they will be met by an
     organization that is prepared with the resources, the skills
25
1
      and the commitment to resolve problems.
2
               In the long run, a safety-conscious work
      environment is most beneficial to our endeavor to safely and
      efficiently run the Millstone station, to our employees and
 4
5
      their morale and motivation, and ultimately to the nuclear
      industry as a benchmark of what can be achieved with the
      right mindset.
8
               Consistent with our first core value, it is simply
9
      the right thing to do.
               The collaborative efforts of management and the
10
11
      work force have produced an environment in which workers
12
      raise concerns with the assurance that management supports
     their efforts, and with the confidence that the raising of
13
14
      concerns will not result in retaliation.
15
               Management has actively encouraged the raising of
     concerns, rewarded employees who have raised concerns, and
16
17
     disciplined those who failed to meet management's unbending
18
     prohibition of retaliation. This is our determined and
     sincere commitment to Millstone's safety-conscious work
19
20
     environment.
21
               CHAIRMAN JACKSON: Thank you.
               Yes?
2.2
23
               COMMISSIONER McGAFFIGAN: Excuse me. I had to
24
      clear my throat.
               Mr. Kenyon said earlier that you think you are
2.5
1
      setting in industry standard now in your safety-conscious
2
     work environment and employee concerns program. The issue
      for a regulator is how long Little Harbor needs to be there
     observing this process; through Unit 2 restart, perhaps, or
 4
     perhaps not. Perhaps at that point you intend to transition
5
      the organization, as you said at the outset, to less of a
     unit focus, and again there will be a period of
 8
      organizational change which you have a plan to manage.
               But how long, in your judgment, do we need -- and
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10 it's our judgment ultimately, but what is your opinion as to having Little Harbor there, and the benefit you get from 11 12 something off the line? It's sort of the equivalent of some 13 of the checks and balances you outlined earlier that the board and the various committees provide. 14 15 MR. KENYON: Well, there are several points I 16 would want to make in response to that. First of all, with Little Harbor having been 17 18 present now for quite some time and being appropriately 19 critical of some of our earlier activities, it was valuable 2.0 in getting the standards to where they needed to be. The 21 standards are now there, and certainly we believe they are 22 there, and we expect Little Harbor to say that as well. Then the issue becomes implementation of those 23 standards, and we have a period of time now where we have 24 been successfully implementing those standards, but it is 25 not a long period of time, and whereas we think we have 1 2 established a good environment, I would also say that we are very sensitive to the fragility of that environment as we 3 4 continue our efforts to strengthen the levels of trust with 5 employees. 6 Now the other thing that's happened is that our 7 employee concerns oversight panel has come into its own in 8 terms of being an effective internal organization, and being 9 very much a check-and-balance and independent review, and 10 the individual who provides leadership to the organization is here today. 11 12 So we have -- I have more and more confidence in 13 -- I have good confidence in line management, I have good 14 confidence in the programs and procedures that are now in 15 place. I have good confidence in ECOP as a mechanism to let 16 me know very clearly and quickly if something is going the wrong way. So I, frankly, am quite comfortable without 17 18 Little Harbor today. I'm not here to suggest that Little 19 Harbor ought to leave tomorrow, but I do think that Little Harbor's effort can scale back, and I do think as we develop 20 just more time to show that the track record is clearly a 21 22 sustainable track record, I certainly don't see the need for 23 -- you know, in my judgment as to how we're doing, and you 24 know, this needs to be an ongoing judgment, but in my 25 judgment as to how we're doing, I certainly don't think we 1 need Little Harbor beyond the restart of Unit 2, and I think a case could be made for sooner than that. Whether I would 3 want to make that case remains to be seen. But I think we 4 are talking, you know, a few months as opposed to another 5 year or so. 6 CHAIRMAN JACKSON: Well, I think the Staff suggestion is six months beyond the restart. MR. MORRIS: And I would also love to hear Little 8 9 Harbor's view of that, but the EDO suggested six months, 10 which seems reasonable. MR. AMERINE: If I might just add a footnote, I 11 12 mentioned the work section portion of the 1998-2000 13 performance plan, and in there we plan to continue bringing 14 in an outside agency to look at -- that's independent of 15 everyone else on a coordinated basis. 16 CHAIRMAN JACKSON: Yes. COMMISSIONER DICUS: Is the ECOP a long-term unit? 17 18 MR. KENYON: Yes. Yes, it is, and that's one of 19 the aspects of the Millstone program that I believe is 20 unique in the industry where you have a cross section of

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employees that are there to independently critique
              management's efforts and is part of our program, and we have
22
23
              no intention of changing that.
24
                                     CHAIRMAN JACKSON: Thank you.
                                     I think, you know, that it seems you have done a
25
              substantial amount. Fragility is always a concern, given
 1
 2
              the historical perspective, and so having the programs in
              place, having the proper oversight, including the commitment
              from management and having an ability to stay on top of it.
  4
 5
              That's why I was asking the questions about the performance % \left( 1\right) =\left( 1\right) +\left( 1\right) =\left( 1\right) +\left( 1\right) +\left( 1\right) =\left( 1\right) +\left( 1\right)
              indicators are all critical, I think, and obviously you
              agree.
 8
                                     MR. MORRIS: Yes.
 9
                                     CHAIRMAN JACKSON: So why don't we hear from Mr.
              Brothers.
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11
                                    MR. BROTHERS: Thank you.
12
                                    The purpose of my presentation today, as we have
13
              talked about, is to characterize the deferred items, to
              describe to you how we are going to manage them.
14
15
                                     In addition, I want to demonstrate that Millstone
              Unit 3 will be ready to return to power operation by the end
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17
              of May 1998.
18
                                     My presentation will be broken down into three
19
              major areas:
20
                                     First, I will discuss in broad terms what we have
21
              accomplished during the two years that Unit 3 has been shut
22
              down
23
                                     Second, I will characterize the deferrable items
24
              which will remain post-restart, along with the commitments
25
              which we have made to communicate our progress in managing
 1
              the completion of our deferrable items.
 2
                                    This I will discuss as the safe return to power
              operation to Millstone Unit 3.
  3
                                     This slide gives a broad overview of our
  4
 5
              accomplishments during the past two years on Millstone Unit
              3. Although not one of the topics which we are presenting
              as complete today, we are in the process of completing the
 8
              certification of a restored design and license basis for
10
                                     During this shutdown we've also brought our final
11
              safety analysis report up to date per current regulations.
12
              As a data point we have processed over 600 FSAR change
              requests during the last two years.
13
14
                                     We have submitted 26 license amendment requests to
15
              rectify identified problems and/or inconsistencies in our
              technical specifications. We have to date received approval
16
17
              on 24 of the 26 submitted license amendment requests.
18
                                    CHAIRMAN JACKSON: What are the two that are
              outstanding. Mr. Brothers; do you know?
19
20
                                    MR. BROTHERS: One associated with inadvertent SI
21
              which is tied to a modification we have left to do and the
              next one associated with pressurizer level.
2.2
23
                                     CHAIRMAN JACKSON: And so you're waiting for the
24
              approval of those from the NRC?
                                     MR. BROTHERS: Correct. We've gotten some RAIs
2.5
              back and forth. We are on track for the 21st on inadvertent
             SI and the 25th for pressurizer level at this time.
 2
                                  Finally, we have essentially completed our
              procedure upgrade program commonly called "PUP" along with
 4
 5
              approximately 500 additional procedure changes as a result
              of our configuration management program.
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7 Next slide please? 8 In addition to the restoration of our design and 9 license basis we have accomplished several major material 10 upgrades in the unit. This slide details some of the more significant upgrades that we have accomplished. I want to 11 12 discuss in some detail the enhancements that we have made to 13 14 These enhancements include ergonomically designed 15 operator stations for control operators, unit supervisors, 16 and shift managers. Separation of the work control portion 17 of the control room from the at-the-controls portion in 18 addition of a shift-manager's conference room. The 19 aggregate impact of the control room modifications results in a net reduction in distractions to our operators while 20 increasing the professionalism and improving the work 21 22 environment of our operations department personnel. 23 This slide gives an overview of the modifications complete during this shutdown. Of the 224 modifications, 24 25 182 involve physical work and the remaining 42 were 1 administrative in nature. I'll characterize those a little 2 more for you. 3 Out of the 182 that involve physical work 79 were as a direct result of the configuration management program. 4 5 Of the 42 mods which were administrative in nature, 17 were 6 as a direct result of the configuration management program. This slide also shows some of the more significant modifications accomplished as a result of our configuration 8 9 management program and modifications which we performed for 10 other reasons such as plant reliability or long-term costs 11 savings. We discussed the CMP-based modifications 12 extensively with the NRC staff and I would like to point out 13 that most of Unit 3 is in the non-CMP area, the first nuclear unit in the United States to accomplish what's on 14 15 the slide here as generator stader cooling, but that's a 16 global stader cooling, epoxy injection repair to our main 17 generator. 18 In addition, we have replaced all four of our 19 reactor coolant pumps with upgraded 93-A-1 pumps. This 20 upgrade is a result of a joint design effort between 21 Westinghouse and Northeast Utilities to redesign the reactor 22 coolant pump main flange, the number one seal housing and 23 the number one seal housing closure system. We're quite 24 proud of this redesign and we believe we probably have the 25 best reactor coolant pumps in the world. 1 In recognition of our extensive role in solving the RCP locking bolt problem for the industry we would 2 retain a proprietary portion of the redesign of the RCP main flange that will be used to solve this problem throughout the industry. 5 6 This slide demonstrates why our deferrable items are acceptable for unit restart. As it says, each item is reviewed individually by either out plant operating review 8 committee, our corrective action department, our management 10 review team, or our expert panel prior to being classified 11 as deferrable. In addition to the individual review an 12

committee, our corrective action department, our management review team, or our expert panel prior to being classified as deferrable. In addition to the individual review an aggregate review has been performed by our probabilistic risk assessment or commonly referred to as PRA group. This review used four criteria to review items which affect maintenance rule, risk or safety significant systems.

Just briefly going through those criteria, the first criteria is, does the item have an impact on the

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14 15

16 17

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system structure, or component's ability to perform its
      intended safety function?
19
20
               Does the item have an effect on the probability of
21
      the plant transient? Does the item degrade the operator's
      ability to mitigate an accident? And finally, does the item
22
      impact the ability of the containment system's capability to
23
24
      mitigate the consequences of an accident. If any of the
      four criteria were met, the item was reclassified as
25
      non-deferrable. None of these criteria were met in the
 1
 2
      review of the deferrable items list, however, ten items were
      conservatively reclassified as required for restart. This
      was based upon injuring judgment and a collaborative
 4
 5
      agreement between PRA and the line management.
               Nuclear oversight has assessed the overall list
 7
      and the numbers and scope are consistent with industry
 8
      standards. I want to emphasize, and the next several slides
      will show that we will continue to work off deferrable items
      up to restart and post-restart for our deferrable items
10
11
      management plan which was docketed on March 31st, 1998.
12
               Okay. This is where it's going to be a challenge.
      The next three slides are an attempt to give you numbers and
13
      at a high level describe our entire deferrable items. This
14
15
      slide is more correctly referred to as open deferrable
      items, not necessarily deferrable, and I'm going to describe
16
      that in some detail. I have backup slides if we need
17
18
      additional information with regard to age.
19
               This is the same format on this slide which I
20
      presented on February 19th. Since we are initiating
21
      condition reports at a rate of greater than 20 per day, and
22
      each condition report generates approximately 2.5 action
23
      request, the pre-restart corrective action assignments or
      the first bullet which are deferrable and open, is expected
24
2.5
      to continue to rise.
 1
               The next two slides will provide additional
 2
      detail, but to make a point here, the 3,687 open corrective
      actions assignments are out of a total population of 10,013
      deferrable corrective action assignments.
 4
 5
               And the 888 open configuration management items is
      out of a total population of 1,350 deferrable configuration
      management items. I hope I'll be able to make this more
      clear on the next two slides.
               CHAIRMAN JACKSON: Can I ask you a question? This
      is a random page from your submittal, so it's not totally,
10
11
      so it's not something you've necessarily seen, but it's more
12
      a generic set of questions.
              There's one related to seismic monitor replacement
13
      parts not compatible. You talked about developing a BOM,
14
15
      this is just informational, what is a "BOM" for seismic
      monitoring?
16
17
              MR. BROTHERS: A BOM is a bill of materials.
18
               CHAIRMAN JACKSON: Okay.
               MR. BROTHERS: And so it goes down to the
19
20
      component level for components.
21
               CHAIRMAN JACKSON: And I noted that this letter
2.2
      had 52 pages of items removed from the list. Does that mean
      that these were already addressed?
23
24
              MR. BROTHERS: Either addressed or reclassified as
      not going to be done at all. Part of what we need to do,
2.5
      and I talked to Commissioner Diaz when he was on site, is go
 1
 2
      through the list and begin saying, no, versus not now.
               CHAIRMAN JACKSON: Right.
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list is because we said "not now" versus "no" and so we're 5 starting to do that --6 CHAIRMAN JACKSON: So you're going to do a more refined look? 8 9 MR. BROTHERS: Correct. And what I'll talk to in 10 the commitments is two weeks after Mode 2 we're committed to give you the final list of deferrable pre-restart items. In 11 12 addition, we'll provide you quarterly updates on where we 13 14 The next four categories on this site all have 15 specific goals delineated in operational readiness plan. 16 Corrective maintenance has two goals, less than or equal to 500 power block corrective maintenance requests and less 17 than or equal to 350 maintenance rule corrective maintenance 18 requests. The 350 is a subset of the 500 goal. This is 19 expected to be at goal prior to Mode 2. 20 21 Operator work arounds are presently at 16 vise our 22 goal of ten. This slide shows control room deficiencies at 21, as of this morning it is at nine, vise our goal of ten. 23 24 And temporary mods are at goal 15, we expect to have it at 13 prior to restart. All of the above are expected to be at 25 goal prior to entering Mode 2. 1 2 The engineering backlog is made up of 3 enhancements, on-line work and refueling outage work. It has been reviewed separately by our PRA group. 5 Next slide? 6 The next two slides are intended to further characterize our deferrable items. The message here is that we have completed all of the items required for restarting 8 and a substantial majority of the items which were in fact 9 10 deferrable. 11 This slide indicates the total population of 12 restart assignments. The first bullet, 12,000 is what's 13 called the significant items required for restart list. Of the 22,000 total assignments, 12,000, or the first bullet, 14 are required to be completed and will be for restart. The 15 first bullet is not part of our deferrable items list. 16 17 The next bullet, the remaining approximately 18 10,000 deferrable items which we have currently completed 19 more than 6,000 of these assignments and we'll continue the complete these as we move towards restart. The 10,013 minus 20 21 6,326 is a 3,687 number reported as the total open 22 deferrable items on the previous slide. 2.3 There are approximately 270 maintenance work orders scheduled to be completed prior to Mode 2. This 24 25 should be contrasted with greater than 40,000 maintenance work orders completed since our shutdown on March 30th, 1996. 2 3 This slide is a subset of the previous slide. The first two bullets show the status of items which came directly from NU's configuration management program. The 5 first bullet shows that we have essentially completed all of the items which are required for restart as a result of our 8 configuration management program. This 2,283 is a subset of 9 the 12,039 on the previous slide and it's not part of our 10 deferrable items list. The second bullet shows that we begin working off deferrable items which came out of our 11 12 configuration management program as well. 13 The difference between 1,350 and 462 is 888. And 14 that's the number reported on the deferrable item summary

MR. BROTHERS: Much of why we've got such a big

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slide as open, deferrable configuration management items.
               The third and fourth bullets shows our status of
16
17
      our response to the independent corrective action
      verification project. The third bullet shows our progress
18
      in completing the 219 assignments which will be complete
19
      prior to entering Mode 2. This item is not part of our
20
21
      deferrable items list.
22
               And the fourth bullet also illustrates that we are
23
      aggressively working off deferrable items in this category
24
      as well.
25
               Once again, I believe that these three slides show
 1
      that we have essentially completed all of the significant
 2
      items required for restart. We have also completed a
      substantial majority of those items which are in fact
      deferrable.
 4
 5
               Recognizing the past performance of Millstone with
      regard to improvement plans, we've docketed our commitments
      via our deferrable items management plan which will be in
      place post-restart. These two slides summarize the
      commitments which will be in place post-restart, and let me
      just quickly go through them.
10
11
               Will provide a baseline of open deferrable items
12
      within two weeks of restart. We will disposition all ICAVP
      or independent corrective action verification project DRs
13
      prior to restart from RFO-6. We will submit quarterly FSAR
14
15
      updates vise the requirement of annual. We will also
      provide quarterly submission of our performance against key
16
17
      issues and deferrable item work down, and those dates have
18
      been documented as of the March 31st submittal.
19
               The next slide details the submissions of the next
20
      two fueling outage license amendment requirements in outage
21
      plants.
2.2
               In addition, we will submit a post-outage
      assessment of our next two refueling outages.
23
               Included in the post-outage assessment of our next
24
2.5
      refueling outage, which is our sixth refueling outage,
      scheduled right now for in the probably April time frame of
 1
 2
      1999, will be a submission of our final deferrable items
      management report.
               COMMISSIONER DIAZ: Excuse me. What is the total
 4
 5
      scope of your backlog management plan? Does it include
      training? What areas are included in it?
               MR. BROTHERS: Included in there are action
 8
      requests coming from CRs, NCRs, which is a nonconformance
      report, DRs that are held over from ICAVP, everything that's
      in the corrective action program is in fact included in the
10
11
      deferrable items plan.
12
               If a training item one way or another gets into
13
      the corrective action program, it will go into the
14
      deferrable plan.
15
               Now there's a pre-restart item portion and a
      post-restart portion of the deferrable items management
16
17
      plan. But the only reason a training item would get in
      there is if it in fact had a corrective action component.
18
19
               Shifting gears now to training. This slide
      summarizes the training that we have accomplished during
20
21
     this shutdown. As of today, we have sent approximately 97
      percent of all first line supervisors and above to our Forum
2.2
23
      for Leadership Excellence. The Forum for Leadership
      Excellence is a two-week program which pulls together the
24
25
      personal aspects of Covey Seven Habits Training and team
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5 CHAIRMAN JACKSON: Let me ask you a question, Mr. 6 Brothers. How do you know the training has worked? What do you look for? 8 MR. BROTHERS: In the case of the Forum for 9 Leadership Excellence, one of the keys is keeping it going, 10 and we had follow-up groups and projects that each of the 11 classes had to in fact accomplish and develop follow-up 12 plans for. That went very well until about the November 13 time frame, and we more or less de-emphasized it for November, December, January. We are starting to 14 re-emphasize that now because we recognize the key to this 15 is in fact keeping it going and inculcating the entire group 16 17 into this way of doing business. CHAIRMAN JACKSON: I guess really what I am asking 18 19 is do you have a metrics built into performance appraisal that relate to what you expect people to gain from this 20 21 training, that you then actually assess them against, as 22 part of their -- you know, in terms of how they carry out 23 their jobs as part of their performance appraisals. MR. BROTHERS: In our performance monitoring plan, 24 25 we have included in what we call a link system components that are primarily with regard to the safety-conscious work environment. There are leadership aspects as well, and they 2 3 are specifically assessed for each individual, both supervisory and non-supervisory. MR. MORRIS: And the leadership assessment is 5 6 clearly another key input. CHAIRMAN JACKSON: Okay. And that's linked to the actual training? 8 9 MR. MORRIS: Yes, exactly. 10 CHAIRMAN JACKSON: Okay. MR. BROTHERS: Okav. As I said, the configuration 11 management training has been accomplished for 100 percent of 12 13 our employees and long-term contractors. More extensive 14 training in this area has been accomplished for areas such 15 as design engineering and tech support engineering. This 16 training is a central part of our 50.54 Foxtrot question 4 17 response to ensure that our design basis and licensing basis 18 is maintained on a going-forward basis. Enhanced 50.59 or safety evaluation training has 19 2.0 been completed for personnel performing safety evaluations 21 or safety evaluation screens. This, along with a continuing effective presence of our nuclear safety assessment board, 22 2.3 safety evaluation subcommittee, has significantly raised our performance in the area of safety evaluations and safety 24 evaluation screens. 25 1 Finally, extensive operator training has been accomplished in our operations department. This training 2 3 includes training in all modifications which affect the way 4 the operators operate the plant. A trio of reactivity management conservative decision-making and start-up power 5 6 and ascension training has been completed for all licensed and non-licensed operations personnel. All of this training is in addition to the 9 safety-conscious work environment training previously 10 discussed by Dave Amerine. 11 This slide shows our organization's readiness

skills into a leadership improvement program.

3

Configuration management training has been

accomplished for 100 percent of our employees and long-term

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12
      assessment as of 4/21/98. This methodology complements the
      nuclear oversight restart verification plan by assessing
13
      departmental readiness, whereas the nuclear oversight
14
      restart verification plan assesses issue or programmatic
15
      readiness
16
               The easiest way to make this distinction is on
17
18
      this slide, when you look at some corrective action,
19
      corrective action on this slide is assessing the
20
      effectiveness of our corrective action department. In the
21
      nuclear oversight restart verification plan, they are
22
      assessing the effectiveness of the corrective action process
      across the station. So there's a complementary aspect to
23
24
      this to the NORVP.
2.5
               With the above explanation in mind, let me discuss
 1
      the one department which assesses as not yet at goal but
 2
      tracking to satisfactory for Millstone Unit 3.
               Work planning and outage management has assessed
      its tracking to satisfactory based upon schedule adherence
 4
      not yet being at our operational goal, and we have two: 75
      percent of our scheduled activities starting on time, and
 6
      the second one, 70 percent of scheduled activities completed
 7
 8
      on time.
               Our current percentages are 43 and 37 percent,
      respectively. This week is the second week in which we have
10
11
      transitioned into our on-line or 12-week rolling schedule,
12
      and we are expected to be at goal prior to entering Mode 2.
      We expect all departments to remain at goal, and we are
13
14
      planning to be at goal prior to entering into Mode 2.
15
              CHAIRMAN JACKSON: Have you gotten to the nub of,
16
      you know, what's inhibiting you in that area in terms of
17
      starting on time and completing on time?
               MR. BROTHERS: Yes, we have. The nub, as you
18
19
      referred to it, is the operations department work release
      process is making a decision at the shift level not to
20
      release work that was planned, and we sent the respective
21
2.2
      managers off site two days ago to address exactly that, and
      what we are doing to address that is pulling one of our most
23
      experienced shift managers off shift to work with work
24
25
      planning to augment that planning aspect.
 1
               We already had three SROs in work planning, and we
      are now augmenting that with a shift manager who is aware of
      what the problems the shift is seeing in releasing work.
               CHAIRMAN JACKSON: Okay. As you have heated up,
 4
 5
      had you had any chemistry clean-up problems?
               MR. BROTHERS: Chemistry clean-up? Not yet. We
      have had some issues with regard to our increased
      conformance to DEP regulations, and -- but it's not
 8
      chemistry clean-up. The condensate system has been on long
      recycle for some time. It's now feeding forward. We don't
10
11
      have a chemistry problem at this time. We do have ETA
12
      injection on the secondary side which is ethanol amine,
      which is -- cuts out the iron transport, so we don't expect
13
14
      a problem.
15
               Final slide, please.
16
               In summary, Unit 3 will be ready to resume safe
      operation by the end of May. As I stated earlier, this is
17
18
      based upon the design and licensing basis being
      substantially restored. Our material condition is very
19
20
      good, and all required modifications will be completed prior
21
      to entering Mode 2.
22
               Our deferrable items have been reviewed for
      individual and risk-based aggregate impact, and are
23
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consistent with industry standards.
               Finally, the overall organization is adequately
25
      staffed and qualified to support Unit 3's return to power
2
      operation.
 3
               This concludes my presentation. If there are no
      further questions, I will turn it over to Marty Bowling to
5
      discuss management oversight and controls.
 6
               CHAIRMAN JACKSON: Any questions? Please.
               MR. BOWLING: Good morning.
               CHAIRMAN JACKSON: Good morning.
8
9
               MR. BOWLING: If I could have the first slide,
10
     please.
               Today I would like to discuss with you an area
11
      that has been very important to our recovery effort,
12
      critical self-assessment. I can tell you that the entire
13
14
     Millstone work force team recognizes that critical
     self-assessment is the key to improved performance and
15
     preventing complacency, and that is why self-assessment has
16
     been designated as one of the 16 key issues.
17
18
               The key elements of effective self-assessment
      which have been accomplished at Millstone are shown on this
19
20
      slide and encompass promoting a questioning attitude, which
     is also fundamental to our achieving a safety-conscious work
21
22
      environment; lowering the threshold in identifying issues in
2.3
      order to find problems earlier, before they become more
24
      significant; and setting and raising standards to compare
25
      our performance to the highest standards, and once that
1
      level is achieved, to raise the bar.
2
               Chairman Jackson, going back to your earlier
3
      question, I think is a good example of the raising the bar
4
      with respect to corrective action, and as Unit 3 goes into
      operation, the performance goals, 3 percent overdue,
5
      completion of corrective action in 120 days, and how that
 6
      will be impacted with the still ongoing recovery of Unit 2,
      which has the similar corrective action success goals.
8
               What we are going to do, we are going to raise
10
      that standard on Unit 3. The standard to -- for recovery
11
      and restart is not acceptable for us for going forward into
12
      operation. So as we go into operation, that standard will
13
     be lowered to 1 percent overdue, and 90 days for completion
     of corrective action. And the organization will be judged
14
15
      against that on our way to what is really acceptable, and
      that's nothing overdue.
16
17
              The Millstone self-assessment program that has
      been developed and implemented during this recovery is
18
      comprehensive. There are sitewide employee support and
19
20
      implementation of the program. Key characteristics of their
21
      program include formal annual plans; dedicated coordinators
22
     in each of the units; sitewide procedure to provide
23
      consistent direction and format; training of employees; and
24
      use of INPO and industry experts to set and raise standards;
      and frequent self-assessment of the program effectiveness.
25
1
               More detail on this key issue is provided in the
2
      issue book which was submitted to you on April 23rd.
3
               CHAIRMAN JACKSON: How big a change is this for
      the station?
               MR. BOWLING: The self-assessment program? Having
      the sitewide -- the program has evolved over the recovery
 6
      from not having a program, which was, of course, a key
      causal factor in the degraded declining performance, to
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```
individual units starting programs to evolving to a common
      program for the site that's embraced and where each
10
      department has its annual plan, and the activities of
11
12
      self-assessment.
13
               This next slide, I think, may go to the heart of
14
      your question. This slide shows the results obtained from
15
      440 workers, or approximately 15 percent of the on-site work
16
      force. The survey, incidentally, was sent to about 20
17
      percent, so -- or about 600, so a very good response, which
18
      was voluntary.
19
               The survey, which was taken in March, was directed
      at understanding worker support of and involvement in
20
      self-assessment. The results provide meaningful insight
21
2.2
      into whether Millstone has been successful in instilling a
23
      questioning attitude into its culture.
               The results from this survey are encouraging and
2.4
25
      correlate well with the results from the Little Harbor
 1
      structured interviews on self-assessment, and questioning
 2
               With respect to the specifics, a very high
 3
      percentage of the work force has participated in at least
 4
 5
      one self-assessment, much greater than 91 percent, of which
      three -- 91 percent have participated in three or more
      assessments during the last six months, and I think that is
      the fundamental change, is that we have the whole work force
 9
      engaged in self-assessment.
1.0
               94 percent see useful results being attained from
11
      self-assessment, which correlates well with the 92 percent
12
      obtained in the latest Little Harbor interviews. 83 percent
13
      indicated that they are being made aware of self-assessment
14
      results.
15
               Now this is a lower percentage than recorded by
16
      Little Harbor, and an area we are now focusing on.
               And finally, 94 percent had confidence that
17
      corrective actions would be taken.
18
19
               Millstone has also continued to lower the
      threshold in identifying problems. The number of condition
20
21
      reports written to identify a potential nonconforming
22
      condition has increased remarkably during this recovery.
23
      This is a direct result of the questioning attitude that
24
      characterizes our work force at Millstone.
25
               Millstone is also systematically looking for
 1
      issues before they become more significant by conducting a
 2
      wide range of formal self-assessments that encompass all of
      our organizational functions and programs. These formal
      self-assessments are in addition to the ongoing plant
 4
      walkdowns and training observations expected from good
 5
 6
      management practices.
 7
               For the self-assessments completed to date in
      1998, a strong focus has been placed on assessing the
 8
      adequacy of corrective actions, safety evaluations, and
      configuration management controls.
10
               In addition, the self-assessment program itself is
11
12
      periodically assessed against the performance objective
      criteria contained in INPO 97-002.
13
               For Millstone Unit 3, the remaining 1998
14
15
      self-assessment program will focus on sustaining performance
16
      post-restart for both the key site issues and the Unit 3
17
      operational organization.
18
               CHAIRMAN JACKSON: Are these self-assessments done
19
      by one or two-person teams, or how are they done?
               {\tt MR.} BOWLING: Within the departments, generally
```

```
it's a two to three, a small team. Some of the programmatic
     issues are three or larger team.
22
23
               CHAIRMAN JACKSON: I see.
               MR. BOWLING: We'll be periodically providing the
24
25
     NRC the results of these performance assessments, including
1
      key operational performance indicators as part of the Unit 3
2
     sustaining performance plan.
3
               At this point I want to make clear that we are not
4
      perfect. Results from our own assessments, external reviews
5
      and, in some cases, NRC inspections have identified areas
      that we missed, but we have learned from these experiences
      by expanding the scope of our current efforts and, in many
      cases, doing additional scope.
8
               Several recent examples for self-assessment has
     been taken and include review of all significant Unit 3
10
     modifications implemented during this outage to make sure
11
     the problems similar to those found on the RSS modifications
12
13
     are not present.
14
               These effort encompassed the review of 194 design
15
     packages that had been undertaken on Unit 3 over the last
      several years.
16
17
               In addition, all of the condition reports -- and
      there are thousands of them -- that pertain to engineering
18
19
     performance were screened to determine basic causal factors
2.0
      so that this self-assessment team would be focused as they
21
      went into these modification packages on what to look for.
     And then, in addition, we took all of the various
22
23
      modification packages, and there are a number of them, on
24
      the RSS system itself and did the independent
25
      self-assessment review.
                                                           95
1
               CHAIRMAN JACKSON: So all of these
2
     self-assessments were post-RSS situation?
3
               MR. BOWLING: Yes; right.
               CHAIRMAN JACKSON: Propagating into the lessons
      learned from them?
5
               MR. BOWLING: Right. In addition to the direct
      root cause on the RSS vibrational failure. This is a scope
8
     expansion part of it.
9
               Of course, we were interested in two things: What
10
      is the overall quality of the engineering that has been
      performed on Unit 3? And as you know, that's been done not
11
12
      only by our in-house staff, but by a number of architect and
13
      engineering and other specialty firms.
14
              Also we were interested in the effectiveness of
      our configuration management reviews which were to catch and
15
      to fix problems of this nature.
16
17
               And, finally, we wanted to understand if we were
      over-relying on our last barrier, the testing, to catch
18
     design problems. And the results of that, we did find one
19
20
      or two where that was evident, and -- but the vast majority
21
      of the design was deemed to be of acceptable quality.
              CHAIRMAN JACKSON: What is your judgment about
22
23
      engineering?
               MR. BOWLING: The -- my bottom line judgment is
24
     that our engineering quality has found and is capable of
25
     finding the significant issues and taking the corrective
      action to address those from a safety standpoint. But by
      the same token, this recovery outage has far and large
      impacted our technical resources. It's been a very, very
      technical outage versus a physical modification outage.
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Any time that we have the engineers at that level of work requirements leads to smaller problems, particularly in the attention to detail, calculational errors, and minor 9 administrative nonconformances. And so we see that in well above any standard that we have. So it's attention to 1.0 11 detail needs, needs attention. 12 A second example of compliance -- a second example 13 are review of compliance to the administrative or Section 6 14 of the technical specifications. After several findings were identified by the NRC, our review has been 100 percent. 15 16 The third example is additional review of the FSAR accuracy from the perspective of the interface between the 17 18 NSSS and the architect-engineer design scopes, based on the 19 ICAVP contractor-identified discrepancy reports. 20 There are many other examples, but you should have 21 confidence that Millstone now has the culture that wants to 22 learn from its mistakes. 23 A key assessment tool that is being used is the 24 unit windows. We have shown you this window at several of 25 our previous meetings, and Mike Brothers just also talked about it, because it rolls up our overall unit 1 2 organizational readiness for restart. You should know that a comprehensive set of criteria and evaluation have fed into this roll-up. This 4 approach will be transitioned to an organization that is 5 6 operating. The power of this tool is that it allows 7 management to set and communicate the standards. The way I look at this is that all green windows 8 9 mean that the organization has met excellence as defined by its management. In order not to have complacency set it, 1.0 11 management must continually tighten or raise the acceptance 12 criteria for each window, and that's exactly what we are 13 going to do. In doing so, management provides a systematic approach and a powerful communication tool for raising 14 15 standards. The next time you see this window, it's going to 16 be yellow and some red. 17 I have talked up to this point on the self-assessment program. The next several slides show the 18 19 effectiveness of the program. 20 The first critical success criteria is shown on 21 this slide and demonstrates that a high percentage of the 22 potentially nonconforming conditions are being identified by 23 the Millstone work force. This is an especially important 24 conclusion, given the unprecedented amount of the NRC and 25 independent third-party inspection being performed at 1 Millstone. 2 With the questioning attitude and high standards 3 now being exhibited at Millstone, you should have high confidence that Millstone can find its own problems. Even 4 5 more important is the fact that Millstone is finding those issues that are most important to nuclear safety. 6 The Millstone Unit 3 reviews conducted to restore conformance to the design and licensing basis have been extensive. The third party ICAVP and NRC inspections have 10 provided additional assurance that all important safety issues have been identified and are being corrected. 11 12 The next slide shows our self-assessment of corrective action effectiveness. It just goes without 13 saying that in order to have an effective self-assessment 14 15 program, you must have an effective corrective action 16 program as well. Our current assessment indicates that we

still have not met our current standards for backlogs and

```
18
      organizational readiness, although considerable progress has
19
     been made. Post-restart, the criteria for each of these
20
      areas will be refocused and heightened as we raise the
21
22
               Although I will talk in more detail about
23
      corrective actions at our next meeting, I wanted to show you
24
      where we now stand on fixing items that have been
      identified. As you know, significant items identify
25
1
     Millstone, NRC or third party independent contractors that
2
      affect safety, licensing basis, design basis, conformance or
      compliance with NRC regulations, have or will be completed
 3
      prior to restart. But, in addition, a substantial amount of
 4
      other improvement items are being completed.
5
               To reinforce that point that Mike Brothers
     discussed, 63 percent of the assignments that could be
7
     deferred post-restart, in accordance with NRC criteria, are
8
9
     already completed.
10
               In addition to the formal self-assessment programs
      and the high questioning attitude of Millstone employees, we
11
      have also established a multi-management review process to
12
     both review performance and to raise standards. These
13
14
      processes are discussed in more detail in our March 31st
      response which was provided pursuant to 10 CFR 5054(f).
15
16
      Many of these processes were also evaluated by the NRC in
17
      the 40500 and OSTI inspections.
               I have categorized these management processes in
      three broad areas which are shown in this and the next
19
20
      slide. The most important review in standards raising in
21
     the safety standards area have been in the preparation of
22
      safety evaluations. This has been accomplished through the
23
      Plant Operating Review Committee and the Nuclear Safety
24
      Assessment Board raising of standards. The safety
      evaluation process, program and training have been enhanced.
25
      Safety evaluations performed when the organization was at
      lower standards have been re-reviewed and, if necessary,
2
      brought up to standard. And self-assessments, including an
      INPO assist visit, were conducted.
               As a result, the quality of safety evaluations has
5
 6
      significantly improved. For example, the Nuclear Safety
      Assessment Board has evaluated the quality of the safety
      evaluations it has reviewed over the past two years. In
8
      1997, 776 safety evaluations were reviewed, with only one
     rated unsatisfactory in the second quarter, that was in the
10
     second quarter of '97, and 26, or approximately 3 percent,
11
      rated as needing improvement. And when it needs improvement
12
      it is sent back to the Plant Operating Review Committee so
13
14
      that they know that they have approved something that didn't
15
      meet the higher level review standard. Through the first
     quarter of 1998, all safety evaluations have been rated
16
17
      satisfactory on Millstone Unit 3.
18
               To accomplish this performance, standards have
     been set and reinforced, especially by the Plant Operating
19
20
      Review Committee. For example, Unit 3 has tabled with
21
      comments about 10 percent of the safety evaluations that are
```

comments about 10 percent of the safety evaluations that are reviewed. As a result, and since most of these come out of the engineering organization, Unit 3 engineering has gone through a quarterly self-assessment of its safety evaluations and safety screens, performed by a supervisory

group.

