UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
***
MEETING WITH NORTHEAST NUCLEAR ON MILLSTONE
***
PUBLIC MEETING
***

Nuclear Regulatory Commission
Commission Hearing Room
11555 Rockville Pike
Rockville, Maryland

Thursday, February 19, 1998

The Commission met in open session, pursuant to notice, at 9:30 a.m., the Honorable SHIRLEY A. JACKSON, Chairman of the Commission, presiding.

COMMISSIONERS PRESENT:
SHIRLEY A. JACKSON, Chairman of the Commission
GRETA J. DICUS, Member of the Commission
NILS J. DIAZ, Member of the Commission
EDWARD McGAFFIGAN, JR., Member of the Commission

STAFF AND PRESENTERS SEATED AT COMMISSION TABLE:
MIKE MORRIS, Chairman, President and CEO, Northeast Utilities
BRUCE KENYON, President and CEO, Northeast Nuclear Energy Company
DAVE GOEBEL, Vice President, Nuclear Oversight
MIKE BROTHERS, Vice President, Nuclear Operations
MARTIN BOWLING, Vice President, Unit 2
DAVID AMERINE, Vice President, Human Services
BRIAN ERLER, Senior Vice President, ICAVP Project Director, Sargent & Lundy
DON SCHOPFER, Vice President and Verification Manager, Sargent & Lundy
DAN CURRY, Vice President, Nuclear Services, Parsons Power
ERIC BLOCHER, Deputy Project Director, Parsons Power
JOHN GRIFFIN, Deputy Team Leader, Little Harbor Consultants
JOHN BECK, President, Little Harbor Consultants
BILLIE GARDE, Consultant
L. JOSEPH CALLAN, EDO
DR. WILLIAM TRAVERS, Director, Special Projects Office, NRR

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STAFF AND PRESENTERS SEATED AT COMMISSION TABLE:
[continued]
WAYNE LANNING, Deputy Director for Inspections, SPO, NRR
PHILLIP McKEE, Deputy Director for Licensing and

Oversight, SPO, NRR
EUGENE IMBRO, Deputy Director for ICAVP, SPO, NRR

P R O C E E D I N G S

[9:30 a.m.]

CHAIRMAN JACKSON: Good morning, ladies and gentlemen.

The purpose of this meeting is for the Commission to be briefed on the status of activities related to the three Millstone nuclear power reactors.

The Commission will hear presentations today from Northeast Utilities, Northeast Nuclear; contractors associated with both the independent corrective verification program; and employees concerns program; and the NRC staff.

Millstone Unit 1 has been shut down for over 27 months; Units 2 and 3 for approximately two years now. All three of the Millstone units were placed on the NRC's watch list in January 1996. The units were recategorized as category 3 plants in June 1996. This action necessitates Commission approval for restart of each of the units.

This Commission meeting is the fifth quarterly meeting to assess the status of activities at the sites. This meeting was scheduled two months after the last meeting in order for the Commission to better assess the results of some of the significant inspections that recently have occurred or are in process now.

In the interest of maintaining our schedule, I will keep my opening comments short. I have recently

visited the Millstone site and conducted a public meeting while I was there in the evening to listen first-hand to comments and statements and concerns of the various members of the local community and other stakeholders. I have made available at the entrances to the meeting my comments from this public meeting on February 2nd, 1998.

The Commission is interested in status updates from all participants today to gauge how the licensee is measuring and tracking its progress, and as I stated at the last Coimmission meeting, to understand how well the site is functioning as a whole.

Once again, all parties should feel not only invited to but compelled to comment on questions asked of any group. But if your turn at the table has passed, I ask that you use the podium as necessary.

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

MR. MORRIS: Thank you, Chairman Jackson and colleagues. Thanks for being here. It's nice for us to come back and give you this update. We are here to represent the company. We have with us members of our board of trustees as well as the chair of our nuclear committee, oversight group, and we are happy that they are here to be with us today. What we intend to do today with Mr. Kenyon

and his team is to update you on the results that continue to be evaluated at the Millstone station. In fact, some indicators aren't as good as we had hoped that they would be, and we will talk about that. Fortunately, some indicators are much better than we thought they would be, and we will surely talk about that as well.

But as we go through this -- and I know from your trip at the site, I hope that you will sense the feeling of the people of this station and the positive attitude that is beginning to grow at the station as we get nearer and nearer what we hope to be the opportunity to bring the stations back on line, Unit 3 in particular.

We -- I felt very strongly about one of the comments you made at that meeting when you looked at the people in the audience that night and said that your decision, along with your colleagues', would be based on results, and that the results were up to the people in that audience which, as you will remember, was surely dominated by Millstone people. That was an excellent comment because it's those people who are going to get this job done for us. And we will give you that data as quickly and succinctly as we can and as straightforwardly as we can. So we appreciate this opportunity to come back and give you that update.

With that, I will turn it over to Bruce.

MR. KENYON: Good morning. The purpose of our

presentation is to highlight the progress that has been made in preparing for the restart of Unit 3, to review the criteria we intend to utilize as the basis of our restart affirmation, and this is new to the briefing book, to discuss our most important remaining issues -- these include our efforts to progress toward establishing a safety-conscious work environment, and Dave Amerine, who is the officer who integrates safety-conscious work environment, human resources and training matters, reporting to Mike Brothers, will brief you on that. And other matters are approaching completion of demonstrating compliance with the Unit 3 design and licensing basis, Marty Bowling will brief you on this topic as well as the topic of corrective action. And Mike Brothers will discuss progress toward achieving Unit 3 restart readiness.

Certainly I want to have oversight briefly update you regarding its assessment of our restart readiness, and that will be done by Dave Goebel.

We plan to focus on Unit 3 and site issues relating to Unit 3, but we are prepared to address questions on other units, should you desire.

We have provided considerable information to you in advance of the meeting, in the form of both the briefing book and copies of the slides for presentation. For the most part, the format and content are similar to what you

have received previously. We added the description in considerable substance regarding the long-term improvement plan. We revised a few of the indicators to more clearly display our status, and in so doing, to eliminate some previous apparent discrepancies between what we were describing as our progress and the data as displayed by your indicator. We substantially expanded the executive summary with the objective of that being a much more comprehensive presentation of our current state of readiness prognosis and issues.

We did not make any changes to the slides after their transmittal to you. Your admonishment from the last meeting was very clear and understood, and we trust that this information and these adjustments have been helpful to you.

The balance of my portion of the presentation will be devoted to highlighting certain items from the executive summary.

This slide shows four of the eight criteria to be used by NU as a basis for affirming restart readiness. Now these criteria were discussed in some detail in the executive summary of the briefing book, two of the four, and these deal with root causes as well as self-assessment corrective action. We view these as currently satisfactory. The other two, compliance with the licensing and design

bases and safety-conscious work environment, are tracking to satisfactory. These topics will be covered later in more detailed presentations.

This next slide shows the remaining four criteria. Unit and station readiness are tracking to satisfactory, and will be discussed in subsequent presentations. Management controls and oversight are satisfactory and, of course, restart affirmation is pending.

Now this slide and the next summarize the progress we have made in addressing the seven success objectives and the associated 16 key sitewide issues. These have been discussed in previous briefings and are an essential part of our recovery strategy.

I am pleased to report that of the 16 issues, nine now meet our success criteria for start-up readiness. This is a net improvement of three since our last meeting to have reached satisfactory for restart. And on this particular slide, emergency planning, self-assessment and corrective action for Unit 3 all move to a satisfactory status.

However, based on having identified an adverse trend on procedure adherence, particularly pertaining to administrative procedures, the status of procedure quality adherence was reduced from satisfactory to tracking to satisfactory, and we expect to have this resolved by the end of the month.

This next slide shows the remaining issues. The one significant change on this slide from last time is that environmental compliance moved to satisfactory. The other five issues are tracking to satisfactory for February.

Now I particularly want to comment on training, which I had expected to reach satisfactory by the end of January. Progress has not met expectations.

Further, as a result of a management assessment followed by an investigation, it was determined that with

regard to in-process training for the shift technical advisors, the requirements of a systems approach to training were not rigorously followed, and there were instances of improper documentation.

Now these are significant issues, we are addressing these issues, management changes have been made, and we are committed to achieving the proper standards, but we do not expect this matter to affect the Unit 3 recovery schedule.

Now this slide indicates what I believe are the most important remaining challenges to bring Unit 3 to restart readiness. Now the first is to complete the process of establishing a safety-conscious work environment. There is one remaining criterion, that is the timely recognition and effective response to problems. This was identified as a key challenge at our last briefing, and while we have

taken a number of important steps to strengthen performance, the entire situation is overshadowed by a recent high-profile event, the use of an inappropriate phrase in working papers, and that situation is still in progress.

CHAIRMAN JACKSON: Let me stop you for a second with respect to that, and ask you the following question. And I realize that, as you say, it's still in progress, and I assume by that you mean that you are still investigating or looking into it. But given the level from which it came, or the level at which it was signed off, did you ever give any thought to having a work standdown to just directly address the issue and to solicit your employees' thoughts about that? Given that, you know, you have had the intense focus on physical readiness of the plant for restart, in terms of what message this might have sent to your employees about your level of concern in terms of what chilling effect it may have had even if it had been inadvertent?

MR. KENYON: What we have done, Chairman Jackson, is add a number of site meetings. I don't know that they'd necessarily be classified as everybody at one point in time, but we responded right away with meetings, both in oversight and elsewhere on the site. We got together all of supervision. We communicated, not just verbally but in writing, not just to our employees and the entire site work force but also to the public, that that particular phrase

--which was not really signed out -- what this was was a working paper developed to describe strengths and weaknesses in the oversight organization. It was a work in progress. The next step in the process was for that to be discussed with first-line supervisors and above in oversight, and they correctly said that phrase is inappropriate. And so that was good, and we have done a review for chilling effect, and we have determined that there is none, which I think speaks well not just to the fact that there is not a chilling effect, but it also speaks to the growing resilience of the work force, and that something that can happen, and we now have an environment where there's a lot greater trust than what there used to be.

Now I am not in any way saying this wasn't a serious event. We are conducting an investigation; it has resulted in a verbal debrief to me yesterday. I expect a written report in about two weeks. This is taking somewhat longer than I would like, and that may be the basis of some

criticism, but I want to underscore the following --

CHAIRMAN JACKSON: In terms of your verbal debrief, are there any preliminary conclusions that you are willing to share with the Commission?

MR. KENYON: Chairman Jackson, with all due respect, I think this is not the time and the place to indicate the conclusions. This is an extremely important

matter. The integrity of the organization and certain people's careers are at stake. It is very important that I get the facts, and while I have a verbal debrief, the issues in this are complicated; it's taken longer than I thought, because as the investigation was accomplished, there were certain conflicts in what was said by people giving their views that required a second round of interviews in some cases, and even in some cases it went to a third round.

While I have certain thoughts in my mind as to what the ultimate outcome is going to be, I feel that given the importance of this, there are certain things I want to see written down. In other words, the investigator who has done this has -- yes, he's given a verbal debrief, but he also needs to write up the investigation results with each principal witness. He needs to take all that information --

CHAIRMAN JACKSON: That's fine.

On February the 10th, the NRC sent you a letter requesting within 30 days your response to several questions related to chilling effect, enforcement under 50.7. You intend then to fold the results of this investigation into answering that under-oath-and-affirmation letter?

MR. KENYON: Absolutely.

Another challenge is to complete the process of demonstrating compliance with the design and licensing bases.

CHAIRMAN JACKSON: Let me stop you again, because I feel that I want to get all the issues onto the table here right from the beginning. You know, I have just read and had a short briefing on -- and all of the Commissioners have copies -- of an event notification on Millstone 3 that the NRC has just received, and I believe, you know, we have to try to be as open and straightforward about this as we can, not to blind-side you, but presumably you know about it since it was a notification that came from your station.

But the notification, at least on the surface, appears troubling for numerous reasons. It states that a condition could occur that could result in the failure of the heat removal -- residual heat removal pump due to inadequate cooling, and that since both pumps have a similar design, this could lead to a common mode failure.

Now from my briefing, I understand that a motor-operated valve on the recirc line of the RHR pump senses a pressure spike on pump start which closes the valve, and that an emergency work request was initiated, and that a subsequent test confirmed the problem, but the issue in the emergency work request was placed on the deferral list, that is for work to be done post-restart, but that, you know, NRC review of the deferrable items list questioned this condition, resulting in further review by you, and this event notification.

I guess I have a couple of questions I just want to walk through with you, if you would.

When was the original testing completed?

MR. KENYON: I am going to have to refer to Mike Brothers.

MR. BROTHERS: The original condition was actually discovered in the 1986-'87 time frame for the cycling on the alpha train.

CHAIRMAN JACKSON: And when were subsequent tests performed?

MR. BROTHERS: The subsequent tests were performed about six weeks ago.

CHAIRMAN JACKSON: And can you tell me a little bit more about your reasons for placing it on the deferred items list and was it reexamined after these subsequent testing failures?

MR. BROTHERS: Yes. The condition occurs -- was conservatively reported as potentially affecting both trains because the logic of the arrangement is the same between the two trains. It's only observed on one train primarily because of the location of the orifice that develops the differential pressure that inputs to this signal to the recirculation valve that you correctly described.

The event that actually has to occur is a break of particular size -- in other words, a break that stabilizes

at a reactor coolant system pressure, at a fairly low level below the injection point of residual heat removal at about 450 pounds, but high enough such that you can get into a cycling mode.

Effectively what's postulated here is that the valve closes based upon a pulse across this orifice, and then when it times out, and by the time it reopens, it once again sees the same type of condition if the break size has caused the reactor coolant system to stabilize at a particular pressure.

We had contacted the nuclear steam system supplying vendor and asked for the probability of a break of this size. It is considered a very low probability that a particular break of this size would in fact occur, but if you postulate this particular break size, you can get into a cycling mode which causes a potential of a thermal overload failure, and then the valve could fail either open or closed. And depending upon reactor coolant system pressure, if it's a high pressure, the valve failing closed is the worst case because then the pump doesn't have enough flow to keep it cool. If it's a very low pressure, the valve failing open is a problem because you could be robbing flow that should be going into the core in this condition.

So depending upon reactor coolant system pressure, the valve failure mode is worse, depending whether it's open

or closed was really indeterminate. We did go back and look at it based upon questions from the Nuclear Regulatory Commission and sent out the prompt report yesterday.

CHAIRMAN JACKSON: How would you assess this in terms of significance level?

MR. BROTHERS: I don't yet have all the details. I think it's very significant. We are in fact going to look at it very hard from a process standpoint. We think it's a low probability event. I believe that that would be concurred upon. However, it appears that it may have been narrowly assessed from the standpoint of the recirculation valve cycling which we have normally seen as once. We have never -- of course, we have never had a break in this

condition, but what you normally see is the valve cycle, it was considered a nuisance, and evaluated as such. It was probably too narrow of an evaluation.

CHAIRMAN JACKSON: Do you feel this indicates some potential vulnerability in your corrective action program, at least with respect to effective root cause and timeliness of resolution? You indicated that the original testing was back in the 1986 time frame.

MR. BROTHERS: The condition that I described has been known for some time. It was just simply treated as a nuisance. This arrangement is generic for Westinghouse plants. It may be a Part 21 issue associated with

Westinghouse. So we knew about it, we have dealt with it for some length of time on a fairly narrow basis. I think from the standpoint of the deferrable items list, that we need to take a look from lessons learned on this one as well.

MR. KENYON: But just to emphasize, Chairman Jackson, we are talking about a situation where a very low probability event, some -- and I'm not trying to argue this, but some believe it's not even a credible event, and certainly once the possibility of the broader interaction was identified, we have gone forward from there. So we are talking about something that is low probability, but certainly we want to be conservative about it, and certainly once it's identified, we want to thoroughly pursue it. It's not, as Mike Brothers indicated, it's not an issue that's unique to us, we think. So it's something that we'll be responsible about, and chase. We --

CHAIRMAN JACKSON: Well, I guess the issue for me, and I'll just leave it on the table, is this: There is the specific issue related to the specific system, with all the issues of whether it's a Part 21 issue, whether it's been quote, unquote, known about. But it is an issue that relates to the potential inoperability of your ultimate heat sink, the ECCS system. It is one that had been uncovered during previous testing, and to the extent that you in fact

continuously say it was something that was known about, then again, particularly known about for over a decade, then it raises questions about the narrowness of focus in getting to the root cause when there was an anomaly in the testing in your ultimate heat sink. And that, I think, is the issue because it's not a question of whether some people think that is credible or not credible. It has to do with something that could render your ultimate heat sink potentially inoperable, and it has to do with narrowness of point of view as well as getting to the fundamental root cause in something that's been around for over a decade. And so that's the message in this from my perspective. And there's not a whole lot of explaining away there can be with respect to those things.

Would you go on?

MR. KENYON: Another challenge is to achieve Unit 3 readiness.

CHAIRMAN JACKSON: And because it does raise issues about your deferred items list, because you, you know, that's been a concern, period. And now this issue comes up at the zeroth hour, before this meeting, that is.

MR. KENYON: Another issue is to achieve Unit 3 readiness. We expect to achieve readiness for Mode 4 next

week. This will provide an important opportunity to heat the unit up to normal operating temperature and pressure in

order to further check out systems.

CHAIRMAN JACKSON: Is this a system that is needed for Mode 4?

MR. KENYON: Yes.

It also will allow us to close out a substantial number of remaining items required for restart as part of the process. We recognize the need to address this issue, to address the recirculation spray system to the NRC's satisfaction before entry into Mode 4, and there's -- that's been a recognized issue and we have a meeting with the NRC staff this afternoon to further discuss that.

We also recognize a challenge to manage nonrestart-related work items to an acceptable level. This obviously goes right into just what we've been talking about.