1

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decrease of 41 percent of the documents receiving a weak
     grade in mid-1997 to only about 2 percent receiving a weak
4
      grade in March of '98.
6
               CHAIRMAN JACKSON: This Independent Safety
      Engineering Group is specific to Unit 3?
7
               MR. BOWLING: The ISEG is required by the Unit 3
9
      technical specific. It is located in the Nuclear Site
1.0
      Organization, so it has the capability to look broader
11
      across the site, but its regulatory requirement is for Unit
12
13
               The Unit 3 engineering group is also reviewing
      independently all of its safety evaluation screens. These
14
     are the screens that determine whether a detailed safety
15
16
      evaluation under 5059 is required. And each of these is
17
      independently reviewed prior to approval. Also, the
     responsible engineering supervisor is attending the Plant
18
19
     Operating Review Committees which are reviewing his group's
20
      prepared safety evaluation.
21
               At the Nuclear Safety Assessment Board level, five
22
      of the officers, including myself, Mike, Dave and John, who
23
     are here today, spend routinely one and a half days each
      month on safety reviews of both specific technical items and
24
25
      the functioning of programs important to ensuring nuclear
1
      safetv.
               Finally, we are now initiating an additional
2
3
     training of up to three days for all Millstone workers who
     perform safety evaluation screens or prepare safety
4
      evaluations. You can have a high confidence that if a
 5
      change will result -- there's an unresolved safety question,
      it will be identified, and that if a change is unsafe, it
      will not be made.
               In the area of program standards, the dedicated
10
      Independent Review Team Group has been used to look at a
      number of diverse areas that provide insight on management
11
      and organizational effectiveness. These reviews range from
12
13
      significant operating issues to critical program reviews of
      operator training, self-assessment, configuration management
14
      and the safety evaluation program.
15
16
               It is especially noteworthy that in the area of
17
      human performance standards we have strong and committed
18
      executive participation from the Executive Board which
19
      covers any actions that may not be consistent with the
20
      safety conscious work environment and the Executive Training
21
     Council, which provides oversight of changes to the training
22
23
               In addition, management has conducted stand downs
      and coaching to improve human performance in the areas of
24
25
     procedural compliance and personnel safety. With respect to
1
     human performance, the key performance indicators have been
2
     developed for this important area. Our goal here is that 95
      percent of the human performance events will be of low
     significant or precursor events, that is, they are caught
      either by self-checking or the first possible barrier in the
      process, as opposed to a near miss, which multiple barriers
 6
7
     have failed or an actual event.
               CHAIRMAN JACKSON: To what do you attribute the
     drop off between February and March?
9
               MR. BOWLING: On Unit 3 it shows we are not yet
10
      hitting our goal. We have had several operational events
11
      that were previously discussed this morning, and the level
12
13
     of activities that have increased that are new and different
     relative for the site since it has been in the recovery
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15
     period.
               CHAIRMAN JACKSON: I mean do you think -- but I am
16
17
      talking about in this specific period. Do you see that as
18
      related to the push to restart?
               MR. BOWLING: I don't see it as -- particularly
19
20
     the operational events, which we looked at very, very
21
     closely through structured interviews with all the people
      affected, and schedule driven was not a factor. However,
2.2
23
      level of activity is definitely.
24
               Now, in order to address this issue, we plan to
      accomplish this by shifting the focus of our organization
2.5
1
      from recovery to operations. In addition to management
     focus on operations, we will also be addressing attention to
2
      detail issues in order to raise standards. This will
      require setting a more realistic expectation and schedule
 4
5
      for engineering and taking the lessons learned from the
      ICAVP reviews to improve our critical calculations and other
      corrective actions from an attention to detail standpoint.
               My overall assessment, however, at this point is
8
9
      that Millstone human performance is acceptable for the
     conduct of safe operation but still requires substantial
10
11
      management focus to meet the high standards that we have
      set. Procedure adherence is achieving our goal but
12
13
      management focus is still being given, especially in the
14
      area of administrative program procedures.
15
               Finally, two new organizations have been
      established by management to self-assess and raise standards
16
17
     in the critical area of configuration control. Unit
18
     configuration management teams consisting of about 10
19
     personnel each have been implemented on Units 2 and 3.
20
     These groups monitor the change process in the unit to
21
      ensure conformance to design and licensing basis.
               The engineering assurance group self-assesses the
22
23
      implementation and effectiveness of the design control
24
     program which is a critical element of overall configuration
25
     management.
1
               CHAIRMAN JACKSON: Are these temporary or
2
      permanent organizations?
3
               MR. BOWLING: At this point we have no plans to
      change the organizations that we are working on to evolve to
4
5
      they are included in that organization.
6
               In summary, I believe that Millstone has
7
     demonstrated an effective management self-assessment
8
      program. The key elements for effectiveness, employee
      questioning attitude, a low threshold for
9
      self-identification, and a desire to learn from our
10
11
      mistakes, a comprehensive formal program, a multi-layered
      and tiered management oversight process, and a leadership
12
      team committed to raising standards are in place and
13
14
     functioning.
15
               You can have high confidence that the
     self-assessment is effective at Millstone and will support
16
17
      the conduct of safe operations.
18
               If there are no further questions?
               CHAIRMAN JACKSON: Commissioner Diaz?
19
20
               COMMISSIONER DIAZ: Yes, I have a comment and a
21
     question. First, I was reassured to hear from you that you
     don't believe you are perfect, I was beginning to be
22
23
      concerned
24
               But, second and more seriously, throughout this
25
      presentation and these previous one, we have seen a very
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robust recovery organization that has many layers and has
1
      many ways of, you know, cross-reference, cross-checking and,
 2
3
      of course, that has helped you put this work together.
              But how are you going to be sure that the
4
      functions are captured when you go to a more probably
 5
     effective, more efficient operations organization? Is that
 6
      something in your plan that --
               MR. BOWLING: Well, I think that has really
9
      incumbent on the leadership team. I think you heard Bruce
1.0
      Kenyon say the balance in the organization is critical.
11
               My entire background is an advocate of the
12
     multi-layer, multi-tiered safety nets. I come from that
13
     background and I am factoring that into the new
14
      organization.
               COMMISSIONER DIAZ: Mr. Kenvon.
15
16
               MR. KENYON: Well, we will take each step
17
      carefully. As I indicated in my remarks, I also am a strong
     believer in checks and balances. So we are not going to do
18
19
      anything to take away the checks and balances. We could
20
      take an organization that functions on Unit X and an
      organization on Unit Y and put it together for greater
21
22
      efficiency, but we will not take away the checks and
23
              CHAIRMAN JACKSON: Mr. Brothers, do you have any
24
25
      comments?
               MR. BROTHERS: Yes. I would agree with that, and
1
2
      add one additional thing that is very high on my list, and
      that is the use of performance indicators. We, the
3
 4
      organization, when we started in the recovery, viewed
      performance indicators as a report card versus a management
      tool, and they are learning now that it both a report card
6
7
      and a management tool, and I believe that that will be
      fundamental in keeping those robust going forward.
              We have 70 performance indicators that we review
      on a weekly basis. Most of those will transition directly
10
      into an operating status and that will prevent it as well.
11
               CHAIRMAN JACKSON: So, again, it comes down to
12
13
     programs and organization, oversight, including management
14
      committee, and the use of performance indicators to stay on
15
     top of things.
16
               MR. MORRIS: And a cultural shift in how you
17
      believe in that.
18
               CHAIRMAN JACKSON: Okay. We are going to hear
19
      from Mr. Streeter.
20
              MR. STREETER: Thank you. At the December 1997
     briefing of the Commission, we expressed our view at that
21
22
     time that nuclear oversight was ready to support restart.
23
     The information that I am going to present to you today,
     part of which we have already discussed, will indicate to
2.4
25
     you the basis, my basis for being here today to confidently,
1
      and without reservation, reaffirm that we are ready to
2
               In addition to that, I will share with you efforts
 3
 4
      that we have underway that will assess the readiness of the
     other organizations at Millstone to support a safe restart
     and future safe operations.
6
               The nuclear oversight function today is -- it is
      remarkably different than it was two years ago. I don't
8
     know how to say it other than that. And that --
9
10
               CHAIRMAN JACKSON: Did it exist two years ago?
               MR. STREETER: Pardon me?
11
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CHAIRMAN JACKSON: Did it exist two years ago? MR. STREETER: Yes, it did. I can't tell you that 13 14 it existed -- I don't know if it had that precise title, but, yes, it did exist. I guess that's the point that I am 15 trying to make. 16 17 A couple of years ago, as has been referred to 18 before, the oversight function was tolerated as a regulatory burden, viewed as having little value. Conversely, today we 19 20 see we enjoy the support of management. We have a robust 21 organization that is increasingly being valued and appreciated by the line. 2.2 23 I am going to say a lot today about the 24 receptiveness of the line to the oversight function and the oversight function becoming an integral part of the team. 25 1 But let me assure everyone here, we understand our role. We 2 understand our role of objectively challenging activities that are going on, and to evaluate them against high standards. And I don't want there to be no mistake about that. No one in my organization misunderstands that. 5 6 However, you can do that professionally and 7 without doing it in an acrimonious manner and a 8 controversial approach. So you can work within a team environment and yet maintain the objectivity necessary to 9 10 carry out our regulatory responsibilities, and we are doing 11 that. 12 The new leadership team at the table here today 13 has emphasized its expectations to all members of the line 14 organization of the importance it attached to the nuclear 15 oversight function and its expectation that it will become 16 an integral and important part of the project. 17 Going yet beyond that, management has taken the 18 step to empower Nuclear Oversight to set standards above the minimum requirements. Faced with this new support of 19 20 management and this challenge to establish and assure 21 adherence to increasingly higher standards, the Nuclear Oversight Organization is reinvigorated with this sense of 22 23 value and they are responding. They are responding through 24 the calibre of their performance and, through that, they are commanding the respect and the acceptance of the 25 110 1 organization. 2 The measures we have taken to improve the 3 acceptance and performance of Oversight have clearly increased the standards of the work activities in making a 4 5 contribution to Millstone, the recovery, that I will go through in a little bit. But I also want to state one thing right up front, 8 don't view my positive remarks and my confidence in the Nuclear Oversight Organization to Support Restart to be overconfidence that might build in complacency and think we 10 11 are perfect. We aren't. We have got a long ways to go. We 12 are what we consider to be an elite level of performance, 13 but we are going to get there, and we will work toward that 14 end. But we have a lot of self-assessments, continuing 15 self-assessments and have to continue to foster a continuous 16 improvement attitude among our staff. And that not only 17 holds true with the Nuclear Oversight, but you have heard 18 similar comments from the other organizations as well. In recovering the capability of the Nuclear 19 20 Oversight Organization, that was really governed by two key 21 objectives. One is to reestablish the capability of the organization itself. And then the second one is to apply 22

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that capability to an assessment of the organizations to
      give them critical assessments so that they can take the
24
      necessary corrective action to increase their level of
25
1
      performance and assure that we were ready for return to
 2
 3
               The first effort was accomplished by a formal,
 4
      what we call, entitled, the Nuclear Oversight Recovery Plan.
      The second was accomplished by what you might say, a subset
      of that, which was Nuclear Oversight Restart Verification
 6
 7
      Plan, where we assess the performance of other
      organizations.
               The Nuclear Oversight Recovery Plan was developed
10
      by reviewing the results, comments of Oversight's
11
      performance, it was contained in a variety of documents,
      including NRC inspection reports. NU observations and other
12
13
      external assessments relating to the criticisms or
14
      opportunities that Oversight had to improve its performance.
15
               What we did was, in addressing those, those issues
16
      in a formal program, we built upon the experience that other
17
      sites who have gone through similar recoveries. We built
      upon their experience in coming up with a formal recovery
18
19
      plan to delineate each one of those shortcomings and coming
20
      up with actions to remedy them.
               Through that Nuclear Oversight Recovery Plan, it
21
22
      has resulted in the transformation of the organization.
23
      That transformation, as I alluded to before, it has been
24
      manifested in improved performance and, actually, in the
25
      field demonstration of the capability of the organization.
 1
      Through the completion of this Nuclear Oversight Recovery
      Plan and the demonstration of the capability in the field,
      this enabled the Nuclear Safety Assessment Board, as has
 3
 4
      been mentioned before, to say that the Nuclear Oversight is
      prepared and capable of performing its regulatory functions.
               The Nuclear Oversight Recovery Plan, it was
 6
      initiated in 1996. It was detailed and it included almost
      200 action items, 179, and it had several important
      elements, one of which was to assure that management
 9
10
      expectations at the highest level were expressed on the
11
      value and importance of oversight in the organization. We
12
     defined the roles and responsibilities of folks within the
13
      Nuclear Oversight, so there is no misunderstanding on their
14
      part about what their responsibilities were. We increased
15
      the staffing and changed the staffing to make it a more
16
      effective organization. We have improved our processes and
17
     procedures to assure alignment with past commitments that we
     have made from Nuclear Oversight, and we have instilled some
18
19
      measurement and feedback tools to assure us that we are on
20
      the right track.
21
               I would like to mention that this recovery plan.
22
      when it was formulated, included the involvement of my
23
      fellow Millstone officers. They come from a variety of
2.4
      backgrounds, with some plants that had very respectable
      performance, and we used that information, because they had
25
 1
      views on what an effective Oversight Organization, how it
      functioned. We used that to build into the plan their ideas
 2
      on how we could make nuclear oversight better.
 3
               Through all that, we ended up closing the Nuclear
      Oversight Recovery Plan in 1997, December 1997. Now, what
      that means is, and I'll get into this in a minute, the
 6
      Nuclear Oversight Recovery Plan initially had several
      provisions for assessing performance. We took those
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provisions, incorporated them into the separate Nuclear
     Oversight Restart Verification Program, and we also have,
10
11
      through the assessments we conducted, the needs for
12
      training, have some follow-on activities that we will
     capture in our tracking system to assure they are completed.
13
14
     Such as assuring that our surveillance personnel are also
15
      qualified for auditors and vice versa, so it increases the
     flexibility and the value of our organization.
16
17
               Speaking to the transformation of the nuclear
18
     oversight organization as a result of this plan, there are
19
      some very, very significant things I would draw your
20
      attention to.
21
              One is we have about doubled our staff in this
      period. Now this isn't just because we also added people to
22
      the functions that existed at that time such as in the audit
23
      and surveillance area. But we also added some functions
24
     such as the Independent Safety Evaluation Group that Marty
25
1
     mentioned before, and in a few other activities like that.
     Through this staff enhancement -- now this is what I
2
      consider to be a vital component of any effective
      organization, and I'm very proud to say that about
 4
5
      two-thirds of those individuals have four-year technical
     degrees. Now this is not taking credit for -- not double
      counting, taking credit for bachelor's degree and advanced
 8
      degrees, it's not taking credit for the two-year technical
      degrees, but I can say that two-thirds of that organization
     have this kind of background.
10
11
               Now the reason that's so important is to have
12
     credibility and to have acceptance for people that you're
13
     overseeing. They have to have an appreciation that you know
      what you're talking about. So this is the reason that this
14
15
      is vitally important, and through my experience I know of no
      other nuclear oversight organization or comparable
16
17
      organization that approaches this type of credentials in
18
      their -- from an academic standpoint.
              Now 13 or about 10 to 15 percent are professional
19
20
      engineers. Now here's another thing that I view as -- I'm
21
      very proud of and I think is extremely significant for the
22
      success of Millstone. About a third of these folks have
23
      either been licensed as senior reactor operators or
24
     operators, not only the Millstone, but we get a variety of
25
     backgrounds from other plants in the country, or they have
1
     been -- have gone through a certification process.
2
               Now my experience is that I was happy in an
      organization like this if I could somehow work up to ten
      percent. Here we're at almost a third of our total staff.
      This is vitally important to us now, especially now, as we
      are going into a situation where we are restoring Unit 3 to
      operations that we have folks who are capable to assess the
8
      quality of operations that have been there, done that, so to
      speak and know the right standards performance. As a matter
      of fact, right now we have 24-hour coverage on Unit 3 as it
10
11
      is proceeding on up the ladder by many of these same people
12
      that have these operating experience backgrounds.
13
              Now in addition to that, in addition to those
14
     credentials, we have increased the overall industry
15
      experience level of those folks, and I would say on the
     average of the total organization excluding administrative
16
17
      staff we're probably in the vicinity of 20 years' experience
18
      of these folks.
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Now this experience background is from -- it comes

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from a variety of sources. Again I'll say not only on
     Millstone, because we made a very, very obvious attempt to
21
      gather experience not be tunnel-visioned just in looking --
22
23
      using Millstone experience, but going outside and getting
     ideas and better ways of doing business so we have it from
24
     other plants, we have it from INPO, and we have it from the
25
1
     NRC. So we've got a lot of varied perspectives on how to do
      business, and they're helping us.
               CHAIRMAN JACKSON: Yes.
 3
4
               COMMISSIONER McGAFFIGAN: One of the groups this
      afternoon is going to -- the Citizens Regulatory Council --
     has a bullet labeled personnel turnover rates. As you built
6
     up, have you also had a high turnover, or can you -- do you
8
      know what that would be referring to?
9
              MR. STREETER: I can guess, and if that's
10
      acceptable, I'll do that. We have over the past year had a
11
      what I'd consider to be a high turnover at the director
12
     level and at the top leadership level in the organization.
13
     And it's just not one or two, but we've had -- for a variety
14
     of reasons people have had in some cases four or five bosses
     in a year. I believe that is stabilized now and has been
15
      for, well, the last change we've had in that area was about
16
17
     a month ago when one of our directors was -- resigned and we
     replaced him.
18
              I can tell you, though, that I believe that right
19
20
     now that we have a very, very competent leadership group
21
      within nuclear oversight, and I believe that that turnover
22
     has stabilized
23
              MR. KENYON: If I could just add to that, I don't
24
      think the turnover rate has been excessive, but I do think
25
      that in general the turnover has been as part of our process
1
      to strengthen the organization. We have a much stronger
      organization today than we did two years ago, and part of
2
      that has been based on some people leaving and some others
3
4
      coming.
               COMMISSIONER DIAZ: If I may --
5
               CHAIRMAN JACKSON: Please.
6
7
               COMMISSIONER DIAZ: Make a comment. When I met
8
     with your Nuclear Oversight Group about a month ago I
     noticed that a few of them were obviously not happy with
9
10
      certain things, and the bottom line was that they didn't
11
      think that, you know, they really pay attention to some of
12
      the things, and I waited today to tell you that.
13
              I didn't find that disturbing. I found that if I
14
      could stay and actually be frustrated I will be an asset to
     the organization, and in relation to the turnover, I hope
15
16
      that that turnover has nothing to do that some of them are
17
      outright ornery in about their, you know, statements.
               MR. MORRIS: We see that as a healthy environment,
18
19
      and when you hear oversight and you hear the reports that
20
     we're telling you about the station, we are never going to
     have a 100-percent happy working environment. No one does.
21
     But people are free to speak their piece, and they're
22
23
     willing to speak their piece, and those are the signals that
2.4
      we're looking for, and we've done what we can, and always
      will do what we can, to listen and respond to those
1
      concerns. So we see that as a potential plus to the overall
     health of an organization.
2
               COMMISSIONER DIAZ: Okay. Thank you.
3
               COMMISSIONER DICUS: I have a question.
               CHAIRMAN JACKSON: Please.
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COMMISSIONER DICUS: This experience of your
     Nuclear Oversight Group, is it going to transfer to -- I
      understand you to say it's going to transfer into the
8
      operating Millstone. If that should occur, is it more
     likely to start eroding or go over to Unit 2?
10
11
               MR. STREETER: Clearly our priority is attention
12
     to the safe restart return to service of Unit 3. That is --
      the staff knows that and so the resources -- if there's
13
14
      competition for resources, that's where the resources will
15
     be applied. We have our -- are implementing a plan now to
16
      where we are -- we have assured that we've got the necessary
17
      support for Unit 3 for this 24-hour coverage and support
18
      while then dedicating other resources to the recovery
      efforts for Unit 2.
19
20
               We're sensitive to that, and I can assure you that
21
     the priorities are to get Unit 3 safe first and then the
22
     recovery of Unit 2. And we have no problem at this point
      that I see as having sufficient resources to accomplish both
23
24
     in a quality fashion.
               CHAIRMAN JACKSON: But once Unit 3 is restarted.
25
     you have sufficient resources and capabilities to continue
1
2
     the nuclear oversight of an operating Unit 3 as you focus on
     Unit 2. I think that's what she's trying to get to.
3
               COMMISSIONER DICUS: That's my question.
               MR. STREETER: Absolutely. And I can tell you
5
      that if it comes to the point in time there's any question
7
      in my mind that I don't have adequate resources, I will get
8
      them, because the management commitment is there.
               CHAIRMAN JACKSON: Great.
10
               MR. MORRIS: Yes, ma'am.
11
               MR. STREETER: Any other questions?
12
               I'd like to continue talking about the
     transformation of nuclear oversight and tell you that in the
13
      past nuclear oversight function is what some of us know as
14
15
     silo effect, even within the nuclear oversight organization,
      where auditors would do their audits, surveillors would do
16
      their surveillances, and inspectors would do their
17
     inspections, and people that did other functions would
18
19
      produce their reports, and there wasn't a great deal of what
20
     I'm calling integration.
21
               To build upon each other's experiences and to use
22
     the resources we've got to focus on the most important
23
      activities and to complement each other's efforts. We make
      great inroads in that area. The nuclear oversight restart
24
2.5
     verification plan is one example where we're pulling all of
      our resources and focusing on that effort. But there's been
1
2
      numerous other things where we have integrated our efforts.
      We've got a ways to go. We're continuing to improve in that
4
      area.
5
               Parallel to that is that a lot of times what we
      know as quality assurance organizations have a tendency to
     be an ivory tower, so to speak, and not being close to the
8
      action and doing what they think is right and doing what the
      programs and the tech specs may require but I have an audit,
10
      I have to do this, and being locked up in complete
11
      compliance that we lose sight of what I call the pulse of
12
     the project, and accomplishing the compliance orientation,
     but focus a resource to the important things that are
13
14
      necessary to support the safe operation of the plant.
15
               We have gone just a long ways in that regard, but
16
      again I'll tell you, we're getting better as we go and we'll
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get further. But we are doing more what we call
     performance-based approaches in our activities, and we're
18
      getting better as time goes along. We have improved the
19
20
      timeliness of our products through -- we have improved the
      scope of our activities. Now we've instituted a program
21
22
      when we do an audit we invite the line organizations to say
23
     hey, what do you think that would be items that you think
      are critical that need to be covered? And by using that
24
      information, then coming up with a more effective and
1
      valuable product.
               CHAIRMAN JACKSON: Give me an example of what you
2
3
      would call a performance-based assessment.
               MR. STREETER: When -- well, I guess it would
 4
     be -- let me contrast it with an audit. That's the easiest,
     clearest way to do it. An audit typically is to go out and
6
7
     you look at most of the time documentation, evidences of
      things that have transpired. They're generally things that
     have already happened and you're checking the adequacy of
9
10
      it. That's not always the case, but generally that's true.
11
               Performance-based activities are most of the time
      incorporated into special review teams, and I think the
12
13
      surveillance activity would most closely illustrate that.
14
      Whereas were audits have to be because of requirements have
      to be very, very -- have to meet administrative requirements
15
      about the entrance interview --
16
17
               CHAIRMAN JACKSON: The checklist.
               MR. STREETER: All of those important
18
19
     administrative requirements, the surveillances aren't
20
     constrained with that level of detail. So they're freer to
21
     respond to emerging issues where they would go out and they
22
      actually look at activities when they are occurring.
23
               CHAIRMAN JACKSON: Actually I was just asking you
2.4
      for an example.
               MR. STREETER: Well, I'm sorry. The example would
25
1
      be the 24-hour coverage that we presently have in place by
      the Nuclear Oversight Organization whether in the control
 2
     room, they're witnessing the communication and the
3
      responsiveness of the operators talking to the management
      oversight individuals to determine if they understand their
      role, their contribution, being in the field with the plant
 6
      equipment operators to get a feel for the plant and their
      knowledge and their activities. So that's real-time
     watching activities are going on.
9
1.0
               CHAIRMAN JACKSON: Okay.
11
               Now we have over the last 16 months -- the next
     slide a little straight -- and I don't want to make a lot
12
13
      of -- a big point about the quantity of these observations.
14
     Actually, I couldn't contrast this to what you would
      normally find at any other plant, only to illustrate to you
15
16
     that we do a variety of activities and we have a wealth of
17
      opportunities to derive some knowledge to assess
      performance, and that is what this is intended to be -- the
18
      QC inspections, the automated work orders, our review
19
20
     process, and it just goes down through the independent
21
      review team reports, so it is just the variety of activities
      that I would like to illustrate from that.
22
23
               CHAIRMAN JACKSON: Do you track or keep --
2.4
     maintain awareness in any way of things, say, in three
25
     areas -- line identified issues and problems, issues and
1
     problems identified by Oversight that were not identified by
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the line, and self-revealing problems?

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Do you track those at all?
               MR. BROTHERS: Yes, we do. I'll answer for that.
 4
 5
      We have a performance indicator that describes exactly
      that -- line-identified, self-identification ratio, internal
7
     oversight, external oversight, and event -- and that is a
8
      weekly indicator.
               CHAIRMAN JACKSON: Good.
               COMMISSIONER DIAZ: How is your QA organization
10
11
      integrated into this?
12
               MR. STREETER: How is it integrated --
               COMMISSIONER DIAZ: Or where is it located with
13
14
     respect to Nuclear Oversight?
15
              MR. STREETER: A quality assurance organization
     normally -- I'll talk about what a normal plant will at
16
17
      least have and then we'll go from there.
18
               A quality assurance organization always has an
     audit function. Most quality assurance organizations that I
19
     know of today have also a surveillance function, so you have
20
21
     got audits and surveillance activities.
               Most quality assurance organizations that I am
22
23
     familiar with also has a QC inspection function, which is a
24
     quality assurance function but not always. In some, in many
25
     plants it's not in the quality assurance organization, so
1
     what people would normally call as quality assurance are
2
      embodied in those three normal organizations -- the audits,
      the surveillances, and the QC inspection.
               In our organization the surveillances and the OC
 4
5
     inspection are the responsibility of our Performance
      Evaluation Group. The audits are performed under our Audits
     and Evaluation Group.
8
               In addition to that, our Oversight function
9
     presently has responsibility for the Nuclear Safety
     Engineering Group, which is this ISEG function. It also
10
11
      includes some human factor reviews and some operating
12
      experience reviews.
              In addition to that, we have the independent
13
      review team, and notably I'll say it also has a temporary
14
      organization of extremely well-qualified people doing,
15
     overviewing our 5054(f) efforts or our efforts to restore
16
17
      and assure our -- restore our design basis and licensing
18
     basis requirements, so that is the temporary organization
19
     that as we restore that, those folks will move out.
20
               Now because they are extremely well-qualified
21
     folks, and us not wanting to lose that information, we have
2.2
      already instituted a practice to where we are rotating those
     individuals who are permanent staff now to let this
23
24
     experience, so to speak, rub off on them before they leave
2.5
      the site.
               MR. KENYON: I think the simple answer is they are
1
2
      all part of Oversight.
               [Laughter.]
               MR. STREETER: Is that all I had to say?
 4
 5
               MR. KENYON: That's all.
               CHAIRMAN JACKSON: That's all you need to say.
               COMMISSIONER DIAZ: They are all integrated under
7
8
     Oversight?
9
               MR. STREETER: Yes.
               COMMISSIONER DIAZ: Thank you.
10
11
               MR. STREETER: That was easy enough.
12
               I want to turn now to -- we were talking about
     restoring this capability and what we have done with it.
13
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We have, and these are just some examples of some
     things where we have put to use, this capability, and
15
      contributed to the recovery efforts in a positive way.
16
17
               The next-to-the-last bullet, I won't say anything
     about that because we have talked about that right upfront
18
      with Commissioner McGaffigan, I think.
19
20
               The other efforts on the independent corrective
21
     action verification program readiness, we were instrumental
22
      in looking at the site's readiness for that and because of
23
      our views on this and discussing it with the line, we came
24
      to an agreement that we weren't ready initially for the
      inspection and delayed that.
25
1
               The operator training audit in the summer of last
2
      year, our input was instrumental in the stand-down that
     occurred and equally all of those other activities had
3
      significant input from us that contributed to improved
               MR. BOWLING: Chairman Jackson, if I could --
 6
               CHAIRMAN JACKSON: Please.
               MR. BOWLING: -- add one comment on the 40-500
8
      readiness.
9
10
               Based on Oversight's performance-based
11
     assessments, in this case it was a couple of the major
     maintenance activities -- there was major work on emergency
12
13
      diesel generator, for example -- where they provided
14
     performance-based review from the start of that job all
     through the job, every aspect of the job, based on that and
15
16
     some of the procedure adherence and other program issues
17
     that came out of that, a decision to defer or delay the
18
     40-500 inspection by almost a month -- that is one example
19
      of how we use performance.
20
               CHAIRMAN JACKSON: Thank you.
21
               {\tt MR.} STREETER: Regarding problems being identified
     to the Millstone Nuclear Organization, that was one of the
22
     success criteria we had for the Oversight function.
23
2.4
     Oversight in this context means management as well as
      Nuclear Oversight.
25
1
               The point that I want to make here, in addition to
2
     the point that Marty had previously made, was the
     distinction or the difference here between those that are
3
      identified by Nuclear Oversight and those that are
      identified by the line.
6
               We don't have a specific acceptance criteria what
7
      that percentage should be, but I would be alarmed if it got
     too large and I would be alarmed if it got too small, so the
      way it is looking now, my judgment is it is probably about
9
10
      where I would expect to see it.
11
               CHAIRMAN JACKSON: Are there benchmarks you can
12
     use?
13
               MR. STREETER: There may be, Chairman. I do not
14
     have that information. That is a good point.
               MR. BOWLING: The goal that we are using on a
15
      weekly basis is less than 10 percent of items are identified
16
17
     by something other than --
18
               CHAIRMAN JACKSON: -- the line.
               MR. BOWLING: -- the line, so the goal is actually
19
20
      10 percent.
21
               CHAIRMAN JACKSON: Okay, thank you.
22
               MR. BOWLING: Another success criteria is what we
23
      would call Nuclear Oversight or the oversight function as
2.4
      embraced by management.
               It is clear now through everything that I see at
```

- the site that management is a proponent. Put another way, they have embraced the oversight function. It goes beyond just accepting it as it was in the past, saying we'll make sure you accept it and understand that it is important, but 4 5 it goes into them now receiving the input and understanding that oversight has a function and it's like we talked about before on the Mode 2 list that we were talking about, where 8 I think it was Mike or Marty, someone said where is it from oversight. 10 We're going through the Mode 4 effort. We had to 11 work off items through the Mode 4 list. That was so 12 effective that the line was now seeking that input to help us prepare for Mode 2. 13 14 They are going as far as soliciting our advice and requesting special reviews and there are a lot of notable 15 examples in that. 16 17 Most recently there was in the Engineering 18 organization an instance where we had reached a point looking at the safety-conscious work environment in that 19 organization, we made the decision that we could relax our 20 21 effort in that area. The Design Engineering Director said I 22 would appreciate it if you didn't, because I have had some difficulties there in the past. This is helping me, this 23 input -- please continue -- which we are doing. 24 2.5 We have had numerous occasions on management -- a

reflection of their support of the organization to where they have taken the time through various avenues to express appreciation and recognition to the whole site of the contribution of Oversight, and that is important for the

5 site to understand that.

1 2

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10

6 We have been integrated as an equal and integral 7 partner in the site activities with not losing our 8 independence or objectivity and we have been empowered, as I had mentioned before, to raise the standards in our 10 operations.

Through our Nuclear Oversight restart readiness assessments, we developed a plan that covered multiple areas including all of the key areas that were in our briefing book. We have added to those other areas that we thought were important. For those we developed critical attributes from a variety of sources -- INPO, NRC documents, our own standards to judge the performance.

From that we developed the mechanisms to assess 18 19 and to score those attributes on a biweekly basis, give a report to line management which they identified areas 20 21 needing improvement, and that is going on on an ongoing 2.2

Now the results of that are reflected and how we communicate this is demonstrated on the next slide, where we then take those results and those numerical results are

1 converted into what we call a color.

2 Now what we chose, as far as -- pardon me, got 3 ahead of myself.

We have used a Nuclear Oversight Verification Plan to make a number of determinations for readiness for major milestones. We have mentioned the 40-500 corrective action inspection, the success criteria and 15 of the 16 have been reaffirmed using this NORVP. The exception is one that has been discussed in detail before, the work planning and management, and the Mode 4 readiness and the OSTI readiness

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have both -- were affirmed using this process.
              The latest results of this effort are reflected on
12
13
      this chart. Now one thing that I want to make very clear is
14
      that on here you will seen greens and here you will see
     vellows Those are the numerical scores from our readiness
15
16
17
               We chose 70 as the threshold for calling something
      what we call "satisfactory." That does not mean once we get
18
19
      at the 70 we view that as acceptable, because again we have
20
     higher standards that we are pressing toward.
21
               Of those areas -- so within the green we have
      areas yet for improvement and in the yellow areas are those
22
      where the numerical grade is below 70. That does not mean
23
      those areas are not ready for restart. It just means that
2.4
25
      we have farther -- more progress to go to get to the higher
1
      standards that we are talking about.
2
              From those the important thing is we extract from
      those area those items that we believe are essential for
3
     being prepared to go to Mode 2. Those are converted, just
      as in Mode 4, into a Mode 2 readiness checklist, which we
      work through those efforts to bring the issues involved
6
7
      before we go to the next step.
               It is a "living list" -- that doesn't mean the
     list is stagnant. It will change as we identify issues, as
9
10
      time goes by.
11
               MR. STREETER: We are committed to sustaining
12
     performance. As a matter of fact, the success criteria that
13
     we have now, we are committed to improving upon those.
      We're going to do that by continuing the process that we
14
15
     have in place now of line rotation to build the experience
16
      into the -- keep the experience in the organization;
17
     continue to do self-assessments to monitor performance, and
18
      continue to use external assessment sources such as the
      Joint Utility Management Organization.
19
              So what I would like to say is, in sum, is that
20
21
      success criteria have been met and the problems are being
      identified by line organization. Management does embrace
22
     oversight assessment functions. The Nuclear Safety Advisory
23
2.4
     Board has confirmed the adequacy. We have demonstrated our
     value and it's clear that we've got more work to do to get
      the elite level of performance that we're striving for, and
     we'll get there.
3
               MR. KENYON: Very quickly, in closing, we've
4
      talked about leadership as being an important factor in the
     recovery of Millstone. I believe leadership is in place
     with high standards and strong values for sustained
6
     performance.
8
               We have talked about the 16 key site issues.
9
     Fifteen of 16 are closed and the other will close shortly.
10
      So we believe those in place for Unit 3.
11
               We have talked extensively and very appropriately
     about the importance of checks and balances, and that ranges
12
      from self-assessment by the line organization through
13
     oversight through the NASB, through the Nuclear Committee,
14
15
      the Board, with its NCAT, a very important aspect of how we
16
     do business going forward.
17
              We have talked about the backlog, the fact that
18
      we've set a very low threshold for items being identified
      into the backlog, but a very thorough process as to what's
19
20
     deferrable and what's not; and even for what's deferrable.
21
      we've worked off over 60 percent of what's there. And we've
      talked considerably about I think one of our fundamental
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challenges, which is to reestablish a safety conscious work
      environment. We believe we have done that.
24
25
               So on the issues we've discussed today, we believe
     we're ready for restart. We look forward to our next
1
2
     meeting.
               CHAIRMAN JACKSON: Thank you very much.
 4
               Mr. Morris, do you have any --
 5
               MR. MORRIS: Thank you for your time, your
6
      attention and your help.
7
               CHAIRMAN JACKSON: Thank you. Thank you very
8
     much. We will excuse you. Thank you. And now we would
     like to hear from Little Harbor Consultants, who will give
     us their status update on the employee safety concerns
10
11
12
               Commissioner McGaffigan noted that we're an hour
13
     behind schedule, so that means you have a minute to give
14
15
               [Laughter.]
               MR. AMERINE: Are there any questions?
16
17
               [Laughter.]
               COMMISSIONER DIAZ: Is that a part of our aging
18
19
      program?
               CHAIRMAN JACKSON: Yes. Yes. It's aging
20
21
      management.
2.2
              Please, Mr. Beck.
23
               MR. BECK: Good morning, Chairman Jackson,
24
      Commissioners Diaz, Dicus and McGaffigan.
25
              I'm John Beck, president of Little Harbor
1
      Consultants, and with me this morning is John Griffin, our
2
     deputy team leader at Millstone, and Ms. Billie Garde, a
3
     member of the team.
               This morning, John will discuss the results of the
4
5
      structured interviews we completed in February, and
     following the structured interview results, he'll cover our
     evaluation of two of the four NU success criteria:
     willingness to raise concerns and the corrective action
     program. Ms. Garde will then present our evaluation of the
     other two success criteria: the employee concerns program
10
11
     and the HIRD area.
12
              Following Ms. Garde, I have some comments on why
13
     we believe the Millstone site has reached a sufficient state
14
     of readiness to warrant your consideration of their request
15
     to restart Unit 3.
16
              As always, we welcome your questions at any time
17
      during the presentation.
              John.
18
19
               MR. GRIFFIN: Good morning.
               As John indicated, I'll present the results of
20
21
     Little Harbor's second set of structured interviews and I'll
22
     try to move through these slides quickly in the interest of
     time. A number of the results you've already heard
23
     presented by Northeast this morning.
24
25
               Our first set of interviews were conducted in June
     and July of 1997, and the results were presented to this
1
2
     Commission in August of last year. The interviews we
     discussed today were conducted during the month of February
     1998.
4
 5
               This slide presents the basic framework of our
      interviews. We used essentially the same questions this
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time as last summer. Some questions were slightly reworded

To answer the Chairman's earlier question, it's 10 11 the size -- we interviewed 298 workers at Millstone selected 12 to represent all site work groups. Of the 298, 24 were volunteers and 18 were 13 contractors. The information we present this morning will 14 include all 298 interviews. We did perform an independent 15 assessment or evaluation of the results of the voluntary 17 responses and determined that the responses were essentially 18 the same whether or not they were included. 19 We selected those to be interviewed to include 20 representation from all work groups, and we selected 21 different people than those that were interviewed last 22 summer. Some of the volunteers were people who had been 23 interviewed before. 2.4 As I said, Little Harbor selected the individuals 25 to be interviewed, we made the contacts, and we scheduled all the interviews. The interviews were voluntary and we have taken every precaution to ensure that there is no attribution to comments made during the interviews. 3 We asked those interviewed to answer a number of yes-no questions as well as questions requiring them to respond using a scale of 1 to 5, again the same scale that 6 we used last summer. We also asked questions that elicited 8 textual responses. 9 We scheduled these interviews as late as possible 10 in order to provide the Commission with information that 11 reflects the current feelings of the Millstone workforce. 12 It's important to remember that what we're about to present 13 is what members of the workforce told us. The results are what they are and are a snapshot of how 298 employees felt 14 15 at the time of their interview. On the first slide, in response to the question, 16 17 "If you became aware of a problem that could affect the safe operation of the plant, would you raise that concern?" 100 18 percent answered that they would raise that concern. The 19 overwhelming majority also indicated that they would raise 20 21 that concern to their line management. There were two or 22 three individuals who indicated they would use an 23 alternative route, such as the employee concerns program. 24 the NRC or even the media. One-hundred percent also indicated that they were 137 1 not aware of any safety concern that had not previously been 2 raised. These were the same results that we saw last 3 summer. 4 We next probed to see if restart pressure was in 5 any way impacting the willingness of workers to raise safety issues. The increase in the number of people that responded 6 yes to this question initially was a concern to us. We did 7 a detailed analysis, including re-contacting some of those interviews to better understand their comments. In no case 9 did we find that a person in a management position had told 10 11 anyone that raising a concern would delay restart. The yes 12 responses were a reflection of water cooler discussions or discussions between peers. And no one indicated that this 13 14 would prevent them from going to the NRC with a concern if 15 necessary. Ninety-eight percent of those interviewed 16 indicated a willingness to take the concern to the NRC. The 17 18 primary reason for not going to the NRC was a belief that the concern would be addressed before it became necessary to

for clarification based on experience gained with the first

set of interviews.

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do so. But there were a few who indicated a lack of
21
      confidence in the Commission.
22
               This slide reflects an increased confidence in
23
      getting nuclear safety concerns addressed and resolved. We
     included three datapoints gathered during our interviews.
24
25
      Last summer, for several of the questions, we asked those
1
     interviewed to tell us how they felt currently as well as
2
     how they had felt the year earlier. These year-earlier
 3
      results appear as mid-'96 on the graphs. As you can see,
 4
      the average response has increased from 3.3 in mid-'96 to
5
      4.3 last summer and then finally to 4.5 in February.
              More specifically, we asked about worker level of
 6
      confidence in the three primary paths to resolve concerns:
      Line management, the employee concerns program, and the NRC.
      Again, as you can see, all three have increased from last
9
10
      summer results.
11
               We asked those interviewed if there was any reason
12
     they would not use the employee concerns program.
     Ninety-three responded that if necessary, they would use the
13
14
      ECP. Some of the no responses were for the reasons
      indicated. As Ms. Garde will discuss later, our surveys of
15
16
      those who actually used the employee concerns program
      confirmed this high level of confidence.
17
18
               Questioning attitude is a critical attribute of a
19
      safety conscious work environment, and when asked to rate
20
      their own level of questioning attitude and those of their
      work group and the site, the results were improved, with the
21
22
      site numbers being essentially the same.
23
              The understanding and awareness of the Millstone
24
      self-assessment program showed a marked improvement during
25
     these interviews. As you can see, responses to each of the
1
     three questions showed significant improvement.
2
               In response to the last question, interviewees
3
      provided numerous specific examples of improvements they
     have seen that resulted directly from self-assessments.
4
               We also asked about the corrective action program,
      and again, we saw a marked improvement in the confidence in
6
7
      the CR process as reflected on this slide.
               We asked questions designed to probe the level of
8
      trust and confidence between workers and their supervisors.
1.0
     This confidence and trust between workers and supervisors
11
     has improved from the last round of interviews.
12
               This slide shows improvement in response to both
13
     questions. The workers we interviewed felt good about their
      contribution that they were making to Millstone, and their
14
15
      awareness of positive recognition being given to individuals
16
      who raised concerns is especially positive.
17
               These questions probed how those interviewed
      perceived the attitudes of workers, supervisors, and
18
19
      management toward people who raise concerns. Again, steady
20
      improvement is shown in each area.
21
               When asked to rate the presence of a chilling
22
      effect, the response was also improved. And it's important
23
      to remember here that the lowest possible number is 1.
24
               Steady improvement was also seen in the area of
25
      teamwork and cooperation within the individual's own work
     group, within their unit or staff organization, and across
1
      the entire Millstone site.
2
               In regard to communications from management, again
     there is steady improvement in all areas. The largest
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improvement is the attitude of employees towards middle management and their supervisors, as shown on the bottom two 6 graphs. We believe this is due at least in part to the training that has recently been conducted for all managers 8 and supervisors 9 10 In summary, the interview results reflect 11 across-the-board improvements. The largest improvements 12 were seen in awareness of management expectation, confidence 13 in the corrective-action program, and the utilization of self-assessment processes. 14 15 The results of our interviews confirm the observations by Little Harbor in regard to the willingness 16 17 of this work force to raise concerns. In fact, we believe 18 that at least in regards to raising concerns, this is 19 currently a very empowered work force. As a result of these interviews, we find that the work environment at Millstone has continued to improve since last summer. These results were utilized by Little Harbor in our evaluation of the

2.0 21 22

23 safety-conscious work environment attributes at Millstone.

If you have no further questions on the results themselves, I would like to shift the presentation to our

Evaluation of the Four Success Criteria.

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As I just stated, the results of our structured interviews provided data that Little Harbor used in 3 evaluating the 12 attributes of a safety-conscious work environment and the four success criteria established by Northeast. I will present the results of our most recent 6 evaluation of the first two of the criteria, and Ms. Garde 7 will discuss the final two. 8

The results that we will discuss this morning were presented to your staff and to Northeast at a public meeting held on April 7, 1998. We revisited these results earlier this week and have determined that there has been no change since that last evaluation. And as we have stated before, these ratings were arrived at after lengthy discussion among members of the team and represent a consensus opinion of the entire team.

CHAIRMAN JACKSON: And what do you use in arriving at your consensus opinion about these attributes?

MR. GRIFFIN: We sit down in a group meeting and we put everything that has happened in the preceding period. We categorize the issues that have developed. We use the company's key performance indicators. We use in this case the results of our structured interviews. Any observations that we have seen we discuss, we debate back and forth among the team members and slowly narrow in on a final

1 determination.

> The first success criterion is a demonstration that the work force is willing to raise concerns. This slide and subsequent slides of the success criteria provide a historical perspective of Little Harbor evaluations conducted to date. As you can see from this slide, we have seen a steady improvement in this success criterion.

During our first set of structured interviews last 8 9 summer and in our many interactions with the Millstone work force in that time period, we found a work force that would 10 11 raise safety concerns but was generally worried about the consequences of doing so. Over the last eight to nine 12 months we have seen these worries diminish as the Northeast 13 initiatives began to take hold. Today we find a work force 14 15 that is very empowered when it comes to expressing concerns.

In addition to the results of our structured

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17
      interviews we have seen example after example where issues
     have been raised and where decisions by management have been
18
     challenged by workers. Our current evaluation of this
19
20
      success criteria is yellow plus, with an improving trend.
21
      And we find this criterion to be acceptable for restart.
22
               The next success criterion is a demonstration of
23
      line management's ability to resolve effectively the issues
2.4
      raised by the work force at Millstone. This is the
25
      Millstone Corrective Action Program.
1
               As you can see from the slide, this criterion has
2
      stayed constant throughout our evaluation period, and we
      find this criterion to also be acceptable to support the
3
      restart of the Millstone unit.
4
               In arriving at this conclusion, Little Harbor
      conducted two assessments of the Corrective Action Program,
6
     one last fall that focused on program and procedures, and a
     more recent assessment that looked at implementation. We
     found the Correction Action Program and its implementing
      procedures to be complete and comprehensive. We also found
1.0
11
      that the Corrective Action Program has been implemented
     aggressively and that NU has dedicated significant resources
12
13
      to this implementation.
              In addition, we reviewed the self-assessments
14
15
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performed by Northeast as well as the recent inspection 16 conducted by the Commission, both of which found the 17 Corrective Action Program to be effective.

As I covered earlier in discussing the results of our structured interviews, the work force as represented by those that we interviewed expressed an understanding of and an increased confidence in the fidelity of this program to resolve their concerns. While we find the Corrective Action Program acceptable to support restart, it is also necessary for NU to continue the efforts to improve this program and to constantly improve the standards that they are measuring

1 themselves to.

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22 23

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18 19

Ms. Garde and I will discuss the remaining two 3 success criteria.

4 CHAIRMAN JACKSON: Let me ask you a question. An 5 up arrow means an improving trend?

MR. GRIFFIN: That's correct. 6

CHAIRMAN JACKSON: And so the fact if it remains 8 an up arrow and the category doesn't change, it just means 9 the slope was not --

10 MR. GRIFFIN: It's slow improvement. That's 11 correct. Or we have not seen enough positive -- it could also mean that we just have not seen enough positive 12 13 measurable factors to allow us to take it to the next step. CHAIRMAN JACKSON: But folding in all of these 14 various considerations you said it still means that it's on 15

MR. GRIFFIN: That's correct.

CHAIRMAN JACKSON: Okay.

an improving trend.

MS. GARDE: That same comment would apply to the 20 Employee Concern Program. The Millstone Employee Concern Program is currently rated vellow with an improving trend by 21 22 Little Harbor. This program has steadily advanced since 23 December of 1996. The ECP program has been determined by

Little Harbor to be acceptable for restart. 24

25 Little Harbor reached this conclusion on the basis

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procedures, observations of the implementation of the
      program at every phase, a review of the case investigative
3
      files, debriefing of a selected number of workers who have
      used the ECP program to pursue concerns, the qualifications,
5
      commitment, and morale of the ECP staff, and the useful
6
      integration of findings, lessons learned, focused areas, and
     other information that provides important insight into the
8
9
      Millstone work environment.
10
               The ECP program and procedures are comprehensive
11
      and provide a foundation for reliable and effective
12
      alternative method for employees to raise concerns and
13
      receive a timely, credible, and competent answer. While
14
     Little Harbor has continued to note occasional weaknesses in
15
      investigative files, the work done by the ECP continues to
16
17
               Little Harbor has observed all phases of ECP
18
     activities throughout the past year. Detailed descriptions
19
     of our findings are contained in the quarterly reports and
     have been the subject of public meetings. Throughout these
20
21
      observations, Little Harbor has noted that the ECP continues
22
      to become more people rather than technical issue oriented.
               The Employee Concern Program has developed and
23
24
      successfully utilizes an excellent working relationship
25
     between executive management, line management, other support
                                                          146
      organizations, and the concerned employees. The ECP
1
2
      investigative case files have been comprehensively audited
3
      at various stages throughout our oversight activities.
4
               In July 1997 Little Harbor completed a review of
5
      100 percent of all files closed out between December '96 and
 6
      June of '97. The Little Harbor findings released in late
      July 1997 were quite critical. Thereafter the program
      undertook major program changes, and a comprehensive review
8
9
      completed last month which included 100-percent review of
     all files involving allegations of retaliation and a
10
     significant proportion of other files indicated substantial
11
12
     improvement in casework and file documentation.
               The confidence of the work force in the ECP also
13
     continues to improve. Last summer only 50 percent of those
14
15
     who had used the ECP indicated they would use it again in
16
     the future. Currently we find this number to have grown to
17
      88 percent.
18
               Northeast Utilities recognizes that it must
19
     continue to earn the confidence of employees in the
      program's independence and credibility. Strong leadership
20
21
     and confidence in the program has come from the ECP director
22
     and his staff, including competent contract investigators.
              Little Harbor has been particularly impressed with
23
24
      the actions and guidance that Mr. Ed Morgan has brought to
25
      this program. His willingness to be an independent advocate
1
     for the facts gathered by the ECP investigators and his
2
      contributions to the work environment are notable.
               In addition, Northeast Utilities has demonstrated
 3
      a commitment to providing the resources necessary to
 4
      accomplish the task. In December 1996 this Employee Concern
     Program faced a difficult task of rebuilding trust and
 6
     confidence of employees while rebuilding itself. It has
     done so. Little Harbor believes that the Commission can
8
     rely on the Millstone Employee Concern Program to provide an
      effective and competent alternative to employees who for
10
      whatever reason are unable or unwilling to pursue concerns
11
12
      through line management.
               The final success criterion is management's
13
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14
      ability to recognize, mitigate, and deal with issues
15
      involving harassment, intimidation, retaliation, and
16
     discrimination. The progress of that area is on the slide.
17
               In 1996 the Millstone work environment was
      characterized by fear, distrust, lack of confidence in
18
19
      management, and feelings of helplessness and hopelessness in
20
     the work force. The reasons that the environment
21
     deteriorated to the point that the Commission intervened are
22
      complicated.
23
               Three studies in 1996 identified a series of root
2.4
      causes that included among others a lack of accountability
25
      and a lack of leadership by corporate and site management.
     As required by the NRC's October order, these weaknesses
1
      were to be addressed by the development of a comprehensive
3
      plan designed to create a safety-conscious work environment.
4
               This has been the most difficult hurdle for
      Millstone to clear, as evidenced by the windows on this
 5
      slide. As late as February of this year, Little Harbor
 6
      still rated this attribute red, the lowest possible
      evaluation under our rating system. It was not until our
      evaluation presented on April 7 that we found this attribute
1.0
      to be acceptable for restart. Our decision was heavily
      influenced by the checks and balances that have been put
11
12
      into place to identify, anticipate, and prevent incidents of
13
      harassment, intimidation, retaliation, and discrimination.
14
               By the presence of a strong employee concerns
      program by the confidence expressed by the work force, via
15
16
      the structured interviews, and by an extraordinary level of
17
      senior executive commitment to work environment issues.
18
               Nonetheless, as Little Harbor has cautioned
19
      Northeast Utilities, in order for Millstone to establish a
20
      truly self-sustaining safety-conscious work environment, it
     must eventually replace the extraordinary efforts it is
21
22
      currently employing with sustained good judgment of line
23
      management in addressing employee questions and issues.
              The Millstone work force no longer feels helpless
24
25
      or hopeless. The employees, from operators to maintenance
1
      technicians to senior executives, understand what is
2
      expected of them in their dealings with others, and
      understand their responsibility to raise safety concerns.
3
      This is a very empowered work force. They understand their
 4
      legal rights, and the legal limitations imposed on their
      employer that prevent and prohibit retaliation.
6
7
               Even with all of these improvements and advances,
      mistakes will happen. Little Harbor believes that the
      tools, the training and the commitment is in place to
9
10
     prevent those mistakes from reversing progress.
11
               However, as we have cautioned, progress on this
      issue can be very tenuous. Some of the work force still
12
13
     have a lingering concern that things could go back to the
14
     old way of doing business after restart. Now is not the
15
     time to relax.
16
               CHAIRMAN JACKSON: Thank you.
17
               Let me ask you two quick questions. I mean if I
18
     took what you said relative to this last attribute, where
19
     you particularly talked about the checks and balances and
20
     the strong employee concerns program, et cetera, et cetera,
     but what is needed in the long term is sustained good
21
22
      judgment on the part of line management in dealing with
23
     these sorts of issues, is there an implication in what
24
      you're saying that there are these supernumerary things that
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have been put into place and that you don't have confidence
      that there is sustained good judgment on the part of line
2
      management?
3
               MS. GARDE: Well, sustained good judgment on the
      part of line management --
              CHAIRMAN JACKSON: I mean are these covering for
 6
      that or do you have evidence that line management's judgment
      in these areas in fact has improved in a measurable way?
               MS. GARDE: It has improved in a measurable way,
8
9
      but use of the checks and balances, as well as the
      intervention that we referred to as the extraordinary extra
10
11
      commitment continues to provide guidance, training,
12
      learning, so that making decisions at the line management
13
      level with confidence is something that will happen easier,
     more frequently, and without the needed intervention.
14
15
              Frequently what we have seen with line managements
16
      exercising their judgment is that their instincts are right,
17
     but because they didn't grow up in a culture that reinforced
      following their instincts, they are hesitant to do that
18
      thing. And as they see the support that comes through these
19
     checks and balances, they are learning, the managers are
20
21
     learning, and because of that, it's certainly not time to
     take away those checks and balances, but eight months from
     now, six to eight months from now, a year from now,
23
      hopefully those checks and balance systems will not be
24
25
     required.
1
               CHAIRMAN JACKSON: Let me ask you Commissioner
2
     McGaffigan's question: How long should you stay around?
               MR. BECK: If I may, that's something that's been
 3
 4
      on our mind since the very beginning, how do you close what
5
      I think everyone considers to be a very extraordinary
 6
      requirement that's been placed on the Millstone site.
               Our view, very simply, has been in this quite
      subjective area of involvement, when we no longer make a
8
     difference. I think speaking directly to that, we are
9
      seeing less and less occasion for us to have to speak up and
10
      in accordance with our oversight plan make recommendations
11
12
     that something be done differently.
13
              So that frequency is going down as we speak on a
14
     daily basis.
15
               CHAIRMAN JACKSON: So what is your exit strategy?
16
               MR. BECK: Our exit strategy is contained -- I
      would describe it this way: We still have a need, I
17
18
     believe, to witness how this organization performs in the
19
      operational environment rather than in the recovery
     environment. It's different, it presents subtle challenges
20
21
      to any organization to be operating rather than in a
22
     recovery mode, and we think it's necessary, and our
23
      oversight plan calls for observations in that circumstance.
24
              We think there are some processes that they have
25
     put in place, particularly in the 50.7 area, that we have
                                                          152
      not seen enough implementation of to be fully confident that
      those processes are going to be effective on a long-term
 3
      basis. So continued observation of that for a while, I
 4
      believe, is imperative.
              Beyond that, I think it will be rather obvious
5
     when we get to the point -- and I don't mean to be trite
 6
      -- but when we become essentially the Maytag repairman, that
8
     the processes and the organizational checks and balances and
9
     their effort -- and they have put in place, by the way, in
     their 1998-2000 performance plan, a process to evolve away
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from all the extraordinary measures that they have at the
      site today. And as you see that beginning to take place, I
12
13
     think it will become very obvious that there is no longer a
14
      need for an independent oversight presence at the site. It
      well might occur in six months, it may occur sooner than
15
16
      that. I think we will see it very shortly.
17
               CHAIRMAN JACKSON: So the two key things are
18
     observation or seeing what happens in the operational
19
      environment, and the second is seeing actually to the
20
      implementation of the 50.7 processes?
21
               MR. BECK: That's right.
22
               COMMISSIONER DICUS: Given your comments regarding
23
     criterion number 4, which I took as something of a
      qualification statement with regard to your overall
24
25
      recommendation for restart, are there some other areas that
1
      you might have a qualifying statement on with regard to
2
3
               MR. BECK: I have some comments I want to make in
      a general sense that may be of benefit to the Commission.
4
               As you have heard from both John and Billie, we
     have concluded that Northeast has established a
6
7
      safety-conscious work environment at Millstone that we think
      is acceptable to permit the restart of a Millstone unit.
8
               The four success criteria that we just reviewed
10
      all meet our acceptance criteria for restart and, in
11
      addition, the 12 underlying attributes, which were included
12
     in your briefing package, also all meet the acceptance
13
      criteria for restart.
14
               We have performed our independent oversight role
15
      in strict accordance with the oversight plan and, as you
16
      just heard from John and Billie, we are confident that that
17
      safety-conscious work environment exists and that there is
      reasonable assurance that progress made to date is
18
19
      sufficient to support resumption of reactor operation.
20
              This progress has been due, to some extent,
21
     however, to the extraordinary measures by management, and
22
      they should be continued until it is clear that the desired
23
     organizational behavior is self-sustaining.
24
               You can be sure, as are we, that these
25
      extraordinary measures have been effective, and we applaud
1
      those successes, but the goal has to be to reach a
2
      self-sustaining basis. The organizational and
      sophistication and cultural change that such measures will
3
 4
      lead to have to be there. This will require a continuation
      of and an increased emphasis on the current efforts
      management has underway in educating and training all the
 6
      work force regarding safety-conscious work environment. In
      particular, team building and accountability efforts are the
     two factors which are key to getting to that self-sustaining
10
      status. And we will continue our oversight activities in
11
      accordance with the plan until the Commission instructs us
     to do otherwise.
12
13
               If there is anything else we can provide in the
14
     way of response to questions, we are happy to do so.
               Thank you very much for the opportunity to brief
15
16
     you this morning.
17
               CHAIRMAN JACKSON: Thank you.
               Oh, I do have one last question. Do you agree
18
19
     with the licensee's assessment that the training in this
20
      area is substantially complete?
21
               MR. BECK: It's an ongoing training requirement.
```

We believe that the training is appropriate, but they have to continue it, and they have to be sure in particular that 23 24 any new people entering the management or supervisory 25 structure receive that training in a timely fashion, and you heard them say that they are committed to do that. CHAIRMAN JACKSON: Thank you very much. MR BECK: Yes 3 CHAIRMAN JACKSON: We will take our midday recess for one hour until 1:00 o'clock. Thank you very much. 5 6 [Whereupon, at 12:05 p.m., the meeting was 7 recessed, to reconvene at 1:00 p.m., this same day.] 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 156 A F T E R N O O N S E S S I O N [1:05 p.m.] CHAIRMAN JACKSON: Good afternoon. This is a 3 4 continuation of the meeting we began this morning assessing the Millstone Station with respect to three issues, in 5 6 particular employee concerns and safety conscious work environment, oversight, and quality assurance, and backlog management. 8 9 We've heard this morning from the utility as well as from Little Harbor consultants who have been overseeing 10 11 the issues related to safety-conscious work environment and 12 employee concerns program. 13 We are now going to hear from -- sequentially from 14 a number of public officials, public interest groups and 15 individuals and I'm going to call on each one in turn. I'm 16 going to ask each person to try to be as succinct as possible to remain within your allotted time, but we do want 17 18 to hear from each person and that's how we can be fair to 19 everyone. 20 I'm going to begin with Mr. Thomas Sheridan, the 21 first selectman from the town of Waterford. 22 Good afternoon. MR. SHERIDAN: Good afternoon. And thank you for 2.3 24 the opportunity to address the Commission. CHAIRMAN JACKSON: Make sure you speak into the --25 157 1 is it on? MR. SHERIDAN: Yes, I think it is. Yeah. By way of providing a little background on myself, 3 it will help me, and you folks who don't know me, understand where I'm coming from. 5 6 I have a license that I've kept renewed over the years in plumbing and pipefitting and that helps me

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also have an advanced degree in organizational psychology
10
      which also helps me understand the complexities of changing
11
      the work environment and the work culture out there. So,
     with that little bit of background and, of course, I'm first
12
13
     selectman. For those of you who are not familiar with such
14
      a title, it's mayor. I'm serving my fourth term, recently
      re-elected to a fourth term. It's a full-time position in
15
16
      the town of Waterford. And with that I will read my
17
      statement.
18
               I appreciate this opportunity to address the NRC
19
      and others present on this important issue. Millstone
20
     station with its more than 2,000 employees is an important
      part of the town of Waterford and its safe operation is
21
      crucial to the economic and environmental well-being of our
22
      community, to the State of Connecticut and indeed to future
23
24
      of the nuclear industry. The last two years have been a
      painful experience for not only the station workers, but for
25
1
      the community as well.
2
               We've seen an erosion in what had been a good
     relationship between the station management and the
3
4
      community, public confidence in the ability of Northeast
     Utilities to operate the Millstone plants was seriously
     damaged during this time. I believe, however, that several
 6
      positive changes have resulted from this ordeal. Much has
      been learned by the company, the community and indeed by
9
     NRC.
10
               First and most important historical deficiencies
11
      in the way Northeast Utility has done business a Millstone
12
     have been changed for the better. The new leadership team
13
      is managing the station to a very high standard, and \ensuremath{\text{I}} am
14
      both hopeful and confident that Millstone will once again
     become an industry leader.
15
               Second, I speak with employees on site as well as
16
17
     many Millstone employees who live, work, and volunteer in
     our town government. I now have confidence that the work
18
      environment at the plants has significantly improved over
19
20
      the past several months. Workers are encouraged to bring
21
      forth issues to be resolved and are acknowledged and
22
     respected for doing so. This speaks well for the future of
23
     this site and I believe this positive organizational climate
24
      will continue to be supported by management.
25
               I also believe that democratic process worked well
1
     here. Two years ago there was a great deal of anger and
      emotion in the community about the unfolding situation at
2
     Millstone. As a result of over 100 public meetings, over
      the past two years, our community is much better informed
      about the complexities of nuclear power plant operations.
 6
               As we move towards the future, we will do so in a
7
      more informed -- as a more informed and more aware
     community. I commend the members of the various public
     groups and company employees who have been involved in this
10
      process because they have raised very legitimate issues. I
11
      commend the NRC staff for allowing these concerns to be
12
     discussed openly in an inclusive public process. These
13
      meetings, I believe, have provided everyone with the
14
      opportunity to be heard.
               It is my hope that the public citizen groups will
15
16
      continue to stay involved in the process to help ensure a
17
     safe operation of the plants and that they will again --
     will gain the confidence in plant operations. Some men
18
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understand the complexity of a plant such as Millstone. I