We have put together a process to determine whether or not an item's deferrable, and certainly that process is dependent on how you look at it, and we do have this question of the cycling of a valve, was that looked at too narrowly. For what we understood it to be, it was legitimate to defer it, for understanding it to be something more than that, then it's not likely to be an appropriate item to defer. And we will as a result of this look back through our screening and come to some further conclusion as to whether the screening has been right, but up to now we

have felt that we have applied appropriate screening.

CHAIRMAN JACKSON: Do you feel your ECCS system is important?

MR. KENYON: Absolutely.

CHAIRMAN JACKSON: Okay.

MR. KENYON: And in response to the NRC's very broad question on backlog, and of course that goes into how do you define backlog, in response to how we were asked to define it, we have provided a listing of items to the staff which is very encompassing. It's not just those that are risk and safety significant. It's not just those that represent physical work. But everything that we're tracking in the way of plant betterment, enhancements, clarifications, drawing upgrades -- I mean, there's a lot here.

The paperwork in process, condition reports, this is all what we're tracking, and thus when you cast the net that widely, you come up with what appears to be a fairly sizable number. But we have assessed not just individual items but we've assessed the aggregate using PRA techniques, so we're comfortable that the totality of the backlog is acceptable for startup.

CHAIRMAN JACKSON: Now my staff tells me in fact that if you look at this particular situation and you look at what may dominate a core damage event, that this is

nonnegligible in that regard. And, you know, the issue is not to get into, you know, a debate specifically about this, but the two points I really want to make is, this issue about nonrestart backlog, the question is whether you may need to reevaluate what you call nonrestart versus restart.

That's No. 1.

A second point has to do with an embedded issue with respect to corrective actions has been timeliness of the fix, as well as comprehensiveness of the analysis that leads to it, and again, and I know the message you're trying to project to us today, and we have a responsibility to listen to you, but, you know, I can't reemphasize more strongly the need to take this and to propagate it as a lessons learned into what you do.

MR. KENYON: And, Chairman Jackson, we will do that, so I'm struggling a little bit to deal with an issue that just surfaced which we need to put through our process and ask us just the same questions that you're asking, and thus we need to respond to that, so I'm trying in a sense to take that one issue and assure you that we're going to deal with that.

CHAIRMAN JACKSON: Well, it's not one issue. That's my point.

MR. KENYON: Well --

CHAIRMAN JACKSON: And that's what I want --

MR. KENYON: Ramifications --

CHAIRMAN JACKSON: You to understand from at least my point of view.

MR. KENYON: Yes.

CHAIRMAN JACKSON: It's not one issue. It is an issue, and the question is to what extent does it have any generic implications.

MR. KENYON: And if I conveyed anything other than that, I didn't mean to.

CHAIRMAN JACKSON: Okay. So why don't we move on.

MR. KENYON: Okay. To -- I guess finish my comments on backlog with all acknowledgement of what you just said, we do have a very broad definition of what constitutes backlog. We do have a very low threshold for identifying items. We have had a careful process to evaluate things. We'll have to go back and check that. And we think the magnitude that we have compares reasonably with other plants providing they use a similar threshold and a similar scope. We'll talk more about the backlog in greater detail later in the presentation.

Another challenge is to achieve station readiness to support Unit 3 restart. And the remaining issue here is training, and we are going to get that resolved.

Now this next slide addresses important other challenges in transitioning the Millstone organization from

a recovery organization into long-term operation. Chairman Jackson, you correctly pointed out certain of these issues and challenges in your recent site visit, and I also want to say in addition to what Mike Morris said that your visit was very much appreciated by -- and this is based on considerable feedback by the community, it was appreciated by the community, it was certainly appreciated by management, and particularly by employees who valued and appreciated the considerable time that you spent devoted to talking with them. That communication was important.

Moving on to the challenges, there's a challenge in the sense of needing to ensure sufficient separation of Unit 3 operations from the continuing recovery efforts on Unit 2 and the shutdown maintenance mode on Unit 1. This is accomplished by having a management structure and dedicated resources for Unit 3 startup and operations separate for

that -- separate for Unit 2 recovery, and thus this is our means to ensure that there's a high degree of focus on unit operations.

CHAIRMAN JACKSON: Where do you stand in developing an integrated schedule?

MR. KENYON: We have an integrated schedule.

CHAIRMAN JACKSON: Has it been submitted?

MR. BOWLING: It will be on the docket this week.

MR. KENYON: We have shifted into the normal

organization for startup and operations for Unit 3, and that's headed by Mike Brothers.

Another challenge is the need to provide additional monitoring and coaching as the plant resumes operation. The unit has been out for a long period of time. We have to be very careful, cautious and conservative as we resume operation. An important action here will be to add mentoring SROs in the control room from other units in order to watch and coach as necessary, and we're going to do something similar with plant equipment operators.

There's also the need to ensure that performance monitoring and reporting and oversight shifts effectively into an operating mode such that we're well positioned to detect any potential backsliding performance. The programs are in place. We have an acceptable but not generous number of personnel in oversight with operating experience, so I think we're prepared to do that.

We need to establish a long-term improvement plan. As I stated previously, achieving restart is just a milestone on the road to excellence. The plan has been drafted. A significant portion of that was included in the briefing book and we will include the complete plan as part of our next briefing.

Another important need is to do organizational and succession planning. As we transition out of recovery mode,

we're going to go to a simpler organization. The needs for that need to be defined. An important characteristic will be to maintain good checks and balances. We will do succession planning for obvious normal reasons, but also to improve bench strength. We're not as deep as I would like, and certainly we need to prepare for the eventual phase-out of the recovery organizations. So even as we prepared for restart, consideration is being given to these important other challenges.

Unless there are further questions for me, I would like to call on Dave Amerine to brief on safety-conscious work environment.

CHAIRMAN JACKSON: Please.

COMMISSIONER McGAFFIGAN: I would like to ask one question since it's not going to fit in anywhere easily in the briefing about Unit 2. The staff is going to present slides later that show their current schedule looking toward completing staff actions around the 10th of July. The last time you were here, you were hoping to be one month behind. Is that where you now are, three months behind in your own schedule?

MR. KENYON: We've I think previously characterized Unit 2 as being two to three months behind Unit 3. The July time frame is obviously -- appears to support the three-month interval. There has been some

impact on Unit 2 because we have been devoting so much attention and resources to Unit 3, so I think three months and the July time frame is right for where we are now.

COMMISSIONER McGAFFIGAN: And then one other questions. Parsons, in one of its backup slides, is -- preliminarily in their discrepancy report found five Level 1's and one Level 2 at Unit 2. You all will have a conversation, but if that holds, that will have implications about your startup schedule as well.

MR. KENYON: We understand that.

Marty, how many have we responded to at this point?

MR. BOWLING: We have responded to those Level 1's and provided additional technical information that should justify a reclassification of those levels. That's certainly up to Parsons to confirm.

COMMISSIONER McGAFFIGAN: So in your judgment, the Level 1's and Level 2's are 3's or 4's?

MR. BOWLING: That's correct, and some of those have been responded to for over several months.

COMMISSIONER McGAFFIGAN: Several months.

MR. BOWLING: Yes.

COMMISSIONER McGAFFIGAN: Very well. I'm going to ask questions later.

CHAIRMAN JACKSON: Okay.

COMMISSIONER McGAFFIGAN: Thank you.

MR. KENYON: Dave?

MR. AMERINE: Good morning. My name is Dave Amerine and I'm the Vice President of Human Services at Millstone.

I have recently assumed the responsibilities for the safety-conscious work environment there. In this capacity, I report to Mike Brothers, who retains the responsibilities as executive sponsor for establishing and maintaining the safety-conscious work environment, but I will be going through that presentation.

May I have the first slide, please.

This slide gives our six high-level success criteria which we will use to ensure that we have successfully established and are in a position to maintain a safety-conscious work environment at Millstone Station. I will discuss the first four of these success criteria. The last two, the employee concern oversight panel and Little Harbor Consultant validation of our efforts, are independent verifications of our evaluation.

At the December 12th NRC Commissioners' meeting, we reported that we felt we were currently meeting our acceptance criteria in the first two success criteria; that is, employee willingness to raise concerns and line management's ability to handle issues effectively. Today, I

am pleased to report that we continue to meet our success requirements in the first two criteria, and we now feel that we are meeting our success criteria in the third area, an effective employee concerns program.

Although in general, we feel we are tracking to success in the fourth area, the ability to recognize and address problem areas, as Bruce Kenyon mentioned, we have had a potentially significant event which is under investigation at this time. This is the recent situation which occurred relative to a brainstorming session in nuclear oversight during which inappropriate terminology was

used.

However, overall, we believe we have made progress in all areas in establishing a safety-conscious work environment and are on track to support the restart of Millstone Unit 3 in this important area.

The first criterion I will discuss is the willingness of employees to raise concerns. This criterion is currently being met.

This graph shows our current leadership results to support success criterion on employees' willingness to raise concerns. As shown on the slide, our criterion is that greater than 90 percent of the people are willing to raise issues to their immediate supervisor. The current value is approximately 97.5 percent, so this criterion is currently

being met.

This graph shows the culture survey results which assess the percentage of respondents who agree that there is a safety-conscious work environment in their work area. Although this measurement is not yet at our long-range goal, we believe the current results in the overall cultural survey coupled with the percentage of people who are willing to raise concerns to their supervisor meet our acceptance criterion.

This next graph shows our confidentiality plus anonymous trend. The top line is the total number of concerns received per month and the bottom line is the total number of concerns which are requesting either confidentiality or are received anonymously. Our criterion is that no adverse trend exists in this area. As you can see, in both December and to a lesser extent in January, we had an increase in the total number of concerns and, correspondingly, an increase in number of concerns which requested confidentiality or were received anonymously.

Although the percentage of confidential or anonymous concerns actually decreased, we will be watching this indicator closely to ensure that an adverse trend is not occurring.

By February 17th, four of the twelve concerns received so far this month requested either confidentiality

or were received anonymously. Now, if extrapolated linearly, the total for February should be approximately 20 total concerns, which is less than both December and January. There is no particular pattern in the increase of concerns that has been detected, and in the same period, the trend of allegations to the NRC has decreased.

I might add that I was responsible for instituting an employee concern program at Davis Besse during their restart, the recovery and restart of that unit, and also at the defense waste processing facility of the Savannah River site. And when you go through that initial training and advertising advertising to increase employee sensitivity and awareness of an Employee Concern Program, in both those cases, I experienced a similar kind of increased activity in the beginning of the program, which eventually tapered off, so this is not unexpected, in my opinion.

CHAIRMAN JACKSON: You mentioned there that although there is an adverse trend, that there are other indicators substantiating that employees are willing to raise concerns. Are those the other graphs that you are going to be talking about?

MR. AMERINE: Yes, ma'am. Yes, ma'am.
CHAIRMAN JACKSON: Okay.
MR. AMERINE: Okay. The second criterion that I will discuss is the effectiveness of line management in

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handling issues, like the first, we are currently meeting this success criteria.
This next graph shows the average age of our Condition Report Evaluations. Our goal is not to have an adverse trend in this indicator. The average time of Condition Report -- from a Condition Report initiation to evaluation was approximately 23 days during the month of January.
The last three weeks the average age of the Condition Report Evaluations has increased from 26 to 34 days. Most of those not achieving the goal are exceeding the 30 day target by only a few days. This is due to the priorities, our engineering work force being directed to respond to the Independent Corrective Action Verification Program, support the transition to Mode 4 and respond to the NRC inspection activities.
However, for the week of February 11th, of average age of completed Condition Report Evaluations dropped once again to 30 days. We believe we are effectively managing this metric and performance in this area is currently satisfactory.
CHAIRMAN JACKSON: Okay. So let me make sure I understand. What you are saying is that even though this average length of time has gone up, you are saying that you understand it because the work force that would be

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addressing these have been diverted to other things?
MR. AMERINE: That is correct.
CHAIRMAN JACKSON: And that even with that, you have dropped from the 34 days to the 30 days?
MR. AMERINE: In this past week, that is correct.
CHAIRMAN JACKSON: In the past week.
MR. AMERINE: Now, that took increased management.
CHAIRMAN JACKSON: And that's what you mean when you say tracking the status?
MR. AMERINE: Yes, ma'am. And we were responding to our trend in this case, in this performance indicator. So we have brought it back down to the 30 days.
The next graph -- the next graph shows our current Condition Report Evaluation score. This score is developed by averaging all the Condition Report Evaluations which are reviewed by the Site Management Review Team during each month. The Condition Review -- the Condition Report receives a 4 if the Evaluation is accepted without comment, 2 if it is accepted with comment, and 0 if it is rejected by the Management Review Team. This criterion is currently being met.
CHAIRMAN JACKSON: Now, is there a sampling of these quality ratings by Little Harbor or NRC?
MR. AMERINE: I am not aware of that.
CHAIRMAN JACKSON: Okay.

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MR. AMERINE: Okay. The next graph, this shows the percentage of all Action Requests as a result of Condition Reports which are overdue. The goal is less than 3 percent. Significant attention has been focused on completing those actions necessary to Mode 4, as we just

discussed. As a result, the lower priority Corrective Actions became overdue.

Now, once again, due to increase management attention in response to this KPI, for the week of February 11th, we once again were at the goal of 3 percent, so this criterion is currently being met as well.

CHAIRMAN JACKSON: How quickly must they be assigned? You say, you talk about the number of overdue assignments. When do they become overdue? I mean how quickly must they be assigned in order not to be overdue?

MR. AMERINE: Well, we are trying to get them assigned as soon as they come in the door, and then get the Evaluation done within those 30 days.

MR. BROTHERS: There's an Evaluation, the timeliness of the Evaluation is 30 days, and then the overdue is based upon the approved due date once that Evaluation comes out. So the overdues are looking at something that has gone past the due date that was approved by the Management Review Team.

CHAIRMAN JACKSON: Okay.

MR. AMERINE: Thank you. The third criterion I will discuss is the effectiveness of the Employee Concerns Program. We now evaluate our performance in this area satisfactory.

The next slide shows the average age of unresolved concerns. In the December 12th presentation, the success criterion was that 90 percent of all investigations are completed within 45 days. It was also indicated at that time we were assessing the validity of this indicator, of the effectiveness of our Employee Concerns Program. This is because an undue focus on timeliness can result in degradation of other areas of the Employee Concerns Program.

We have altered our criterion to look at the average age of unresolved concerns to more effectively assess the ability of the organization to keep up with its receipt rate, without sacrificing any of the other aspects of the concern processing. No adverse trend with regard to this average age of unresolved concerns exists at this time, so this criterion is currently being met.

The next slide shows the percentage of employees who have used the Employee Concerns Program, that would use it again if they had the need. The first three data points are really Little Harbor consultant numbers since we were not tracking this parameter during the early part of 1997. In December of 1997, we commissioned the Employee Concerns

Oversight Panel to ascertain a certain value for this metric. This was determined to be 75 percent, which is the lighter shade bar. At the same time, Little Harbor, their estimate was 83 percent.

CHAIRMAN JACKSON: When do you plant to do your next survey?

MR. AMERINE: We are going to have them commissioned to do that from now on. In fact, I talk about that at this moment.

CHAIRMAN JACKSON: On what frequency, I mean?

MR. AMERINE: I am not sure of the frequency, but it is going to be -- they are just getting into this metric now.

CHAIRMAN JACKSON: You haven't decided what the frequency will be?

MR. AMERINE: Yes, ma'am.

CHAIRMAN JACKSON: Okay.

MR. AMERINE: We are continuing to refine this metric to determine additional factors such as the areas that we would be looking, reasons for dissatisfaction and so forth, and we are going to fold that into determining, you know, what the answer to your question would be.

At this moment, though, based on both Little Harbor and our initial one, we assess this metric as meeting expectations and expect to gain further useful information

for it to become a more effective measurement as we use the Employee Concerns Oversight Panel data. So, therefore, right now, we believe this criterion is being met.

The fourth criteria is our effectiveness if recognizing and remediating problem areas within the Millstone organization. Although the performance in this area has improved, we are not currently meeting our standards.

The first slide here is simply a compilation of our current status of training to our supervisors and above at Millstone Station. We are committed to get above 95 percent on the first three training categories, and we believe that we will have all three of those above 95 percent by mid-March. The other one that is shown on there is our Forum for Leadership Excellence, and we will have the work force above 95 percent by mid-1998.

CHAIRMAN JACKSON: Is this in-house training that you do, or you bring in outside?

MR. AMERINE: It is a combination.

CHAIRMAN JACKSON: Combination. And tell me about the Forum for Leadership Excellence.

MR. AMERINE: That is a program that, in fact, my first two days at Millstone were spent in that Forum for Leadership Excellence. And we get, at various levels, we have brought together the managers and supervisors and we

are working our way on down through the organization, and it is facilitated by an outside contractor who has done this at other utilities, to basically develop communication skills and techniques and team work approaches and so forth, and we have found it to be very useful.

One of the things that I have seen that it does is it starts to develop a common language across the site.

Okay. Next slide. This slide shows our current trend of Employee Concerns alleging instances of harassment, intimidation, retaliation and discrimination with 50.7 implications. We use a conservative classification of HIRD, including not only explicitly stated alleged activities, but also any inferred from the Concern Statement, including fear of possible future retaliation.

The HIRD classification includes matters such as race discrimination and sexual harassment, as well as the chilling effect and adverse actions related to protected activities. So we are using a conservative definition in looking at this.

But, regardless, we have zero tolerance for all HIRD instances, especially those leading to potential violations of 50.7.

We have completed a review of 218 concerns between December 1st, 1996 and January 31st, 1998, which reveal that approximately 50 percent of the concerns had one or more

HIRD elements, and approximately 25 percent had 10 CFR 50.7 potential implications. These proportions are consistent

with previous classifications, but we are working hard to bring those down.