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never gain that confidence, but their participation is still
      an important part of the process.
20
21
               I want to publicly thank the new management and
22
      all Millstone employees for their efforts and their part in
      the process of developing the new work environment of the
23
     plants. The thousands of employees at the site have put in
24
     countless hours at great sacrifice to themselves and to
25
      their families. I know how hard they have worked on that
      effort and I am confident that the plants will be operated
 3
      safely in the future.
               And I comment the Commission for their willingness
 4
5
      to include the various public interest groups in this
 6
     meeting today. I also appreciate being included myself as
      first selectman of the host community which is the town of
8
     Waterford.
9
               Now, I believe it is time to get on with the
10
     process of safe operations at Millstone 3. Millstone has
11
     historically been a good neighbor. Millstone's new
12
      management is determined to restore the status. I ask that
13
      you authorize the restart of Millstone 3 so that we can
     begin to put this painful chapter behind us.
14
15
               I'm happy to answer any questions which the
16
     Commissioners may have.
               CHAIRMAN JACKSON: Any questions, Commissioner
17
18
     Dicus?
19
               COMMISSIONER DICUS: No, thank you.
               MR. SHERIDAN: Thank you very much.
20
21
               CHAIRMAN JACKSON: Thank you very much.
22
               I would like to call forward Mr. John Markowicz,
23
     Vice Chairman of the Nuclear Energy Advisory Council for the
24
     State of Connecticut.
25
               Good afternoon.
                                                          161
               MR. MARKOWICZ: Good afternoon, Chairman Jackson,
1
     NRC Commissioners. Thank you for this opportunity to
2
3
      participate in the public briefing on selected issues
      related to the proposed restart of Millstone 3.
               My name is John Markowicz. I'm a citizen of
5
6
     Waterford, Connecticut, and as you've indicated, Vice
      Chairman of the State of Connecticut Nuclear Energy Advisory
     Council, also known as NEAC.
8
               With my family I've resided for the past 21 years
10
      within two miles of the Millstone Nuclear Power Station.
     Prior to that for more than 11 years I served on active duty
11
12
      as a nuclear trained commissioned officer in the United
13
      States Navy, including a final tour as chief engineer of a
     fast attack nuclear submarine.
14
15
               I have never been employed by a commercial nuclear
16
     utility. As a local civic leader and as a businessman, I
17
     was nominated by the first selectman of Waterford, Mr.
18
     Sheridan, to serve as a volunteer on the NEAC nearly two
19
     years ago.
2.0
               NEAC was established by the Connecticut
21
      legislature by public act in 1996. Our membership consists
22
      of 14 uncompensated appointees from varied backgrounds and
2.3
     perspectives to provide diversity, balance, and credibility.
      We receive clerical support from the Department of the
24
25
     Environmental Protection and have been appropriated $15,000
      per year for travel funds in Fiscal Years 1998, the current
     year, and 1999.
2
3
              Four of us have signed communications protocols
      with the NRC. We have been charged by the legislature to
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hold regular public meetings to discuss safety and operation
     of Connecticut's nuclear plants and to advise the Governor,
 6
     the legislature of municipalities within a five-mile radius
      of the plants to work with Federal, state, and local
     governments and companies operating the facilities to ensure
9
10
      public health and safety, to discuss post-changes and
11
      problems arising from the operation from nuclear generating
12
     facilities and to communicate the written reports and
13
      presentations with nuclear plant operators about safety and
14
     operational concerns, and to review the current status of
     facilities with the Nuclear Regulatory Commission.
15
               Pursuant to this charter, the NEAC has regularly
16
17
     held 21 monthly meetings in Waterford, East Lyme, Haddam,
      and Hartford since we first met August 1st, 1996.
18
               At least one or more members of NEAC have
19
      monitored and observed more than 100 of the meetings, nearly
20
21
      all of which have been public noticed. This includes 21 NRC
     public meetings; approximately 70 meetings between the NRC,
22
23
     the utility, Northeast Utilities or a third-party contractor
24
      such as Sergeant Lundy, Parsons Power, and Little Harbor
      Consultants; and at least 10 NU public meetings or senior
25
1
      management training sessions that Mr. Kenyon and others
      talked about this morning. I personally attended
2
3
      approximately 90 percent of those events.
 4
               In addition, and in accordance with communication
      protocols I noted earlier, telephone conferences between the
     NRC, NU, and third-party contractors have been routinely
6
7
      monitored by two NEAC members whenever possible.
               Site visits, plant tours, periodic unannounced
      monitored observations have also occurred on several
10
      occasions both at Millstone and at Connecticut Yankee. With
11
      this year's appropriations of travel funding NEAC members
     have also monitored the corrective action verification
12
13
     program activities on multiple locations both at Sergeant
14
     Lundy in Chicago, Illinois and at Parsons Power in Reading,
     Pennsylvania. As required by the Public Act NEAC has
15
      prepared and submitted annual reports in 1996 and 1997 to
16
17
      the Governor and to the legislature.
18
               Copies of these two documents have also been
19
     distributed to the NRC and has documented therein extensive
20
     correspondence has also been generated with Federal and
21
      State officials and this has included a number of letters to
22
     the NRC.
23
               With this information as background, I would like
2.4
      to share with you the following observations for more than
      22 months of monitoring in Millstone Unit III restart
25
1
 2
               Public participation. There has been significant
      efforts on the part of all parties in the process to solicit
3
      and receive public input. Noticed meetings by the NRC have
 4
     provided numerous opportunities for members of the public to
      observe and/or speak on Millstone restart issues.
 6
      Demonstrating similar openness, the utility, Northeast
      Utilities has sponsored open meetings in Waterford and
9
     Haddam, invited the public to normally closed officers
1.0
     meeting and solicited comments via local advisory council
11
     committees at both locations. I would note that as of
     yesterday, for example, at my request I was allowed to
12
13
      participate in a Nuclear Safety Assessment Board meeting
14
      inside the plant.
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The Citizens Regulatory Commission, CRC, also has

hosted a weekly one-hour telephone call-in program on cable access television to voice its concerns and to take citizen 17 18 19 Though the gap has narrowed, it would be inaccurate to assert that a uniform public consensus has 20 emerged from these discussions as I'm sure you will conclude 21 22 from the presentations you will receive today from all of the public interest groups. However, it has been and I hope 23 24 will continue to be a remarkably open process. 25 Thousands of hours of effort by your staff, the utility and the public have focused upon health and safety 1 2 concerns. NEAC appreciates the measures taken by the NRC to foster this level of public participation. In this regard, 3 I would like to mention the time and effort of the NRC staff personnel in hosting these local public meetings. Open 5 6 meetings in New England can be a unique experience and a test of the sponsor's tact, diplomacy, and restraint. The monthly five-hour meetings that have been provided have 8 provided your staff particularly the special projects office 10 excellent opportunities to demonstrate these skills. They have certainly earned my respect and 11 12 admiration. I would also comment the appearances that you 13 have made also on site and the willingness to take similar public events in stride. 14 CHAIRMAN JACKSON: I haven't done it 21 times, 15 16 though. MR. MARKOWICZ: Millstone employee concerns 17 18 program and the safety conscious work environment, this has 19 recurringly appeared to be the most challenging aspect of the restart process. In part because it is difficult to 20 21 quantify and evaluate. It has been likened by one NEAC 22 member as trying to get ones hands around smoke. Most 2.3 significantly NEAC has observed that a comprehensive change in the Millstone work culture was a fundamental prerequisite 24 25 to restart certification. 1 While we fully support the NRC order establishing third-party oversight in this area, we raise concerns and 2 3

questions regarding your independence criteria and the membership of Little Harbor consultants. Having now observed the implementation of this order for nearly 16 5 months, it appears that Little Harbor consultants has credibly implemented the letter and the spirit of the order. 8 A comprehensive plan and common-sense approach to 9 grading attributes provide a quantitative criteria for 10 understanding and evaluating progress by NU in this critical area. It has -- it was and is essential that Little Harbor 11 12 consultants to maintain lines of communications with NU 13 employees to implement the NRC order. I know some in the public have recently challenged 14 15 this degree of interaction that has resulted. NEAC has observed that Little Harbor consultant, 16 17 North East Utilities, and the NRC have demonstrated a reasonable, best effort to achieve and maintain an 18 19 arm's-length, third-party oversight.

20 Furthermore, the trends reported to the public by
21 Northeast Utilities and Little Harbor Consultants on April
22 7th, and also this morning, are believable and suggest the
23 work place culture at Millstone has improved. We also
24 observe that this condition is fragile. It requires
25 continued monitoring by NU management and by Little Harbor

employee concerns and NRC allegations has been reduced to and maintained at the industry averages or best run nuclear power plants. I would suggest based on some of the 4 discussions this morning that you consider something like that is a metric for when the order ought to be relaxed 6 and/or Little Harbor could be released from their 9 Deferred items management and corrective action. 10 The major challenges and solutions to deferred items 11 management has been more understandable than employee 12 concerns and safety conscious work environment issues. 13 The magnitude of this situation has been of 14 particular concern with 88 risk-significant, or safety-significant systems at Millstone 3. As well is the 15 erosion of public confidence and the ability of the NRC to 16 17 monitor and enforce corrective actions standards. 18 Though challenging again, the independence 19 criteria for the selection of third-party contractors to 20 implement the corrective action verification program, NEAC's 21 support of the goals and objectives of the NRC order. 22 Additional confidence in this process was established when 23 NEAC was allowed to develop and implement a random process 24 for selecting the corrective action and verification program systems and the NRC then went on to further define four 25 1 understandable levels of publicly grouping and disseminating the deficiency reports of DR that were produced by the 3 contractor. Pursuant to the affirmation communications 4 protocols NEAC members have monitored telephone conferences and working meetings both public and closed between the NRC. 6 7 the NU, and Sergeant Lundy. 8 NEAC is satisfied that an arm's-length 9 relationship has been achieved and maintained and that the 10 work product from Sergeant Lundy is credible. My personal 11 observations from participating in nearly all of the public working and private working level meetings differs from 12 others' characterize that this is hand holding. 13 We insisted on an independence criteria and it 14 15 evolved into an arm's-length criteria and the proof of that 16 was, when I went to this meeting, the first couple of 17 meetings, in fact all meetings, and when a question would be 18 asked by Sergeant Lundy with the NRC sitting between 19 Sergeant-Lundy and the utility, and the response from the utility was a deer-in-headlights look like, gee, I didn't 20 21 know that's what you wanted, I was assured the process was arm's-length. Others would look at as because there were 22 23 exchanges of information, I would attribute that to the 2.4 rigidity of the communications protocol and the fact that we had to then go beyond exchanging pieces of paper to have 25 1 face-to-face communications. 2 However, the number of deferred items remains of concern, particularly the number of level four DRs that 3 emerged from the CAVP process. The docketed commitment by Northeast Utilities on March 9th regarding final corrective 6 action on deferred level for DRs, prior to the completion of the next refueling outage is positively noted by NEAC. Insofar as practical, and this is a suggestion, this should be the standard goal for all current deferred items. In 10 other words, for the numbers that were shown this morning by 11 Mike and other that perhaps the goal should be that only the

level four -- commitment to the level four DRs is being

```
correctively pursued before the end of the next refueling
     outage, but perhaps all that are currently on the table.
14
      That level of confidence would perhaps be well received by
15
      the public.
16
17
               In addition, NEAC considers the prompt and
18
      comprehensive implementation of Passport, it's a software
19
     management control system, as essential for North East
20
     Utilities to establish world-class deferred items management
21
22
               Management oversight and quality assurance. Many
23
      of the observations noted in the preceding two paragraphs
24
     have management oversight and quality assurance
     implications. Specific observations of oversight have been
25
1
      by the very nature and function rather limited.
2
               Certainly the small number of level three DRs
3
      resulting from the CAVP process reflect upon the validity of
      oversight certification process. The results of ongoing NRC
      inspections will add to this database.
5
               The public and press have recently challenged the
     role of oversight and the recirculations system are
      assessed. But that was discussed earlier this morning.
8
               We were similarly concerned. We were similarly
9
10
     concerned because in the press reports we read, and as I
     indicated to you, Commissioner Diaz, when you came and
11
      visited that there seemed to be this risk taking that, well,
12
13
      we'll test it and it if fails we'll take that risk. And
     there was the fear that, well, we're rushing to schedule and
14
15
     not doing what makes sense.
              So I attended the April 7th meeting that the NRC
16
     hosted at Northeast Utilities. Present were Northeast
17
     Utilities and Sargent & Lundy. There was a very thorough
     discussion of the events that led up to the detection of the
19
2.0
      failure and the corrective action that resulted.
21
               The failure was the result of cavitation. The
     cavitation was neither predicted by anybody in the room,
22
2.3
      neither the members of the oversight team nor the engineers
      and design staff nor contractor experts from the field nor
24
      Sargent & Lundy. That was what caused the sleeve to fail.
25
               Now I agree with Don DelCore. The Navy knows a
1
      lot about cavitation -- you know, propellers when I go fast,
2
      velocity, speed and pressure and all that kind of stuff, so
      I think there is probably something on the industry that
5
      massive flow rates through orifices and cavitation ought to
 6
     be something to be studied even further, but I was assured
     that the process that was described this morning by
     Northeast Utilities whereby Oversight took a position, there
8
      was a test created, there were criteria established, and
10
     Oversight maintained a position in the process to the end
      was in fact the role of Oversight in the process, and that
11
12
     nobody was taking a risk.
13
               There was a test to determine whether the
14
      calculations were accurate and nobody predicted that
      cavitation would cause the failure. I even asked the person
15
     from Oversight that made the calculation whether he
16
17
      predicted cavitation and he did not -- so it is my opinion
      that Oversight appeared to properly execute its
18
19
     responsibility in this particular situation
2.0
               I would also add that having observed the NASB
21
     meeting yesterday, there was a very frank, very objective,
22
     very comprehensive and a firmly-focused meeting on all
23
      appropriate aspects of nuclear safety.
               In summary, I have the following observations.
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address you this afternoon.

16 17 the Director of the Radiation Control Division of the State 18 Department of Environmental Protection. I am also the State Liaison Officer for the State of Connecticut and Governor 19 Rowland's representative to the Northeast Interstate 20 21 Low-Level Radioactive Waste Commission. Currently I am the 22 Chairman of that Commission.

I also frequently represent Commissioner Rock at 23 2.4 the Nuclear Energy Advisory Council meetings, the council

25 that we just heard from. 1 The DEP has several roles with regard to nuclear

power plants in the State of Connecticut. We have a radiological response function and a non-radiological. regulatory responsibility.

The radiological function includes the protection of the public health and safety in the event of an emergency involving the exposure or potential exposure to radioactive material. This function, as you know, is not limited to nuclear power plants but involves all facilities that

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10
     utilize radioactive material.
               We obviously take that responsibility very
11
12
      seriously and work very closely with your staff, other
13
      federal agencies, other state agencies, local and private
     organizations to ensure a constant state of readiness.
14
               The non-radiological regulatory responsibility
15
     involves the issuance of various waste permits, water
16
17
      discharge permits and air permits.
18
               We have been keenly interested in the
      circumstances associated with the nuclear power plants
19
20
      situated in Connecticut and have been following closely the
21
      changes that have occurred at Millstone.
22
               We have also observed positive changes at the NRC.
2.3
               There are many very important issues that are
24
      being addressed a Millstone. Time does not permit
25
      addressing all of them. We heard a lot of them this
1
      morning. They range from training, maintenance, equipment
     replacement, quality control, quality assurance, emergency
2
      planning, radiological controls, environmental monitoring --
      and the list goes on.
 4
               However, one characteristic of the past senior
5
      management team that trickled down to supervisors and many
 6
     of the employees was attitude, and I would like to talk to
      it just for a moment.
8
               The lack of a safety-conscious attitude on the
10
     part of previous senior management led to a loss of respect
     for the regulatory process. The loss of respect for the
11
12
     regulatory process resulted in a decline in regulatory
13
     performance and the lack of a safety-conscious work
14
      environment at the Millstone Nuclear Power Complex.
15
               The decline in regulatory performance resulted in
     the NRC action that placed the Millstone units on the Watch
16
17
     List.
               Over the last several months we have received
18
     reports and correspondence that indicates that the new
19
20
      management team at Millstone is indeed demonstrating a
      change in attitude. The Employee Concerns Program is
21
      closely linked to the concept of a safety-conscious work
22
23
     environment.
24
               Recently, the independent third party oversight
25
      program concurred that Northeast Nuclear Energy Company has
                                                          176
     achieved a safety-conscious work environment at Millstone,
2
      and NRC documents dated April 20th and April 21st and
 3
      others, but I am referring to those in particular, one of
      which was entitled "Employee Concerns Program and
      Safety-Conscious Work Environment Evaluation at Millstone
5
     Nuclear Power Station" -- the documents generally reported
 6
      that although the team found two weaknesses in the
     safety-conscious work environment that required attention,
8
9
     the evaluation team found that the Employee Concerns Program
10
      was well-established, that Northeast Nuclear Energy Company
     had significantly improved the Employee Concerns Program,
11
12
     and that the Employee Concerns Program was functioning
13
      effectively.
14
               The Department has received additional NRC and
      contractor reports that indicates this very important change
15
16
     in attitude.
17
               In the area of the non-radiological environmental
      programs, we understand that several improvements have been
18
      and are currently being made to Millstone's non-radiological
19
20
      environmental program. New policies are being implemented
      and training to support environmental programs has been
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conducted. Key station procedures now include environmental
23
      considerations.
24
               In conclusion, it appears as though the
      effectiveness of NRC's regulatory program has improved. We
25
1
      support the continued efforts to improve the
2
      safety-conscious work environment which should result in
      regulatory compliance at Millstone.
3
 4
               However, the commitment must continue. The
5
      concepts of critical self-assessment, of questioning
6
      attitude, conservative decision-making, and respect for the
7
      regulatory process by both Northeast Utilities and the NRC
      will result in a safer facility.
8
               If you allow nuclear operations to continue at
9
10
      Millstone, you must regulate and oversee with diligence to
11
      ensure that all nuclear activities are performed in a safe
12
      manner.
13
               That concludes my remarks.
14
               CHAIRMAN JACKSON: Thank you very much.
15
     Commissioner?
               COMMISSIONER McGAFFIGAN: I have one question.
16
               The Citizens' Regulatory Council, which is going
17
18
     to follow you, has given us an outline of their
     presentation, and on it twice occurs the words DEP,
19
20
     Department of Environmental Protection, I assume, violations
21
      under the category of safety-conscious work environment and
22
     health and safety.
23
               Are there recent violations --
2.4
               MR. McCARTHY: Yes.
25
               COMMISSIONER McGAFFIGAN: -- that you'd want to
1
      talk about.
               MR. McCARTHY: There have been recent violations.
2
     Right now they are in litigation and we are asked not to
3
     discuss that litigation process, especially under these
     conditions, but yes, there have been violations -- not only
     the Department is concerned. The Attorney General's office
6
      is also involved.
               COMMISSIONER McGAFFIGAN: But that doesn't detract
     from the statement you just made that on balance you think
9
10
     that --
11
               MR. McCARTHY: That's correct.
               COMMISSIONER McGAFFIGAN: Thank you.
12
13
               MR. McCARTHY: Well, what I did say was that in
     their non-radiological environmental program they have
14
15
     indeed, you know, improved and committed to additional
16
      improvements.
17
               COMMISSIONER McGAFFIGAN: Okay.
18
               CHAIRMAN JACKSON: Any other questions?
               COMMISSIONER DIAZ: You are saying the
19
     non-radiological. How about the radiological program?
20
21
               MR. McCARTHY: The radiological program -- we are
22
      involved with that. As I indicated, you obviously take the
     lead in the radiological program. We are involved to the
23
24
      extent that we respond in the event of an emergency.
               We become familiar with the plant. We need to
25
1
     understand the operations at Millstone in order to
     understand if there is any kind of an emergency how to
     respond to that particular emergency, and you know, as I
3
 4
      said earlier, we feel that with the work that was done in
      turning around the attitudes associated with upper
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management, we feel that trickled down and it is a safer

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facility, or will be.
               COMMISSIONER DIAZ: Thank you.
8
               CHAIRMAN JACKSON: Thank you very much.
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10
               From the Citizens' Awareness Network, I would like
11
     to call forward Ms. Deborah Katz their President and
12
     Rosemary Bassilakis.
13
               MS. KATZ: Thank you for having us speak to you
14
     today and thanks for having Rosemary come up with me. We
15
      were both a little nervous about this, so we figured if we
      were together, it would be safer.
16
17
               CHAIRMAN JACKSON: It's safe, at any rate.
               MS. KATZ: Well, safer. Always safety first.
18
               I wanted to -- I am going to talk about the issues
19
20
     of the -- issues of an absence of a safety-conscious work
21
      environment, and Rosemary will focus more on the issues of
     Little Harbor and standards.
2.2
23
               One of the things that we are very concerned about
24
      are the issues of intimidation and harassment and the
25
     systemic mismanagement by Northeast Utilities that has gone
1
      on over a period of time which resulted in, in fact, their
     being closed for two years. And one of the things that is
2
      -- and this is important to us because in fact we live in
      impacted communities, and we in our communities suffer from
     issues of intimidation and harassment when we question
5
      what's going on at our local reactor. So how workers are
     treated directly affects us, in fact, because if they are
     intimidated, then the ability for communities to question
8
     what is going on is really compromised to an even greater
9
10
      extent. And since workers basically protect us by their
11
      questioning, it is essential that an open atmosphere and a
12
      democratic atmosphere happen.
               I mean one of our concerns is that basically
13
14
     Little Harbor has said that it would -- in terms of
      intimidation and harassment and issues of allegations, it's
15
     only on April 4th that NU actually got a passing grade. And
16
      this is a minimal passing grade. This is just satisfactory.
17
      In March they didn't pass. This is very serious to us. We
18
     don't believe that the utility, until it has shown
19
20
      significant passing grades for a period of time, should be
21
     allowed to operate. And we also believe that they should
     have to be able to stand alone before they stand operating;
22
23
     that they shouldn't reach a point after they are operating
24
      for a while where they don't need Little Harbor. They
25
     should be able to demonstrate that they can do it without
1
     Little Harbor, even though Little Harbor is still there, and
     then Little Harbor should watch them during the period for
2
      another six months at least after they are up. But to allow
3
4
      them, with only three weeks of satisfactory performance, to
5
      go on line in terms of work and intimidation is unacceptable
6
      to us.
               There have been repeated instances in terms of
      worker harassment. There were the MOV workers and the
8
      contractors who were fired there, managers and supervisors
      were responsible, they were demoted and not fired. The
10
11
      message to us is really anomalous in that we think these
     were serious violations, and that it's true these people
12
13
     left, but they -- the only people that have been fired have
14
     been workers in this whole situation.
               We are also very concerned with the Focus 98 memo
15
     in which everyone knows there were issues of isolating
16
17
      cynics, pockets of negativity, and in fact CAN submitted a
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2.206 petition with Nuclear Information and Resource

Service, and we believe that a determination on that should 20 take place before restart is allowed. 21 Now Northeast Utilities is asking for the benefit of the doubt, but we think the benefit of the doubt, after 22 23 two years of history on these issues, you know, is really 24 stretching things. And if it's true that it was meant --25 and it wasn't meant to mean anything, then how come two of 1 their executives resigned? I mean it's sort of an anomalous situation. If this was just mere accident and didn't mean 3 anything, well, why were two of the people responsible left the company? And if it is true that it was just an accident, as 5 it were, then somewhere they don't get it yet. They are not 6 getting it. And this is a serious concern to us, because if they don't understand the power they have over their work 8 9 force, if they don't understand the effect that managers and supervisors have over ordinary workers, they are not getting 10 11 it, and that really concerns us. 12 There is also Captain Guy Mendenhall who will in fact talk a little later, but he has submitted a series of 13 complaints and concerns. As far as we know, no action has 14 15 been taken on these, and he will speak to those. We also know that there are approximately five 16 17 allegations per month still being submitted to the NRC, and 18 this is very high in terms of what is going on in terms of 19 That's Northeast Utilities. And I just want to 20 21 focus, though, for a moment on the NRC Commission because 22 this systemic mismanagement at NU and their lack of 23 compliance with the rules and regulations couldn't exist 24 without, in a certain way, the NRC not doing their job, 25 which is of even more distress to us. I mean, you know, the 1 utility is not a human rights organization, but the agency is here to protect our health and safety, and it hasn't done it. And so we are concerned whether there has been 3 collusion or intimidation by NRC Staff or whether there's been a kind of abdication on the front lines for the NRC to 6 be doing their jobs. We believe an investigation of this has to take place for the public, us ordinary citizens in the front lines with those reactors, to know that there are 8 9 people doing their jobs here. 10 We really believe that a message has to be sent at 11 this point that reactors in New England, you know, and 12 throughout the country, aren't going to operate the same way they have, because Vermont Yankee is suffering from these 13 mistakes; Connecticut Yankee; there -- Maine Yankee; Pilgrim 14 15 has just gotten fined. 16 What we want the NRC to say is that, you know, you are a strict, tough regulator and second-rate work will no 17 18 longer be accepted, and intimidation and harassment is no 19 longer acceptable or allowed by the NRC. MS. BASSILAKIS: Millstone's safety-conscious work 20 21 environment must be held to tougher standards than those 22 currently put in place by Little Harbor. If your agency is 23 unwilling to hold them to tougher standards, then as Debbie 24 had mentioned, at the very least Millstone should 25 demonstrate that they can sustain an effective 1 safety-conscious work environment for a designated period of 2 time prior to restart.

You see, the inherent problem with your agency

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accepting mediocrity from Millstone safety-conscious work
     environment is that it leaves absolutely no margin, no
5
      margin for the work environment to backslide without falling
      into one of these categories that isn't acceptable to
     restart. They are really right on the margin of being
8
9
      acceptable, as Debbie pointed out. And that is really
10
      unacceptable to us.
11
               There could be an incident or event that could
12
      take place that would definitely negatively impact this work
      environment, and being in the community we don't feel
13
14
     comfortable knowing that they are going to be on line at
      that point in time, and we know they will be very hard
15
16
     pressed to shut down in the future once they start up again.
17
               So it would be of great comfort to us to know that
18
      they have really gotten a handle on their safety-conscious
     work environment enough that a backward slide wouldn't
19
20
     negatively impact them.
21
               Another inherent with the mediocre standards
22
      currently in place is that Unit 3 will be operational as
23
     Millstone safety-conscious work environment attempts to wean
24
      itself from the unprecedented and extraordinary level of
      management attention, legal advice and other resources. And
25
      Millstone still does have to wean itself from Little
     Harbor's hand-holding, and we would go on to say that we
2
      don't think they have been at arm's length at all; in fact,
      they have been very much involved with what's been going on
      at Millstone. And it's very easy to behave a certain way
5
     when you know you are being watched closely, but what is
 6
      going to happen as Little Harbor pulls back and is not
8
     watching closely?
               So this again is very -- this sort of
      co-dependency is very dangerous, and Millstone should have
10
11
      not only an effective safety-conscious work environment, but
12
      one that can stand on its own two feet prior to restart.
13
              Now Little Harbor, whose leaders are made up of
14
      ex-utility executives, has a seemingly biasness towards
      management, and this biasness seems to prevent them from
15
     being fully objective, in our opinion. Little Harbor
16
17
     allowed a new management to quantitatively compare 1997
18
      leadership survey data to that obtained in 1996. Everyone
19
     knows that quantitative comparison is invalid, yet Little
20
      Harbor allowed Northeast Utilities to provide you, the
21
      Commission, with this deceptive information during both the
22
     August and December 1997 Commission meetings. Little Harbor
23
      is giving the green light for restart, even with the
24
     inappropriate nuclear oversight focus 98 list surfacing;
      with all its underlying chilling tactics that it represents.
25
1
      Little Harbor is giving the green light, even though 27
     percent of the identified focus, otherwise called problem
2
      areas, remain open. And this is after two years that 27
 3
     percent of these focus areas remain open. That's a long
      time. And they're not resolved yet.
 5
               Little Harbor is giving the green light, even
      though they were aware of Captain Guy Mendenhall's February
8
      12th resignation in disgust with management, and the
      employee concerns programs' lack of response to his
10
     concerns, until after he went public on April 8th at an NRC
11
      meeting.
               Little Harbor also apparently finds it acceptable
12
13
     that Millstone's employee concerns program still relies
14
      significantly on contracted help; still 50 percent of the
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employee concerns program is made up of contractors. This

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and contractors leave? Is it going to still be an effective
18
19
      employee concerns program?
               So we believe that Little Harbor is not holding
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21
     Millstone accountable to tough enough standards, standards
     that are acceptable for restart. Little Harbor, however, is
22
2.3
     not the regulating body charged with protecting public and
24
      worker health and safety. It is the NRC who must protect
25
      our communities. Therefore, we are asking you to require
1
     Little Harbor to create a standard of excellence at
     Northeast Utilities that will assure the safe operation of
     the Millstone units if that is ever possible.
3
               Thank you.
               CHAIRMAN JACKSON: Thank you. Questions?
5
6
     Commissioner Dicus?
               COMMISSIONER DICUS: I think both of you indicated
     that you believe that Northeast Utilities should have a
8
     passing grade in their employee concern program as well as
9
10
      the safety culture work environment program for quote,
      unquote, some time. Could you characterize and define some
11
12
      time?
               MS. KATZ: You want to give that to me?
13
14
               I would say they would need to do that for at
15
     least six months; that they would need to get passing
      grades. I mean in school we have to pass, to pass the class
17
      and go on. We are not allowed to just get one grade that's
18
      good and get the others that fail. So that I think they
19
      should have to go through a whole term and pass the grades
     before it could go forward. I mean I think they should do
20
21
      what we had to do in school.
22
               COMMISSIONER DIAZ: You know, you have mentioned
      several times the fact that there are mediocre standards.
23
24
     Would you expand on that, you know, how -- you know, what
25
     are all those standards? Because it's a difficult issue,
                                                          188
      and I'd like to know more, you know, what are higher
      standards. What are they?
3
               MS. BASSILAKIS: Higher standards would be
 4
      standards that could allow Northeast Utilities to slide
5
     backwards without falling into the red. So if they were
 6
     held to a more excellence of a standard, that would be
      possible, that an event could occur, there could be a
8
      chilling effect in the organization but it wouldn't be such
9
      that it would affect safety at the plant.
               COMMISSIONER DIAZ: But is there -- you know, in
10
11
      the -- I'm sure you have analyzed Little Harbor's
      performance standards and so forth. Is there any one of
12
      those that you could pinpoint and say this should be higher
13
      than what it is? You know, 98 percent one time, and 83
14
15
      percent. Is there one particular standard that --
16
              MS. BASSILAKIS: No, and I'm referring to the four
17
     attributes that they put up.
18
               COMMISSIONER DIAZ: That's right.
               MS. BASSILAKIS: Those are the standards that I'm \,
19
20
     referring to.
21
               COMMISSIONER DIAZ: You mean the yellow on the --
     MS. BASSILAKIS: Yes, exactly. And, in fact, when they
     first came out with their indicators and their, you know,
23
24
      their whole criteria, restart could be obtained when
     something still required management action. And, in fact,
                                                          189
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is of concern. And I have raised this with Little Harbor,

you know, what's going to happen as this transition goes on

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they would be allowed to restart, but because there was such
2
      misunderstanding or concern about how it was worded, they
4
      changed the way they laid out that format. But just high
     enough standards that they could slip backwards and health
5
      and safety wouldn't be impacted.
               CHAIRMAN JACKSON: So you are saying it should be
8
      beyond the yellow category?
               MS. BASSILAKIS: Or at least maybe the yellow with
10
      an up arrow, or something.
11
               CHAIRMAN JACKSON: So you're looking for more
12
               MS. BASSILAKIS: More margin. I mean let's have a
13
14
     little margin here. This is a utility that went beyond
15
      chilling workers. I mean they were frozen for a long time.
               CHAIRMAN JACKSON: Okay. Thank you.
16
17
               [Applause.]
18
               CHAIRMAN JACKSON: Thank you very much.
19
               I'd like to call forward from the Citizens
20
      Regulatory Commission Ms. Perry-Luxton and Mr. Guy
21
      Mendenhall.
               MS. PERRY-LUXTON. Good morning, Chairman
22
23
      Jackson -- I mean afternoon, Commissioner Dicus,
24
     Commissioner Diaz, Commissioner McGaffigan.
               I'm Susan Perry-Luxton from the Citizens
25
1
     Regulatory Commission. I represent a grassroots citizens
     group from Waterford, Connecticut, housed in Waterford,
2
      originated in Waterford, but from southeastern Connecticut
3
 4
      as a whole.
 5
               We've been asking questions of your Commission and
     Millstone for the last 2-1/2 years when George Glatas,
      senior engineer at Millstone Station, revealed to the public
8
      in the fall of 1995 that Northeast Utilities was operating
      in a manner that was dangerous and illegal.
9
10
              So we formed the group, and here we are, still
11
      plugging away.
12
               Joining me today are a few residents of
13
     Connecticut who represent thousands who have grave doubts
14
     about the readiness of this utility to restart. In the
15
     final analysis the decision you make is not about programs,
     not about pipes, and not about Northeast Utilities' profits,
16
17
      it's about people, individuals and families living in
18
      eastern Connecticut, the people that were here this morning
19
     with the babies crying in the gallery and the young kids
20
      sitting on the floor.
21
               For the safety of our community, we're convinced
     that Northeast Utilities' ECP or Employee Concerns Program
22
23
      and safety-conscious work environment require a period of
24
      successful, sustained performance. Mere improvement is not
25
      sufficient.
                                                          191
1
               Management oversight and quality assurance.
      Assurance at this time should be vigorous, proactive, and
2
      independent and effective. This would enable a true
 4
      recovery, but instead it has been and remains dysfunctional.
5
     It has been and remains dysfunctional.
               Regarding the management of the 5,700 or whatever
     items that the management has on the deferred items list, we
     don't believe that they should be deferring anything,
8
     because we understood that when NRC came, Dr. Jackson came
     to our community and said that all these things were going
10
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to be fixed before restart. With the history that NU has had of not fixing things -- I mean, some of those things on

11

12

they changed that. If it still required management action,

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13
      the -- in this process were from ten years ago, they still
     hadn't fixed them, and when they went down they had to be on
14
15
      the deferred items list.
               We go no, no, we don't want that, because we feel
17
      that nuclear power is a controlled nuclear explosion within
      the plant. The conditions of safety are very precise. The
18
19
      process is an organic unity, and small details can lead to
      major problems. But to ask us to accept 5,700 small details
2.0
21
      is not acceptable because this is what got {\tt NU} in trouble in
22
      the first place is their inattention to detail.
2.3
               So now what brings us to this conclusion is not
24
      just experiencing the last two years of dealing with
      Northeast Utilities, but also listening to the concerned
25
      voices from the inside, because workers of conscience that
      call -- to this day I'm still getting about two calls --
 3
      several calls a week from people in different departments
      who express concerns to me or need to be given the names
      of -- they don't feel they can go to ECP. They don't feel
 6
      they can go to Employee Concerns, and they don't feel they
      can go to Little Harbor.
 8
               As a matter of fact, last week someone said I'm
 9
      not going to Little Harbor -- because I say, "Did you go to
      Little Harbor? Would you go to the ECP?" And they said no,
10
11
      they're not going to Little Harbor because we feel they're
12
      in bed with the utility. This is an employee telling me
13
      this. So when I'm still getting calls and the NRC is still
      getting a lot of allegations, then something is not right
14
15
      with the safety-conscious work environment. So if you're
16
      going to fulfill your moral and statutory obligation to
17
      ensure the protection of the health and safety of the
18
      public, you must listen to these warnings.
19
               nd I want to mention just a couple things. I have
      three reports referring to the DEP guestion Commissioner
20
21
      McGaffigan had that came out in March for violation of
22
      permits that Millstone engaged in.
              CHAIRMAN JACKSON: Why don't you hand them to the
23
24
      secretary, please.
25
               MS. PERRY-LUXTON. Oh, sorry. I forget where we
                                                          193
 1
      are.
 2
               And then I also have our mission statement and a
      little bit about us. But --
 3
 4
               CHAIRMAN JACKSON: Give it to the secretary.
 5
               MS. PERRY-LUXTON. Ninety copies was just too much
 6
      for me, 90 copies. So -- I almost didn't get here. I was
      caught at the zoo with -- in the rain.
 7
               Now the reason -- I need to say one more thing,
 8
      and that is about the RSS. I had to leave this morning. I
 9
      couldn't take it anymore listening to Millstone management
10
      about the RSS. To me the RSS modification failure was a
11
12
      clear example that things are dysfunctional still at
13
      Millstone, that ethics and leadership at Millstone are still
      lacking, as they were when we got into this 2-1/2 years ago,
14
15
      because they continue whenever an event happens, they
16
      continue to spin it, to spin it so it comes out making them
17
      look good. And I can't see how the calculation problem, the
18
      relationship between oversight and the line that broke down
19
      and the engineering, elementary engineering that was
      evidence could possibly be put in the positive category for
20
21
22
               So that's all I have to say about that. But with
23
      me today is a highly qualified individual with impeccable
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credentials, a patriot, a veteran, a captain of nuclear
      submarines who absolutely stunned us at a public meeting a
25
1
      couple of weeks ago, and we felt that you had to hear his
      story, because when we heard it, it stunned us because it
2
      validated our concerns. The concerns that we've been having
      for the last months were verbalized by this man who left the
      company. That's why I wanted him to share our time. So I
 5
     give you Captain Guy Mendenhall.
               CHAIRMAN JACKSON: Okay.
8
               MR. MENDENHALL: With that introduction --
     Chairwoman Jackson, Commissioners, I am Captain Guy
9
     Mendenhall, United States Navy, Retired. I reside in Gails
10
11
     Ferry, Connecticut.
12
               I served as a commissioned officer in the Navy for
13
     26 years, retiring from active duty in 1992. For 20 of
14
      those 26 years I served in nuclear-powered submarines, where
15
      I was responsible and accountable for the training,
      qualification, operational performance of increasingly
16
17
     larger-size organizations which operate and maintain nuclear
18
      powerplants. For eight of those 26 years I was commanding
     officer of two nuclear-powered submarines.
19
20
               Additionally I served two years as a direct
21
     representative of Admiral Rickover on one of his training
     facilities. I reported to him at least weekly in writing on
22
23
      the performance of students, Navy staff, and managing
24
      contractors at nuclear propulsion training units where they
     operated three reactors.
25
1
               For five years following my departure from the
2
      Navy and concluding with my resignation in February of this
      year, I served as a lead auditor and then as a
     self-assessment coordinator in the independent and line
 4
5
      nuclear oversight organizations and performance assessment
      organizations at Millstone.
               I have a very long list of prepared remarks today,
8
     but I feel that I need to talk and address some of the
      things that were brought up. And I know the time is an
     item, and so I will not --
10
11
               CHAIRMAN JACKSON: Let me say this to you. There
12
      is a time limit, because (a) we have to respect everyone who
13
      wants to present.
14
               MR. MENDENHALL: Yes, ma'am.
15
               CHAIRMAN JACKSON: And (b) one Member of the
     Commission does have a time constraint, and we want to be
16
17
      sure --
               MR. MENDENHALL: Well, I will keep my time short.
18
               CHAIRMAN JACKSON: To hear everyone. Thank you.
19
               MR. MENDENHALL: I was to say the least blown away
20
21
     by the presentation made by NU today. It's typical of what
22
     bells and whistles and they have thousands -- they have
23
     millions of dollars to spend on presentations and they have
24
     millions of graphs and performance indicators, but that's a
     different side of performance that I don't think they
2.5
1
     understand.
2
               There are two sides -- you have programs and
4
5
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processes, and they tell the people how to do the job. And you have leadership, and they lead them to do the job. And for my five years at Millstone, I worked very hard to try to work with the people there to instill leadership. Given I was just a, you know, just an employee, I was not in a 8 position of leadership. But I feel a leader is a person who can lead -- he can lead from any position if you do it

right.

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11 I brought up issues similar to the ones that the 12 CRC brings up over and over again, and I was continually met with one of three answers. It was -- the issue was either 13 trivialized, it was studied to death, or it was looked at so 14 15 narrowly that they only treated the symptom rather than the 16

We say we have an effective corrective action program. I worked in the correction action department for a year in my assessment job, and we routinely had to question people on root-cause analysis, people who didn't know how to

I can see the urgency to get the plant started up. I understand nuclear is a very viable energy source. But unless you have the leadership to run the plant and to lead the people, it isn't going to work.

197

For 20 years Millstone was on a downhill slide. I think people realize that now here. In 20 years they created habits of the people that work there that cannot be eliminated in two years, period. I don't care how many Little Harbors or anybody else comes in and tells you.

What we've done is we've taught them how to say the words so that when they get interviewed they can say the words, they know, and they're scared to death about losing their jobs. And so what -- this is not intentional on their part, but what they do is they answer the question with the key words and tricky phrases, but when they go out in the field to operate, they don't know how to do it the way it ought to be done, and management is not ready to supervise

13 14 them

15 The management we have in our plant, if you ask, 16 you would find out that probably a handful of them have ever really operated the plant. Using the rules we have, you can 17 18 be in management, you can be in high positions and never 19 having operated one of those plants. And I'm not talking about getting a license. I respect people who get licenses, 20 but it's like a driver's license. You wouldn't give your 21 22 daughter or your son a driver's test and then send them out 23 to drive the car without some practical experience. Well, 24 that's what we're doing. We did it for years, and that was 25 somebody else's decision.

1 But the program I worked in for 26 years didn't do 2 that. And we don't have the safety record that's out in the 3 real world. The Navy is a very, very different environment. I understand that. But there are certain basic fundamentals that Admiral Rickover built into both of those programs. And consistently during my time in Northeast Utilities the answer I would get when I asked people why they were doing things, they would say because the NRC says so. And I hear 9 that even today. Throughout my job I would challenge for 10 the basic fundamentals of why they were doing what they were 11 doing, to understand it.

12 Is my viewgraph up there? Can you put up my 13 viewgraph? Oh, okay. Good. This is a little bit of ad libbing, and I'm not going to go very long. But this 14 15 graph -- you need to look at it while you're doing it. Oh, 16 you can see it I guess. That graph captures very precisely the problem at Millstone. It's been that way. It took me 17 18 four years to figure it out. And I took that graph to Mr. 19 Kenyon last July and gave it to him, and I didn't get much response. I don't know why. He never told me why. I've 20

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21
     given it to almost every senior management person at
     Millstone, and I have yet to see anybody do anything with
22
23
24
               Looking at the graph, I don't want to, you know,
     insult anybody's intelligence, but the more you know about
25
     what you're doing, the more you understand what you're
1
2
     doing, the less people have to write down what they're
      telling you to do.
               When I first at Millstone five years ago, I read
 4
5
     the procedures and I couldn't get through them, they're so
      complicated, they're so -- and I said why are they like
     this. And so I started kind of to help fix them. I
     couldn't fix them because the rules to write them are so bad
8
      that you can't fix them. And I concluded after four years
     that people do not understand what they're doing to the
10
11
     degree that with the fundamentals that they can operate on a
12
     small number of documents so if they don't understand it to
13
     operate it, they certainly don't know how to write the
14
      procedures.
15
               CHAIRMAN JACKSON: Do you have experience at any
      other nuclear stations?
16
17
               MR. MENDENHALL: Well, I was --
18
               CHAIRMAN JACKSON: Commercial?
               MR. MENDENHALL: No, ma'am. Well, Haddam Neck and
19
20
     Millstone.
21
               CHAIRMAN JACKSON: My question is do you have any
     sense of the level of knowledge that you're speaking about
22
23
     relative to --
24
               MR. MENDENHALL: Well, I can give examples.
               CHAIRMAN JACKSON: No, no, no.
25
                                                          200
               Well, I'll take them in a minute.
               MR. MENDENHALL: Okay.
 2
               CHAIRMAN JACKSON: But relative to any other
     commercial operating station.
4
               MR. MENDENHALL: I guess -- no, I don't. I won't
5
     try to talk around that one. I do not know. But I do know
     that when you ask a guy why he's doing what he's doing and
8
     he can't explain it and he's not willing to go break out the
     book and show you the book, he doesn't in most cases know
     where the book is that explains it, and what do I conclude?
10
11
      And I have challenged people individually on level of
12
      knowledge frequently, and I do not get answers that make
13
      sense.
14
               That's one of the reasons why I left. I left
15
      because I could not continue to try to go over the hurdles I
     was going over just to get people to understand the problems
16
17
      that we had. And every time I bring one up, I get this
18
      trivialization, study it to death, or only look at the
      symptoms. You miss the problem. So if you go out and fix a
19
20
      symptom, and then the problem happens again, you know, what
21
      would you? You are supposed to find out what the real
     problem is and go fix it. We don't do that. We don't do it
2.2
23
      very well. I can't say we don't do it all, but we don't do
24
      it verv well.
2.5
               The real reason why I got even involved with this,
     when I left Northeast Utilities, I told myself I am not
     going back. I don't want to get involved with it, I'll let
2
      them go. Well, on the last day I was there, I discovered
     there was a problem and so I documented that problem in a
4
5
     CR. And following the procedures, it took me all day to do.
      I did it. Got home about 2:00 a.m. that night, they
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probably fined me for being there too many hours. But
     turned it in, got the guy to sign it, everything went
      through. I find out a month later that that CR got
      cancelled, or basically signed off closed because they said
     there was no problem there. Okay.
11
12
              First off, there's a rule in our process that says
13
     if you -- when you disposition a CR, you go back to the
     person that wrote it and you tell them why you didn't. I
14
15
     purposely wrote on that CR, and I have a copy here if you
16
      want to see it, I purposely wrote on that CR my boss's name
17
      and said I am not going to be there, I knew I was leaving,
      everybody knew, you need to go to talk to Gordon Winters was
18
19
     his name. Okay.
20
              Nobody ever went to him to talk to him about it.
21
      They didn't even cover it with him, it just got signed off.
               So I had one of my friends that worked there pull
22
23
      the paper work out and send me a copy. And, lo and behold,
      they said this is not a problem, you know, so we closed
24
25
     this.
               Well, I went back -- that's the real reason why I
      even went to the NRC public meeting, was because I felt
3
     like, gee, you now, this is something that I can't let
      stand. I don't want to create any new work for myself, but
      I at least want to finish the old work. So I went to the
5
 6
      meeting and that was one of the issues I brought up.
               Subsequently, NU has looked at that and they said,
     yeah, there is a problem. But they have said that they
8
9
     can't meet the rules because -- they can't, it's too many,
     there are too many impediments in the way, it takes too
11
     long, costs too much, so they are going to try to get around
12
      them.
13
               CHAIRMAN JACKSON: What did this CR concern?
               MR. MENDENHALL: The CR was measuring and test
14
15
      equipment. Non-conformance reports. Your office, your
16
     staff has questioned me extensively on it. In fact, I
     worked with one of your staff during the time when the issue
17
      first came up. The issue has been on the table for six
18
19
      months, it's eight months now. And when I first brought it
20
     up, it got shuffled off to the side. And one of your
21
      fellows on our staff brought it up and said, What happened
22
     to this? He asked us, and I was the guy responsible, and I
     went and looked. I first thought it was taken care of.
23
24
      Then I looked at saw it wasn't and, lo and behold, it got
25
      shuffled away. So we resurfaced it October last year.
1
               In between last October of last year and December,
     the people responsible for that wrote a procedure change.
      You know, everything is okay, but the procedure change
     didn't change the -- didn't change the issue, fix the issue.
      So when I left, I --
5
 6
              CHAIRMAN JACKSON: Did you view it as safety
      significant? Did you view this --
              MR. MENDENHALL: I viewed it not directly safety
8
      significant, but it was a loophole in one of our processes
10
      that could allow non-conforming -- or not non-conforming --
      conditions adverse to quality to exist in the plant without
11
12
     being looked at.
13
              I can explain all the details. I have explained
     it to your staff. They don't seem to argue with me that it
14
15
      is a valid issue. In fact, they claim they still had it on
      their list of things to follow. But if I hadn't written a
17
     CR on it, they would be the only ones that are following it.
```