Our criterion is that substantiated instances of potential 10 CFR 50.7 violations are rare and are handled responsibly. The top line shows the total numbers of concerns received and the bottom line on the chart shows those concerns with potential 50.7 implications.

The bar, in August 1997, represents three instances of substantiated potential 50.7 violations. These three were all as a result of the MOV event which occurred in July-August time frame. Now, as of February 17th, these are the only substantiated cases of potential 50.7 violations which we have had during the period of May-December 1997.

There are additional cases that are still under discussion with a third party which have the possibility to be substantiated as potential 50.7 violations.

This criterion, we feel at this time is being met. However, extensive executive involvement in any confirmed case of HIRD, regardless of whether or not there are 50.7 implications, will ensure that Corrective Actions, up to and including reassignment and removal, are effective at eliminating HIRD at Millstone.

CHAIRMAN JACKSON: If you have zero tolerance, what is your satisfactory performance criteria?

MR. AMERINE: Well, in the discussion that Bruce Kenyon had about that before, where we are headed is to get the instances of this to be very rare and the total impact to be as low as possible.

CHAIRMAN JACKSON: I guess I'm really trying to probe the thinking, I mean you have this lump-up here in the November-to-January time frame, but you feel that your performance is satisfactory, and is that because at this stage of the game, even though you have the potential concerns, they haven't been substantiated? I guess I'm trying to understand these relative to the trend on the graph what the definition of satisfactory is.

MR. AMERINE: Right. As I was saying before, this looks similar and it is very similar to the previous graph I had on this, and these are alleged concerns that have come in, and again I believe that we're seeing this spike up, which is now coming down, and if we make a linear projection, February will be a 20, whereas January is 27.

CHAIRMAN JACKSON: Ah, you can't make a linear projection.

MR. AMERINE: Oh, I'm not saying --

CHAIRMAN JACKSON: Can't do that.

MR. AMERINE: You're absolutely right. But if we

were, the number would have come down --

[Laughter.]

MR. AMERINE: But again, as I said, my experience at both Davis-Besse and the Defense Waste Processing Facility was that they went up and started to come back down.

CHAIRMAN JACKSON: I understand all that. But what I would suggest that you -- I think it's -- you don't make linear extrapolations with something like this.

MR. AMERINE: No.

CHAIRMAN JACKSON: That's No. 1. No. 2, it is better to keep the emphasis on what's substantiated and what's not.

MR. AMERINE: Right.
CHAIRMAN JACKSON: And 3, if you think that there are explanatory statements you can make, which is probably buried in here, you know, just list them in the margin, because I think that you don't want to affect your credibility about statistics and talk about extrapolation here.
MR. AMERINE: I understand.
MR. KENYON: Could I just -- I agree with what you said, Chairman Jackson. These HIRD items, just to emphasize, these are either alleged --
CHAIRMAN JACKSON: I know.

MR. KENYON: By the concerned or inferred --
CHAIRMAN JACKSON: Right.
MR. KENYON: Or just a chilling effect. I mean, it is a pretty broad definition.
CHAIRMAN JACKSON: Right. And all I'm trying to say is that it is better to talk about it that way, in that way, then to talk about linear extrapolation.
MR. KENYON: We understand.
CHAIRMAN JACKSON: Right. Please.
COMMISSIONER DIAZ: Also, when you look at all of this graph, it might be appropriate to, you know, look at any one of them and say, you know, right now is not satisfactory, but the trend is not declining, but some of them you put a criteria and then you said well, you know, I look at any one of them, you know, criteria is less than 3 percent, and obviously the last four months is over 3 percent. Without extrapolation, using some averaging, you'll still be above three.
So you have not met the criteria, but you can make an explanation if that is not significantly above the criteria, and that is not trending adversely. But, you know, I think making a statement that, you know, it's satisfactory or we met the criteria, it doesn't track with your graph. It's better to say it doesn't meet the criteria, but it doesn't meet it by a little bit, and is

not, you know, tracking adversely. And I think that would be a little better from my viewpoint.
CHAIRMAN JACKSON: Right. And I mean I think that all of these things are consistent. But, you know, and I realize you've had quite a bit of prior experience, but each, you know, entity and each organization is different, and therefore linear extrapolation's a very dangerous thing.
MR. AMERINE: Okay. If I could have the next slide, please.
This slide shows our total number of problem areas at Millstone Station. In fact, successful action plans have brought the number of problem areas down from 33 to 11. Four of the problem areas' action plans are nearing completion, four of the 11 that are left at this time, and are expected to be effective in mid-March.
Now a problem area is any area in which a safety-conscious work environment may not exist. Problem areas are identified by inputs from the employee concern program, from the employee concern oversight panel, from Little Harbor Consultants, or from the culture or leadership surveys, or a combination thereof.
Our criterion is that the total number of problem areas not indicate an adverse trend. While we meet that criterion, we have not yet demonstrated the ability to proactively identify and remediate problems prior to them

becoming obvious problems.

The nuclear oversight problem discussed by Bruce Kenyon notwithstanding, we have several examples of proactive responses to potential problem areas in the recent past. In other words, we have successfully prevented some potential areas from becoming problem areas by effective intervention. We expect this performance level to continue to improve and the organization's ability to identify and prevent problem areas to take precedence over our ability to remediate problem areas which have been allowed to occur. Increased senior human resource management and legal presence on site is helping in our responsiveness.

Returning to our six success criteria as we reported during the December 12 NRC Commissioners meeting, we are meeting our criteria for employees' willingness to raise concerns and line management's effectiveness in dealing with issues raised by employees. We have made significant and meaningful progress towards establishing an effective employee concerns program. Today we feel we're meeting the success criteria in that area.

The fourth success criteria, our ability to recognize and address problem areas, is where we still need to improve to meet our success criteria. Significant progress has been made over the last few months. This area will continue to be our focus going forward.

The remaining two success criteria, employee concerns oversight panel and Little Harbor Consultant concurrence, are under way and expected to support the Unit 3 restart schedule.

Now speaking of going forward, our next focus in the area of safety-conscious work environment is the development of the plan that Mr. Kenyon mentioned. As we have consistently stated, our overall recovery strategy is the startup and then power ascension, and then the long-term performance improvement plan. Mike Brothers is also the executive sponsor for the long-term performance improvement for Millstone station, as well as the safety-conscious work environment, which is a subset of that.

Included in this plan are some plan enhancements to our processes which will support the safety-conscious work environment. These include but are not limited to clarification of employee concern program responsibilities, long-term organizational alignment within the areas that I'm responsible for, first-line supervisors' handbook, and a safety-conscious work environment manual. This plan should be finalized in late February or early March.

CHAIRMAN JACKSON: Thank you.

MR. AMERINE: If there are any other questions, I'll pass the baton to Marty Bowling.

Thank you.

MR. BOWLING: Good morning.

Before I begin, let me clarify my response to your question, Commissioner. In terms of the five Level 1s and the one Level 1 -- Level 2 on Unit 2, we have responded to three of the Level 1s and the one Level 2, and that was done in '97. The responses for the remaining two Level 1s are in final preparation and will be provided shortly to Parsons.

In my August and December briefings to you I discussed the status of corrective actions at Millstone. Today I want to update you on our progress.

In general terms it's my view that the corrective actions continue to be on track to fully support both Unit 3 restart and the continuing recovery of Unit 2. We have a program that is designed to industry standards. This program has been implemented, personnel trained, and self-assessments of both the process and the quality of results are being performed. I think this is the key attribute, in that it's not a perfect program, but when we find we've made a mistake, we're looking at it in its broadest extent to understand the extent of the problem and making sure that we get that fixed. And this issue that you've brought up will go right into that process.

Also, nuclear oversight is providing weekly independent surveillance of the program.

This slide shows the four major programmatic

elements and the supporting attributes of corrective action in the broadest sense. This slide, which focuses on Unit 3, is color-coded to represent the current status toward restart readiness for Unit 3.

My purpose is to give you a balanced sense of the robustness of our corrective actions at this stage of the recovery. The first two elements, problem identification and problem evaluation, were discussed last December and continue to be satisfactory. As you will note, the two elements of problem resolution and corrective action effectiveness are not yet satisfactory, but are on track. Indicators are provided in the issue book for most of these areas, and include both restart and postrestart items.

With respect to problem resolution and corrective action effectiveness, the principle issues that I will focus on are the restart backlogs and configuration management effectiveness. Both Mike Brothers and I will also discuss postrestart backlogs. Mike will also discuss repetitive issues and Unit 3 organizational readiness.

The restart backlog or remaining tasks required for restart of Unit 3 are shown in this slide. These remaining tasks include all of the items required to restore compliance with the design and licensing basis for safety and risk-significant systems as well as NRC regulations. As you can see, this indicator is showing steady progress and

it's tracking to satisfactory. As of February 17, 684 restart tasks remain.

CHAIRMAN JACKSON: How many, 683?

MR. BOWLING: 684.

CHAIRMAN JACKSON: 684. And that's as of the 7th -- 17th.

MR. BOWLING: Yes.

This slide and the next give a better perspective of the remaining tasks required to restore compliance. As Bruce indicated in his remarks, progress continues on the key organizational and programmatic issues. This slide shows that most of the significant items, that is, those issues that could affect the operability and functionality of safety and risk-significant maintenance rule equipment, have been addressed.

In addition, substantial progress has been made in responding to the NRC's significant-item list relating to manual chapter 0350 process.

Finally, we are meeting our commitments to the NRC. Just to update you where we are as of yesterday on the significant items with 50.54(f) it's 252 items remaining for the MC0350 significant items list there are six.

CHAIRMAN JACKSON: You had indicated in your executive summary that you would expect that all the significant items list packages to be submitted to the NRC

by mid-February. Did you -- were you able to meet that?

MR. BOWLING: There are still six.

CHAIRMAN JACKSON: Oh, that's what you mean when you say there's six.

MR. BOWLING: Yes. Yes.

CHAIRMAN JACKSON: Okay. I understand.

MR. BOWLING: I will discuss our responses in more detail. That number's substantially less. And for open NRC restart commitments, it's at 77.

The next slide.

This slide shows the corrective action resulting from the NU-performed reviews to restore compliance to design and licensing basis. As you can tell, a substantial number of the corrective actions have been completed.

The next slide, please.

Now moving to the second element, corrective action effectiveness, I want to concentrate on configuration management program effectiveness.

The program for reviewing the Millstone Unit 3 design and licensing basis was developed in the spring of 1996. The methodology used was to perform a diagnostic review of key design and licensing basis documents. Based on the diagnostic results which were provided to the NRC in July of '96, the scope of the configuration management project was determined. In summary, this was a graded

review based on risk and safety significance. Still, it was comprehensive in scope with 88 maintenance rule covered systems, 19 topical areas, environmental qualifications, energy, line break, fire protection, and portions of approximately 60 other technical programs. Also, the FSAR and technical specifications were reviewed to determine if they were being complied with.

CHAIRMAN JACKSON: Let me ask you, you have a meeting this afternoon --

MR. BOWLING: Yes.

CHAIRMAN JACKSON: -- with the NRC staff on the recirculation spray system, and it's a system, you know, that I happened to look at when I was there, and to a large extent, you've reconfigured that system during your shutdown. Can you describe the problems you've had and how you assure yourselves that the system now is operable? Would you just kind of walk through that in a succinct fashion?

MR. BOWLING: Okay. And I may ask Mike Brothers for some help here as well.

CHAIRMAN JACKSON: Sure. Okay.

MR. BOWLING: In initial startup, there were flow stability problems through the heat exchangers of that system which required restrictions on flow, and the various analysis has been to assure that the flow stability is

acceptable, and that has required both reconfiguration of the lineups in terms of injecting into the reactor coolant system directly as well as supporting other ECCS pumps, and it has also required physical modification such as orificing in order to get the flows right.

Also there was a timing issue in terms of operators being able to do lineups in the required amount of time, and that time was extended to give them the adequate time to perform these evolutions.

Mike?

MR. BROTHERS: Yes. I would break the problems with the recirculation spray system up into, as you described, the original problem, too much flow through the heat exchangers when we went into the injection mode, which was changed in 1985 and called into question in our process.

When we shut down, we identified fluid temperature problems with a failure of service water which resulted in a fluid system excedent, ambient temperature problems, and the fact that we treated the containment temperature profile during a large break LOCA as a transient event, that was called into question.

We had water hammer events that came from the generic letter as a result of the Haddam Neck problem that they had had on their containment air recirculation fans. It wasn't in the same system, but it was a water hammer

event.

We had the ECS valve erosion event, the single most significant event we had, an industry event, which says that the valves were throttled down so far that if you can imagine a line going to the break, the loop that the break is in, that the position of that valve being throttled is supposed to eliminate or reduce the amount of flow that's being robbed and going to the break, but the valves were found by EPRI to be in the cavitating range and they fail quickly. Orifices were installed for that as well as the air entrainment issue that was identified in the tier 1 inspection.

So all those in addition to the original design problem of too much flow were in the recirculation spray system.

CHAIRMAN JACKSON: Okay.

MR. BOWLING: We have put on the docket a fairly comprehensive discussion of how the system is performing today versus its original licensing basis and all the -- explaining all the changes.

CHAIRMAN JACKSON: Thank you.

MR. BOWLING: As I stated, the configuration management effort was graded based on risk and safety significance. Initially, the scope was focused on the areas of weakness identified in a diagnostic review; however, we

recognized that self-assessment would be critical. Simply stated, we know that we must be able to find our own problems and fix them before they become more significant.

In addition, the ICAVP review process has resulted in findings that have also required us to determine the need for additional reviews. In a number of cases, we have performed the necessary additional work to provide added assurance that we have identified all of the important issues.

This slide shows the additional areas that have or are currently being addressed. A number of issues have been identified by these reviews, but none individually have had high safety significance or have resulted in a reportable event under 10 CFR 50.73.

Two of these reviews cover areas recently

addressed in a pre-decisional enforcement conference. The principal concern was for the potential for air binding of safety required pumps which was identified by the NRC in their Tier 1 out-of-scope SFFI and was mentioned by the NRC in the December Commission meeting with you as a potential high safety significant issue.

At the January 13th pre-decisional conference which was open to the public, we provided the NRC staff with information demonstrating that this issue posed no safety impact and that the Millstone ECCS systems were operable and

functional. We are also providing the NRC staff the technical information we relied upon so they can independently review our conclusions.

The other issue concerns the use of operating experience, especially NRC information notices. The Unit 3 configuration management effort did utilize a significant amount of operating experience, but the scope did not explicitly require a review of NRC information notices. As a result, despite several opportunities, we missed the RSS air-binding issue.

To address the extent of the potential for air binding as well as any other operating experience issues that relate to system-to-system interactions, we expanded our reviews to an integrated system functional review. This review, which drew heavily upon operating experience, looks specifically at system interfaces and system-to-system interactions.

The team consisted of a multi-discipline group of engineering, operating and operating experienced personnel and has been in place since late October of last year. The team is also performing reviews of the FSAR with a particular focus on the interface between the AE and the NSSS design safety system functions.

Additional reviews of NRC information notices is also currently taking place to ensure that our scope has

been adequate. With respect to the other items on this slide, reviews and any needed corrective actions are being pursued. You will note that several of these items are consistent with the preliminary ICAVP contractor DR trend results to be presented later by Sargent & Lundy.

CHAIRMAN JACKSON: Has your management team in any way been surprised at the amount of work necessary for you to regain your assurance of conformance with the design and license basis?

MR. BOWLING: I don't know if surprise is the right word. Clearly, we have learned a lot as we have gone through this process, and I have to say that it started -- the process started with an organization that was not at the level of performance that we have today or that met a standard, so it's a process of increasing standards.

The other aspect of this which I think is important is that I mentioned several times that we did a graded safety review. In other words, this review stopped when conformance to design and licensing basis was confirmed. The ICAVP review goes deeper in the sense that it's looking at essentially all calculations and drawings that relate to the systems that are in scope. I think this is the explanation for a lot of the Level 4's.

CHAIRMAN JACKSON: Let me ask you one last question given what you just said. You know, when I was on

site, I met a number of contractors.

MR. BOWLING: Yes.

CHAIRMAN JACKSON: You know, I was walking around to meet employees, and I did that, I met a number, but I also met a lot of contractors, and I guess -- what is your assessment today? One has to do with standards, but the other actually has to do with actual capabilities, of the strength that the organization has in engineering, you know, given that a lot of these kinds of issues, at least, that we are discussing at the moment, depend on that area, and one of these days, the contractors are going to be gone.

MR. BOWLING: Right. Certainly, the knowledge transfer is a critical issue for us. I would say that in our system engineering area that we are less reliant on contractors, and they have been involved heavily in the process. In addition, we have done a lot to document with design basis summaries of the key safety-related functions and systems so that we have that record.

CHAIRMAN JACKSON: Okay.

MR. BOWLING: We are also looking at the ICAVP Discrepancy Reports, DRs, and although, individually, most are not safety significant, in aggregate, they may indicate an area requiring program enhancement. We will make these enhancements upon confirming that the DRs and the trends are valid.

The trends that we are currently evaluating do not indicate any programmatic weakness or breakdowns, but will likely afford an opportunity to improve.

With respect to the DRs, we are on track to respond to all that have currently been received from the ICAVP contractor by the end of February. We currently have 212 remaining to respond to.

As of February 11th, we have responded to 634, subsequently we have responded to more, as I indicated.

The single level 2 DR for Unit 3 relates to a number transposition error and a degraded voltage calculation. This error was in a non-conservative direction, but sufficient voltage is available for the effected safety-related equipment to perform its safety function and the design basis was met. We have responded with the technical information to support a level 4 reclassification of this issue, which we believe the ICAVP contractor will confirm.