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18
               CHAIRMAN JACKSON: Okay.
               MR. MENDENHALL: But my point is that that is not
19
20
      the only one. I could go on ad infinitum, and I know you
21
      don't want me to do that.
               I will bring up one more thing, design control. I
22
      got a copy of this. This is an assessment that was done by
23
24
      Nuclear Oversight of the design control system in Unit 3, or
      the -- yeah, design control. I read it on the way down
25
      here. I didn't get it till last night, so I apologize for
 1
 2
      not having not too much detail. But I read it, and I pulled
      out some numbers out of it. Basically, there are three Mode
      2 issues in here. They say that. There are zero Mode 4
 5
      issues. I wonder why. There are zero Mode 3 issues. I
      wonder whv.
 7
               There are problems with 50 percent of the
 8
      self-assessments that have direct impact on design control
      reported in this audit. There are 25 percent of the 5059
10
      safety screenings have problems. 70 percent of the minor
11
      modification package are screened for safety
12
      inappropriately. There's 41 percent of the CRs that cover
      -- 41 percent of the CRs have safety valve problems, they
13
      haven't been done on these CRs, to make sure that they are
14
15
      really not safety issues. Okay.
              Now, the bottom line is that this thing -- the
16
17
      bottom line of this team was the team concluded that
18
      although problems were found, the design process is
      functional. Okay. And I don't know what functional means.
19
20
      I was an auditor, okay. I was a self-assessor. I don't
21
      know what that means.
22
               I looked through -- they have to write a plan
23
      which they are going to follow. I looked through the plan,
24
      they didn't even finish following their plan, and it doesn't
      say what functional means in their plan. To me, that's --
2.5
      you know, but that's -- that is the oversight group doing an
1
      audit. There's a lot of good issues in here, but not
 2
      characterizing it properly, sending it to management.
               On one hand it gets in their desk one week, and
 4
 5
      the same week they are standing and saying we got no
      problems. I don't think that's -- I think the issue is
      leadership. I don't think they have established what they
      need in leadership to fix the problems. Anybody can fix
      problems if you recognize them, acknowledge them and get on
      and do it. But they don't have it. So that's --
10
11
               CHAIRMAN JACKSON: Thank you very much.
12
               Commissioner Diaz.
               COMMISSIONER DIAZ: Yes. You know, listening to
13
14
      you, you said you had been five years working at the plant.
15
               MR. MENDENHALL: Yes, sir.
               COMMISSIONER DIAZ: Yes. Let me, you know,
16
17
      because you are an experienced officer. You obviously have,
18
      you know, manager look at large organizations. And Chairman
      Jackson just asked you a pointed question on the safety.
19
20
      During your time, even during the operations, has there been
21
      a point in which you, as an experienced person, have seen,
2.2
      okay, or have experienced, have observed, or have
      information in which the adequacy of the protection or
23
24
     health and safety has been compromised? I am not looking at
      the details of the valve. I am not looking at the other
2.5
 1
      things. Those are all important things, and I am not taking
 2
      the -- but I want you to get above that.
               MR. MENDENHALL: I haven't seen any that -- I have
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problem, sir, is -- have you ever operated one of these
 5
      plants? I mean, you know, as an operator.
 6
               COMMISSIONER DIAZ: Yes, sir.
               MR. MENDENHALL: Okay. Then we are talking the
 8
 9
      same language. I'm sorry, I don't know your bio. The
10
     problem is that when you have safety nets the way we have
      them, there are interlocking and intermeshing. All the
11
12
      systems are designed to work together. If you have a
13
      deficiency in one system, it affects the operation -- it may
      affect the operation of another system.
14
15
              When you have hundreds of deficiencies that
16
      haven't been analyzed properly, you are leaving yourself
      open. Who can predict where the fault is going to be? Who
17
      knows? You don't know where it is going to happen and what
18
      -- and I am not trying to be, you know, save the world for
19
20
      humanity, but there is some kind of evaluation that has to
21
      be done on these issues to make sure. And if we have a
22
     final safety analysis report that is not correct, and hasn't
     been maintained for two years, part of what was in this
23
      audit report says we didn't have knowledge and understanding
24
25
      of the final safety analysis report.
                                                          207
 1
               CHAIRMAN JACKSON: Okay. Thank you.
               MR. MENDENHALL: I am -- no direct, but they are
 2
 3
      all indirect, and they are all --
               CHAIRMAN JACKSON: Thank you. I am going to let
 5
      -- does anyone from Northeast Utilities care to speak to
 6
      this issue?
               VOICE: Why should they?
               MR. MENDENHALL: Why shouldn't they? I am ready
 8
 9
      to answer their questions any time.
10
               CHAIRMAN JACKSON: We are gong to get into an
11
      audience/presenter debate.
12
              Thank you very much. Thank you.
               MR. MENDENHALL: Thank you very much. I
13
      appreciate it.
14
15
               CHAIRMAN JACKSON: I now call forward Mr. David
16
17
      Lochbaum from the Union of Concerned Scientists. Good
18
      afternoon.
19
               MR. LOCHBAUM: Good afternoon.
20
               Slide 2, please.
21
               I came here today to talk about the four items
22
     that were on the scope for today's meeting, employee
2.3
      concerns, safety conscious work environment, deferred items
      management, and management oversight and quality assurance.
24
25
              Slide 3, please.
               UCS has no reason to doubt Little Harbor's
      conclusion that the improvements made in the employee
 2
 3
      concerns program support restart. The exception we want to
     note is the 2.206 petition that was filed by Citizens
      Awareness Network and the Nuclear Information and Resource
 5
      Service on the suppression of the Focus '98 memo. We think
 6
      that petition should be resolved prior to restart.
               That would do two things. That would put that
8
 9
     issue to bed and it would also give some credence to the
10
      only vehicle the public has for interacting with the
      Commission, and that's the 2.206. We think that petition
11
12
      needs to be closed prior to restart.
13
               We feel that right now Little Harbor is serving as
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the training wheels for the employee concerns program at

14

not seen any that haven't been reported and dealt with. The

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15
      Millstone. It is essentially propping up, it could be
      propping up the employee concerns bicycle. If Little Harbor
16
      is correct, and we believe they are right, then those
17
      training wheels could be taken off at this point. However,
18
     the start-up of Unit 3 will stress the organization, or
19
      could conceivably the employee concerns program. So we
20
21
      think it is prudent to keep Little Harbor around until
      sometime after restart. I don't have a metric on when that
22
23
     point would go away, but we think it is prudent to keep
24
      Little Harbor around until after restart of Unit 3.
25
               Slide 4. Basically, the same thing with safety
1
      conscious work environment. We have no reason to doubt
2
      Little Harbor's conclusion that improvements to date at
      Millstone Unit 3 support restart. At this moment it doesn't
      appear that any employee with a safety concern will refrain
4
5
      from raising it either to line management, to the employee
     concerns program, to NRC, to the media, or to local
      citizens. Our only concern would be there is some
      hesitation with not going to line management employee
      concerns, too many of these seem to be going outside. But
      at least they are being raised. There doesn't seem to be an
10
11
     unspoken thought at Millstone these days.
12
              Slide 5, please. And there's an unfortunate typo
     in Slide 5 that I need to point out. The second bullet,
13
      "improperly" really should be "properly". It changes the
14
15
     meaning somewhat.
16
              We looked at the process by which Northeast
17
     Utilities went through and decided which items need to be
18
     done before restart and afterwards, and it is consistent
19
     with what other problem plants have done. We did some look
20
      at the actual deferred items, although not to the same
21
      extent as we looked at corrective actions, and it appeared
2.2
      that they were properly screened. We didn't see any
      evidence that things should have been done prior to restart.
23
              NU has backed up the deferred items with
24
      commitment to close them off in a timely manner. We think
2.5
      that's a good idea. That was a concern, that they would
1
2
     defer and then other emerging issues would come up and those
      things would never get closed out. But those commitments
      seem to be sound and take care of that issue.
4
               Our one concern in that area is that as Unit 2
      then restarts, and if there is any new emerging issues on
      Unit 3, those would be competing attention sources for the
8
     closeout effort on the deferred items.
              Millstone currently has, in our opinion, a weak
     corrective action program, and it would probably only get
10
11
      worse if you stress it any.
12
              Slide 6. On management oversight and quality
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12 Slide 6. On management oversight and quality
13 assurance. We look at the RSS orifice modification as
14 providing ample reason to suspect the effectiveness of
15 management oversight.
16 The second bullet there, in our opinion, we
17 thought the reason for the RSS mod problems were NU placed
18 schedule demands ahead of safety. I learned this morning
19 that wasn't true, NU did the best it could, it just wasn't

good enough.