Again, the remaining DRs are scheduled to be responded to by the end of February.

CHAIRMAN JACKSON: Let me ask you, you know, and I know the focus has been on Unit 3, but from where you sit, is there a difference, or a detectable difference in the threshold for calculating level of significance between Sargent & Lundy and Parsons?

MR. BOWLING: Yes.

CHAIRMAN JACKSON: Would you speak to that for a second?

MR. BOWLING: I am not sure I can give you the answer that you are looking for. I do see a difference in the determinations of significant levels, but I think maybe the NRC staff would be better able to answer that.

CHAIRMAN JACKSON: Okay.

MR. BOWLING: If I could have the next slide. Based on the 634 responses that we have made through February 11th, and recognizing that only about 30 percent have been closed by the ICAVP contractor, we can generally conclude that the Unit 3 reviews have identified most of the design and licensing basis issues. To date, NU has confirmed that only seven of 634 DRs are of level 3 significance, which is a design and/or licensing basis issue, but does not affect or operability or functionality, and which has been characterized to be of low safety significance.

This slide shows the safety significance of what has been identified during the Millstone Unit 3 reviews and the ICAVP inspections. It is important to note that no LERs have resulted to date from any of the over 600 ICAVP DRs that we have reviewed to date. This provides a strong indicator that the Unit 3 reviews to restore conformance to

the design and licensing basis were effective in identifying significant safety issues.

With respect --

CHAIRMAN JACKSON: What percentage did you tell me were closed?

MR. BOWLING: Thirty.

CHAIRMAN JACKSON: Thirty percent.

MR. BOWLING: Approximately. With respect to the NRC inspections, a number of potential violations have been identified, as well as several issues that have been determined by us to be reportable, and from yesterday, that has gone up to four items.

These issues and potential violations also have not been of high safety significance, at least the three that I have on my slide. Nonetheless, as previously discussed, we have already taken both the NRC preliminary findings and the ICAVP contractor DRs into account in our self-assessments to determine the need for additional reviews.

As you know, we have informed the NRC staff, in response to Question 2 of 10 CFR 50.54(f), that over 4,000 items may be deferred to after restart of Unit 3. Question 2 cast a wide net by essentially asking for all items that will not be completed prior to restart, irrespective of either safety or business significance. Both Mike Brothers

and I will discuss these deferrals in our presentations, but I wanted to make clear that the items required to restore compliance with the design and licensing basis, as well as NRC regulations, will be completed prior to restart in key areas such as RSF prior to Mode 4 entry.

For the deferred items under Question 2, we will docket our approach for managing and monitoring the post-restart backlog. In our February 9th, '98 letter to the NRC, we committed to the Corrective Actions for any deferred level 4 DRs by the end of the next refueling outage, as well as providing periodic status on the level 4 Corrective Actions.

This slide shows the number of our deferred tasks resulting from both the Configuration Management Review and the ICAVP Reviews. The 705 configuration management tasks will be addressed and either completed, scheduled or cancelled based on the value added that can be provided.

Examples of what is included in the deferred backlog are listed. About 30 percent of the 705 relate to minor drawing enhancements for labeling, pointers and designators which are not relied upon by the operator or the design engineer when using the drawing. Only a few, approximately 12 items, are related to the FSAR and reflect grammatical or editorial preference or applied to a non-safety system.

Procedures constitute about 30 percent and include enhancements which do not affect functionality. However, a significant number of the procedure deferrals are significant, but consist of procedures, primarily, in-service inspection, in-service testing, that will not be required until the next refueling outage. These will be completed prior to the next refueling outage.

It is also worth noting that the size of the backlog was originally 948 and is currently 697. Our intent is to work this off as quickly as possible.

CHAIRMAN JACKSON: Now, the numbers you are showing here, subsets of the, quote-unquote, "5,000 open items," --

MR. BOWLING: Four thousand, yes.

CHAIRMAN JACKSON: Four thousand.

MR. BOWLING: Forty-two.

CHAIRMAN JACKSON: Forty-two-hundred.

MR. BOWLING: And Mike Brothers will discuss the remainder of that.

CHAIRMAN JACKSON: Okay. All right. And so there are other categories?

MR. BOWLING: Yes.

CHAIRMAN JACKSON: Okay.

MR. BOWLING: Which Mike will discuss. But I wanted to discuss those that may bear to one degree or

another on the design and licensing basis.

Now, with respect to the ICAVP DRs, please not that these deferrable tasks of 215 represent the DR Corrective Action assignments, not the number of DRs being deferred.

Now, I mentioned that we would docket our approach to this backlog. I have several back-up slides that discuss that approach and our planned commitments to the backlog, if you would like to see those.

CHAIRMAN JACKSON: We'll go on. But let me --

MR. BOWLING: We are working with the staff on that.

CHAIRMAN JACKSON: Let me ask you a question here. You have a slide 62 that is further on, that says, "Discipline work prioritization process applied to identify items deferrable until after restart." I see the 705 on that.

MR. BOWLING: Right.

CHAIRMAN JACKSON: But I don't see the 215.

MR. BOWLING: The 215, once they get their assignments, are collectively included in the first number there, the assignments. They are not further bend at this point.

CHAIRMAN JACKSON: So they will be additive to

this list?

MR. BOWLING: No, they are inclusive.

CHAIRMAN JACKSON: Okay. I see. All right. Okay.

MR. BOWLING: Again, none of these deferrals will affect conformance to design and licensing basis.

In addition to restoring conforming to design and licensing basis, we have also strengthened the programs necessary to maintain the design and licensing basis going forward. This required correcting longstanding issues with the Design Control, Document Control, Safety Evaluation and many other programs that are required to maintain operational changes in conformance with the design and licensing basis.

The tier 3 portion of the ICAVP looked specifically at these programs, and it is worth noting that the NRC preliminary conclusion at the Public Exit on January 28th was that the Millstone change control process satisfied 10 CFR 50, Appendix B, and would serve to maintain a design and licensing basis.

It should be noted that this NRC inspection also identified several issues which will need to be corrected prior to restart.

In our August 6th meeting with you, I discussed two new and innovative organizations that we have added, a Configuration Management organization for each unit and an

Engineering Assurance function. These organizations which increase our confidence that future changes will be made in conformance with the design and licensing basis are now staffed and functioning for both Units 2 and 3.

In addition, there is a dedicated Nuclear Oversight Surveillance of the configuration control change process and we have completed most of the specialized configuration management training for over 1200 personnel in Unit 3 and the groups that support Unit 3. Unit 2 training is currently ongoing.

Finally, self-assessment and performance monitoring is being utilized to evaluate the effectiveness of the Configuration Management Programs.

In summary, the actions that have been taken to date to restor and maintain conformance to the design and licensing basis, and to address longstanding safety, programmatic, organization, human performance and technical issues are being effective. Still, we recognize that all Corrective Actions necessary to restore full compliance have not yet been completed. However, the work completed has been substantial and to acceptable standards.

The remaining work to support the restart readiness is on track and will restore conformance with the design and licensing basis and NRC regulations. The organizations, programs and processes are also in place to

maintain conformance.

The ICAVP Reviews to date indicate that Millstone 3, Configuration Management Review and Programs have been effective in identifying almost all of the issues of safety significance, including those issues necessary to restore compliance with the design and licensing basis. In saying this, I recognize that the entire Millstone organization must continue in its pursuit of a healthy respect for regulations from both an intent and compliance standpoint,

and that we must continue to demonstrate timely and effective Corrective Actions.

In conclusion, I do believe that our overall Corrective Actions approach is robust and that we have the programs and organizations in place to now support the conduct of safe operations.

If there are no --

CHAIRMAN JACKSON: Thank you.

MR. BOWLING: If there are no further questions, I will turn it over to Mike.

MR. BROTHERS: Good morning. The purpose of my presentation today is to discuss the readiness of Millstone Unit 3 to return to power operation. My assessment of Millstone Unit 3's readiness is as follows: The Unit is tracking as satisfactory with regard to readiness to support power operation. This assessment is made up of four broad

areas, physical readiness, regulatory readiness, organizational readiness, and operational readiness.

The start-up and power extension plan in supporting organization support is satisfactory to support restart. This is currently satisfactory. The Unit backlogs are tracking as satisfactory to support restart.

The metrics presented on the next slides are designed to support these conclusions. One overall point to make is that the slides that you have are up-to-date as of February 6th, 1998. Because we are rapidly readiness to enter Mode 4, these small numbers of remaining items are decreasing rapidly. I will give you the current numbers in my presentation today.

CHAIRMAN JACKSON: Can I get you to slow down a little bit?

MR. MORRIS: You're working on the same issue we are working on.

MR. BROTHERS: There's a contrast between me and --

CHAIRMAN JACKSON: Mr. Bowling set you up.

MR. BROTHERS: Next slide. Under the topic of physical readiness, this slide shows the number of modifications which remain to support restart. As of February 13th, 1998, there were five modifications remaining, of which one is working in the field. The four

are engineering modifications that don't require physical work.

It should be noted that the total number of modifications required for restart that have been performed to date is 216. The five remaining modifications bring the total to 221 modifications required for restart. This does not include the potential mod required to resolve the RHS MOV 610 and 611 cycling problem that we discussed earlier.

CHAIRMAN JACKSON: Do you have emergent mods? I mean when was the last new mod added? Are there ones that are popping up?

MR. BROTHERS: Yes. We had a mod added on Saturday that was associated with a DWST, demineralized water storage tank uncertainty. It is not a physical mod, but it's a modification to support the calculation. So they are coming up, and they get assessed per our PI 20 criteria as to whether or not they're required for restart.

This metric is tracking a satisfactory.

Continuing on our physical readiness, this slide depicts our current status of online orders. The total number of work orders remaining as of February 11 is 665.

All of these work orders have been individually assessed as meeting our deferral criteria. We are on track to work the existing numbers down to our goals of 500 power block and 50 maintenance rule or PRA significant work orders prior to

resuming power operation. In my discussion of backlogs I will give a more detailed breakdown of the 665 remaining work orders. This metric is tracking a satisfactory.

Now shifting to regulatory readiness, Marty talked earlier about the completion rate of NRC commitments required for restart. To recap what he said, we currently have 77 remaining commitments to address prior to restart, none of which are overdue. The total number of commitments which have been addressed up to now is 691. This metric is tracking a satisfactory.

CHAIRMAN JACKSON: And you don't anticipate asking to defer any of these?

MR. BROTHERS: That's correct.

Also under regulatory readiness this slide shows our current significant items list status. As of February 12, 1998, we had six packages remaining to submit out of a total of 216. This list corresponds to the 86 zones in the NRC's Millstone 3 specific attachment to manual chapter 0350. We are on track to have all the packages submitted for review and closure to support unit restart. We believe that the quality of packages continues to be good. This metric is tracking a satisfactory.

This slide shows our current status on the 5054F significant items required for restart. As Marty said, as of February 17, 1998, we have 252 items remaining to be

closed out of a total of 4,284 items. The 4,284 is different than the 3,876 shown on a previous slide. The reason for that is because of the way as Bruce characterized the net being cast as TRs come in and they do in fact become automated work orders, they become deferable or nondeferable. So that is a moving number. So we have 252 out of 4,284 items. These items are also on track to support Millstone Unit 3 restart. This metric is tracking a satisfactory.

This slide shows our current LER submittal rate for Millstone Unit 3. The solid portion of the bars are current LERs, and the cross-hatched portions are historical LERs. This slide shows that we are below the industry standard of approximately two LERs per month, although we do acknowledge that the fact that we are in Mode 5 makes this a non-like-to-like comparison. In addition, the 5072 prompt report that went out yesterday will be an LER.

The historical LERs being reported shows that our low threshold and questioning attitude continues to be fostered at Millstone station. As we return to power operation we will monitor our performance in this area. This monitoring, however, will be on a strictly benchmarking manner to preclude the adverse consequences of trying to directly improve this indicator. This metric is satisfactory.

The third broad topic under unit readiness is organizational readiness. This slide shows our organizational readiness assessment as of February 10, 1998. This methodology complements the nuclear oversight restart verification plan by assessing departmental readiness, whereas the nuclear oversight restart verification plan

assesses the issue of programmatic readiness.

An easy distinction between the two assessments is to contrast this assessment of the corrective action which addresses the departmental effectiveness of the correction action department versus the nuclear oversight restart verification plan assessment of corrective action which addresses the broader implications of the effectiveness of the corrective action program at Millstone Unit 3.

With the above explanation in mind, let me discuss the organization is assessed as not yet a goal but tracking a satisfactory for Millstone Unit 3. As of February 10 the operations department is assessed as tracking a satisfactory based upon training that is required for Mode 4 and not yet being complete for all shift personnel. As of today that should be in fact done.

This will be completed prior to Mode 4 and the operations department will be satisfactory prior to entry into Mode 4.

Work planning outage management is assessed as

tracking a satisfactory based upon schedule adherence not yet being at our operational goal of 75 percent of planned activity starting on time and 70 percent of those planned activities completing on time. Our current percentages are 62 percent and 55 percent respectively. This is not expected to be a goal before entry into Mode 4, but will be a goal prior to entry into Mode 2.

Maintenance planning is assessed as tracking a satisfactory based upon the restart backlog goals not yet being a target, but all the items are tracking a satisfactory. These goals are also Mode 2 goals.

Training is assessed as tracking a satisfactory based upon the fact that we have not yet completed our evaluations as to the extent of the systems approach to training problems within training and the Millstone Unit 3 shift technical advisor program status. Both of these two areas will be satisfactory for Millstone Unit 3 prior to entry into Mode 4.

Licensing is assessed as tracking a satisfactory based upon the continued need to extend an excessive percentage of commitments. This is expected to be evaluated as satisfactory for Millstone Unit 3 prior to entry into Mode 4.

Finally, management is assessed as tracking a satisfactory based upon greater than five percent of CR

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evaluations taking longer than 30 days. As discussed by Dave Amerine in his discussion on CR evaluation timeliness, the average age of evaluations is less than 30 days, and the quality of evaluations continues to remain high. Increased attention is being applied to this area, and we will assess overall management effectiveness as satisfactory prior to entry into Mode 4.

In summary, we expect all departments with the exception of work planning, outage management, and maintenance planning to be assessed as satisfactory prior to entry into Mode 4. In addition, all of the departments will be assessed as satisfactory prior to entry into Mode 2.

This slide under the overall topic of operational

readiness shows our current number of temporary modifications which are installed on Millstone Unit 3. Our goal is to have less than 15 temporary modifications installed prior to entry into Mode 2. We currently have 18 temporary modifications installed, three of which are for outage support. We are on track to meet this goal prior to entry into Mode 2. This metric is tracking to satisfactory.

Continuing under operational readiness, this slide shows our current status on control room and enunciator deficiencies. Our goal is to have less than ten deficiencies prior to entry into Mode 2. As of February 11, 1998, we have nine deficiencies. This metric is

satisfactory.

This slide shows our current number of operator workarounds at Millstone Unit No. 3. Our definition of an operator workaround is based upon industry standard definition. Our goal is to have less than ten operator workarounds prior to entry into Mode 2. As of February 8, 1998, we have eight operator workarounds. This metric is satisfactory.

This slide shows our percentage of low significance or precursor events as a percentage of all human error events. It is desirable to have a high percentage of low-significance errors to total errors to allow for the implementation of corrective action at a lower threshold, thereby preventing more significant events. An example of a precursor event will be a tagging error caught by the individual performing the second check of the tag.

A higher level event or near-miss would be the same error missed by the second checked but caught by the worker prior to commencing work. A breakthrough event would be a failure of all the barriers, the initial tagger, the second checker, and the worker, and then work actually being performed on an incorrectly tagged component.

We have set an extremely high percentage goal in this area of greater than or equal to 95 percent of all human errors being classified as low significance precursor

errors. Although in December we fell to 92 percent, in January our performance was once again at goal, and as this slide shows, our general performance exceeded goal for the last seven months.

During that same time, there have been no breakthrough events in which all the barriers failed or significant consequences have occurred. This metric is satisfactory.

This slide shows our current errors per 1000 hours worked for technical and administrative procedures at Millstone Unit 3. We show an increase in both the technical and administrative error rate in December. As Bruce pointed out in his summary remarks, this caused us to change our assessment from satisfactory to tracking to satisfactory in the area of procedure compliance.

January's levels returned to approximately our previously low historic values, but continued good performance in this area is required before we once again rate procedure compliance as satisfactory for Millstone Unit

3.

CHAIRMAN JACKSON: Why do you feel you have the problems in the administrative procedures area this far down the line?

MR. BROTHERS: We have taken a look at that. I think what you had was the same type of thing we

demonstrated in the timeliness evaluation during the January time frame. The December period of work at Millstone Unit 3 was the most extensive period of work that we had for the last two years, and I think we saw the corresponding --

CHAIRMAN JACKSON: You said because of the concentration of the work?

MR. BROTHERS: Yes, the physical work and driving to complete the integrated leak rate test in the beginning of January was compressing, and in our view was what caused things to happen.

This metric is tracking to satisfactory.

This slide shows an overview of our heat-up, start-up and power ascension program. I have seven points to make here.

We have an approved procedure which governs a heat-up, start-up and power ascension of Millstone Unit 3 which takes into account the fact that we have been in cold shutdown for approximately two years. We have a dedicated start-up organization which has been in place since January 12th, 1998, to provide integration and management support as the unit returns to power operation.

We currently have in place shift mentors for operations which we will expand with NU and non-NU senior reactor operators as the unit returns to service.

Our operating crews are visiting operating plants

and have observed plant start-ups during the last few months.

Specific heat-up and start-up training will be provided to all operating crews. Training on modifications has been largely completed and will be completed for all crews prior to entering mode four.