But we have looked at other plants like Grand Gulf
during its start-up, and Indian Point 3 during its -- when
it tried to get off the watchlist and it was essentially off
the watchlist. In both of those cases, and in others, the
NRC required either around the clock full-time presence or a

```
mentor to back up or provide confidence that was there due
      to lack in confidence in the licensee. We think for
      Millstone Unit 3 that would be a good idea to make sure that
      either schedule ahead of safety, or just mistakes, or as an
      additional safety net. There is no guarantee, but there's
      an additional safety net. We think that would be a good
      idea, there is a precedent for it.
              On Slide 7, which is the summaries, employee
 8
 9
      concerns program and safety conscious work environment, we
10
      agree with Little Harbor, we have no reason to doubt Little
11
      Harbor that things are ready to support restart. We feel
12
      that Little Harbor should stay around for a while to monitor
13
      until after restart just for insurance, and to make sure
      there is no stress from that activity.
14
               We think the deferred items at this moment appear
15
      appropriate for restart, even given the volume is a little
16
17
      larger than other restart plants. But this process is sound
      and the volume is just a product of Millstone.
18
19
               Management oversight and quality assurance, we
      think is less certain for restart and to compensate for
20
      that, we are recommending around the clock NRC or some
21
      mentor presence that would guard against schedule over
22
23
      safety mistakes or any other -- provide an additional safety
      net for any other kind of mistakes that are made. With
24
25
      that, that's the only comments.
               Most of the comments we have on Millstone are on
 2
      the other issues, and we would like to come back and address
 3
      those at a future date.
               CHAIRMAN JACKSON: Let me ask you a couple of
      questions. You talk about stress and it may only get worse
 5
      as resources shift to Unit 2, if Unit 3 started up. Do you
 6
      believe that the quarterly progress reports to the NRC will
      provide for adequate verification of the licensee's
 8
 9
      commitments? I mean you are basically seeming to suggest
10
      that the actual independent oversight, do you mean in terms
      of having an independent contractor continue to be involved
11
      for some period after restart? Is that what you are
12
13
      recommending?
14
               MR. LOCHBAUM: The reason for the independent
15
      oversight was the quarterly closeout schedule by itself
16
      would be good if you had a good corrective action program,
17
      because then you could throw resources at it and close them
18
19
               When you have a suspect corrective action rate,
2.0
      the items may be closed, but you may not be fixing anything.
21
      So you can meet your schedule paper-wise but not be doing
      anything quality-wise. So that's why the closeout schedule,
22
2.3
      without some assurance that the things are actually resolved
      correctly, is not enough. That's why we thought the
24
      independent contractor or some oversight in addition to the
25
                                                           213
 1
      work-off curve would be a strong confidence factor.
               CHAIRMAN JACKSON: NRC oversight?
 2
 3
               MR. LOCHBAUM: I guess, in our opinion, if it was
 4
      Region 1 providing that oversight, we would have that
      confidence. We have less confidence in Special Projects
5
 6
      office
               CHAIRMAN JACKSON: Okay. Could you give me one or
      two examples of what you feel demonstrate a weak corrective
 8
      action program?
10
               \ensuremath{\mathsf{MR}}\xspace . LOCHBAUM: What we looked at to reach that
11
      determination was NU's response to the corrective action --
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or the DRs that were identified by Sergeant and Lundy. we
12
      went to Sergeant and Lundy's web site, pulled off several
13
      dozen items that had been responded to by Northeast
      Utilities and then look at what Sergeant and Lundy's
15
      evaluation of that response was. So it wasn't our
16
17
      determination of what NU proposed, it was what Sergeant and
      Lundy thought of what NU proposed.
18
19
               Our numbers were about 20 percent of those
20
      category were being returned to Northeast Utilities for more
      work. And I have heard -- over the last few months and
21
22
      weeks, I have heard talk about the communications protocol
      and not understanding the question and things like that. We
23
      saw some of those. And we recognize that that is another
24
2.5
      Millstone unique situation that isn't there at others. But
      that's not the only reason for 20 percent. That may knock
1
 2
      it down to 15, that doesn't knock it to zero. And that's
      too high.
               What concerns us most about that is those are the
 4
 5
      most visible corrective actions that probably anyone in the
      plant is ever going to work on, and if you can't get those
      right, the chances of getting the deferred items right is
      less, in our opinion. So that's what led us to the
      conclusion the corrective action was a problem and why we
      think that needs to be addressed.
10
               CHAIRMAN JACKSON: Okay. Why is that you feel
11
12
     regional oversight is better than the Special Project
      oversight?
13
14
               MR. LOCHBAUM: We draw that conclusion on going to
15
      some of the meetings. We regional oversight asked a lot of
16
      probing questions similar to the way you ask questions about
17
      the licensee and others. The first answer, the nice and
      easy answer isn't sufficient. The regional folks generally
18
19
      follow it up with probing questions and make you generally
20
      explain why you feel something is adequate or that your
21
      schedule is going to be met.
2.2
              From looking at the Special Projects tapes of
      public meetings and reading some of the transcripts, most of
23
      the questions are on schedule and cost, and those -- those
24
25
      don't give us the same comfort level as either Region 1 or
 1
      Region 3, or any of the other regions, or NRR for that
 2
      matter.
               CHAIRMAN JACKSON: Okay. I understand.
 4
               Any questions? Commissioner.
 5
               COMMISSIONER McGAFFIGAN: Can I ask, how satisfied
      were you with the explanation on the RSS problem this
      morning? Was the first time you had heard that level of
      detail about --
 8
 9
               MR. LOCHBAUM: I've heard that, or variations of
      that before.
10
11
               COMMISSIONER McGAFFIGAN: Okay.
12
               MR. LOCHBAUM: The thing that wasn't mentioned is
      that the reason that RSS mod was made was to fix a problem
13
      with pump vortexing. And when you simply swap problems, one
14
15
      had been a problem for 15 -- or 10 years, and you swap that
16
      for a problem that breaks the lines in a few minutes. You
      know, whether Oversight was involved or not involved, it
17
18
      simply is not supposed to happen if you do your 5059s
19
      correctly, and that was not a 5059 that was even close. So
20
      there was a serous problem with that mod, and whether it was
21
      Oversight's fault, or however you draw the line, NU was
22
      ultimately responsible and they blew that one fairly
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23 largely.

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24
               CHAIRMAN JACKSON: Do you have a feeling as to
25
      whether you think it is indicative of other problems, you
      know, deeper problems, or do you think that is an isolated
2
      incident?
3
               MR. LOCHBAUM: We think it is an isolated
      incident. But an isolated incident right prior to start-up
     in a high profile fishbowl doesn't bode very well once you
5
 6
     don't have this great attention. You know, that's the
     stress we are talking about after restart. When a plant is
8
     on-line and something comes up on backshift, are you going
9
      to RSS mod it, or are you going to do it correctly? Those
10
     are the issues we are worried about.
               CHAIRMAN JACKSON: Okav. Commissioner.
11
12
               COMMISSIONER DIAZ: Yes. Going back to the weak
     corrective action program, and the basis on the 20 percent,
13
14
      and I think the percentage, you know, is really not the
15
16
               MR. LOCHBAUM: Right.
              COMMISSIONER DIAZ: Because they might vary in
17
     importance and according to risk and so forth. Do you have
18
19
      something that, you know, for the Commission, you can tell
20
     us, what is the base in which you say is weak? I mean it's
21
      -- have you looked at similar processes?
               MR. LOCHBAUM: Well, actually, I was responsible
22
2.3
      for closeout items at Indian Point 3, Fitzpatrick and
24
      Brown's Ferry 2 in the restart projects in the '80s.
25
               COMMISSIONER DIAZ: Right.
1
               MR. LOCHBAUM: The other two are more recent. And
2
     also Salem prior to joining UCS, I was on the Salem 2
     restart effort. And those processes were similar. You had
3
4
      a large number of items that had to be closed out before the
      plant could restart. Similar issues. I mean there are
5
6
      variations, but they are similar.
              I was responsible both for closing out items and
     also for reviewing items proposed, closure proposed by
8
      somebody else. In all those efforts, I didn't see the
10
     volume of problems that were evident at the DRs for Sergeant
11
      and Lundy.
12
              And it also goes back to the communications
13
     protocol. On those efforts you have a large volume of
     things to do in a short order. You don't sit down with
14
15
      every initiator of those items and find out exactly what the
     guy meant when he wrote the piece of paper. You have a
16
17
     college education, you have had some training, you read it,
      and you go out and close it. So that -- I think that
18
19
     communications protocol is being blown all out of
2.0
      proportion.
               COMMISSIONER DIAZ: Okay. But, you know, let me
21
      focus on the volume issue. The volume might be because we
22
23
     have a microscope that is turned to a higher power, which
24
     means that this issue or in this case, it was taken a step
     farther than normally. How about the quality? You know, if
25
      we drop the volume, how about the quality? From your
1
      experience, because you reviewed it.
2
3
               MR. LOCHBAUM: Right. Well, I think the volume
     issue, the person who works on an individual response is
     working on that individual response. He doesn't know if
      there's 10,000 others or not. If that person in the review
     chain, it's usually not just one person, there's a technical
      review and so on, if that chain can't get it right, then
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there is something wrong with that review process, that
      whole corrective action process.
10
              I have worked on projects where the threshold was
11
12
     way too low. At Salem, if you parked illegally, that
13
      entered the CR process, because security put a wheel lock
     your car and that entered the process the same as the
14
15
     reactor had been held on with velcro. It was the same
     process. So we closed out an awful lot of things that
16
17
      should never have been in there.
18
               So I have seen the volumes before and I have seen
19
     other people -- in fact, I haven't seen anybody not handle
     corrective actions like Millstone is doing now and that is
20
21
     what troubled us.
2.2
               COMMISSIONER DIAZ: And how is that?
23
               MR. LOCHBAUM: Well, given the fishbowl that they
     are under right now, and the seeming pressure to get the
2.4
25
     unit back on-line, if they can't do corrective actions any
1
     better than about 15 to 20 percent, whatever the numbers
     turn out to be, that doesn't suggest to us that after the
     Special Projects office leaves and all these independent
 3
      contractors, and all these other special precautions are
4
 5
     gone, that their corrective action rate will be any better
      when normal, quote, "normal issues" come up after restart.
               CHAIRMAN JACKSON: I'm sorrv.
               COMMISSIONER DIAZ: No, go ahead.
8
               CHAIRMAN JACKSON: Net. Net. Are you saying that
     the corrective action program is weak to the point that they
1.0
11
      should not restart at this point? Or are you suggesting
12
     that their corrective action program has weaknesses and if
13
      they are allowed to restart, they need to be watched very
14
      closely? Those are separate questions.
15
               MR. LOCHBAUM: Right.
16
               CHAIRMAN JACKSON: They are different.
               MR. LOCHBAUM: It's hard for us to say that the
17
     corrective action program is flawed to the part that it
18
      shouldn't allow restart. We have strong concerns and we
19
      were going to address that in the next issue. That gets
20
     back to -- if that corrective action process is flawed, it
21
22
     is going to manifest itself somewhere down the line. If we
23
     confidence in the NRC or something to step in and draw the
24
     line to make sure the plant doesn't operate unsafely, then
25
      they could start up with an unsafe -- or a deficient
     corrective action program and somewhere down the road they
1
2
      are going to come back down. And I guess we are going to
3
     address that a little bit later.
              Right now what we see is the corrective action
4
     program isn't -- is only costing them only, because things
5
6
      are being iterated back and forth between Sergeant and Lundy
7
     and Northeast Utilities, and eventually the right answer is
     being obtained and the thing is being closed properly. We
8
     think Sergeant and Lundy is gong a very good job of
      maintaining high standards and making sure that it is done
10
11
      right. So we think the corrective action program is weak
12
      but Sergeant and Lundy has the patience to stick it through
13
      to the end.
               CHAIRMAN JACKSON: So it is not unlike what was
14
15
      said in the employee concerns area. You don't know that
      they can iterate alone? Is that what you are telling me?
16
17
      Iterate to solutions.
18
               MR. LOCHBAUM: Well, we can they can. Right now
19
     Sergeant and Lundy is forcing the iteration. Once Sergeant
     and Lundy leaves --
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CHAIRMAN JACKSON: That's what I am saying.
22
     Iterate alone.
23
               MR. LOCHBAUM: That's correct.
24
               CHAIRMAN JACKSON: Okay.
25
               COMMISSIONER McGAFFIGAN: This is the subject of
1
     the next Commission meeting, but is the same analogy where
     we are talking about keeping Little Harbor there for six
2
3
      months at least, or so, after restart, would Sergeant and
4
      Lundy being there watching the program be one of the
5
     safeguards that you may be coming back to us on in a week or
6
               MR. LOCHBAUM: I think it's a safe bet, yes.
               CHAIRMAN JACKSON: You are getting your heads up.
8
               COMMISSIONER McGAFFIGAN: Early notice.
               CHAIRMAN JACKSON: Anything else? Thank you very
10
11
     much?
12
               MR. LOCHBAUM: Thank you.
13
               CHAIRMAN JACKSON: I would like to call forward a
     group of Millstone employees, Mr. Harry Blank, Mr. Dave
14
15
      Collins, Mr. Gary Verdone and Mr. Mike Meehan, who I
     understand are rehired employees.
16
17
              MR. BLANK: Yes, we are.
              CHAIRMAN JACKSON: Okay. Thank you. Good
18
19
      afternoon.
2.0
              MR. BLANK: Good afternoon, Chairman. Good
21
      afternoon, Commissioners. Thank you for having the time to
22
      see us today.
23
               My name is Harry Blank and with me is Dave
24
     Collins, Gary Verdone and Mike Meehan. We are here as
25
      employees of Northeast Nuclear Energy. We are not your
      average employees though. We were part of the 104 employees
     laid off in January 1996. Each of us had safety concerns
2
      that were addressed by the management at that time by
3
     labeling us as whistle-blowers or non-team-players and
     terminating us as soon as was possible. They didn't want to
5
      hear what we had to say, regardless.
               We, individually and collectively, have been with
8
     the company for over 60 years, through good times and bad,
9
      and into the recent problems in the '90s. Our experience
10
     included the many changes in management and leadership that
11
      occurred as NU attempted to deal with the problem of the
     '90s.
12
13
               When asked about the mistreatment of employees and
14
     whether the company was concerned with employee loyalty, the
      former leadership indicated to us, if you want loyalty, get
15
     a dog. When it came to maintaining the plant, the attitude
16
17
      was if it is not necessary to do it, then it is necessary
      not to do it. That was the decline of Millstone. The
      attitudes brought them to where they were in March '96 when
19
20
     the NRC placed them on the watchlist.
21
              Attitude comes from the top. There have been
     numerous management changes at Millstone in the last two
22
23
     years. The management there now, in the form of Bruce
      Kenyon, has the attitude we will do it right. We believe
24
25
     him, and we had more reason than most not to. It takes a
     man with a great amount of integrity and courage to admit a
     wrong and to extend a hand and mend fences. Bruce Kenvon is
      that sort of a man.
               During the time we were out of Millstone, we were
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not their best friends, to put it mildly. We talked

extended his hand first, we accepted and haven't regretted 8 9 The new environment at Millstone is a far cry from 1.0 the old one that we were removed from. Ouestioning 11 attitudes are encouraged, no reprisals are sought. The old 12 regime is dead. Problems are no longer overlooked, the answers are sought. Solutions determined and then 13 14 implemented, regardless of the cost, the time, or whose fault it may have been in the past. 15 16 We have been rehired with no hint of retaliation. We have been welcomed back by everyone. NU's trust of us 17 18 has extended to the point of placing one of our group in the 19 employee concerns program. We have not taken that display 20 of confidence lightly. 21 Others today will try to influence you that 22 Millstone Power Station should remain closed down, as long 23 as possible or maybe forever. That meant that the 24 management is not different from the old regime. Employees 25 still feel the chilling effect about reporting problems. 1 They are wrong. We are back as full-time employees, now contributing and committing to the effort to get Millstone 2 Power Station back to its former position as a leader. There are people on the outside throwing stones as best they 4 can. They can theorize and guess as to what has happened in 6 the new Millstone environment, but we are in it, we can see 7 it and we can feel it There is new attitude at Millstone, it is the 8 result of Bruce Kenyon's leadership. The attitude is we 1.0 will do the right thing and we will do whatever it takes to 11 get it done right. The units will not start until you give 12 it their blessing and will not also start more so than Bruce 13 Kenyon feels they are safe to start. People follow a good leader. Mr. Kenyon has established a new leadership with 14 15 new guiding principles, and he has overcome the huge hurdle 16 of previous management's reputation. The NRC, the DPUC, the CRC have all done what they 17 were chartered to do. They safeguarded and they created 18 19 change when there was a need for it. The management has 20 changed, attitudes have changed, and ethics have all 21 changed. And Millstone is not what it was in January 1996. 22 It is time now to move forward and look at the positive. 23 We ask the NRC to give Northeast Utilities the 24 opportunity to show through actions, not talk, that they 25 have indeed changed. Two years ago none of us present here as rehired employees would have asked that. It was rare in 1 2 Connecticut for whistle-blowers to be given their jobs back. 3 Bruce Kenyon had the guts to do that. And by doing that, he eliminated a lot of the chilling effect that used to exist. 4 5 Two years ago NU felt that having the loyalty and commitment of employees was meaningless. They were wrong. 6 Kenyon and his management team, through their leadership, have instilled an attitude of caring and respect for the individual, and for doing things right. They have now 10 earned our trust, our respect and our commitment. We know the difference between the former management and the new 11 12 management, and they are like day and night. Actions speak louder than words. NU's actions in 13 the past have demonstrated a commitment to the employee and 14 to nuclear safety work environment concerns that should 15 16 hopefully restore both the community's and the NRC's trust. We ask the NRC to listen to us. We know, we were, and we 17

sometimes from totally opposite corners of an arena. Bruce

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still are in the middle of it. Thank you.
              CHAIRMAN JACKSON: Thank you very much.
19
20
               Commissioner?
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               MR. BLANK: No questions. Any questions?
               CHAIRMAN JACKSON: Thank you very much.
22
23
               MR. BLANK: Thank you.
24
               CHAIRMAN JACKSON: I would like to call forward a
25
      second group of Millstone employees, Mr. Joseph Amarello,
1
      Jerilyn DuFreen, Richard DiBernardo and Donna Harrington
2
     Burns.
3
               MR. AMARELLO: Good afternoon, Chairman Jackson
      and fellow NRC Commissioners. We appreciate the opportunity
4
     to speak to you today. My name is Joe Amarello, and I am
5
     here with my co-workers Rich DeBernardo, Gerry Duefrene, and
      Donna Harrington-Burns.
8
               We are members of an ad hoc group of employees who
     came together back in February for the purpose of focusing
9
10
     on all the positive activities that are happening in
     Millstone station
11
12
               We want everyone to know that there are great
     things happening at Millstone station; great things in the
13
14
     areas of leadership and employee attitudes.
             The four of us took the day off from work today
15
16
     and drove down here last night to attend this meeting
17
     because we believe there is not a more important place for
18
               This meeting is about the restart of Millstone
19
20
     Unit 3, and one of the major focus points is the
21
     safety-conscious work environment. A safety-conscious work
22
     environment is all about people, their attitudes,
      perceptions, and beliefs. We would like to tell you a
23
24
      little bit about these attitudes, perceptions, and beliefs
     of some workers at Millstone station.
25
               Our ad hoc group has initiated some significant
      activities that we feel demonstrate the presence of a
2
      healthy safety-conscious work environment at Millstone
      station. I want to talk about a couple of these.
               First, our ad hoc group developed this statement
5
 6
      which, if you will please put it up on the overhead. This
      statement stresses our belief in the safety and our
8
     confidence in Millstone station's management to address our
      safety concerns. This statement was signed by 1553 workers
     in less than 36 hours.
10
11
              Second, our ad hoc group initiated a newspaper ad
      campaign and raised $4125 to place a full-page ad in the
12
     local newspaper. I brought a copy today and I'll give it to
13
14
      the Secretary.
15
              CHAIRMAN JACKSON: Thank you.
               MR. AMARELLO: The significance of this effort was
16
17
      the widespread involvement and enthusiasm that the campaign
18
     generated. This money was raised mostly in $1 and $5
     increments collected in the work spaces, collected in a
19
20
      glass jar outside the cafeteria at lunch. People were
21
      excited. They saw the advertisement that we had posted,
      they read the words, they wanted this message of our belief
22
23
     in safety and trust in our management to get out to the
24
     local community.
               These two activities were initiated by our ad hoc
25
     group, but they were made successful by the participation of
      thousands of workers at Millstone station. So what is our
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message to you today? It is that a safety-conscious work environment is alive and well at Millstone station, and more 4 importantly, we believe it is here to stay. Each of our co-workers would like to say a few words. 6 Donna MS. HARRINGTON-BURNS: Good afternoon. My name is Donna Harrington-Burns, and I have worked for Northeast 1.0 Utilities for over 10 years. CHAIRMAN JACKSON: Can you talk a little more into 12 the microphone. Thank you. 13 MS. HARRINGTON-BURNS: Sure. A number of years ago I would have found it very difficult to sit here at this 14 table and talk to you about some positive aspect about the 15 16 safety-conscious work environment because, frankly, we 17 didn't have one. At that time I worked as an instructor. It was my job to teach the managing for nuclear safety 18 19 course. I think you have heard about that before, that it 20 is and it continues to be training for supervisors on how to 21 handle safety concerns. It is an excellent training program 22 and emphasizes supervisory responsibility to listen to 23 workers, to respect and value differing opinions, and to act as an agent for employees as they bring forward their 24 25 concerns. In 1994 and 1995, when we were teaching this 1 course, it was a very difficult class to teach. There was 2 very little evidence that NU management truly embraced these principles, and although we appealed to each supervisor's 4 sense of personal responsibility, it was very difficult to 5 convince employees that they needed to do the hard work necessary to change their own behaviors and attitudes when they didn't see upper management committed to the same. I no longer teach, but I have seen some dramatic 10 changes in the attitudes and behaviors of our management, and I think it is more than just attitudes and behaviors. 11 It's really about a change of heart, and there are any 12 13 number of KPIs that you can measure, but you can't really get a feel for how people feel. 14 15 The change that we see in our management has 16 allowed us to also change as a group of employees. I think 17 that we are more respectful, we are a more respectful work 18 force because we are treated with respect, we are more open 19 to ideas because our ideas are listened to. That has made a 20 21 I consider myself an employee of conscience, and I 22 will not misrepresent the fact that we still have things 23 that we need to do. This is not perfect. But I really do believe that as a company this management acts with good 24 25 will; that we have now programs and processes in place that 1 allow us to go forward; and that together we can partner and 2 create the kind of work environment that we need to have. Thank you. CHAIRMAN JACKSON: Thank you. MS. DUEFRENE: Hi. My name is Gerry Duefrene and I am an employee of Northeast Utilities as well. I have 7 also lived at East Lyme, which is a neighboring community of Waterford, for over 20 years. I speak for myself when I say that I would never work in a place that I felt was unsafe and one that could be 10 11 detrimental to my health, the health of my family, friends, and the community. 12 13 I also would not work in a place that I was uncomfortable in voicing a concern. If I had any questions

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on things that happened at Millstone, I have gone to my
      supervisor with questions. I have been treated with respect
16
17
      and even taken out into the plant to see what was going on
      for myself. I am a secretary there, I am not a technician,
      I am not an engineer, but I want to know how it works, and I
19
20
      have a boss -- I've had bosses that take me out there and
21
      explain things to me. I still couldn't recite it to you
      word for word, but I understand a lot better because of
2.2
23
      their patience with me and their taking the time to educate
24
      me on how it works.
2.5
               In my job, I work with several levels of workers
      from directors to mechanics, electricians and technicians.
      I have observed meetings where they work together for
      solutions to issues that have come up. To me, this is a
      team working together, and I have complete faith in my
 4
 5
      co-workers and our management to safely get us ready for
      restart. I am proud to be an employee of Northeast
      Utilities, and anyone who knows me knows that I speak for
      myself and no one can tell me what to say or what to
 8
      believe. I have my own mind and strong opinions.
10
               I would like to thank you for your time. It means
11
      a lot to us to have been able to come down and express
      ourselves, and we appreciate it. Thank you.
12
               MR. DeBERNARDO: Good afternoon. My name is Rich
13
14
      DeBernardo, and I have worked at Northeast Utilities for
15
      five and a half years. I started at Connecticut Yankee and
      transferred to Millstone 14 months ago where I currently
16
17
      work as an electrical systems engineer for Unit 3.
18
               Over the last 14 months at Millstone, I have seen
19
     numerous changes in management. One of those changes in
20
      management is management's commitment to making the right
21
      decision, given the right information.
               I had the opportunity to present the management
22
23
      team a modification to enhance the reliability of the four
24
      120 volt vital AC inverters at Unit 3. This modification
      was only a system enhancement. It was not an NRC commitment
25
      or required for restart. After a number of meetings with
 2
      the management team, the management team concluded that this
      modification would be implemented prior to restart.
 3
               This team effort, to me, was one of the many
 5
      examples of management's commitment to doing the right
 6
      thing. We greatly appreciate this opportunity to share our
 7
      experiences with you.
 8
              MR. AMARELLO: We'd like to just at this point
      welcome any questions that you might have for any of us in
 9
10
      the group.
11
              CHAIRMAN JACKSON: Thank you. Thank you very
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               I would like to call forward Mr. Donald W. Del
13
14
      Core, Senior.
15
               MR. DEL CORE: Good afternoon, Commissioners.
               I certainly would like to thank you for the
16
      opportunity to speak here today. And I would also like to
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      comment that I think it needed to be done at an earlier,
18
      many earlier sessions.
19
20
               I think the input from the public is very, very
21
      important, and I think that unfortunately we have only had a
      very few minutes to provide you with some input.
22
23
               So possibly if you have other plants in the future
24
      that happen to go on a watch list or happen to be shut down
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and you continue your quarterly updates, I would hope that

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you would include public comment on each and every one of those.

First of all, let me give you a little bit of 3 background about myself. I was a former Navy nuke and as 4 such I was a senior reactor operator on a couple of submarines and engineering watch supervisor. I was a Navy

instructor for a couple years, and I have also been in the

civilian world. I worked for Stone & Webster in security

engineering, working on nuclear security backfit projects.

1.0 I worked for Nuclear Engineering Services out of Danbury,

and in that capacity I worked at Duane Arnold Energy Center

12 as a contractor in the OC department involving welding

13 changes and welding type repairs to the reactor water

14 clean-up at a boiling water reactor. And also I was

involved in the replacement of target rod valves and so

16 forth at the quality control end of it.

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Additionally, I worked at Shoreham Nuclear Plant as training coordinator, setting up their cold license plant training program and teaching a number of courses there. So to give you a little bit of background about what I was doing. I also worked at Millstone as an electrician for approximately a year and then as an instrument technician and specialist for about 12 years at Unit 2.

One of the comments I think that's important to identify here is we have had an awful lot of discussion

1 about the safety-conscious work environment and the employee concerns program, and I think it is interesting to point out 2 that, you know, not everybody, but I think for the most part 4 what I have heard here is everybody is trying to tell you that they think Little Harbor needs to stay on.

If Little Harbor needs to stay on, they are not 6 7 ready to run, folks. They are not ready to run by themselves. So if there is any indication -- and that's what I seem to have gotten here is everybody feels they need 10 to have Little Harbor there as sort of this insurance policy. Maybe somebody wants them here for three months; 11 somebody wants them here for six months; somebody wants them 12 13 here for -- to be sure that everything is status quo before 14 they walk off. If that's what we need, then don't let NU 15 start up.

I am not against them starting, I am against them starting so that they can safely and adequately run the plant. We are talking about a place for 10 years that hasn't had what I would consider a safety-conscious work environment or an atmosphere that is conducive to getting employees to come forward with concerns.

22 I had the Chairman of the NRC come to me in 1986, 23 Lando Zech, talked to me in the Unit 2 control room and asked me what I thought about Millstone. 1986, it was a 2.4 25 great place to work. And when we had a problem, Mr. Sellin

and the managers under him shut the plant down, fixed it,

and we started it back up. In 1987, it was a whole different ball game, and 3 4 from there on it's been downhill ever since. And you should not take that lightly and you should not make the bare minimum requirements for employees concerns and work place environments the criteria here. That's not what I think I heard the Commission say; that's not what I think I heard Chairman Jackson say at her public meetings, and I think we 10 need something, an environment that's much better than adequate, and I think that it was well covered by the

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individuals in CAN that pointed out there's no slideback.
13
              Cynics, the word cynics has no place in a
14
      safety-conscious work environment. It should have never
15
      been brought up in any context in a safety-conscious work
      environment. It's absolutely unacceptable, and I don't care
16
17
      how NU chose to indicate it was used in a sentence or how
18
      they redefined it, it has no place. And the very fact that
19
      some manager or some director or some vice president felt
20
      that there were cynics in his organization suggests to me a
21
      much bigger problem than what I've been hearing from Little
2.2
      Harbor Consultants regarding that work place environment.
23
      There's a problem there somewhere. Something is wrong, it
24
      should not be there.
               I kind of got the sense from Commissioner Diaz's
25
      comments about some individuals he talked to in the
 1
      oversight that weren't happy with the oversight and didn't
 2
      feel like the oversight was doing the job it should, I kind
      of got the feeling, sitting there this morning, that maybe
      he was talking to some of those cynics. That's very
      disturbing, that individuals have concerns and that their
      boss's sense that they're cynics, that they're developing
 8
      some kind of overhead projection or so-called memorandum to
      identify that issue. Nobody that ever worked for me would
10
      be considered a cynic because he had differences in an
11
      opinion. I don't think that's right and that's a real
12
13
               This morning Mr. Kenyon talked about strong
14
      backgrounds in engineering. I beg to differ with you. I am
15
      an instrument technician and I would know enough not to put
16
      an orifice that reduced an opening from 10 inches to 3
17
      inches with something immediately downstream of it. I think
18
      it's general engineering knowledge, freshman knowledge, that
      you need a certain number of pipe diameters downstream of an
19
20
      orifice in order to let the flow get laminar so you don't
21
      have a lot of velocity changes, disturbed water flows; I
      can't believe they did that. It seemed to me they did it
22
      out of a rush. Seemed to me if you got a 4000 gallon a
23
24
      minute pump and you needed to pump 2500 gallons a minute,
25
      you'd take a couple of stages out of it. That probably
1
      would have took too long. So we did the quick fix.
2
               The problem with oversight, the problem with
      quality control, and the difference between the line, a
      number of issues, but primarily NU submitted numbers for
 4
 5
      flows to do an evaluation for cavitation that were not
      equated to the flows they actually used in the test.
               The other issue -- and you should take a look at
 8
      that. They have a number of reports that they wrote on
      that; you probably ought to take a look at that. I think
      the flows are up around 25 or 2800 gallon a minute, and what
10
11
      they submitted to Stone & Webster and what they submitted to
12
      Westinghouse was somewhere down around 2200 gallons per
      minute, and I think the resident expert that they had look
13
14
      at that indicated that around 2000 gallons a minute was when
15
      they started seeing the minute cavitation bubbles.
16
               An issue that is very important to the RSS issue
17
      is the fact that there were some calculation errors
18
      identified by Sergeant & Lundy. Interesting enough,
      Sergeant & Lundy reviewed that exact system, RSS, as a part
19
20
      of the ICAVP, and it's amazing to me that they didn't come
21
      up with the problems that came about. I find that very
      interesting. I find it even more interesting that your SPO
2.2
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Department has them going back and re-reviewing the Rev. 1
23
      to that modification. I think that's rather strange.
24
               On top of that, I looked at the -- I know we're
25
     not talking about the ICAVP, but I think we're talking about
1
      corrective actions and I think we're talking about oversight
 2
      issues, and they direct -- they relate directly to the
 4
     workplace environment and to employee concerns, because you
      have to have this ability to correct problems when people
      identify them and, of course, we know that didn't take
6
7
      place.
               Having said that, the ICAVP identified as of the
      7th of April some 380 issues of deficiencies which both NU,
10
      Sergeant & Lundy and your SPO have agreed to, and of that,
11
      there were 158 Level 4 calculation and calculation control
      errors, an additional five Level 3 calculation and control
12
13
      -- calculation control errors, and there were 147 that had
14
     not been resolved yet. That was the go-between that the
15
     Union of Concerned Scientists talked about back and forth.
16
      back and forth. So I imagine there were more.
17
               Interestingly enough, 14, I believe, of the 17
     that Sergeant & Lundy found because the SPO asked them to
18
     review the RSS modifications, most of those were associated
19
20
     with calculation errors. A calculation error was why the
      cavitation problem wasn't discovered.
21
               If it was me, I wouldn't let anybody start it up
22
23
     until you went back and looked at all of the calculation
24
      situations, not only on the four systems that they looked
25
      at, but at the 84 systems. Talk about an emerging expansion
1
      of ICAVP and your SPO not looking at it -- I don't care if
     they're Level 4; I think it meets the Level 4 criteria that
     says if you have a programmatic issue emerging or there's a
     trend, you need to take a look at it. They're not looking
      at that. We brought that up meeting after meeting after
      meeting in the public meeting in Waterford. They're not
 6
      addressing it. I think you need to look at that.
               You know, somebody talked this morning about keys
     in vehicles and security. That problem has gone on at
9
10
     Millstone for ten years. And you would think they would
11
      have it fixed right now, but they don't. That's amazing.
12
      I'm absolutely amazed about that.
13
               The Nuclear Committee Advisory Group that was
14
     discussed earlier, which is the trustee oversight, I think
15
      they're doing their job, because if it wasn't for them, the
16
     two guys in the MOV Department and the engineer that got
17
     demoted over that MOV issue would have never even been
     offered their jobs back, as far as I'm concerned. I think
18
19
      if you look at Little Harbor Consultants' report, you will
20
      find that a call was made from NCAT to Mr. Kenyon and I
21
     think that's why Mr. Kenyon changed his mind and brought
22
      those boys back.
23
               I have no question that the four people who were
      just before you have a lot of veracity. I'm sure they
2.4
25
      believe in their company and I'm sure they're very
1
      comfortable with what they're doing. I'm not convinced the
      previous for did because those were individuals that
2
      communicated with me when they had complaints and lawsuits
3
      against NU because they couldn't come back to the company.
 4
               Speaking of people calling me, I contacted you,
 5
      Wayne Lanning, a couple of weeks ago because I have an
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individual who has three very significant concerns, what I believe are concerns, and he doesn't want to come forward.

a couple of other people. 10 11 The issue, he feels, will directly relate to him and originally had given me the issues and asked me to try 12 to deal with the NRC on a confidential basis, and since then 13 14 has had bad feelings about it and has retracted the comment 15 from me that he wants me to come forward and talk to the NRC and I had to do that. I think you need to be aware of that. 16 17 I wish I could discuss the issues here. I can't do that. 18 Only suffice to say that they are issues, they need to be fixed. The company is aware of them. I don't think the 19 20 company is going to come forward and tell you about them, 21 but I think they need to get addressed. I think a very, very important issue with regard 22 23 to the RSS issue, with regard to oversight, with regard to quality control and quality assurance, quite plainly, there 24 was inadequate test review by both the line and by QC and 25 1 QA. If that was the case, they would have known enough to look at the transverse axial requirements of those 2 transducers to look at the vibration. The fact that they didn't and went back to the manufacturer of the expansion 4 5 joint and he asked what the numbers were for axial and transverse and they couldn't give them transverse numbers and then they went back and hooked up the transverse 8 detectors and then realized they were way over the limit. So what that really speaks to is somebody didn't adequately review the work order. Somebody didn't 10 11 adequately review the design. If they did, they wouldn't 12 have put an orifice right next to an expansion joint anyway. 13 So there's lots of problems there and, you know, 14 to say it's an isolated case, I don't know, but you don't 15 want to talk to me about having a strong engineering background at Millstone because I'm very concerned about 16 17 18 The period of performance -- at which time Millstone says they're ready is when you should start 19 looking at the period of performance. They need to show you 20 21 some sustained performance with regard to all the areas that 22 they are being evaluated for, and from the time they say 23 they're ready, that's when we start evaluating them, that's 24 when we should be looking at what they're doing. Some 25 people have brought that up to you, and I think it's a very, 1 very important issue, because we have seen event after event 2 after event there. Corrective action -- we've seen all kinds of events. If I get an opportunity to come back to this table 4 5 and talk to you at the next meeting, I'll talk to you about corrective action and I'll show you some problems with corrective action that I think need to be addressed. 8 Recent noncompliances in the Nuclear Training Department with regard to the nuclear training manual in that there was a course taught for shift technical advisor 10 11 where there was some falsification of documents which essentially established that the program had adequate lesson 12 plans and lesson guides, both for the simulator and the 13 14 taught course. 15 I guess what that does is begs to differ with Mr. Bowling's conclusion that the procedure compliance program 16 17 is working. That was pretty recent -- February, January. I 18 don't think it's working right, guys. You need to take a look at that. 19

He is afraid he's going to be retaliated and identified, and

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The last success criteria that was ID'd by Ms.
20
     Garde seems to underscore the fact that Little Harbor is
21
22