Finally, the dates and the days given here are to provide a framework for planning only. We will conduct a measured and controlled return-to-power operation, taking whatever time is required. Unit management will not rush to return this unit to service. My unit and engineering directors will recommend to me and receive permission from me prior to making any mode change as the unit is sequenced back to power operation.

This slide shows the current numbers for the seven broad areas which make up our deferrable items. I have previously discussed the corrective maintenance, operator work-arounds, control room deficiencies, and temp mods, and Marty has discussed the configuration and management items in his presentation.

The remaining items, corrective action assignments, corrective maintenance, and engineering backlogs have been individually reviewed by our management review team and expert panels.

The next three slides further characterize our

current progress in the areas of corrective action assignments, corrective maintenance and engineering backlog.

This slide gives a breakdown of our deferrable corrective action assignments. Roughly half of these items fall into the area of minor procedure or documentation improvements. None of these, or any of the remaining deferrable items, affect the design or licensing basis of Millstone Unit No. 3.

A review by our probabilistic risk assessment group has been conducted on all of these assignments. This review first screened the 2260 items to look at only maintenance rule items. As you know, the maintenance rule includes systems which are risk and safety-significant, systems which are risk or safety-significant, and systems which are in scope, but are neither risk nor safety-significant.

This screen reduced the 2260 items to approximately 1000 items. These 1000 items were individually reviewed by a team in our PRA group. This review identified approximately 250 items which required additional information to verify that they were in fact deferrable.

Additional information was provided on those 250 items, and the final result was the identification of 11 items out of the original 2260 for further consideration by

line management. This consideration is under way.

I do want to point out that this review has not yet been conducted on the engineering backlog that you see in two more slides. Within that engineering backlog was the RHS issue that we discussed earlier. That review will occur, however, prior to entering mode two.

I consider this an excellent cooperative effort with our organization that gives us added assurance that our deferrable items are properly characterized.

This slide shows our breakdown of our corrective maintenance backlog. Approximately 52 percent of this backlog is associated with maintenance rule systems, and none of these items affect system operability.

Let me just describe what these headings mean. An example of a non-functional component which does not affect system operability would be a non-functional local temperature indicator on a piping system. The system is so operable with a non-functional temperature indicator. It should be emphasized that this classification cannot be applied to any component directly covered by technical specifications or used to ensure continued operability for any technical specification, component or system.

Equipment which is functional characterization covers minor degradation which does not in any way affect component or system operability.

The remaining 48 percent of our power backlog is associated with non-maintenance rule systems, so they are not risk, not safety-significant, and not in scope.

This slide characterizes our current engineering deferrable items. 65 percent of this backlog is associated with enhancements or modifications which have been screened by unit management as appropriate for future consideration, but unnecessary to perform at this time. 20 percent of the engineering backlog is devoted to component level engineering in which, for some reason, an exact replacement part is not available.

The remaining 15 percent is made up of items such as administrative actions or organizational/programmatic enhancements. As I described earlier, our corrective action assignment backlog has been screened for individual and aggregate impact by our PRA group.

As we approach mode two, we are continuing to work down all of our deferrable item areas. As such, we will perform another assessment of the aggregate impact of all deferrable items shortly before entering mode two.

It should also be emphasized that we have benchmarked ourselves against recent industry experience for all the metrics I have presented today. Millstone Unit 3's goals, when stacked against these goals, compares favorably to units which have recently started up after extended

outages.

In summary, we believe that Millstone Unit 3 will shortly be ready to enter mode four and begin the controlled sequence which will lead us to meeting all our goals and satisfying the prerequisites for mode two by late March of 1998. Millstone Unit 3 is on track to return to power operation with the unit ready from a physical, regulatory, organizational and operational standpoint.

Our start-up and power ascension program is in place and ready to support the unit. Our backlogs are at reasonable levels and have been screened both internally and externally, from an individual and aggregate impact standpoint, to fully support our plans to be ready in all aspects by late March of 1998 to return to power operations.

If there are no questions, I'll turn it over to Dave Goebel to discuss nuclear oversight's current assessment.

COMMISSIONER DIAZ: Yes, if I might go back to your figure on Table 62 of slide 62, I'm sure that Mr. Morris saw this and understood very well every one of these items, but I didn't. And I know that now you have gone and explained it. This figure, when I saw it yesterday, you know, created some concerns because, you know, we started with a series of 6000 issues, and then we classified them. I would recommend that, you know, when you get back in here,

you take this and do like what you did in your quick presentation, you know, like saying there are only 11 of 2260 items that are being considered. That narrows the scope down significantly. If not, it looks like an insurmountable task to be done, you know. And clearly, you know, there are differences in here that need to be reviewed to determine the risk significance, and obviously you have been doing all of those things, and I hope you keep doing it. But it's not obvious from this table when you look at it. And I strongly recommend it, please. You know, separate them, even when you put them in a table that, you know, it's not clear at all what the meaning of these things are.

MR. BROTHERS: Thank you.

MR. GOEBEL: Good morning. Today I would like to present the current status of the nuclear oversight restart verification plan for Unit 3. The data is shown on this slide.

I would like first to review what the slide depicts. There are 21 issues; each is listed on the left-hand side of the slide. These were taken from the 16 in the summary book which we provided you, and selected

other issues which I feel are important.

One item in the latter category is materials, and another is engineering.

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Attributes are evaluated for each issue, and those attributes are derived from the NRC's manual chapter 0350, INPO guidance, in particular 96-006, and other relevant documents. The attributes are evaluated throughout a two-week period and the summary scores derived. A roll-up of the scores in a given area resulting from this look is then related to a color, either red for significant, yellow for improvement needed, or green for satisfactory. Those colors are then displayed on this slide.

In general, for an issue to change color, two evaluation periods at the new level are needed.

Since our last meeting, there is leadership, corrective action, configuration of management, regulatory compliance, conduct of operations, and environmental monitoring have turned green, while procedure quality and procedure adherence has gone from green to yellow, as problems once fixed have resurfaced, and this has been discussed previously.

You will note a green dot adjacent to the emergency preparedness area. If all goes well, this area will turn green this week. At the last evaluation two weeks ago, it had exceeded the limit to move into the green area.

There are three key areas which are in yellow that are impacting our moving forward. There are others that are yellow, but today I am comfortable with their status. The

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three areas which require increased management attention are procedure quality adherence, training, and work control and planning, and those have been discussed by other gentlemen at this table earlier.

I would like to discuss each area as each is clearly defined activities which require improvement. It is my opinion that if these activities are completed, these areas will achieve a green status and be ready for restart.

The first is procedure quality, procedure adherence. Procedure quality has improved since the last briefing, but adherence issues have resurfaced. Those areas which require increased management attention include increased coaching by the first-line supervisor. You recall the last time I stated that increased first line supervision time in the field is the most beneficial change we can make in this area.

Another area requiring attention is providing feedback to all affected workers on problem areas, and the third is holding people accountable for adherence problems.

Additionally, we need to prioritize and complete the remaining procedures which are required for restart. I don't see this as a problem, but additional work must be done in this area.

In the area of work control and planning, which is another area requiring increased management attention, we

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need to improve our schedule adherence, and Mike Brothers has mentioned that.

The primary sources of schedule adherence difficulties are work package quality, work release start times, work prioritization, and schedule development assumptions.

Among the issues in this latter category -- that is schedule development assumptions -- we need to improve the coordination between operations and the various work groups in establishing a schedule.

Additionally, we need to obtain management support and accountability for accomplishing this schedule as it is laid out.

In the training area, the training area is one of great importance to the organization and has been discussed previously, as the others have.

Increased attention is required in several areas. Complete the qualification of systems engineers prior to final system verification of readiness for start-up must be done. We need to ensure that the system's approach to training is functioning for Unit 3 as it was designed. We need to ensure that items from the corrective action plan which resulted from the shutdown of training are properly closed, and on a longer term basis we need to verify that the proper staffing skills are present within the

organization.

As I said, these three remaining areas provide the biggest barrier to near-term success, and additional effort is needed to ensure that success.

Subject to any questions, I'll pass it back to Bruce for his closing remarks.

CHAIRMAN JACKSON: Tell me again about the emergency preparedness area that's been tracking steadily yellow.

MR. GOEBEL: Right. At the last session, which --and I hold these sessions -- the people do the work on a daily basis. We have a roll-up on a two-week basis, and at the last roll-up two weeks ago, it will be reviewed again today and tomorrow, but two weeks ago, with a score that could drive it into the green area as being a 70 cut-off, it received a score of 80. So for a two-week period preceding that, it was essentially green, but we have an internal process where we don't change the color because we want it to sustain and hold; we just don't want a fluke up or down. So if it goes well this week, then I expect it to sustain and stay at that level, and my information from my people who are doing this week are the indications that it will stay there, it will go up. I need to wait and get the score.

CHAIRMAN JACKSON: Okay.

MR. KENYON: Chairman Jackson and Commissioners, we appreciate the opportunity to brief you regarding our progress. Certainly as a result of recent events and this meeting, we recognize the need to deal with the RHS valve cycling issue. We will do that. We will look at it for its implications, and we certainly understand that we need to test that against what it means for the credibility of our deferred items list, and we will do that.

We also have what I have referred to as the oversight event playing out, and I need to get the remaining information there, but I want to assure you that I will take appropriate action in due course and with every intention of demonstrating that this organization can and will handle, with careful deliberation, even of a serious event such as this, and this really should set the stage for an understanding of how this organization -- it's not that we never have an event, but it's when we have one, we know how

to handle it and handle it responsibly.

We have an understandable concern on your part on the nature of the backlog, and Commissioner Diaz, we understand the need to make our -- whereas we are comfortable, we have a responsibility to portray the information in a way that's clear as to what's outstanding. We need to do it in a way that makes a clearer statement as to its relevance, its significance, and we will do that.

Having said all that, I think we are close. We have a manageable amount of work remaining. I think that performance indicators show that, and certainly I look forward to our next briefing, and the work force and the leadership team is starting to get excited after a long haul.

Mike, do you want to add?

MR. MORRIS: I would just close with one comment, Chairperson Jackson. You asked a question about whether we were surprised on the amount of effort that it's taken to get to where we are today, particularly with the license and design bases. I think we are impressed with what it has taken, deeply impressed with what it has taken, and by that I mean to say that we understand what it would be like, I think, to be on the other side of this gap again, and I think this team is prepared, from the comments that you have seen today and the data that you have seen today, that if you believe with us that we are ready to come back on line, we understand what it is going to take to stay there, because we never want to have to do this again. It is an impressive amount of work.

Thank you.

CHAIRMAN JACKSON: Well, thank you.

Normally I would wait till the very end to make some comments to you, but I will, and they are in the way of

reinforcing some things that in fact Mr. Kenyon has already spoken to.

You know, we have a responsibility in making our decisions with fairness, and that creates a very narrow line that we end up having to walk, and many times the question is raised of, well, if any other unit or licensee in the country had the degree of scrutiny that you folks have had, would not these kinds of issues have turned up then? And wouldn't we find some lack of conformance with design or licensing basis issues? Would we not find some of the kinds of employee concerns, difficulties, et cetera, that the licensee has had? And, you know, I tend not to get into those discussions, and I will tell you why: fundamentally because we can't do that, because we are where we are, and that's what we end up having to deal with in the end. And even though most of you who are the incumbents in the position today were not in these positions when at least this latest episode began, the organization got to where it is because of its historical problems and historical patterns and the longevity of those problems, and a history of perhaps pencil-whipping problems away, and in some sense you come to a point where in a way that something that you are struggling with is the issue of if we can't have confidence relative to the little things, it raises questions about the confidence with respect to big things.

And that's what the results in the end have to demonstrate, that it is a comprehensive approach to dealing with things,

such that, yes, at any given time there can be items that pop up, items that are unresolved.

The obvious confidence one is going to have is particularly the things that have the greatest safety significance are addressed, but that is undergirded by an approach and a philosophy and a way of doing things that says one aggressively goes after issues and gets to the root of them, and therefore, in looking at how deferred items are evaluated, how they are addressed, what you do ends up having to be evaluated in that regard. It's not -- it may not make you happy, but in the end it does come to that, and that's why the recent issue -- and we all recognize that it has to be fully evaluated and all of its implications drawn out -- but why it is troubling with regard to everything I have laid out. Because of its implications for self-discovery of problems, robustness of evaluations. And so it is very important that it get reviewed, not just for the issue-specific clarification or, yes, if it's a Part 21 issue, then we are going to have to deal with that from the broader perspective.

But you have to look at it from both its generic implications, but it's important that you give everything, whether it's 4200 or 5000, whatever the number is, a

complete scrub, obviously with respect to safety significance. That's the base line.

But one really does have to ask the question of if there are historical items, then you are kind of on the spot as to say why, particularly if they are in a safety-significant system, but just generally because of what I said. If it's historical, why should you continue to defer it? And I'll say more at the end. And I appreciate the comment -- I think it's implicit in something you said, Mr. Brothers, about having the total review of all of the engineering items. And so the question is, as you go forward to do that, then you have to ensure that you don't miss things like this, because we are where we are.

MR. MORRIS: We fully understand that. We will tighten the mesh on our screen and rerun. We understand your point. Thank you.

CHAIRMAN JACKSON: Thank you.

We will now hear from Sargent & Lundy.

As is structured, we are going to hear from Sargent & Lundy, and then from Parsons Power.

MR. ERLER: As we have done before, Sargent & Lundy will provide some lead-in to cover both overall review process and then the details on Unit 3 review that it completed. I am Brian Erler, the project director for the ICAVP for Unit 3 for Sargent & Lundy, and Don Schopfer, the

project manager for the review team. Don will present the summary.

MR. SCHOPFER: Good morning.

The first slide we have is again it's sort of a refresher of the structure of the ICAVP, and I'll go through these rather briefly. I know you have seen them before.

The structure of the ICAVP is broken down into three tiers as required by the Commission paper 97-003. Tier 1 is the system verification to confirm that the system selected meets the licensing and design basis, and system functionality.

Tier 2 is the accident mitigation system review to determine that those systems that design parameters meet the requirements in the FSAR.

And Tier 3 is the programmatic review, or the review to verify that configuration control processes have not introduced changes into the licensing and design basis.

CHAIRMAN JACKSON: Now you can always depend upon me to do this. If I look two slides down the road at these tiers, you marked them complete. Now when you say that, do you conclude that you have made the verifications that are laid out in each of these tiers?

MR. SCHOPFER: We have.

CHAIRMAN JACKSON: Or does it mean something else?

MR. SCHOPFER: It means that we have completed the

discovery process and the reviews, and have identified all of the discrepancy reports, preliminary discrepancy reports from those tiers. Now the resolution of those preliminary DRs has not been completed yet, but the review process and the discovery process and identification of any discrepancies is complete for those items.

CHAIRMAN JACKSON: Okay. So discovery, review and identification of the DRs --

MR. SCHOPFER: Correct.

CHAIRMAN JACKSON: -- is what you mean when you say complete?

MR. SCHOPFER: Correct.

CHAIRMAN JACKSON: Okay. Thank you.

MR. SCHOPFER: The scope of the Tier 1 system review is as shown here. It lists the 15 maintenance rule group 1 and 2 systems that comprise our grouping of four systems which we have used the shorthand designation at the bottom of the page in bold that describes service water, RSS, HVX, which we termed the ventilation systems, supplemental leakage collection and release system is what SLCRS stands for, and the aux building ventilation safety-related portion of the aux building ventilation and the emergency diesel generator room ventilation system. And then the DGX system consists of the diesel generator and all the associated auxiliary systems supporting the diesel

generator and the electrical 4160 volt distribution system.

As four, I'd like to mention that the scope of the review for these systems also includes the review of the electrical power feeds from each component in these systems up to the first motor control center, and then a load path review from that motor control center to the diesel generator. Also the I&C; signals that interface with these systems from other systems are included in the review process.

CHAIRMAN JACKSON: I see.

MR. SCHOPFER: And any supporting systems from a mechanical standpoint also.

CHAIRMAN JACKSON: So let me ask you a question about the RSS. What is your assessment of the difficulties that the licensee has had with the recirculations crisis?

MR. SCHOPFER: I am not sure I understand the question, Chairman Jackson.

CHAIRMAN JACKSON: Well, it seems that it has taken a long time to kind of, you know, come down the line, pin the problems down, get, you know, comprehensive fixes, et cetera. But I don't want to say it, I want you to talk to me.

MR. SCHOPFER: Well, there have been a number of issues and problems associated with that, and Mike Brothers

identified those.

CHAIRMAN JACKSON: So you basically agree with his assessment?

MR. SCHOPFER: Well, I agree with -- you asked what the problems were, and there were a number of those. And it has -- there have been a number of modifications made to this system after we started the review. And, in fact, as you will see on the next slide, there are some additional modifications that the staff has asked Sargent & Lundy to look at that have just been completed or are being completed. So -- which came out of some of the earlier reviews of the previous mod. So it has been a continuing process for the RSS system in particular.

The basic system review in Tier 1 and the Tier 2 and Tier 3 reviews, as we discussed a few minutes ago, is complete from the standpoint of discovery being complete, and the Discrepancy Reports being issued. The two items remaining from -- associated with Tier 1 is these additional recirculation spray systems modifications that were given to us for review in late November of '97 and we have completed that first set of reviews.

We also have these additional four modifications that the staff has asked Sargent & Lundy to look at, and those were just completed this past week or the week before. We are in the process of receiving those packages, that calculations, those modification documents and completing

that review. We expect to get those documents this week and we will complete our review in about two weeks after we receive everything.

CHAIRMAN JACKSON: Was the RSS system -- RS system operable before these modifications?

MR. SCHOPFER: I guess -- I don't know the answer to that. They are modifications that are improvements, certainly, to some of the cycling of the valves that were occurring in the changes they made. The other changes go back to a direct injection system into the vessel that was one of the original design and sort of undoes one of the changes, and I think the licensee had determined recently that that was an unreviewed safety question, so there were significant issues.

I guess I don't know the answer.

CHAIRMAN JACKSON: I am going to ask the staff that, so I am giving you a heads up.

MR. SCHOPFER: The second issue of items that are being completed is the Tier 1 Corrective Action Implementation Review, and that is there was a Corrective Action Review as part of the Tier 1 system of some 1500 Corrective Action documents. We selected and screened and came up with about 250 to 260 specific Corrective Action documents that the staff wanted us to look, I'll say at more detail in the implementation, not just the Corrective Action

plan, but what the results of those Corrective Actions were in terms of, again, engineering activities, analyses, evaluations, calculations and those sorts of things.

We are still obtaining some of those documents from Northeast Utilities and expect those this week and next week and, again, have about a two week completion date after we receive those documents.

The final report, as noted here, is already in preparation. We expect to be able to issue that final report approximately the end of March, based on the current

schedule of completion the resolution of the Discrepancy Reports that we have issued and NU's comments earlier about their schedule for completing their responses to us.

Just a brief, again, lesson or reminder of how our Discrepancy Report process works with the -- with both Sargent & Lundy and Parsons, and then I will address the comment -- the question you made about the difference between Sargent & Lundy and Parsons, threshold, perhaps, if I can.

CHAIRMAN JACKSON: All right.

MR. SCHOPFER: The NRC staff and Sargent & Lundy and Parsons have developed this common process for reporting the findings identified during the review process. An individual reviewer initiates a preliminary DR. It undergoes an internal review process within Sargent & Lundy

or Parsons. Upon completion of that process, the preliminary DR is issued to Northeast Utilities, the NRC and the NEAC, the state of Connecticut agency, and is posted to the web site.

Northeast Utilities evaluates the preliminary DR and submits a response, and we review that response and either return it with additional comments or questions, or close the DR. That DR --

CHAIRMAN JACKSON: Let me ask you a question. Closure -- is closure based on the response, or if it involves a physical non-conformance or something that has to be done, is it closure after that which has to be done is done? Is that what closure --

MR. SCHOPFER: Closure, in our process, means that we have reviewed their response, accepted their Corrective Action plan and, in some cases, we do wait to see that action, if it is an engineering action. If it is a significant engineering action, I guess I should say. We do not, if they say they are going to correct the FSAR, we do not hold that open until they correct that FSAR. That will go into their Corrective Action process and make sure that that happens. But if they need to make a calculation change or a drawing change, or a licensing document change, and they commit to doing that, that allows us to close the DR from the standpoint of the ICAVP.

The response from NU is expected to include whether the condition identified as a discrepancy, whether they had previously identified this issue in their Configuration Management Plan, what action has been or will be taken to correct the deficiency -- the discrepancy, whether they agree with the significance level that we established and assigned to the DR, if there is any impact on plant hardware and, in the case of generic or programmatic issues, the response should also address the extent of condition.

The DR may be closed based on acceptable response, and it is categorized as a confirmed DR, meaning that they agree that it is discrepancy that they had not previously identified, or it may be identified as something that they did previously identify during their process, or it may be considered non-discrepant based on additional information, technical information that has been provided by NU and we agree with that.

CHAIRMAN JACKSON: Now, looking ahead again, your last slide indicates that your preliminary conclusions include that you have -- it was judged that calculation

control and radiological calculations are weaknesses. So does that mean that besides individual DR closures, that you actually trend and assess the more programmatic weaknesses?

MR. SCHOPFER: Yes, we do.

The next slide does show the significance level, the DR significance levels that have been assigned, created by the NRC staff and both Parsons and Sargent & Lundy use this criteria to assign significance level. To address your comment, the question that you had earlier, is there a difference in threshold, I will answer to the extent that I can in terms of how we do it.

The criteria is not so specific between level 3 and level 4 that there are -- there can frequently be some level of opinion whether something should be a level 3 or level 4. The criteria between level 1 and level 2, or between a level 1 and level 2 versus a level 3 is more clear, and I think that is probably where your comments were directed, is at level 1 and 2 versus level 3 and 4, but that is a guess on my part.

The level 1 or 2 means that the system, based on the finding, the discrepancy, was not able to perform its design function, either one train or both trains. And our approach has been, if we are able to determine that via the review and say that, then -- then we classified it as such. If we were -- if there was a discrepancy that needed evaluation by NU to determine the extent, we classified it as level 3 with words to, in the Discrepancy Report, asking them to evaluate this so that the final significance level can be determined, and that's the approach that we have

taken.

If we are able to say it doesn't function, from our review, we don't do the calculations or evaluations to determine the final outcome, that is NU's responsibility and we ask them in our DR to evaluate that so that a final significance level can be determined.

CHAIRMAN JACKSON: So if it requires some additional analysis, you essentially -- the default position is level 3?

MR. SCHOPFER: Correct.

CHAIRMAN JACKSON: And so the ultimate categorization depends upon this additional analysis?

MR. ERLER: They must complete the analysis in order to establish a significance.

CHAIRMAN JACKSON: And then as part of your closure, you go back and evaluate that that analysis has been done, and that the proper -- and you concur that the level assignment is what is suggested?

MR. ERLER: That is correct.

CHAIRMAN JACKSON: That you accept it or reject it, is that correct?

MR. SCHOPFER: Yes.

CHAIRMAN JACKSON: Okay. But the default position is level 3. I didn't know that, that's interesting.

MR. SCHOPFER: That's the position that we have

taken to the processes.

CHAIRMAN JACKSON: And you are going to speak to how you do that, when you --

MR. CURRY: Yes, ma'am, I can't make a comparison, but I can talk about how --

CHAIRMAN JACKSON: Please.

MR. SCHOPFER: The next slide shows the Summary

Table of the Discrepancy Reports that have been issued. The first column is the number of -- total number of Discrepancy Reports that have been issued, broken down by the significance level. These numbers will be different, or are different than the numbers you saw on the Northeast Utilities slide because they are taken as of a different date. These are as of Monday of this week. I think the NU numbers were from a different date.

The second column is their responses and, as Mr. Bowling said, these numbers change now very rapidly. Their number is well over 700 now, and our number of responses in the system and evaluations are going up. Also, as the next slide will show. But NU, as of this date, had responded to approximately 75 percent of the DRs that had been issued as of that date, and we have evaluated approximately 40 percent of those submitted.

We have been utilizing face-to-face meetings and conference calls in accordance with established protocol to

resolve the more difficult technical Discrepancy Reports and --

CHAIRMAN JACKSON: What does resolution involve?

MR. SCHOPFER: Resolution, if their response doesn't address all the issues that I laid out as what we expect on a response, if they have a technical response that our reviewers don't agree with, or don't have sufficient information to agree with, then, usually, a conference call or a meeting will be held to lay out those concerns, from our standpoint, for them to provide any responses to questions that we may have about their response.

We had a series of meetings last week at Millstone where we did it by topic, where the HVAC filter unit, we had a number if discrepancies written on that, and we had a meeting that discussed about 12 or 15 individual DRs on that subject, so that we had the right people there and provided the information, and the basis for why we thought it was a particular issue, not in compliance with a requirement, and they gave their response to that.

CHAIRMAN JACKSON: So let me make sure I understand the statistics. You say that NU has responded to 75 percent of the DRs, and that you have reviewed 40 percent.

MR. SCHOPFER: Forty percent of --

CHAIRMAN JACKSON: Of the 75 percent. So we are

talking 30 percent?

MR. SCHOPFER: Thirty percent of the total.

CHAIRMAN JACKSON: Of the total. Okay.

MR. SCHOPFER: The next slide is a graph of the response, the submittal and response rate, and for the people in the -- here are the copies that were handed out. Unfortunately, the color section, the yellow doesn't show, but it does on the screen here somewhat, and that shows the fact that NU has turned up the response rate dramatically on the Discrepancy Reports, as you can see, and our evaluation rate will follow this curve with about a two week lag to it, for us to receive the information, put it into our system and put it through the review process.

CHAIRMAN JACKSON: So you are saying you are going to be able to keep up with this, with NU's response rate with about a two week lag?

MR. SCHOPFER: Pretty close. We have started turning it up, as you can see from the blue line, and this

week it has gone up dramatically also. So I expect we will, yes.

We expect to resolve the majority, the great majority of the DRs by about the first week, or early in the second week of March, that's our current plan based on NU's comment to complete the response by the end of February.

A summary of the closed or confirmed Discrepancy

Reports is provided next. Of the 211 DRs that have been accepted and closed, there have been 111 confirmed DR discrepancies. Forty-two were previously identified by NU and 58 were considered non-discrepant after their response and Sargent & Lundy's review of that response.

Of the 111 confirmed discrepancies, five have categorized as level 3 and 106 as level 4. There are also four pending discrepancies and I should note that pending is that we have accepted their Corrective Action Plan, they agree that it is a discrepancy. We have accepted their plan, but there is some engineering document that we want to see before we call it closed, an evaluation, a calculation, some action that they needed to take that we want to see that result before we close it again because the significance level may be affected by the results of that. But their Corrective Action Plan on resolving it was satisfactory.

CHAIRMAN JACKSON: Can you talk about the most significant of the level 3, the five level 3 confirmed discrepancies?

MR. SCHOPFER: I'll talk about all eight, because there three pending --

CHAIRMAN JACKSON: Okay.

MR. SCHOPFER: -- and I have some information about that, or at least seven of the eight. They are in

various areas, and you can see on the next slide, actually, how they are broken down. But those, we had one under Design Control, one level 3 under Design Change Process, that was basically a use of unverified information and procedures, and NU accepted that and has made a procedure change to make sure that they don't have the ability to use unverified information in procedures. That was a level 3 from a procedural Design Control standpoint.

There were three or four calculations; four shown here. One was an embedment plate that was overstressed because the loads were -- certain loads were not considered. There was a calculation for ventilation in the pump house for the service water pumps that did not consider two-pump operation. That one is actually in the pending category and they're doing that calculation to see that it would or would not have been more significant.

There was a calculation on auxiliary building ventilation system filter unit bypass leakage calculation that did not consider everything that it needed to consider.

There was two in the corrective action areas that there we judged their corrective action not adequate, meaning that they're on different issues, but their corrective action process was not complete or not adequate. One issue dealt with control of vendor information used in procedures, and the other was the environmental

qualification of terminal blocks.

And the one that shows up as component data on the next slide was an auxiliary building ventilation fan basically not meeting its design and licensing equipment

requirements for vibration design.

Those are at least I believe seven of the eight that we've identified as Level 3s.

The slide that shows the again confirmed and pending DRs that should add up to the 215 are distributed across various configuration control processes and products as we've identified here and categorized them at the beginning of the job.

The notable trends here are that the number of discrepancies in calculations, there have been minor drawing errors, and I'm looking more at the -- we've talked about the Level 3s. I'm talking more to the numbers of Level 4 discrepancy reports on calculation issues, drawing errors -- minor drawing errors -- differences between the design and as-built configuration, which is categorized or called installation implementation. Licensing documents would be FSAR inconsistencies, handling of corrective actions, and components not in compliance with their design specification or their licensing commitment. That's the type of what these have shown for the confirmed DR so far.

And the last slide I have is the preliminary

conclusions slide that you mentioned earlier. Based on -- and I've termed this preliminary conclusions because we in fact have looked at about a third of the -- or a little less, perhaps -- of the responses, and conclusions really won't be drawn until we've completed that DR resolution process, but that based on the numbers of findings that have remained Level 3 are determined to be significant to Level 3, we have a preliminary conclusion that the effectiveness of their CMP was relatively good in determining design and license basis deficiencies because of the minimum number of those things that we have found based on the total number of things that we've in fact looked at.

The conclusions about configuration management going forward, we have reviewed their design control manual and we think it will be able to provide configuration control in the future. There are some aspects of their modification process that we have discussed with NU and the NRC that could be improved, but they have not resulted in issues that were unacceptable, that are improvements or enhancements to their process.

Programmatic issues that have jumped out at us are calculation control, and we've discussed these issues again with both the NRC and NU. They have a -- and they have programs in place to deal with that, but we found it very difficult to deal with the calculations, what is the

calculation of record for a particular system and aspect of a system, what -- which calculations used as input to others and superseding of calculations that may have been used as input. So there are a number of issues like that related to calculation control.

And we also found some issues in general with radiological calculations that were not of the same quality and control of the calculations as the other calculations done recently on site. The radiological calculations are a little bit more difficult to deal with. They have not shown as good of conformance to the licensing basis. So those are two of the issues that again we have discussed with NU and the NRC.

CHAIRMAN JACKSON: Thank you.

MR. CURRY: Good morning, Chairman Jackson.

CHAIRMAN JACKSON: Good morning.

MR. CURRY: My name's Stan Curry, and I'm the project director for the Unit 2 ICAVP, and with me today is Eric Blocher, my deputy. I'm very pleased for this opportunity to talk about Unit 2.

As you see from the agenda, we'll get -- on the third bullet there we'll get down to discrepancy reports, and I'd like to cover those issues that have been previously mentioned at that point.

Our Tier 1 review is continuing as similar with

Sargent Lundy, we have four major systems have been selected which also encompass significant numbers of additional systems which are touched as interfaces or as major components that have been added to define a single system.

Our high-pressure safety ejection, today we have finished our discovery in following on with the definition given previously. That means that we've finished our discovery. We're finalizing the discrepancy reports to submit on that particular system. And then the corrective action review is indeed ongoing in that particular area.

The auxiliary feed water system is on hold as we've indicated there, and we expect based upon NU's information to start receiving some information to allow us to restart our efforts in that particular area in the mid-March time frame.

CHAIRMAN JACKSON: Now there were changes made to that system. Is that the --

MR. CURRY: There were additional calculations that needed to be redone. In order to establish the design and licensing basis and to make it efficient for our reviews it did not seem prudent to proceed until those were complete.

On the two other Tier 1 systems we are proceeding in the design and licensing basis. As indicated there our work is in progress and we're going through the normal

process of a Tier 1 inspection on those two systems.

Our Tier 2, which again is the accident analysis review, we've gotten our critical design characteristics approved. The 29 events are in review. As you notice, the major bullet there that we will reevaluate the ten events that Northeast Utilities is currently working on to reanalyze. We have a process that will allow us to work around those for a period of time. Those other analyses are not affected by the reanalysis work.

And then we have a process which allows us to take placeholders but will require us to come back and validate once they have completed their calculations on Tier 2.

Our Tier 3 proceeds. There is the one outstanding area of vendor manuals as far as the selection of the sample that we will be reviewing. The other is progressing well and we're 75 percent complete with that tier.

Discrepancy reports. Just to review what's currently on the slide before I proceed for some other comments. As you see, similar in definition, 57 discrepancy reports are closed, are confirmed pending, and of the 39 that have been confirmed as discrepancies, and again those are in a manner that we have agreed with the licensee on the particular issue and the action that will be taken. Closed indicates that we have seen their final piece of paper that would allow us to agree, and if they've not yet implemented

it, we would close it, and it would move to the corrective

action portion of our review.

To follow up on the earlier questions that have to do with the elevated discrepancy reports. Mr. Bowling has already made a remark about the actual number that we received, and I'd like to discuss a little bit the process we've developed to utilize on what we call elevated DRs, anything that are in Category 3, 2, or 1 in particular, with specific emphasis on 1s and 2s.

And as you can imagine, most of these are not just open a book and find the issue. These were fairly complex issues. And because of that we and the licensee and the staff and the State of Connecticut have developed a process by which we sit down and discuss any one of these to make sure that everyone understands what those issues are.

This process was not in place before we issued the initial elevated DRs. We are now using those. And to the -- I think to the credit of the licensee they're bringing significant amounts of staff to those meetings to make sure that they understand those issues before they begin to respond.

Again, these issues in many cases are driven out of the accident analysis reviews rather than simply the systems that they have across the plant implication, so it's not just a single system issue. And I have seen from them a

very sincere desire to understand and make sure that we fully appreciate what their response will be and why we can accept that response.

In many cases again as we've discussed in the past there are -- this is an older plant, and sometimes you reach the point where the data provided does point you to an elevated definition or would be met, and then further research may turn up additional information which may allow all parties to agree that indeed the situation is nondiscrepant. And clearly that's some of the things that we're seeing coming out of those.

CHAIRMAN JACKSON: Do you have the comparable default position in terms of --

MR. CURRY: We do, but I should tell you, I mean, we certainly do, and I think Mr. Schopfer adequately discussed that. When it's indeterminate, we indeed send it back to them and indicate at this point without us redoing calculations and that's not part of our scope. It is indeterminate what's the exact level, but we believe it is as a minimum of three.

Now again sometimes the information provided does meet the criteria to identify it at that time as a potential Level 1 or Level 2. As I've mentioned, sometimes that potential goes away when more information is provided. But you deal with the information that you have at the time when

the licensee provides all information that he thinks he has to address that issue. As we've seen in the past, there was one particular item that we were unaware and did not receive an LER from the licensee. Upon receipt of that LER, that starts helping us understand where they are on that particular -- resolution on that particular item.

These meetings have resulted on the elevated DRs and they have taken the opportunity to go back and, on three of those particular items, do a further evaluation and they will be shortly getting back to us as far as what they have seen to evaluate the potential, whether or not there is a problem or not.

Again, I would like to emphasize that they have shown significant commitment to me as far as making sure they were bringing the right people to the table. There has been no lack of their dedication in that area.

Were there other questions about DRs that -- our schedule, as we show here, we have coordinated these dates with the staff to make sure that, as we currently have indicated here, that they will support the staff's inspection of our work on both Tier 2 and Tier 3 as well as in Tier 1 and the corrective action review.

CHAIRMAN JACKSON: So given the date you have for the HPSE, does the high-pressure safety injection system meets its design and licensing basis?