      continuously, has been continuously intervening and
23
      consulting to ensure that things get done correctly with
     regard to workplace environment and employee concerns. If
24
     that's the case, then that's what's going on. That
25
1
      reinforces what I told you before. We can't do that. If
      you're going to need Little Harbor around, and it appears,
     from what the Union of Concerned Scientists said, they're
 3
 4
      going to need S&L; around to be comfortable, then these guys
      aren't ready and we shouldn't be looking at that.
               CHAIRMAN JACKSON: Can you --
 6
               MR. DEL CORE: Yes, I will.
               John Beck's final statement to you regarding
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     Little Harbor leaving sort of demonstrates to me the same
10
     thing I just identified about Ms. Garde's comments. They're
11
     not real sure about it, so how can we be real sure about it?
12
              I thank you for your time, and I would like to
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      include in this record all the letters that I have submitted
14
     to the Commission as a part of this proceeding if that is
      possible.
15
16
               CHAIRMAN JACKSON: Yes.
17
               MR. DEL CORE: Thank you.
               CHAIRMAN JACKSON: Thank you. Thank you for
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19
      coming.
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               I'm going to call forward the NRC staff, but we're
     going to take a three-minute break here.
21
22
               [Recess.]
23
               CHAIRMAN JACKSON: We will continue with the NRC
24
      Staff, with respect to the three issues under discussion.
25
      Mr. Callan.
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               MR. CALLAN: Good afternoon, Chairman,
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      Commissioners.
               As usual, as is our lot, the NRC Staff will
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4
      provide the closing presentation, concluding presentation
               Our presentation this afternoon will differ from
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     our past presentations in the sense that in the past we have
      focused on status of the activities that the SPO is
     providing oversight for. Today our focus will be more on
10
      Staff conclusions and recommendations relative to the
11
      restart readiness of Millstone Unit 3 in the three areas
12
     before the Commission this afternoon.
13
               With me at the table are Sam Collins, to my right,
14
     who is the Director of the Office of Nuclear Reactor
     Regulation; to my left is Bill Travers, who is the Director
15
16
      of the Office of Special Projects, and also at the table are
17
      Bill's three main deputies, Gene Imbro, Phil McKee, and
     Wayne Lanning.
18
19
               Dr. Travers will be the main Staff presenter.
20
     Bill?
21
               MR. TRAVERS: Good afternoon.
               As Joe indicated, we are here before the
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23
      Commission today to talk about three principal issues and
2.4
      our conclusions about each one of those.
               After I make a few introductory background
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1
      comments, Phil McKee is going to be addressing the aspects
      of the Employee Concern Program and Safety-Conscious Work
      Environment, and then Wayne Lanning is going to be
      addressing oversight quality assurance, and I am going to
      follow with a discussion of the backlog management issue.
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By way of background, the NRC Staff is continuing its oversight at Millstone and we are using the guidance in the NRC Inspection Manual, Chapter 0350, to guide us. That guidance was used to develop the Millstone Review Plan, which we submitted to the Commission in SECY 97003. We are 10 11 essentially using the same plan that we established back in 12 January of '97 and we have been using that throughout. For each of the Millstone units, the Staff has 13 14 developed a Restart Assessment Plan which identifies the 15 issues which need to be resolved before the Staff provides 16 the Commission with the restart recommendation. 17 Importantly, the Restart Assessment Plan 18 incorporates the issues associated with the two orders which have been issued regarding required improvements in the 19 Employment Concerns Program, Safety-Conscious Work 20 21 Environment, and conformance with design basis licensing 22 basis. 23 This slide lists the key elements that we have 24 contained in our RAP and several of which we are going to talk about today. 25 1 In addition to -- rather, before I begin by 2 turning it over to Phil, let me just mention, as you have heard today that our program has been continuing, I think, to meet its commitment to involve stakeholders in this 5 process. We recognize that the people who live in the area of the Millstone plants have a vested interest in our program and how we approach our job, and I won't go over the 8 numbers of meetings or anything like that that we have had, but we are trying to continue to actively involve the people 10 who live in that area in our process. 11 With that, I will turn it over to Phil McKee to 12 discuss --CHAIRMAN JACKSON: Let me just ask you two things 13 14 in going forward. 15 If at any point any of your conclusions rests on inspection reports that have not yet been made public, for 16 17 the record, will you so indicate? 18 MR. TRAVERS: Yes. We will be happy to do that. CHAIRMAN JACKSON: And secondly, you know, you 19 20 were tasked with independently reviewing the quote/unquote 21 "Cynics Memo" -- and somehow through your presentation I 22 think it would be helpful to give your conclusions in that 23 regard. 24 MR. TRAVERS: Perhaps we could just give you a 2.5 status, since we are not yet complete with that review. It will be completed essentially in the issuance of a response 1 2 to the 2-206 petition that we have, but if I could briefly run down the events. Following the issuance of that memo, and we became 5 aware of it, I issued a letter to the utility, a demand for information letter, that required them under oath and affirmation to provide us with their assessment of the events associated with the language in that report and 8 whether or not in their view there were any violations of 9 NRC regulations. 10 11 Subsequently to my issuance of that letter, they 12 have responded. They conducted an -- well, they conducted an investigative report or an investigative assessment of 13 14 the issue. They have given us their assessment of that. 15 They have given us the actual investigative report resulting from that. 16

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               We are now in the midst of an independent
      assessment of that information and we expect to close that
18
19
      issue in our response under the 2-206 petition, and we
20
      expect that that could be within weeks. We have essentially
      completed what we need to do to gather the information to
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22
23
               If there are no other questions, I will turn it
24
      over to Phil
               MR. McKEE: Thank you. Good afternoon.
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               I am just going to touch briefly on some
      background. I recognize some of this information has been
2
3
      covered previously.
 4
               In December, 1995, NRC formed the Millstone
      Independent Review Group to assess how employee concerns and
      allegations were handled at the Millstone Station.
6
7
               The Review Group found that in general an
      unhealthy work environment which did not tolerate dissenting
     views and did not welcome or promote questioning attitude
9
10
      had existed at Millstone Plants for the past several years.
11
               These problems had been recognized by Northeast
12
     Utilities' self-assessments as early as 1991 and again in
13
      some of their assessments in root cause analysis in 1995 and
14
               Because of these concerns, on October 24th, 1996,
15
      NRC issued an order to Northeast Utilities requiring
16
17
      specific actions to be taken to resolve problems in their
      processes for handling employee safety issues. The order
18
19
     required specific actions.
20
               One, it required Northeast Utilities to submit for
21
     NRC review and comment a comprehensive plan for reviewing
22
      and dispositioning safety issues raised by employees and
23
      ensuring that employees who raised safety concerns can do so
2.4
     without fear of retaliation.
               Secondly, it required Northeast Utilities to
25
1
      submit for NRC review and approval a proposed third party
      organization to oversee implementation of its comprehensive
2
     plan.
3
 4
               Third, it required that the third party
      organization, once approved, to submit for NRC review and
      approval a plan for overseeing Northeast Utilities'
6
      implementation of their plan.
               Lastly, the order required, the order specified
9
      that the third party oversight will continue to be
1.0
      implemented until the licensee demonstrates by its
11
     performance that the conditions which led to the requirement
      of the oversight have been corrected to the satisfaction of
12
13
      the NRC.
14
               I just wanted to make those points because that
     bears on the structure of our review and analysis.
15
16
               Whereas the first three elements of the order
17
      specify actions to be completed prior to restart of a
     Millstone unit, the remaining element, the NRC determination
18
19
     of cessation of the third party oversight was not linked to
20
      the facility restart but to demonstrated licensee
     performance.
21
               The Staff anticipates, and this was discussed I
22
23
     believe earlier here, that the decision can be made on the
     continuing need for the third party oversight about six
2.4
25
      months following the restart of a Millstone unit.
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The order did not specify requirements for restart of Millstone units. The Special Projects Office Restart

Assessment Plan addresses this aspect and specifies that Northeast Utilities' programs for handling employee concerns need to be improved and effective to support the restart of any of the Millstone units. The next slide, please. 8 To kind of give you an overview here, the Staff's approach for the assessment of Northeast Utilities' progress 9 in upgrading programs for handling employee concerns was 10 11 provided as an attachment to the Special Projects Office 12 December, 1997 Commission paper. 13 The assessment plan presents the Staff's 14 methodology for determining progress made by the licensee to 15 improve their Safety-Conscious Work Environment and operations of their Employee Concern Program. 16 17 The Staff's plan purposely distinguishes between Employee Concern Program and Safety-Conscious Work 18 19 Environment activities. I might just give a brief description here that the Employee Concern Program refers to 20 21 the licensee's formal organization and program that handles concerns raised by employees which arise outside the normal 22 23 line organization function. 24 Safety Conscious Work Environment refers to a 25 broader perspective of work environment in which employees 1 are encouraged to raise safety concerns and the concerns are 2 promptly and appropriately resolved with timely feedback to the originator. The Staff's assessment approach included 4 5 independent Staff evaluations of the licensee's Safety-Conscious Work Environment activities and review and monitoring of Little Harbor oversight of those activities. 8 This approach provided the Staff with independent 9 assessment of the status and effectiveness of Northeast Utilities' programs as well as providing a comparative basis 10 11 for establishing confidence in Little Harbor's oversight 12 findings and conclusions. In implementing this approach, the Staff 13 evaluation of Little Harbor focused on their oversight 14 15 processes, the thoroughness of their activities, and 16 completeness in implementation of their oversight plan. 17 Staff's evaluation of Northeast Utilities' 18 Employee Concern Program included a limited scope assessment 19 of organizational support, conduct of their activities, and 20 assessment of the results of their investigations. 21 Staff's evaluation of Northeast Utilities' 2.2 Safety-Conscious Work Environment activities included staff 23 assessment of key program functions that support a 24 Safety-Conscious Work Environment. 2.5 In the next couple of slides I will cover some of these aspects of our looking at Little Harbor and the 1 2 Employee Concern and Safety-Conscious Work Environment with a little more detail. If I can have the next slide, please. 4 5 First, I would like to provide an overview of Staff's actions -- before I do that, I want to provide an 7 overview of the Staff actions to review Employee Concern and 8 Safety-Conscious Work Environment activities. This slide lists a broad range of the activities that we performed over the period. 10 11 The first three items listed concerns -- Staff 12 actions with respect to the order. Staff reviewed and provided comments on Northeast Utilities' comprehensive 13

plan. Staff reviewed and approved Northeast Utilities' 14 proposal for a third party organization, and Staff reviewed 15 and approved the third party organization and their plan and 16 17 their oversight plan. 18 Following approval of Little Harbor Consultants as 19 the third party oversight organization, Staff initiated 20 periodic meetings between Northeast Utilities, Little Harbor Consultants, and the NRC. These working meetings provided a 21 22 means for Little Harbor to present the results of their 23 oversight activities, including their presentation of 24 observations, their findings, recommendations, and 25 conclusions. 1 The licensee had an opportunity to present the 2 results of their planned implementation activities in response to past -- and they also responded to past Little 3 Harbor recommendations and the status of their performance. 4 CHAIRMAN JACKSON: And how effective do you think those meetings were? 6 MR. McKEE: I think those meetings and the preparation involved in those meetings was very critical to 8 9 our processes. 10 I think it brought forward the issues in an open 11 forum. Those meetings were open to the public and to everyone's knowledge and response to those issues, so I 12 think not only the meetings themselves but the preparation 13 14 and the follow-up after them were critical in our processes. Since October, 1997 at a frequency of about every 15 16 other week, the Staff or an NRC contractor has been present 17 at the site with the sole responsibility to monitor the 18 licensee Employee Concern Program and Safety-Conscious Work 19 Environment program activities, their implementation, and also that individual was observing the activities in the 20 21 oversight activities of Little Harbor Consultants. In December, 1997 -- a week in December, 1997 and 22 a week in January, 1998 NRC conducted a team evaluation of 23 2.4 Northeast's Employee Concern Program and Safety-Conscious Work Environment Programs and their implementation. 25 254 1 During the same period some of the same 2 individuals involved also did an evaluation of Little Harbor's oversight activities. Staff closely tracked the 3 licensee's development, use, and assessment of Employee Concern Program and Safety-Conscious Work Environment 6 performance measures, many of which you have heard earlier 7 An inspector was assigned to NRC's team inspection of Northeast's corrective action program to assess how 9 10 concerns raised by employees were addressed through use of 11 normal line organization processes. The inspector on the team also assessed the willingness of employees to raise 12 13 concerns through the corrective action program and their 14 comfort in using this process. MR. TRAVERS: If I may just add one point here, 15 while we have issued our team evaluation report of the 16 17 assessment of both Little Harbor and Northeast, the 18 corrective action inspection report has not yet been issued. A quick look summary of our significant results 19 20 has been issued, to respond to your direction. CHAIRMAN JACKSON: Thank you. 21 MR. McKEE: Yes. I might add, and it will save me 22 23 from mentioning it in the future, our reports on our 2.4 oversight of Little Harbor Consultants and our report on the

Employee Concern Program, both of those reports have been

issued. We had quick look reports on them earlier, but the final reports have been issued.

The Staff also followed personnel actions taken by the licensee or contractor that raised concern of potential 4 5 discrimination or chilling effect.

Our attention for these actions was directed on the processes used by the licensee for handling of these incidents.

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17

1 2 Okay -- if I could have the next slide, please.

Little Harbor's NRC approved plan for overseeing 10 11 licensee activities highlights three primary functions. The 12 slide may be a little confusing in that the activities listed under each of these three functions or functional 13 areas refer to Little Harbor activities and not NRC 14 15 activities.

Staff's evaluation of Little Harbor's oversight concentrated on their implementation in these major functional areas.

18 19 Regarding the first element of Little Harbor's 20 plan and that is listed as "Assessment of Millstone Safety Culture." Staff found that Little Harbor's structured 21 22 interviews conducted once -- the first one was in the summer of 1997 and again in February 1998 to be thorough, 23 24 well-structured, and carefully administered. Further staff 2.5 found that Little Harbor's periodic assessments of

licensee's performance with respect to the 12 attributes of an ideal safety conscious work environment and Little included accurate and acceptable supporting bases.

Harbor's assessment of the licensee's four success criteria 4 5 With respect to the second major element of Little 6 Harbor's plan, that's program evaluations, staff found

Little Harbor's programmatic evaluations to be well planned. conducted, and documented. Soon after their approval Little 8 Harbor conducted significant or major programmatic reviews and provided recommendations regarding the licensee's 10 11 comprehensive plan and also their employee concerns program. 12 Staff found that Little Harbor's review of the employee

13 concern program implementation, including investigation

14 processes, assessment of harassment and intimidation

15 concerns and documentation and findings to be particularly

16 thorough and effective in identifying potential programmatic

17 weaknesses that were later addressed by the licensee.

In addition, Little Harbor conducted assessments 18 19 of the effectiveness of other licensee programs supporting a safety conscious work environment including Northeast 20 21 Utilities' corrective action, self-assessment, and oversight 2.2 programs. Staff found these assessments to be thorough and

23

24

Further Little Harbor conducted independent 25 investigations and monitoring of alleged incidents of

harassment and intimidation, the long word, retaliation, and 1 2 discrimination and I'll try not to use the word "HERD" as our acronym for that, and chilling effect.

4 These investigative and monitoring activities were 5 considered by the staff to be well planned and comprehensive.

Regarding the third major element of Little Harbor's plan, communications and reporting, the findings of Little Harbor cultural assessments and programmatic reviews 10 were presented at the periodic open public meetings with the

licensee and NRC. These are the meetings I was speaking of 11 before. Little Harbor also presented the findings that one 12 major element was the presentation of their findings of 13 their surveys and also their assessments of attributes. 14 From May 1997 through April 1998 nine meetings 15 16 were held. At these meetings and in follow-up 17 correspondence Little Harbor presented some 111 recommendations. Staff found these recommendations were 18 representative of thorough program reviews and appropriate input for enhancing program effectiveness. 20 21 As specified in Little Harbor's oversight plan, they have -- Little Harbor has effectively tracked the 22 licensee's response to each of these recommendations. 23 2.4 Further, staff found that Little Harbor's documentation of 25 their activities, including details provided in their 1 quarterly reports provided a sound basis supporting their findings with respect to cultural assessments, performance evaluations, and program reviews. 3 In summary, staff considers that Little Harbor has 5 effectively carried out its oversight activities. Could I have the next slide, please? 6 7 Special projects -- special project office evaluation of Northeast Utilities employee concern program was derived mostly from the findings of the NRC team evaluation conducted in December of 1997 and January of 10 11 12 The team looked at several key aspects of the 13 program and audited several concerned investigation cases. Staff found the employee concern program organization which 14 15 consists of a staff of about 23 people had independence. 16 resources and management support to perform thorough, 17 unbiased investigations. Staff found that employee concern 18 program staff and investigators to be well qualified and appropriately trained for their assigned tasks. Staff 19 audited 18 employee concern program case files and found 20 21 that employee concerns were prioritized based on safety significance. Identities were protected, case resolution 22 was timely and there was appropriate follow-on corrective 23 2.4 action. Staff further found that the conclusions of the employee concern program evaluations were properly supported 1 by investigations. The investigations were unbiased, corrective actions were proper the resolve the issues and 3 communications with employees about their concerns was 4 improved and being further enhanced. CHAIRMAN JACKSON: Did you question any of the case file resolutions that would have resulted in any 6 different conclusions? So you're saying, to the extent that 8 you looked at the case file resolutions you agreed with 9 them? 10 MR. McKEE: We agreed with the resolutions. We 11 saw -- some discrepancies were found in our review and some of their capturing -- in one case they found some of the --12 one elements of a concern may not have not been captured for 13 14 follow-up, and also categorization. But the resolutions we 15 didn't find any issues with the resolutions. And we did some comparison or this. These were 16 17 cases that had gone through the process and I don't believe 18 that Little Harbor had found issues as we were making some comparative analysis. And I think partially because of 19 Little Harbor's recommendations early on in April and a 20 21 combing of the cases, the cases in the files, and the preparation were done very well.

23 Staff found that the employee concern program 24 management was using performance measures effectively to 25 trend and analyze emerging issues of performance trends and initiate actions as may be necessary. 1 2 The Millstone independent review group found in their evaluation serious interface problems between the employee concern program and other organizational elements, 5 particularly human resources. Early in their program 6 evaluations Little Harbor consultants also found 7 programmatic deficiencies in these interfaces. 8 The staff team evaluation last December and January found organization interfaces between the employee concerns program, organization, other organizations and 10 particularly that of human resources were well integrated 11 and much improved and they were operating effectively. 12 The NRC evaluation team reviewed self-assessments 13 and found that they covered a broad spectrum of employee 14 15 concern program activities, were improved from earlier 16 assessments and were appropriately self-critical. 17 Based on its review staff considers that the employee concern program had made significant improvement 18 19 over the past year and was an effectively operating 20 organization. 21 Can I have the next slide, please? 2.2 Special projects office evaluation of Northeast 23 Utilities safety conscious work environment activities was derived principally from the findings of the NRC team 24 25 evaluation conducted in December of 1997 and January 1998, 1 the staff's on-site monitoring of Northeast's safety 2 conscious work environment activities. 3 Several key activities closely aligned to a safety 4 conscious work environment were evaluated. 5 It's important to note here, and I think it was discussed by others, that several of these activities are unique to Millstone and represent enhanced measures needed to address significant past program weaknesses. As recently as last summer staff had concerns about the organizational support for the safety conscious work environment and 10 11 activities. 12 Since that time Northeast has established a formal 13 safety conscious work environmental organization with 14 dedicated staff and with that staff being delineated to 15 specific safety conscious work environment responsibilities. 16 Staff considers that the organization and staffing 17 now provides appropriate support and coordination of the many ongoing work environment activities. 18 19 The next three items on the slide there identified in the slide are activities implemented at Millstone station 20 that are distinct from programs that may be found at other 21 22 nuclear power stations. Northeast Utilities program to 23 identify and take actions to address areas were a challenge to the safety conscious work environment exists. 24 25 Their specially designed training programs for managers, supervisors and all employees emphasizing safety 1 2 conscious work and their formation of the executive review board to review proposed disciplinary actions with respect to potential discrimination and chilling effect. All of these are significant safety conscious work environment initiatives and they have been discussed earlier, but they are important -- important program initiatives that they

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have done.
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              CHAIRMAN JACKSON: But the programs are as
 9
      programs do. And I noted you skipped over "response to
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11
      personnel action cases."
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               MR. McKEE: Oh, okav. I -- I'll get to that.
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      I'll discuss that in a minute. I must have -- I think that
14
      got crossed in my notes here.
15
               One additional item that's not listed on the slide
16
      is the formation by Northeast Utilities of their employee
17
      concern oversight panel which consists of Northeast
18
      employees who have a role in monitoring the Millstone
19
      workplace environment.
20
               Staff reviewed and monitored implementation of
21
      these programs and considers them constructive enhancements
22
      to promote a safety conscious work environment. Each of
      these programs was found to be operating effectively.
2.3
2.4
              And getting to your point, Chairman Jackson, staff
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      reviewed and monitored licensee handling and response to
      incidents involving potential harassment, intimidation and
 1
      chilling effect that occurred over the last year with an
      emphasis on assessing the adequacy of the licensee's process
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      for dealing with issues as they arise.
               Staff considers that Northeast's response to the
      incidents demonstrated management willingness to admit to
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      mistakes or problems in their processes and willingness to
 8
      take prompt actions to address issues as they arise.
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      Further a number of the safety conscious work environment
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      program enhancements were implemented and refined based on
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      lessons learned from these incidents. So I think some of
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      these incidents, there are some and there are some that are
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      not mentioned here where proactive efforts may have avoided
      those. I think they had shown a demonstration to
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15
      acknowledge them and deal with the incidents and actually
      their program is growing to some extent from lessons learned
16
17
     from this.
18
               Northeast Utilities developed longer-range plans
      for continued dedication of resources and maintaining the
19
      employee concern program and the safety conscious work
20
21
      environment infrastructuring in monitoring a performance
22
      following the restart of a Millstone unit. Staff reviewed
23
      these plans and considers that they provide an acceptable
24
      framework for assuring the organizational and resource
25
      support necessary to assure -- to assure that the safety
1
      conscious work environment is maintained.
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              And if I could have the last slide that I'm going
      to speak to here?
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               In summary and in conclusion I would like to say,
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      the actions required in the NRC October 24th, 1996 order to
      be accomplished before the restart of any of the Millstone
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 7
      units have been completed.
               Staff concludes that Little Harbor Consultants has
 8
      effectively carried out its oversight functions and staff
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      has high confidence in results and conclusions of their
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11
      assessment of licensee performance and program status.
12
               Staff concludes that the licensee's employee
      concern program is significantly improved, well-established,
13
14
      and operating effectively.
15
               Staff also concludes the licensee's programs to
      support a safety conscious work environment are improved and
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17
      effective, and appropriate plans are in place to see that
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      support of these programs is appropriately maintained.
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Based on these findings special projects office

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considers that Northeast Utilities safety conscious work
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      environment and employee concern program are acceptable to
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      stipulation restart in Millstone 3. This conclusion
23
      recognizes that the Northeast employee concern program and
     safety conscious work environment program will continue to
24
25
      be subject to a period of continuing oversight by the third
     party, our contractor, until the NRC is satisfied that the
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2
      program corrections are established and sustained.
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               CHAIRMAN JACKSON: Do the allegation numbers, but
4
      more particularly the extraction of the technical content
5
      and the disposition of concerns raised support your
      assessment of program improvements?
6
               MR. McKEE: The allegation numbers by themselves
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-- the allegation --

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6 7

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CHAIRMAN JACKSON: I said, and especially how the technical content was identified and dispositioned.

11 MR. McKEE: Because that's important. The 12 allegation numbers at Millstone had stayed high and relatively the same, although they received -- I believe the 13 14 numbers are 71 allegations in calendar year '97 and however which equates almost to a rate of six allegations per month. 15 16 I think in the last six months we've seen maybe a slight 17 decrease in that number.

18 I might note that of those allegations and of the 19 ones that have been closed and confirmed, about 20 to 25 20 percent of those have been -- are substantiated. Which is a 21 lower number than the national average in substantiation 22 which give -- I mean, you can take numbers and apply and 23 give meaning to it, but I think that has somewhat inferences 24 on some of the details of the allegations as far as the 25 technical aspect. As far as the technical issues, and there

1 are no issues -- our technical issues -- vou know, we've 2 looked through the allegations and involved with any of the allegations that we're aware of at this time, we think that are of significance that it would have an adverse impact on 4 restart of Millstone Unit 3.

And you recognize that these are allegations all for the site and there are some allegations that involve some of the other specific units.

CHAIRMAN JACKSON: Well, it seems to me there are

1.0 three issues with any allegations or any employee concerns 11 raised. One is getting to the root of it, you know, 12 assessing the technical content of it. Having done that, 13 determining the safety significant and looking at how it's dispositioned accordingly. And the third is whether the 14 15 individuals who may have raised the concerns have been dealt with professionally and fairly. And are you assuring the 16 Commission that on each of those three points that you feel 17 18 that the employee concerns program and the safety conscious 19 work environment programs are working effectively to support 20 21

MR. McKEE: I think from the licensee's point the concerns that they receive and observations of programs they have come a long way and accomplish those three criteria that you mention. As far as our allegations, that is our goal and our purpose.

CHAIRMAN JACKSON: No, but I'm saying from -- you 1 said from the licensee's point of view, I'm asking you from 2 your point of view of the licensee's program, can you give us assurance with respect to those three points?

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MR. TRAVERS: Within the licensees, we're talking
      about a little bit separate thing, but in combination,
 6
      directly in response to your question, yes. The program
      that they have in place that we have evaluated and that
8
     Little Harbor has been looking at to take concerns, evaluate
9
      them, effectively interface with the people who raise them,
10
11
      and appropriately correct, if any technical issues are
12
     substantiated, the issue, we have found effective in the
13
      course of our program.
               CHAIRMAN JACKSON: Commissioner?
14
15
               COMMISSIONER DIAZ: Yes. There has been an issue
      coming all day long with regard to the employee concern
16
17
     program and the safety conscious work environment, and the
18
      issue is, are the results good now because there are that
19
      many independent organizations?
               Could you elaborate a little bit on how robust do
2.0
21
     you think the present licensee program is, not what anybody
22
      else is doing, but how robust is that program to be able to
23
2.4
               CHAIRMAN JACKSON: Stand alone.
               COMMISSIONER DIAZ: -- stand alone.
                                                          268
1
               MR. TRAVERS: There's no question that this
     licensee, because of the problems that it faced, has taken
     extraordinary measures, not the least of which is our order
3
      for them to establish an oversight -- independent oversight
     organization which has been a factor, clearly, in their
     ability to recognize and deal with the program problems and
6
     the implementation problems that they face.
7
               The conclusion that we're providing the Commission
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9
      today is one that, from our vantage, concludes that these
10
      programs are working effectively, and they're working on
      their own adequately to support restart, but mindful of the
11
12
     history at Millstone, mindful of the fragility that I think
     Little Harbor addressed in these programs and the potential
13
     for them to backslide if these programs aren't very
14
      carefully carried through. We think it's appropriate for
15
      some extraordinary measures to continue. We think the
16
      licensee's programs have provided a transition plan which is
17
18
     directed to our more nominal state.
19
              Certainly the program and the order that we've
     laid on this utility envisions for some period of time that
20
21
      extraordinary measures in the form of an independent
      oversight committee would be appropriate. But the bottom
23
     line to our assessment is that we have to conclude and we
24
     have to come before the Commission and express to you our
     view that the programs that they have in place today are
1
      functioning adequately.
2
               We have had some two years of time to review the
     progress that they've made. It hasn't been as quick in some
3
4
      instances as we would have liked. But today, we think we
5
     have had adequate opportunity and a fairly long period of
     opportunity to assess not only the programs being in place,
      but the implementation of those programs, and we think
      that's --
9
               MR. CALLAN: I might say also, without taking
      anything away from what Bill said, mindful also of the NRC's
10
11
      experience over the last decade and a half elsewhere, other
     sites. You know, Millstone is not the first site that the
12
13
      NRC has grappled with organizational climate problems and
     dysfunctional organizational cultures. We have a fair
14
15
     amount of experience, particularly in the last ten years or
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so. We know how long it takes, we know how difficult it is.

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And believe it or not, I think we all share some of the
18
      skepticism that we heard earlier from some of the earlier
19
      speakers, maybe not to the same degree, but I think we also
20
      worry about margin. We worry about backsliding. I mean,
21
      those are legitimate concerns, and we should be skeptical
22
     and we should think of compensatory measures, if you will,
23
      if you think of Little Harbor as a compensatory measure to
2.4
      add additional margin to ensure that we see the sustained
25
      performance that was referred to earlier.
1
               So I think a fair amount of healthy skepticism,
2
     not only because of Millstone, Millstone's unique history,
     but also because of our experience elsewhere.
3
               CHAIRMAN JACKSON: Okay. Thank you.
4
               COMMISSIONER DIAZ: Let me go back to it. Does
 5
      the program have roots inside? I mean, it's not something
6
7
     that it's just sitting there? Does it have roots in the
      organization?
               CHAIRMAN JACKSON: Is it sod?
               COMMISSIONER DIAZ: Is it sod?
1.0
               MR. TRAVERS: Well, what we've seen and what we're
11
12
     trying to convey is that what we've seen -- is it working?
13
     We've seen evidence from Little Harbor and our own
     evaluations that the work force embraces it and is using it.
14
     We think we need to see follow-through. We think that's
15
      going to be important. They have expressed their intent to
16
17
               COMMISSIONER DIAZ: Sometimes these organizations
18
19
      are very people-dependent.
20
               MR. TRAVERS: Yes.
21
               COMMISSIONER DIAZ: You have seen almost a
      traumatic change, okay. How has that impacted the
22
      effectiveness of the program? Did it continue because the
23
     program had roots or it was dysfunctional for a while? You
24
25
     actually saw that happening.
               MR. TRAVERS: I guess, in my own estimation, the
1
      program didn't change overnight. It was a gradual, painful
2
      process at times. There were mistakes made, there were
4
      lessons learned. We followed some of it. Little Harbor
5
      followed it much more closely.
               COMMISSIONER DIAZ: No, you're missing the
6
7
      question.
8
               MR. CALLAN: But Commissioner, usually these kinds
9
     of programs at the early stages are very personality driven,
10
     individually driven, and it takes a long time for that to be
      institutionalized, and at what point are these -- are the
11
12
      successes of these programs weaned from personalities and at
      what point are they institutionalized, if you will, so that
13
      they're independent of individual managers, and that's a
14
     very difficult call.
15
16
               COMMISSIONER DIAZ: I understand. You did see a
17
      significant change in the organization --
              MR. CALLAN: Right.
18
19
               COMMISSIONER DIAZ: -- which was very recent, and
20
     I was wondering whether there was any change that you
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of what -- and how they dealt with that issue and how they

noticed in the performance at that time.

21

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23

24 25

reacted to that issue, I think that reaction would not have

performance at that time is the way -- again, we look at those incidents, we look at the process. I mean, it's part

MR. McKEE: I think if there was a change in their

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been there, the same reaction, had something like this come
     up a year ago. So I think there definitely was a change in
      their performance and their attitude in dealing with that
      item as it came up, to the positive.
5
               CHAIRMAN JACKSON: Okay. Yes?
6
               COMMISSIONER McGAFFIGAN: I just want to explore
     the criteria for when Little Harbor might cease being this
8
      -- I think of it more as a safeguard than a compensatory
      measure because you're telling us that the program is
11
     working, but there's this safeguard.
12
               \operatorname{Mr.}\nolimits Beck earlier today said one metric might be
      when he's not getting anything, there's no value added. Mr.
13
14
     Markowicz suggested a metric that keeps them there at least
15
      until the number of employee concerns and the NRC
      allegations have been reduced to and maintained at the
     industry averages for best-run power plants.
17
18
               You have turned out six months, but the way I
19
     heard that phrase was six months and we can make a decision,
     not six months and they're gone. But how do you make that
20
21
      decision at the six-month point as to whether the -- what is
22
     your metric at that point? Are you going to --
               MR. McKEE: Okay. I think a couple of things that
23
24
     you mentioned are appropriate is -- one item that we're
25
     interested in is, given the changing environment, once a
      unit is approved for restart, watching the operations of
      that program under the atmosphere where you have a unit
3
      operating and also a unit where you still have a lot of
      activity to correct. You want to see that that program,
 4
      which has gotten to the level it is, can sustain and deal
 6
      with issues at that time.
               We'll be looking for a period, and we just assumed
      -- six months was kind of a guess that that would be an
8
9
      appropriate kind of watch period, and it would be some of
     the elements that Little Harbor talked about, that there
10
     weren't incidents that Little Harbor's observations or, you
11
12
     know, recommendations on incidents would not be involved,
      that if things come up, they would be properly dealt with,
13
      and we just assumed that six months might be an appropriate
14
15
     time for that.
              MR. TRAVERS: But fundamentally, we're looking at
17
     the same kinds of performance indicators that got us to this
      point. I think the follow-through is essentially the same
18
      model. In other words, what are our continued observations,
20
      what kind of observations does Little Harbor have in the
21
     same areas that we've been covering with the Commission from
22
     time to time.
              MR. McKEE: And I also might add, there's one
23
24
      element in that that we have now, and I think what we have
25
     been presented is a pretty good plan, is a transition plan
1
      presented by the licensee and how they plan sometime in the
     future, not necessarily six months, but a year or whatever
      it is, and based on measures, how they plan to transform
      from the organization in which they have enhanced elements
      into a more regular structure organization, and I think
     we'll need some period to see how that -- how they may do
      their own measurements and assessments so that they can do
     that transition, and that will be part of the decision.
8
               CHAIRMAN JACKSON: Thank you.
               MR. CALLAN: The next presentation will be from
10
11
     Wayne Lanning on oversight and quality assurance.
12
               MR. LANNING: Good afternoon.
               CHAIRMAN JACKSON: Good afternoon.
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               MR. LANNING: First slide, please.
15
               The Millstone Restart Assessment Panel has
16
      addressed oversight as the combined activities of the
17
      quality assurance organization as required by Appendix B,
      reviews completed by the safety committees as required by
18
19
      the technical specifications, and the self-assessment
20
     function performed by the line management to improve
21
     processes.
22
               Oversight is a restart issue because of
23
      ineffective program implementation and failure to identify
     declining performance.