MR. CURRY: At this point, our discovery is complete. We obviously have several outstanding DRs related to that system, and you have to wait until you get those answers.

CHAIRMAN JACKSON: Okay. So you're waiting for what?

MR. CURRY: We have several outstanding discrepancy reports on HPSE and also on the corrective actions to be performed on HPSE, and there's a significant number of corrective actions the licensee has identified that they will be performing.

CHAIRMAN JACKSON: Okay. So this feedback process and the re-review has not been done.

MR. CURRY: That's correct, yes, not yet been done.

Our current target, based upon our current knowledge of what we're doing and certainly the Northeast Utility's current schedule, providing us the information that I discussed earlier, some of the design basis calculations and the accident analysis, based upon those schedules and a process, a normal proceeding of resolutions for discrepancy reports and corrective actions, we look to have a July the 10th date for our final report.

CHAIRMAN JACKSON: Okay.

Any questions? Yes?

COMMISSIONER McGAFFIGAN: The Level 1's that you tentatively identified, five Level 1's, what is the nature of some of them? Apparently NU has responded on three of them, and you're presumably looking at their response, but what is the nature of some of these Level 1's?

MR. CURRY: Eric, would you like to characterize those for me?

MR. BLOCHER: Right. The elevated DRs that exist to date, one of the Level 1's deals with water intrusion into the diesel fuel storage tank that would render both trains inoperable. There is another Level 1 DR that deals with the RC flow, RPS trip set point being in a non-conservative direction and certainly would violate or potentially violate a fuel integrity limit.

There is an issue dealing with enclosure building integrity, both from a pressurization and overall leakage point of view.

The fourth one deals with steam generator narrow range level trips point dealing with potential cause of drawing inconsistency resulting in an over-leak, under-conservative trip set point.

Then there is the fifth Level 1 DR deals with the containment sump valves, potential vulnerability to pressure binding and pressure locking, therefore rendering them

inoperable.

Our one Level 2 DR deals with accumulator tank, an air supply that provides backup air to safety injection discharge valves, and the mounting of that accumulator tank is in question.

MR. CURRY: I again would say that, again, those are potential DRs at this point.

CHAIRMAN JACKSON: Anything else?

Thank you very much.

We'll now hear from Little Harbor Consultants.

Let me see if my Commissioners would like a break. No? Keep going?

[Pause.]

CHAIRMAN JACKSON: Good morning.

MR. BECK: Good afternoon.

CHAIRMAN JACKSON: It is afternoon. It was morning when we started.

MR. BECK: I'm John Beck, president of Little Harbor and team leader of the independent third-party oversight program at Millstone, and I have with me this morning -- this afternoon John Griffin, who is a deputy team leader, and Billie Garde, a member of our oversight team.

Our presentation today will be very similar to that we gave in December. Since then, we have presented an interim report to Northeast Utilities and the NRC staff in a public meeting on January 27 at Millstone. Today's

evaluation of NU's success criteria was conducted earlier this week and is thus very current and represents the consensus opinion of the LHC team.

Before we report on the NU success criteria, I would like to briefly discuss the evaluation system we use to measure each of our safety-conscious work environment attributes. While our evaluation system which we discussed in December remains the same, we have modified this particular slide to more clearly define our criteria. Specifically, we have indicated that a green evaluation means world-class performance. Previously this was labelled "meets expectations" and left unsaid that the expectations referred to were meant to represent ideal performance or world-class performance.

CHAIRMAN JACKSON: This is not a re-normalization

MR. BECK: It is not a re-normalization.

We have also added a line to show, as we discussed in December, what level of performance we consider to be acceptable for restart. These changes, as well as the addition of positive and negative factors which I will get to in a moment, were made based on feedback we received from members of the public following the December meeting.

Our oversight plan defines twelve attributes of the safety-conscious work environment, and we have mapped these twelve attributes into the four success criteria

utilized by Northeast Utilities to measure the safety-conscious work environment. We evaluate each of our twelve attributes, discuss the facts gathered and observed in our work, and then strive to reach a team consensus on the evaluation for each of those attributes.

CHAIRMAN JACKSON: And do each of those attributes all have to be above the line individually in order for you to make an acceptable determination?

MR. BECK: For all practical purposes, I would say

yes, although there could be an exception. I don't believe there is at this time, and certainly we would point it out and justify why, if it didn't quite meet the line, that would be the case. But I don't believe it is as we stand here today.

CHAIRMAN JACKSON: So I want you to, again, to state for the record, when you said earlier it meets expectations, you were saying implicit in that was meets world-class expectations, so it's not a re-normalization?

MR. BECK: For the green rating, that's correct, it is not a re-normalization.

Within roll-up, our twelve attributes into the four NU --

CHAIRMAN JACKSON: Excuse me.

COMMISSIONER DICUS: On this slide in question, what would yellow declining mean? Put the slide back up a

minute. You've got these different categories and you show whether it's improving or declining, but what if you had a yellow declining? Is that the same thing as yellow negative?

MR. BECK: No. If it were a middle yellow or a neutral yellow declining, that would not meet our acceptance criteria for restart of the unit.

COMMISSIONER DICUS: Okay.

MR. BECK: It has to be at least neutral yellow holding steady. If it were declining, that would not meet our criteria.

CHAIRMAN JACKSON: So minus means it's declining and plus means it's improving?

MR. BECK: No. The arrow indicates improving, steady, or declining.

CHAIRMAN JACKSON: Did you get the answer to your question? Okay.

COMMISSIONER DICUS: Close enough.

CHAIRMAN JACKSON: Okay.

MR. BECK: We're trying to keep a very close finger on the pulse.

We then roll the --

CHAIRMAN JACKSON: Let me back you up --

MR. BECK: Sure.

CHAIRMAN JACKSON: -- since you're showing

performance indicators.

MR. BECK: Yes.

CHAIRMAN JACKSON: What does plus mean relative to the arrows at the bottom of the page? What do plus and minus mean?

MR. BECK: Plus -- the absence of a plus or minus or the middle yellow and the minus yellow are three gradations in that yellow range, plus, neutral or minus. The arrows indicate a trend --

CHAIRMAN JACKSON: I see. Okay.

MR. BECK: -- at that gradation level.

COMMISSIONER McGAFFIGAN: Where is yellow minus improving? Yellow minus with an up arrow, is that above or below the line?

MR. BECK: Below.

COMMISSIONER McGAFFIGAN: It's below. Okay.

MR. BECK: You could look at it, although we try to stay away from it, as A, B, C, D and F.

As stated earlier, the information we're about to present was developed by Little Harbor in meetings held earlier this week and represents our consensus.

The first of the success criteria is to demonstrate a willingness to raise concerns. We have evaluated this criterion as neutral, yellow and improving, or an up arrow. We consider this criterion to be acceptable

for restart and it represents an improvement from our last evaluation.

This slide shows the five Little Harbor attributes which will appear as Slide 29 in your handout package, which roll up into the first of these NU success criteria. And you can see by examining those five attributes, each of them would meet the acceptance criteria at this point, if you looked at them on an individual basis.

This next slide lists the factors that we considered in our evaluation. For example, the event that occurred in January in Unit 3, mechanical maintenance, the second bullet in the left hand column, made both the positive and the negative lists. It was negative because of the perceptions about the event.

CHAIRMAN JACKSON: Why don't you give us a quick summary?

MR. BECK: Sure. In this particular case, a change in a manager's assignment was being made, and it was reacted to very vigorously by the people who were responsible to this individual, and by others in the maintenance department, as they felt that it was an inappropriate thing to be done. They had a lot of trust in this individual and they, frankly, did not want to see him reassigned to other duties.

The action was taken on New Year's Eve day and it

was quite a strong reaction on the part of the individuals affected by it, and the potential existed for a chilling effect. But -- and those certainly were negative aspects of it.

On the positive side of the equation was the fact that the employees involved and affected by it were willing to stand up and question the decision by management which they believed was wrong for the company. Management's reaction to that challenge was relatively swift, and by the end of the first week in January, the decision to reassign this individual was reversed. A new understanding was reached about the standards expected by people in the maintenance department by all, management and the employees, and it had, frankly, a very rapid and happy ending.

Moving on to the second criterion, and this is to demonstrate that issues are being effectively resolved by line management.

CHAIRMAN JACKSON: Excuse me, what is the ERB review process?

MR. BECK: Executive Review Board is a board the company has set up to review any potentially adverse personnel action being taken at the Millstone site, whether it be an employee or a contractor. It is at a high level and it considers all aspects of potential adverse employee or contractor personnel actions and is intended as a final,

high level review, and they have been catching a number of circumstances that might have not been properly handled.

It has also been, not only is a catch for these things, but it has had, I think, an effective -- effectiveness in precluding things that might have happened in another day. It is serving its purpose.

The second criterion is to demonstrate that issues are being effectively resolved by line management, and this corresponds to the Corrective Action Program at Millstone. We have evaluated this criterion as neutral, yellow and improving. This evaluation shows an improvement since our December meeting, and we find the criterion to be acceptable for restart, as we did in December, and it corresponds to our Attribute No. 10.

We will begin next week a detailed review of the effectiveness of the Corrective Action Program. Our review so far has been more of a programmatic nature. Do they have all the essential elements that you would expect to see in a Corrective Action Program?

Criterion 3 is to demonstrate that the Employee Concerns Program is effective. Our evaluation of this criterion has also improved from December. You may recall in December we evaluated this criterion to be unacceptable for restart, based on seemingly high levels of dissatisfaction by users of the Employee Concerns Program.

Since that time we have interviewed over 30 employees who have recently used the program and determined that 83 percent of those interviewed would use the ECP again should the need arise. These results compare favorably with evaluations conducted independently by Northeast.

Our current evaluation is neutral, yellow and improving, which we find to be acceptable for restart. We will be conducting additional reviews of recent Employee Concerns Program activity over the next few weeks to determine the effectiveness of Corrective Actions which are intended to address and resolve the negative factors on this slide.

CHAIRMAN JACKSON: Do you -- if you interview employees who have used the Employee Concerns Program, and you have asked them if they would use it again, do you ask them if -- is that the question they are asked, or are they asked if they felt the issue they raised was satisfactorily resolved?

MR. BECK: The specific question that we developed for this contained about 10 or 11 questions, if I recall. We asked them to characterize the concern and then walked them through the entire process from the day they walked in to the Employee Concerns. How were you treated? Did the intake person understand your concern? All the way down to, Where you satisfied with the resolution? How were you

treated during the process? Et cetera. So we got a pretty comprehensive review.

COMMISSIONER DICUS: You said this was done by survey?

MR. BECK: No, this was done by individual contact.

COMMISSIONER DICUS: Individual.

MR. BECK: We contacted in excess of 30 people that had recently used the program.

COMMISSIONER DICUS: Okay.

MR. BECK: And talked to them directly.

COMMISSIONER DICUS: So it is 83 percent of?

MR. BECK: I don't -- we were struggling this morning to remember the exact number. It was over 30, I just don't recall the exact number.

COMMISSIONER DICUS: Out of how many potential people did you have to interview?

MS. GARDE: When we first did the survey -- I do

not mean survey instrument. When we first called people, that covered over a hundred files, which were the older files that we had looked at, files that were open when we first arrived, and then began to be developed. This group would come out of about 60.

COMMISSIONER DICUS: Okay. But -- all right. Because you are showing a change in the trend, and I am

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trying to figure out where that came from.

MS. GARDE: It is from a different group of people, so that the last group that we called were from people who had open concerns within, I think since --

MR. BECK: Six months.

MS. GARDE: Yeah, within the last six months.

COMMISSIONER DICUS: Okay.

MS. GARDE: May.

CHAIRMAN JACKSON: Did you go back at all to the earlier group?

MS. GARDE: In the second batch. If their case was closed during the new time period, yes, they would have been within that second group.

MR. BECK: The final NU success criterion is the ability of management to recognize and effectively deal with alleged instances of harassment, intimidation, retaliation or discrimination, including potential chilling effect on the Millstone work force.

In December we evaluated this criterion as a significant weakness, red, and unacceptable for restart. Our current evaluation still classifies this criterion as a significant weakness and unacceptable for restart.

Since December, we have seen some improvement in this area and have indicated this improvement by an up arrow. We believe that this issue continues to be the most

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significant challenge for Northeast relating to the safety conscious work environment.

The next slide shows --

CHAIRMAN JACKSON: Before you go to the next slide.

MR. BECK: Yes.

CHAIRMAN JACKSON: What do you mean when you say inconsistent handling of HIR&D; allegations and 50.7 analysis?

MS. GARDE: I completed a review of all of the files that raised a potential 10 CFR 50.7 issue up through the first week of December, and what I found within those files was somewhat varied approaches by the different investigators that were handling the cases in terms of what they -- how they individually approached a particular allegation of retaliation. And that was one of our findings in our last presentation, and I believe the ECP is working on trying to bring some consistency so that any file and any investigator will work to the same criteria in reaching determinations in that area.

CHAIRMAN JACKSON: Does guidance exist for them?

MS. GARDE: There's not written guidance now, but I hope that there soon will be.

CHAIRMAN JACKSON: So there's no written guidance for the investigators?

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MS. GARDE: No. There are very detailed procedures, but within those procedure, there is not a written guidance that sets out how retaliation is to be

investigated.

CHAIRMAN JACKSON: And what about training for the investigators?

MS. GARDE: They are going to get training in that area. They have already received quite a bit of training in other areas. This training has to be further developed.

CHAIRMAN JACKSON: Okay.

MR. BECK: The next slide shows the five Little Harbor attributes which roll up into the Northeast Utilities criterion.

As I just mentioned, we have seen some improvement in the criterion. If we could have the next slide? And this one represents some of the positive factors and events. The executive review board, which we discussed a few minutes ago, has been especially effective in preventing events from occurring, and in recent weeks, Northeast has made significant progress toward resolving several longstanding issues of concern with the Quality Control Department.

On the next slide, however, you will see that there continue to be negative high profile events and untimely resolution of some incidents. We have been following closely management's handling of the recent event

and oversight, noting both positives and negatives. Our next report will contain conclusions about this ongoing matter. Bottom-line composite of these factors result in our judgment that considerable effort is still required in this area.

CHAIRMAN JACKSON: Tell me about this management oversight relationship. This is -- what are the problem areas?

MR. BECK: This springs from a relationship between maintenance and the quality control inspectors that dates back a couple of -- three months at this point, and it's an issue that frankly festered for some time until it received more management attention. I think it is definitely on a trend of improvement at this juncture, but it does represent a significant area for improvement.

Billie, you might want to add to that.

MS. GARDE: I think that there was a lack of understanding between the maintenance organization and the quality control-quality assurance department that led to some interdepartmental behaviors that we wouldn't expect to see at a site in a restart mode. I think, frankly, the maintenance event that John referred to earlier probably brought some of those things to the forefront and is one of the areas that they have been addressing more recently and more aggressively.

CHAIRMAN JACKSON: Do you systematically go back and check or monitor the progress? For instance, when you were talking about the HIR&D; and you indicated that there wasn't the kind of guidance that there needed to be, you go back to see if, in fact, that has happened or that it's scheduled to happened? I mean, how --

MR. BECK: Yes.

CHAIRMAN JACKSON: You do a systematic backtrack?

MR. BECK: Yes. We have a -- we have developed a matrix of all recommendations that we've provided to date and we status each of those recommendations periodically.

CHAIRMAN JACKSON: Okay. Very good.

MR. BECK: John would like to respond to a question you raised earlier with Northeast, Chairman Jackson.

MR. GRIFFIN: As I understand, the question was whether Little Harbor periodically samples the data that leads into their performance indicators. The short answer is yes, we do. We either independently verify the data itself or we conduct independent data collection to verify or validate that information. With probably two exceptions on the corrective action program, as John indicated, we had -- well, we had looked at that program in the fall, we have not looked at it over the last several months, so we haven't looked at the most recent data. We will begin a

reevaluation on Monday and we will sample that data at that time.

The other variance from our agreement with their performance indicators would be in the area pertaining to the fourth performance criteria of the HIR&D;, and as I think Mr. Amerine had indicated, there are ongoing discussions over the classification of concerns that fall into the HIR&D; area and into those that fall to the potential 50.7 violations. We're still discussing those.

CHAIRMAN JACKSON: Why don't you go on.

MR. BECK: That's it. That concludes our presentation this morning. We did not intend to go through each of the LHC attributes. If there are no further questions --

CHAIRMAN JACKSON: Actually, I do have a few. Let me look at the safety-conscious work environment attribute status. Now, the licensee actually performs six-month surveys. Do your independent surveys indicate similar things, and how extensive are your surveys?

MR. BECK: If you recall, we did an extensive structured interview session last June and July.

CHAIRMAN JACKSON: Right.

MR. BECK: We are going to finish tomorrow interviewing 298, I believe, individuals at the site who have been selected to be representative of the site

population and asking them the same questions that were asked last summer, so we'll have another data point available. Those results will be compiled next week and our presentation prepared, and it will be given March 3rd at the Millstone site in a public meeting to NU management and the NRC staff. The results will speak for themselves. I haven't done the evaluation yet, so I have no predictions to make.

CHAIRMAN JACKSON: Let me look at attribute 3 --

MR. BECK: Sure.

CHAIRMAN JACKSON: -- having to do with senior management providing training to all managers and supervisors, et cetera.

Has Little Harbor commented on the adequacy of this training?

MS. GARDE: Yes, Chairman. First, we commented on the inadequacy of the training that they had in place when we first arrived and they made a number of changes within their ongoing training programs, additional pieces that they put into their programs.

They also added -- actually specifically developed and presented in the late fall -- training to all their supervisors and managers on 10CFR 50.7, what that means, how to comply with it, how it's implemented. That training covered three different training programs, so there were

actually three different sessions that people attended. They have also had a number of sessions off site with all their mid-level managers that included training in that area. So we have watched it, we have observed it, and it has been continual since I would say early fall.