2.4
25
              Historically oversight contributed to the weak
      performance at Millstone. In the 1995-96 time frame
1
     external and internal audits judged oversight ineffective.
      Prior to '94 the NRC twice rated in our systematic
 3
4
      assessment of the licensee performance program the
      functional area of safety assessment and quality
     verification as category 3. Quality control effectiveness
     was diminished by the systematic elimination of the quality
     control hold points and the failure of line management to
      accept audit and surveillance findings and carry out
9
1.0
      corrective actions.
              Audit exit interviews were not well attended by
11
     line management. Self-assessments were typically not
12
13
      initiated until a problem became apparent, and they were
14
      narrowly focused and often lacked critical and thorough
      evaluations. Identified performance improvements were
15
16
      generally not carried out.
17
              The four safety committees are the Plant
18
     Operations Review Committee, the Site Operations Review
19
     Committee, the Independent Safety Engineering Group, and the
20
     Nuclear Safety Assessment Board. In the past these
      committees were narrowly focused on compliance and generally
21
22
      not effective in preventing recurring performance problems.
23
     They did not manage their backlogs, and they tolerated weak
      performance by management.
24
25
               The licensee developed a broad corrective-action
1
      program for the deficiencies identified through these
2
      external and internal audits. The root cause for
      ineffective oversight was identified as a lack of executive
3
4
      leadership and management support.
               The next slide lists staff activities regarding
     the evaluations of the licensee's corrective actions to
6
7
     recover oversight. These include the normal inspection
      activities done by the resident inspectors and region-based
      inspectors. The most comprehensive evaluation of oversight
10
      was performed by an inspection team using the inspection
      procedure 40500, the title of which is "Effectiveness of
11
      Licensee Controls in Identifying, Resolving, and Preventing
12
13
      Problems." This eight-person team completed its inspection
14
      in late February. This report has not been issued. It's
15
     currently under management review.
16
               The Operational Safety Team inspection completed
17
     its onsite activities just last Friday. The exit meeting
     for that team is next week. This inspection evaluates the
18
19
     readiness of plant hardware, staff, and management programs
20
      to support safe restart and continued operation.
               CHAIRMAN JACKSON: Did you look specifically at
21
22
      oversight?
23
               MR. LANNING: Yes, ma'am. They evaluated the
24
      performance of the safety committees and self-assessment
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activities, and the role of oversight in other functional areas is maintenance, surveillance, and engineering, and so 1 2 forth. 3 The preliminary results were used, the staff assessment of oversight. Additional insights were gained through both NRC and contractor inspections of the significant-items list. The restart assessment panel 6 identified this list of safety issues and processes required for restart as part of manual chapter 350 activities that 8 9 Dr. Travers discussed previously. Finally, the NRC held periodic management meetings 10 with the licensee to discuss the status of restart 11 12 activities. These meetings gave the staff insights into licensee management support of oversight. 13 The next slide outlines some of the findings by 14 15 the staff's evaluation of oversight. The Nuclear Oversight 16 Organization adequately implements the license's quality 17 assurance program. Management support for the oversight organization is evident. Key managers have been replaced to 18 19 provide leadership, and adequate, qualified staff has been added to the organization to accomplish its mission. 20 21 The recovery plan to improve performance through 22 programmatic and organizational changes is complete. CHAIRMAN JACKSON: Is almost complete. 23 MR. LANNING: Is complete. There is an error on 24 25 this slide. 278 1 CHAIRMAN JACKSON: Okay. MR. LANNING: The recovery plan is complete and 3 the oversight organization continues to improve on some of 4 the areas that were in the initial plan. Management has established standards and 6 expectations, organizational infrastructure, and teamwork. Particularly noteworthy is that line management now embraces oversight findings and evaluations. 8 9 Audits and evaluations are rigorous and completed on schedule with substantial feedback on management 10 performance in the recovery process. They maintain 11 12 differing and sometimes unpopular positions during the 13 recovery process. 14 The nuclear oversight assessments, the readiness 15 to promote changes, and the design reviews of the recirculation spray system were excellent. Quality control 17 now reviews all quality assurance work for hold points 18 before the work is released to the field to the mechanics. 19 Finally, the Nuclear Oversight Organization has demonstrated that it can identify problems at a very low 20 21 threshold and assure that corrective actions for their 22 findings are completed in an acceptable manner. 23 The staff concludes that the Nuclear Oversight 24 Organization is improved, it's integrated into the Millstone 25 organization, and now effective. 279 The four safety committees add value to the oversight function. Currently each committee meets its

oversight function. Currently each committee meets its
regulatory requirements and achieves its goals and
management expectations.

The committees focus on operational safety. They
identify safety issues and track their findings and
recommendations to ensure that they're adequately carried
out by line management.

The next slide -CHAIRMAN JACKSON: What does "meets technical

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11
      specifications" mean in this context?
              MR. LANNING: It meets the requirements specified
12
13
      in Unit 3 technical specifications.
               CHAIRMAN JACKSON: You mean to have these
15
      committees.
16
               MR. LANNING: To have these committees, proper
17
               CHAIRMAN JACKSON: I just wanted to understand the
18
19
      context.
20
               MR. LANNING: Meeting frequency --
               CHAIRMAN JACKSON: Fine.
21
22
               MR. LANNING: In that respect.
23
               This slide summarizes the Staff's evaluation of
     the licensee's self-assessment activities.
24
25
               The licensee has implemented a formal self-
     assessment program that now defines the expectations,
1
     accountability, and ownership.
2
              For example, every department must perform self-
3
      assessments and this includes the Nuclear Oversight
4
      Organization, which also has responsibility to evaluate the
      effectiveness of the self-assessment program, and you will
6
7
      recall from this morning's discussions that the Nuclear
      Safety Assessment Board provides oversight of the Nuclear
9
     Safety Organization.
10
               The Staff has reviewed several self-assessments
11
      and found them to be critical and the technical adequacy
12
      improving. The self-assessments identified problems,
13
     identified the issues at a low threshold and generally did
14
     so before they were identified by outside organizations.
15
              Line management showed ownership of the findings
16
      and ensured that corrective actions were addressed and
17
      completed in a timely and acceptable manner to improve the
     organization and processes.
18
19
              The next slide shows the Staff's conclusion
20
     regarding oversight. The Restart Assessment Panel has
21
      integrated the inspection findings and concludes that
22
     oversight is adequate to support restart and continue safe
23
      operation.
               CHAIRMAN JACKSON: Mr. Lanning -- I'm sorry, go
24
25
      ahead. Please, finish.
               MR. LANNING: Okay. This conclusion is based on
1
2
      demonstrated effective performance by the Nuclear Oversight
3
      Organization and adequate performance by the safety
     committees and an effective self-assessment program.
4
              CHAIRMAN JACKSON: I want to look at this adequate
6
      performance by the safety committees for a second.
               Can you comment on the safety committee
      performance as it is related to the recirc spray system
      modifications?
9
10
               MR. LANNING: The Plant Operations Review
11
     Committee reviewed the modification before it was done.
     They did have questions, but quite frankly, the technical
12
13
     aspects of that mod is really not within the capability of
      the PORC organization so I think it's fair to say that it
14
     was not an expectation for them to have identified the
15
16
      complex engineering weaknesses that were probably included
17
      in that design mod.
               CHAIRMAN JACKSON: Should it have been? I mean is
18
19
      that -- I mean how does that comport with what you would
20
      expect other --
21
               MR. LANNING: I wouldn't expect the PORC to be in
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22
      a position to understand that level of detail engineering
      analvsis.
23
24
               MR. IMBRO: I have nothing to add. I agree with
25
      Wavne.
                                                          282
               CHAIRMAN JACKSON: I guess I want to just -- one
 1
 2
      last thing.
 3
               I asked a guestion this morning having to do with
 4
      engineering strength and to what extent this RSS issue
 5
      relates to what strength and depth of insight there is in
 6
      engineering.
               Can you make a comment?
               MR. IMBRO: Well, maybe I can answer --
 8
 9
               CHAIRMAN JACKSON: Please.
10
               MR. IMBRO: -- try to answer that.
               Engineering was historically not a very strong
11
12
      organization. I think we have seen in our two years at
13
      Millstone that it is substantially improved.
14
               I talked to a lot of the folks in the Engineering
15
      organization and also in the Oversight and other
16
      organizations, but specifically to the Engineering
      organization. I think they acted in a reasonable manner. I
17
18
      think they had analysis that supported the design, or at
19
      least they thought they did, and I think they had several
      consultants agree that the design seemed reasonable, so, you
20
21
      know, the fact that there was a failure I think is not
22
      necessarily a reflection on the Engineering organization,
      but I think they proceeded with reasonable information to go
23
24
      forward, so I would not consider the failure of the RSS
25
     bellows necessarily something that I would attribute to a
 1
      weakness in Engineering.
 2
               CHAIRMAN JACKSON: Well, you know, we talk about
 3
      the PORC, we talk about Engineering, and we talk about the
 4
      Oversight organization.
 5
               Where is the catch basin for a problem like this?
               MR. IMBRO: Well, again I think it is a complex
 6
      issue and to me I think that all organizations were involved
      that should have been. Oversight certainly identified the
 8
 9
10
              I think the testing people that got involved that
11
      also had questions that then in a sense prompted another.
12
      the Nuclear Materials Engineering Group, to go back to the
13
      vendor to get calculations, so I guess what I am trying to
      say is I think there is -- the process worked because all
14
15
      the organizations that were, that should have been involved
16
      ultimately got involved.1
               Could they have gotten involved sooner? Possibly.
17
18
      But I think that the fact that the modification was not
19
      totally approved, was being tested, you know, indicated that
      many organizations had some concerns.
2.0
21
               Is there one catch? I think in this case maybe
22
      the fact that the Oversight identified the problem
      heightened the concerns of the other organizations possibly
2.3
24
      was the, quote, safety net, if you will, but I think that
25
      the appropriate organizations got involved and they acted in
 1
      a professional manner and they really worked to get the
 2
      information they needed.
               CHAIRMAN JACKSON: Is this a significant system?
 3
               MR. IMBRO: Certainly. Absolutely.
               CHAIRMAN JACKSON: Right, and so I guess again the
 6
      question becomes you are convinced, you know, that with
      these various legs to the stool that there is sufficient
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strength that for system of this safety significance with problems of this complexity that there is robustness in the 10 system to adequately address it? MR. IMBRO: Well, the answer in my mind would be 11 12 13 MR. TRAVERS: I think one question you might ask 14 as a result of this event is, as was presented earlier, there were some nearly 200 physical modifications made to 15 16 this plant while it's been shut down, and a reasonable 17 question in the face of what is obviously not a nominal 18 situation -- it would have been better if the design of what 19 was done initially in the RSS resulted in the right answer 20 the first time. It didn't. A critical question about that interaction is how 21 well did the organizations work, and I think you have heard 22 23 from us that we think even though they came out with the 24 wrong answer the first time that the organizations that should have come into play did. 25 1 Unfortunately, it didn't come out correctly before the testing. However, the other modifications that were made, some 186, nearly 200 modifications, the answers that I 3 4 got when I asked the question of my inspectors in both them and the licensee is that there were no similar incidents of post-modification failures based on poor design that 6 resulted from any of those modifications, so I think it obviously didn't result in an optimal conclusion in this 9 instance. 10 We have looked at it. We think that it was not an 11 obvious technical issue that should have been obvious to 12 all -- you know, a very simple issue. Rather, it was a 13 complex issue on cavitation and aspects of how you account 14 for that cavitation, and unfortunately the wrong answer came 15 out. The good news, if there is any here, is that the 16 17 testing that was done ultimately found the issue and resulted in a fix that we have reviewed subsequently in some 18 detail that we are asking Sargent & Lundy to look at in 19 20 additional detail. 21 We expect it will be determined to be an 22 acceptable fix for what is a very important system --23 CHAIRMAN JACKSON: Well, look, look, look -- the 24 Commission is dependent upon you --25 MR. TRAVERS: Yes. 286 1 CHAIRMAN JACKSON: -- in this instance, okay? And 2 the question really is, you know, we need to have some baseline here and some understanding in two regards. 3 One has to do with what I just asked, whether or not you feel there is sufficient robustness in the set-up with the various organizations and entities to deal 6 7 adequately with problems in system of this safety significance if there are similar issues. But a kind of baseline one is what is reasonable 10 to expect relative to this kind of issue with some other 11 licensee that we think does an adequate job, and you have to tell us that. You can't dance around the issue. You have 12 13 got to tell us that, and that is what I am asking you. 14 MR. CALLAN: Chairman, let me just provide -- I agree with the perspective that the process worked in this 15 16 instance, but this is not good engineering. I mean we can't 17 sit here and tell you that that is an example of good

engineering. It is not.

18

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19
               And the thing about this particular modification
      or this particular problem -- it was self-revealing. It
20
21
      could be picked up with post-modification testing.
22
               I mean as you know from the types of issues that
     we deal with daily across the industry, we are worried more
23
24
      about the types of engineering --
               CHAIRMAN JACKSON: Not really.
25
               MR. CALLAN: -- flaws that are not self-revealing
      that you -- that are only manifested during design basis
 3
      events
               CHAIRMAN JACKSON: Right.
               MR. CALLAN: But you have to rely on analytical
5
 6
      techniques --
               CHAIRMAN JACKSON: That's right.
8
               MR. CALLAN: -- to provide the protection.
9
               In this instance, testing turned up the problem.
10
               CHAIRMAN JACKSON: That's right.
11
               MR. CALLAN: So it is an issue, clearly. It is
12
      not a success story in that sense, but the process did work.
13
               CHAIRMAN JACKSON: So what I am saying is as long
      as we focus on the particular system and the very fact that
14
15
     the testing can reveal what needed to be revealed, we're
16
     okay, but if we have a situation where that is not available
     or it is not self-revealing in that sense, then that is why
17
      I am asking you the question about the robustness of what is
18
     in place.
19
20
               MR. TRAVERS: And our assessment of much more of
21
     what has occurred at Millstone in terms of engineering that
22
     has been completed including other modifications is what I
     was trying to allude to is that the engineering is adequate,
23
24
      is robust sufficient to justify the conclusions we are
25
     bringing forth today.
                                                          288
1
               CHAIRMAN JACKSON: Commissioner Dicus?
               COMMISSIONER DICUS: With regard to the
2
3
      recommendations that were made regarding the ECP and the
      SCWE there was qualification that everything -- a
     qualification that the third-party oversight should continue
5
6
     for some period of time. Do you have any qualifications on
     your recommendations?
               MR. TRAVERS: On our recommendations?
8
 9
               COMMISSIONER DICUS: On oversight and quality
10
      assurance.
11
               MR. TRAVERS: Oh, I'm sorry.
12
               COMMISSIONER DICUS: Yes.
13
               MR. COLLINS: I wasn't following your question. I
      thought you were asking an ECP question. Ask me again.
14
15
               COMMISSIONER DICUS: Fair enough.
16
               There was a qualification with the ECP, et cetera,
17
     that third-party oversight should follow for a while as a
18
      qualification to their recommendations, or at least that's
19
     how I perceived it. Do you have any qualifications to your
2.0
     recommendations?
21
               MR. COLLINS: No. No qualifications.
22
               COMMISSIONER DIAZ: Going back to Mr. Lanning,
2.3
      something that he said that I put back here. I mean, it's
     piggy-backing on the Chairman's question, and you actually
24
25
     said that there was a weakness in the organization, you
      know, in engineering at the time that it was done, and
     that's, you know, that's about the way it was expressed.
2
3
              The thing that I would like to go back to is do
      they know or they appear to know when there is a weakness
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that they need additional support? And are there, you know,
     does their processes they set to seek the additional support
 6
     that is needed when it is needed?
               MR. LANNING: What you're talking about is a
9
     rigorous design control process. That's what we're talking
10
      about here. One of the weaknesses in this design was the
11
      independent verification of the calculations. For example,
      simply assuring that the input, the assumptions are correct.
12
13
     That didn't occur in this case. It's a lesson learned, and
14
      I think the program -- design change program will benefit
15
     from that.
              COMMISSIONER DIAZ: Okay. I'm willing to accept
16
17
     that that happens. It is not the first time or maybe the
     last time. The question is are the processes in the system
18
      capable of realizing when there is that weakness to seek
19
      additional help. That's the distinction. Go beyond, you
20
21
     know --
               CHAIRMAN JACKSON: Do they have a rigorous design
22
23
      control process, to use your terminology?
              MR. LANNING: I think that's the answer. They
24
     have just revised the design control manual, and they have
25
1
      established a rigorous design control process, and the fact
     that they've gone and looked at the almost 200 previous
2
3
     modifications including the calculations provides some
 4
      assurance that that process is working.
               COMMISSIONER DIAZ: All right. Thank you.
               MR. COLLINS: Commissioner Dicus, if I can just --
6
7
      excuse me. If I can just be sure I'm clear on your question
      and the answer. We have talked here about the Corrective
     Action Program and the 4500 process. You have heard, and I
10
      think we would agree from previous presenters that that
11
      process needs to be tracked to the extent that we have
12
      confidence that it is in fact a robust program, particularly
13
     in the backlog area. And I believe in a later presentation
14
     you will hear that we do believe that there is additional
      oversight.
15
16
               In fact, it's been suggested that there be
17
     unannounced inspections in those areas by one of the
18
      previous presenters. We would not disagree with that. We
19
      are of the view also that there needs to be an enhanced
20
     followup in the corrective action area in light of the
21
     disposition of the backlog.
22
               COMMISSIONER DICUS: Fair enough.
23
               COMMISSIONER McGAFFIGAN: I just want to make one
2.4
      point and ask one question. The heart of what I'm hearing
     you say about this RSS issue is that the notion that -- I
25
                                                          291
1
     think Mr. Del Core talked about freshman engineering
      knowledge -- that there was beyond freshman engineers at a
     typical college to have spotted this problem and said it's
3
 4
      obvious and fix it. You agree with the licensee that this
      was a complex issue that needed people to look at from
      several directions, and it's a disservice to characterize it
6
7
      as freshman engineering?
8
               MR. CALLAN: Well, my experience, and I don't --
     correct me if I'm wrong, but I dealt in my experience in my
9
1.0
     NRC role overseeing a lot of utilities grappling with
11
     vibration problems and positioning of orifices and
     turning -- what they call tuning a system, positioning the
12
13
      orifice, some pretty strong engineering organizations, and
14
     some say it's more of an art than a science. I don't know
      that. But it -- I would not concede the point that it's not
15
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necessarily rocket science. I don't know. It's -- I don't
16
      think it's -- it's not necessarily easy to do.
17
               COMMISSIONER McGAFFIGAN: The question is we heard
18
19
      Captain Mendenhall talk earlier, and he was a part of this
      oversight organization, and his basic statement was that
20
      when he came up with problems in his audit role they were
21
22
      either trivialized, studied to death, or looked at narrowly
23
      as symptoms. And the question I have for you is that that
24
      obviously isn't your general judgment or you wouldn't be
25
      making the conclusion you have at the moment. How do you
 1
      fit his testimony in with your general judgment?
               MR. LANNING: Well, I respect his comments and,
 2
 3
      you know, we've talked to him in detail about his concerns.
 4
      Quite candidly, oversight organization in its performance is
 5
      not perfect. Our Corrective Action Inspection Team found
 6
      imperfections. They found things that needed to be
      corrected. But that didn't indicate that the oversight
      function itself is programmatically broken. So there are
 8
      weaknesses. There's not a perfect organization. They're
10
      continuing to identify deficiencies and identify
      improvements. So I think it's part of the continuing
11
12
      improvement process.
13
               COMMISSIONER McGAFFIGAN: But if we were to survey
      the employees in the oversight department, what percentage
14
15
      would agree with Captain Mendenhall that their concerns are
16
      trivialized. We had one testify earlier, at least
      somebody -- but is this -- this is not the typical
17
18
      situation, I assume.
19
              MR. LANNING: I'd be speculating to try to guess
      how many oversight employees would say that. But through
20
21
      our inspections, and we've looked at oversight in a number
22
      of avenues, and corrective actions even more broadly, we're
2.3
      finding that the process is functioning adequately. There
      are warts. There are imperfections. There are still
24
      findings on the part of NRC. That's what we would expect.
25
      But overall the program is functioning.
 1
 2
               CHAIRMAN JACKSON: When you say, Mr. Lanning, the
 3
      program is functioning, do you mean people go through the
      steps they should or that the outcomes are what they should
 5
               MR. LANNING: I mean that the oversight
 6
 7
      organization is involved, it's respected, it's performing
 8
      its function according to our requirements, they're going
 9
      beyond that and asserting themselves into the process.
10
      They're adding value to the quality of the work being done.
11
               CHAIRMAN JACKSON: Okav.
12
               Mr. Imbro, you were going to make a comment
13
      earlier?
               MR. IMBRO: I just was going to add that we had
14
15
      also inspected the design control manual, the new design
16
      control manual as a part of ICVP in that year, year 3
      inspection, and I thought we found that the manual itself
17
      was pretty comprehensive. Of course it has to be
18
19
      implemented properly. But the manual itself we thought was
2.0
      pretty solid.
21
               CHAIRMAN JACKSON: Okay. Again, all I'm going to
22
      leave is a question, and it's an implicit -- I mean a
      comment that it's an implicit question. And that is that
2.3
      again one can look at programs, processes, does everybody
24
      take the steps he or she should take. But in the end what
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ensuring that safety-significant systems can be -- that if a
      design change is made that in the end the right thing is
 4
      done, or if there's a problem, the problem is resolved. You
     have comfort in that regard. I'm not interested in whether
6
      a program is in place.
               MR. TRAVERS: Right.
               CHAIRMAN JACKSON: I'm not interested in whether
9
10
      people go through the steps of the process. I'm interested
11
      in the outcome. And so what are you going to tell me?
               MR. TRAVERS: And that is in fact exactly the
12
13
      right focus. It's the focus that we've taken in our
14
     inspection activities, and we're here to tell you that in
      the areas that we're addressing today that the outcomes.
15
      whether it be in oversight and the effectiveness of
16
17
      oversight, for example, in stopping work, that -- or mode
18
      changes to make sure that work is done correctly, in the
      area of the effective functioning currently of ECP and SEWE
19
20
     that our conclusions are based in fact on our best
     assessment of that factor as a principal one, and we do look
21
22
      at programs, we do look at how they're structured, we do
23
      look at whether or not they're programs that can be used
24
     effectively, but in addition to that, and perhaps even most
      importantly, as you suggested, Chairman, our look-see is
25
1
      focused on those very outcomes that you've made reference
 3
               And when we talk to you in the next Commission
 4
     meeting it will be even more apparent.
               CHAIRMAN JACKSON: Okav. That's very important
6
     because you know my mantra.
7
               MR. CALLAN: Right.
8
               CHAIRMAN JACKSON: Programs are as programs do;
9
     right?
10
               MR. CALLAN: I've heard that before.
11
               CHAIRMAN JACKSON: Right. Okay.
               MR. TRAVERS: The last issue that we wanted to
12
13
      address with the Commission today has to do with backlog
     management. The size and composition of the licensee's
14
15
      post-restart backlog are issues that were addressed by the
16
     Chairman at out last Commission meeting and in a subsequent
17
     staff requirements memo by the Commission. Although
18
     backlogs are expected at restart and historically at
19
      Millstone the licensee has not been effective in assuring
20
     that work is effectively completed and completed in a timely
21
     way. Given this historical issue the staff has been closely
     monitoring the licensee's effort to improve it's programs
22
23
      relative to corrective actions, work planning and control.
2.4
      In fact, the staff has identified improvements in these
      areas as fundamental elements of our restart assessment
25
1
      plan. We're going to address corrective actions, per se, in
2
      its many elements in detail at our next Commission meeting
     and also work planning control.
3
               But with regard to the backlog specifically, we
 4
     have identified the following issues as key to an assessment
6
      of our view or restart readiness. And those issues are the
      following, have the work items that need to be accomplished,
     have they been classified appropriately as either required
     before restart or appropriately deferrable. And the second
10
      question is, for those items that are appropriate to defer,
11
      does the licensee have a plan to complete that work in a
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reasonably timely fashion. So that's the way I'm going to

12

understand from you is in terms of outcome relative to

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13
     approach this presentation.
               Next slide, please?
14
15
               To address the first issue we issued a letter -- a
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      demand for information under 5054(f) about a year ago that
      required the licensee to submit a number of things. They
17
      required them to submit a detailed list of all of the items
18
19
      that they identified as required prior to restart. It
20
      required the licensee to submit a detailed listing of items
21
      that they viewed as deferrable until after restart.
22
      required them to submit their process and their rationale
23
      for making those judgments. And, lastly, it required them
      to provide us with an overall assessment of why they believe
24
25
      they meet their license basis and the regulations and the
 1
      FSAR.
 2
               The licensee has responded to each one of these
 3
      items and we've been providing -- and they have been in fact
      providing us periodic updates of these lists of deferrable
      or required before restart work items.
 5
               Next slide, please?
               In order to evaluate both the process and the
      criteria being used to categorize deferrable issues and the
 8
      licensee's implementation of the process, the NRC staff has
10
      carried out four inspectors, actually with the recent
      completion of the OSTI, you can count it as five. We have
11
12
      not issued report, however. We've issued two of those four
13
      inspection reports. The first inspection assessed the
      licensee's process and concluded that it appropriately
14
15
      conservative. To give you a sense of that the process that
      they are using requires that for items to be deferred they
16
17
      can't have anything to do with corrective actions to conform
18
      with licensing or design basis. They must not be associated
      with any support to at tech spec change and they can't be
19
2.0
      issues that are important to a determination of operability
21
      for a maintenance group one or two system. So anything
      associated with those kinds of issues are put in the pre-
22
2.3
      restart bin.
               CHAIRMAN JACKSON: Can you comment on the status
24
      of the deferred item on the RHR system that we discussed at
25
 1
      the February meeting?
               MR. TRAVERS: Yes, that issue had just been
 2
      identified and it came up and it was fairly prominent and
 3
      the discussion that we had with the Commission the last
 5
      time, the NRC in -- I guess it was our April inspection
 6
      identified this as an issue that we thought might need to be
      put on -- rather than deferrable list, the restart list.
      And the licensee has subsequently agreed with that and has
 8
      actually made the fix to mini-flow line in the RHR system
10
      which results in elimination, we believe, and agree with, a
      potential for a cycling of that valve which could result in
11
12
      a misfunctioning of that very important system.
13
               Whether or not that misfunction would have
      occurred given the situation, it is not determinant, but
14
      nevertheless they've taken the steps to provide additional
15
16
      assurance that it won't. And so that's a corrective action
17
      that's actually been implemented.
               The inspections that we've completed have included
18
19
      a review of all of the deferred items, the descriptions for
      each one of those many items. We've looked in more detail
2.0
21
      based on a smart sample at about 1,000 items on that list,
      and we've asked questions and we followed up on assessing
22
23
      whether or not the implementation of their process was
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effective in identifying items that really should be

completed prior to restart. And the results of those 1 inspections indicated that in about ten instances items of the 1,000 or so that we looked at in some detail were required to effect the change. 3 4 Now, the conclusion we reached relative to the significance of those things not being on the restart items list is that none of them really posed a very significant 6 issue if they had remained, in fact, on the deferred list. 8 Nevertheless, in about 1 percent of the instances, you know, 9 we took issue with their judgement on how they classified 10 those items. 11 Next slide, please? In order to determine the extent of the licensee's 12 13 planning and programs to complete deferrable work in a timely fashion after restart, we asked the licensee to 14 commit -- to submit a backlog management plan and they've 15 done that and you've heard some discussion of it here today. 16 17 An objective of our review was to determine if the agency should establish some level of additional regulatory 18 19 requirement, an order or a CAL, for example, to provide some 20 added assurance that the backlog would in fact, given the 21 history of Millstone be addressed in a reasonable timeframe. The plan which they have submitted provides 22 certain commitments. It is essentially, though, a 23 2.4 methodology and a process framework, along with a statement 25 of targets and goals for addressing deferrable items for 1 restart. 2 3

This slide characterizes the fact that their plan includes a characterization and breakdown of deferred works, a listing of functional requirements which they've developed. Again, these targets and goals, and as has been mentioned earlier, certain commitments for reporting to NRC on performance indicators and updates on progress that they make or don't make in addressing these issues.

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Although firm commitments are not provided in their plan, they have targets, they have goals, they've indicated intent to disposition all of this work prior to restarting for the next refueling outage which would be about 10 or 11 months from now. We believe that a number of things add up to provide confidence that this is a reasonable plan.

Number one, the fact that they have relatively conservative threshold for identifying the work that needs to be done before restart, the fact that we've reviewed that and have found that in most instances they've appropriately applied it, also the fact that they have in fact already completed a relatively large fraction of deferrable work, I think you heard something like 6,000 of 10,000 deferrable items. Oh, no, I'm sorry, 60 percent, I forget what the number is. But about 60 percent of deferrable work that has already been completed in the course of this current outage.

301

Combine that with the commitments that they've made to provide us on a quarterly basis with detailed program on their disposition of these items leads us to conclude that this is a reasonable plan, it can -- it doesn't have to, but it can be implemented effectively.

It might not implemented effectively. It provides a series of targets and goals and combined with the commitments to provide us with progress reports, we think it provides a reasonable approach given the significance or

lack of significance of these kinds of issues. 10 CHAIRMAN JACKSON: Does it require a CAL? 11 12 MR. TRAVERS: We believe, and I will ask for the 13 next slide, that based on the items that I just mentioned, we don't think a CAL at least at this time is something that 14 15 we would recommend to the Commission. 16 We would, however, as Sam indicated, we would 17 however recommend that in the context of assuring not only that the backlog is dispositioned effectively but that the 18 broader question of Corrective Action Program implementation 19 20 is successfully implemented after restart that the Staff plan to carry out another 40-500 team inspection in this 21 22 area, and that is what we are planning to do within about a 2.3 year to assure that the follow-through in these areas, both 24 in terms of the backlog management and the Corrective Action 25 Program, be checked. 1 This is a bit of a checkpoint, if you will, for 2 establishing whether or not the follow-through has been 4 Really, this recognizes what we started with and that is a historical problem associated with a program that 5 has not in the past been very effective at completing work, 6 getting backlogs down appropriately and so forth. COMMISSIONER DIAZ: Yes, Dr. Travers. Getting at 8 the conclusion in here, maybe you can clarify for me, based 9 10 on our criteria of adequate protection of health and safety, 11 how is the determination made whether 1000 items are 12 adequate or 10 or 2000. What do we use as the criteria to 13 establish that, yes, it is okay or is not okay to defer 14 certain items? 15 MR. TRAVERS: I think in response to your question that a quantitative answer is something that is probably 16 17 elusive. More importantly would be an assessment of the 18 process -- what kinds of items, for example, is the licensee 19 deferring? In the aggregate, can they be viewed as 2.0 significant enough to warrant some level of concern, and I 21 think what you are hearing from us today is that even with 22 23 the 4000-5000 items that they have identified as deferable, 24 that we believe that the threshold they have used is a conservative one which really results in most -- any safety 25 significant work being done before restart. 2 For example, as I mentioned, all of the issues 3 that need to be done to address conformance with the licensing or design basis are pre-restart items. That captures a lot of material that might potentially be 5 6 deferable, in some sense, on purely safety --COMMISSIONER DIAZ: So quality implies safety. 8 MR. TRAVERS: I think so. 9 COMMISSIONER DIAZ: Thank you. MR. TRAVERS: So our conclusion, which I will just 10 roll off, is that we think that they have made reasonable 11 12 determinations of what is on the restart list versus the 13 backlog list. 14 We think that their plan, while it doesn't provide firm commitments, does provide a process that can work and 15 16 combine that with the commitments they have made to keep us 17 informed of their progress and combined that with our planned follow-through inspection to assess both corrective 18 actions and the backlog renders this issue sufficient to 19 20 come to the Commission and argue that it is supportable for a restart decision.

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               CHAIRMAN JACKSON: Thank you. Commissioner Dicus?
      Commissioner Diaz? Commissioner McGaffigan? Well --
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24
               MR. CALLAN: Commissioner, we have two more
      slides -- if you would just bear with us.
25
 1
               CHAIRMAN JACKSON: Okay.
 2
               MR. CALLAN: And I will be very brief but I think
 3
      this is somewhat of a seque to the next meeting that we
 4
      have.
 5
               Just to quickly lay out what is before us, before
      we meet again on Millstone, first of all, first and foremost
 6
 7
      the independent corrective action verification program will
      need to be substantially completed for Unit 3 -- clearly.
 8
               We have not yet received the final Sargent & Lundy
 9
      report and, Gene, we are due to get the interim report next
10
      week? Is that right?
11
               MR. IMBRO: Yes, on May 5th.
12
               MR. CALLAN: But additionally there is about 80,
13
14
     plus or minus about 80 ICAVP issues that have yet to be
      resolved by either Sargent & Lundy or the licensee, so those
15
      have to be resolved and once that is done the Staff, the NRC
16
17
      Staff can then review the manner in which the licensee's
18
      Corrective Action Program dealt with those issues.
              While we do that, we are also completing the next
19
20
     bullet there, which is our assessment of the licensee's
21
      Corrective Action Program.
22
               And as was mentioned earlier we have yet to
23
      complete our assessment of the results of the Operational
2.4
      Safety Team Inspection, the OSTI. In fact, the exit is also
      May 5, isn't it, next Tuesday, and there'll be an exit at
 1
      the site open for public observation.
 2
               What time is that going to be?
               MR. LANNING: One o'clock. One o'clock.
 3
               MR. CALLAN: One o'clock at the site. So at that
      time the staff will formally present its findings, its OSTI
      findings. The report will follow obviously. There will be
 6
      a lot -- even after the exit we'll still be assessing what
      it all means and root causes and that sort of thing. So
      we'll be reporting out on that at the next meeting.
 9
10
               If you add all -- and then finally I guess, the
11
      paperwork. We owe you all another report similar to the one
12
      that we gave you to support this meeting summarizing our
13
      conclusions and recommendations relative to the outstanding
      issues. All of that, if you add it up, looks like a minimum
14
15
      three to four weeks to do all that, and that's if the
      licensee's progress continues on the track it's on.
16
               CHAIRMAN JACKSON: Okay. Now you're done.
17
18
               Thank you very much, and I would like to thank
      Northeast Utilities, Little Harbor Consultants, the public
19
      officials, and members of interest groups and the public,
20
21
      and the NRC staff for briefing the Commission on the
22
      progress in assessing the readiness for restart of Millstone
23
     IInit 3
24
               And once again I will state on behalf of the
25
      Commission that we recognize how difficult it is to condense
                                                          306
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     the subject -- the substance of either the reviews performed
     by each of you or in the case of the public your comments
      and evaluations into briefings like this. And that is the
      primary reason that the NRC in November 1996 created the
 4
      Special Projects Office, to provide for direct oversight of
      all licensing and inspection activities and to tailor the
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NRC's staff guidelines for restart approval to address specifically deficiencies at the Millstone units. 8 9 Now I want to reassure the public especially that 10 the Commission as a consequence of making the Millstone units Category 3 plants in June of 1996 took on the 11 12 responsibility of a more careful monitoring of these plants. 13 To that end we have relied on the Special Projects Office. 14 We have had regular meetings, and we do receive and read the personal correspondence from the public to our offices, and we consider it all part of the Millstone record for our 16 17 deliberations and evaluations for restart readiness. And we 18 do appreciate your input. 19 And as I state at each meeting, the Commission 20 does not presuppose any of the plants will restart by a 21 specific date, but it does depend upon the various 22 evaluations being done and receipt of the documentation of 23 that from the staff, as well as from the licensee and other 25 The Commission is primarily concerned with ensuring that if and when the Millstone Station restarts, it is a safe station with an effective Corrective Action 2 Program and with an environment supportive of the public, but especially the employees raising and that there is adequate and appropriate resolution of safety concerns. 5 Now with regard to the schedule for the next Commission meeting on Millstone, I can only reiterate as I stated in my opening comments that the Commission will 8 9 schedule the meeting as promptly as possible following 10 receipt and assessment of the progress reports from the NRC 11 12 And so unless my colleagues have any closing 13 comments, I want to thank you again, and since you talked 14 about till we meet again, at the risk of dating myself, $\ensuremath{\text{I}}$ say, "Happy trails to you." [Whereupon, at 4:33 p.m., the briefing was 16 17 concluded.] 18 19 20 22 23 25