CHAIRMAN JACKSON: Now, if I look at attribute 4, and that's the slide you have where you talk about negative factors, you seem to be primarily event driven. Do you have other ways that you arrive at the conclusions that you reach?

MR. BECK: Yes. Structured interview specifically probes that area, and there will be results available March 3rd on that subject that will add to our specific event-driven observations.

CHAIRMAN JACKSON: And that -- but in arriving at this yellow steady, at the moment, that is event based?

MR. BECK: That's correct. That's right.

CHAIRMAN JACKSON: Okay. So it could go up if the survey is different?

MR. BECK: That will certainly have an impact in this area.

CHAIRMAN JACKSON: Okay. You mentioned and we had talked earlier about the maintenance and oversight relationship.

MR. BECK: Yes.

CHAIRMAN JACKSON: Does any other group have interface problems with oversight? Have you looked at that

MR. BECK: We certainly looked at it, and right now, I can't -- I don't recall any -- remember any issues that would rise to the level of the oversight QC maintenance issue, no.

CHAIRMAN JACKSON: Have you looked at it in a systematic way?

MS. GARDE: We haven't looked at it in a systematic way other than when we're looking at the problem areas, the identified problem areas, which looks at why you have a problem area. Other than that, it should come out in the context of the structured interviews because there's questions specifically designed to look at that.

CHAIRMAN JACKSON: Looking at Attribute 5, you talk about the lack of trust. I mean, in your view, how can this best be regained, and is there an aspect, in fact, to the "isolate the cynics" memo that is undergoing review, that, in fact, pointed to trying to regain a team atmosphere?

MR. BECK: There will be input from the structured interviews on this whole question of lack of trust. And, certainly, there are aspects of the oversight event that will impact it.

CHAIRMAN JACKSON: But I am saying, are there

aspects -- are you going to be looking at what may be positive as well as negative aspects of that event?

MR. BECK: Yes, we are. Yes, we are.

CHAIRMAN JACKSON: Okay. Let me look at Attribute 6. In your view, is this an area then where the licensee has made a significant amount of progress?

MR. BECK: Yes. Absolutely. Without question.

CHAIRMAN JACKSON: Okay. Attribute 7, this positive recognition, the catch of the day. Is this a formal recognition process?

MR. BECK: Yes, it is.

CHAIRMAN JACKSON: Okay. All right. Attribute 8,

looking at incidents leading to allegations of HIR&D; rarely occur and management is timely ineffective in taking action.

What do you look at most strongly? Is it -- are you looking at number of allegations or the effectiveness of the Corrective Action primarily? I mean where do you put the weight?

MR. BECK: The simple answer is both. It is quality of the issue, or the seriousness of the issue that may or may not have occurred. The frequency, is it declining as the work force and management become more sensitive to these very important relationships. And as far as management's timely addressing of the issues, that is certainly a matter of importance to us.

Billie, do you want to?

MS. GARDE: I think -- I agree with what John said, and I also would like to say something we said the first time that we came here, and that is that it is unrealistic to expect that there will never be an incident. This is a human work force, it's a dynamic work force. You could have a supervisor start today that didn't attend any of the training, and one of the things we want to make sure is that that training is captured for new supervisors.

So, although we certainly would not expect to see increasing incidents, there should be levels to catch it, both below and above, and we are seeing that catch system develop. They may happen. Incidents like this can occur. And that is where you have to weigh and balance. And, actually, an incident could occur that could have a timely, effective, immediate response and would only show up on our plus side because of that reason. So it really is a balance between numbers and why it occurred and how it is handled.

CHAIRMAN JACKSON: And my last question for you is on Attribute 8, where you talk about a negative factor being manpower. What does this mean?

MS. GARDE: There was an incident involving some contract employees who -- employment was terminated. The issues that they raised a concern about were not 10 CFR 50.7 issues, that is, they didn't deal with nuclear safety, but

they did deal with personnel safety issues. They were let go. The issue went to -- came to the attention of the Executive Review Board, which originally approved the terminations, mainly because they believed they were going to go right back to work in another position. They were not for-cause terminations.

CHAIRMAN JACKSON: Okay. So what you really mean is Human Resources or personnel policy?

MS. GARDE: It was a personnel -- no, not Human Resources. Personnel safety.

CHAIRMAN JACKSON: Personnel safety.

MS. GARDE: That is the issues that they raised. In any event, they were immediately put back on the payroll, but it took over six weeks to really come to closure on the issue in a satisfactory way. So, although the people didn't lose salary, the condition festered for too long, and it should have been resolved more promptly. And that grew and it caused it a bigger problem than it needed to be.

CHAIRMAN JACKSON: Okay. Any other comments or questions?

[No response.]

CHAIRMAN JACKSON: Thank you very much.

MR. BECK: Thank you.

CHAIRMAN JACKSON: Last but not least. I think we will take a five-minute break.

[Recess.]

MR. CALLAN: Chairman, we will be on our scheduled start time, but as you have repeatedly admonished the Staff that when it comes to Millstone, we should be immune to schedule or pressure, so in that spirit, we will --

CHAIRMAN JACKSON: That just shows if you tell people things, they will use it against you.

MR. CALLAN: That's right.

[Laughter.]

MR. CALLAN: With me at the table I have the Director of the Office of Special Projects, Bill Travers, and he has with him also his three deputies; Wayne Lanning, who is the Deputy Director for Inspections; Gene Imbro, who is the Deputy Director for ICAVP Oversight; and Phil McKee, who is the Deputy Director for Licensing and Employee Concerns Program Oversight.

And with that, Bill Travers will be our principal presenter. Bill.

MR. TRAVERS: Good afternoon.

Could I have the first slide, please? I am just going to jump in.

The staff is continuing to carry out its oversight responsibilities at Millstone using the guidance listed in Manual Chapter 0350, and, as you know, we used this guidance to develop a Millstone Review Plan that we submitted to the

Commission in 9703 and it was within just a few months of my becoming Director of the special organization.

We have for each Millstone Unit developed a Restart Assessment Plan which documents the issues that the staff has identified required resolution prior to coming before the Commission with any restart recommendation for any of the units.

This slide sort of lays out the structure of those Restart Assessment Plans. Importantly, some of the key orders that have been issued to date in ICAVP and Employee Concerns Program, Safety Conscious Work Environment, are encompassed within this Restart Assessment Plan for the each of the three units. The Restart Assessment Plan also identified the specific NRC inspection reports that are being used to document closure in specific issues, so it is really a good template for assessing the progress that we have been making in our reviews to date.

As I have done in previous meetings, I will emphasize a continuing commitment that I think we are meeting, and that is a commitment to make this process as open as we possibly can. We have coordination with the public in the context of evening meetings that we hold every four to six weeks. We have been holding most of the technical meetings and exchanges that we have in the licensee and the contractors in the area of Millstone, and

we have been keeping organizations like the state chartered Nuclear Energy Advisory Council apprised of the status of our activities.

In fact, as it regards to NEAC, we have a Memorandum of Understanding with them, they are actually participants as observers in many of our ICAVP activities, and we have recently expanded that MOU to include our 40500 Corrective Active Inspection and the Operational Safety Team Inspection as well, if they choose to participate as

observers.

Before turning to a more detailed discussion of status, I would like to make just a few comments about our overall assessment of the licensee's recovery program and their progress. As I indicated in December, the staff's overall assessment is that NU is continuing to make progress in its broad scope effort to fix problems at Millstone. The NRC staff has been observing and documenting in NRC inspection reports, licensee progress in essentially all of the elements of our Restart Assessment Plans for Units 3 and 2.

Although we have closed and documented specific items identified in those Restart Assessment Plans, we have not yet completed our evaluation of any of the key programmatic issues that are the foundation of some of the key problems at Millstone. And before we can complete our

action in areas such as Corrective Action Program, licensing design basis conformance, Employee Concerns, quality assurance oversight, the licensee must determine for itself that their Corrective Actions are complete and effective. As such, our program is one that is necessarily back-ended and several important inspections, some of which have been postponed by the licensee, must be completed before we can finish our review in these programmatic areas.

Currently, at Unit 3, of a total of eight team inspections, five are complete, one is in process, and two are planned. In a few minutes, I will present a detailed listing and schedule of the remaining NRC staff inspections related to Unit 3.

Fundamentally, of course, our program is focused on a thorough evaluation of the issues, and on no particular schedule. We recognize that it is the issues and their resolution that drive our examination and closure.

Can I have the next slide, please?

An important element of our Restart Assessment Plan is the evaluation of improvements to the Employee Concerns Program and Safety Conscious Work Environment, and the Commission has heard a number of pieces of information relative to the status of Little Harbor's review and the licensee's own appraisal of its status.

The staff's plan for assessing these improvements

in these areas was provided as an attachment to our December Commission paper, and that plan presents the staff's methodology for determining if the licensee has made sufficient improvements in their Employee Concerns Program and Safety Conscious Work Environment to support a restart at Millstone.

The plan purposely makes a distinction between Employee Concerns Program and Safety Conscious Work Environment. The Employee Concerns Program refers specifically to the licensee's organization and programs that address concerns raised by employees outside the normal line organization. Safety Conscious Work Environment is a broader term and that refers to a work environment in which employees are encouraged to raise concerns and where concerns are promptly reviewed and resolved, with timely feedback to the originator.

The October 24th, 1996 Order issued by the Director of NRR required Northeast to develop and submit to the staff a comprehensive plan for reviewing and dispositioning safety issues raised by its employees. That

Order also required Northeast to propose for NRC approval an independent third-party oversight program organization to oversee implementation of Northeast's plan to assess licensee performance.

The Order further required that the third-party

organization, once selected, develop and submit for NRC review and approval, an oversight plan. Currently, all of these elements of that Order have been completed.

Consistent with the Order, Little Harbor, as you know, is charged with important oversight responsibilities, and the staff, as part of its overall conclusions regarding the adequacy of ECP and SCWE, expects to utilize input for LHC as a significant element in our decision making.

CHAIRMAN JACKSON: Do you have your own criteria against which you assess LHC's evaluations, as well as any either incidental or direct inspections that you do, or reviews that you do?

MR. TRAVERS: Yes, we do. I was just about to emphasize that, in addition to our reliance, as I just mentioned, on Little Harbor and its expertise and findings, we are carrying out rather extensive activities on our own, independent of Little Harbor, but certainly related to what they are doing.

Those activities, Chairman, as you point out, include an assessment of Little Harbor's effectiveness, because, obviously, in order to rely on what it is they are doing, we need to come to an independent conclusion on their effectiveness.

But what I have listed on the bottom section of this Slide No. 3 is just a summary listing of the activities

that the NRC staff is carrying out in connection with these issues at Millstone. And they include, very briefly, continued staff on-site monitoring of both the utility and the Little Harbor activities at Millstone.

They include recently completed team evaluations of Employee Concerns Program and Safety Conscious Work Environment. That team evaluation also was directed directly at an assessment of Little Harbor and its effectiveness. We are continuing right now to carry out another inspection, the 40-500 that is focused on a broader concept of corrective action programs. We have included an additional team member to look at SCWE and ECP as it directly focused in the area of corrective action. So we've added a specific team member to augment that inspection team to -- sort of in recognition of the importance of having an adequate corrective actions program and the effect that could have on the safety environment and the employee concerns program.

CHAIRMAN JACKSON: Let me just ask again, though, are your criteria in that area LHC's criteria, or do you have additional -- any additional criteria that you --

MR. TRAVERS: I'm going to ask Phil to address it, but --

CHAIRMAN JACKSON: Okay.

MR. TRAVERS: We have laid out in our plan that we

submitted to the Commission basically our own performance measures and criteria.

Do you want to --

MR. McGEE: I'll just add that in our plan we identify for the most part their process and programmatic issues that we're looking at, and we've done that as part of

our team evaluation and the activities that Bill described.

But also when you use that to compare that with Little Harbor, but we've identified some additional measures and issues that we want resolved in a status that we want to see for acceptance for restart, and they do mesh with Little Harbor's criteria in a way, and also the licensee's criteria.

And that includes items such as looking at their corrective action program, and as we mentioned the additional members seeing that issues raised by individuals in that program are resolved, are resolved promptly, and so forth. And also elements in the employee concern program also, timeliness of case resolution. And when we do that, we're looking at what the licensee has found, and also Little Harbor's assessment in that area.

MR. TRAVERS: Just to talk a little bit further about some of the measures we are using, in the next slide the plan that we're using specifies some of the broad acceptance measures for determining whether or not adequate

program improvements to support restart in fact have been made. We've indicated an expectation really that the licensee needs to reach a judgment in this area and that we're as we mention relying to an extent on Little Harbor's activities as well.

But some of the areas in looking at the adequacy of the employee concerns program are listed in terms of staffing, training qualifications, how they implement their program, documentation, and so on and so forth. We have much more specific things that we look at we have on a backup slide, but these are sort of a broad treatment of some of the measures that we include in our program for assessing these issues.

CHAIRMAN JACKSON: How many of these areas have you measured to this point, and are there any preliminary assessments or conclusions that you --

MR. TRAVERS: Yes, in fact there are. We've as I mentioned completed team evaluations which covered both the licensee's programs in both ECP and SEWE as well as Little Harbor's effectiveness in carrying out their oversight responsibilities.

The way we've documented the results of these team evaluations to date is via a quick-look letter. A quick-look letter is a letter that's public, it documents the preliminary team evaluation findings. It's transmitted

to the licensee. We've provided it to your offices as well, relatively recently, I must admit, but nevertheless it's up there. So this is the mechanism that we use just prior to documenting in a formal inspection report.

CHAIRMAN JACKSON: The Commissioner said 9:29 this morning.

MR. TRAVERS: That's pretty recent. Yes.

CHAIRMAN JACKSON: Well, given that quick look, why don't you give us a quick summary of what's in the quick look.

MR. McGEE: Okay. On the quick look we -- actually there were two reports, and we're going to come out with final reports in two areas. One would be to the licensee, Northeast, describing our evaluation in those areas, and one to Little Harbor Consultants. In summary are looking at the licensee's programs. We looked extensively at the employee concern program aspect because those

programs were more developed and established.

I think for the most part in summary we found similar to what you heard from Little Harbor Consultants' summary that the activities and the efforts, how they're dealing with intake of issues, resolution of issues, and timeliness, that that process and programs and employee concern program is working well and effectively.

And the safety conscious work environment, that's

a more difficult area, and we're going to get that additional piece when we are doing our follow-on on the corrective action program which I personally think that's a very important piece. But we did look at a number of elements in that area as far as the licensee's dealing with I think they term it their problem areas, organizational areas where there's issues. And we had some findings and issues there that will require -- I think Little Harbor mentioned a few of them -- followup and need some additional attention.

And also looking at their training I think as you heard before that the training in some of the training sessions that our staff attended as part of the evaluation we thought was good and effective, but we did find another area as far as long-term planning, what are they going to do in the long term, some deficiencies in that program. And I believe I heard Northeast Utilities say that there are plans to give a more detailed plan in that area, in the safety conscious work environment.

But we're still out a little bit on the corrective actions and how those issues evolve, because we've got some ongoing activities in that area.

CHAIRMAN JACKSON: Commissioner McGaffigan.

COMMISSIONER McGAFFIGAN: On the slide that you had up a moment ago, the postrestart elimination of

third-party oversight, which restart are you talking about? Would they stay on board through 2, and if they reoperate 1-1 or how do you see that playing out?

MR. TRAVERS: Well, I put this on to be inclusive of everything that's in the order, as it's currently written, and the order as written anticipated the need for sustained performance and demonstration given these issues are not ones that turn around overnight and are quickly resolved.

Certainly the order as it's interpreted by us in any case we've put in our plan an expectation that's for at least six months after restart of at least the first unit we would expect the third-party oversight organization to be in place. That was a guess on our part. We had to pick a time frame that might seem reasonable for that kind of sustained performance to be evidenced, but the order simply specifies that sufficient -- how is it put? -- the sufficient performance sustained needs to be at evidence for the staff to come to a conclusion that the third-party oversight is no longer required. So in a sense that's the only element of the order, strictly speaking, that remains in the most formal sense.

As I indicated within the RAP, within our restart assessment plan, the conclusions that the staff has to reach in ECP and SEWE are still at issue, and we need to come

before the Commission.

The last bullet, or the second-to-last bullet on this slide is meant to capture that we intend to do that by

writing a safety evaluation report that covers both of these issues and provide that to the Commission prior to restart. And right now Unit 3 of course is the one that looks to be the nearest term.

CHAIRMAN JACKSON: Have you found -- Mr. McGee, maybe you can answer this -- similar issues with the oversight and maintenance and oversight of other operating organizations that Little Harbor spoke to?

MR. McGEE: We are aware -- and it's rather unique for us to get -- and a lot of these involve personnel actions and personnel issues and disciplinary issues, and they are quite apparent when they come up at the site and I'll do the sensitivity and we have -- are monitoring with our staff following along with -- I know Little Harbor gets the same information following those activities. And there are a number of those events and issues, and we are the most part in an observation role and looking at the licensee's process for dealing with those issues. But our findings in the events are consistent I think with what Little Harbor described in presenting their attributes.

MR. TRAVERS: Can I have the next slide, please? It would be slide No. 5.

CHAIRMAN JACKSON: So these quick-look reports are publicly available?

MR. TRAVERS: Yes, they are.

CHAIRMAN JACKSON: Okay. Yes.

MR. TRAVERS: Maybe I'll just list the fact that in addition to the ones we've sent up the program expectation is that for each inspection, at least the team inspections that we complete from now till the end of the project we would expect to issue such quick-look reports so that we can give more timely -- maybe even more timely than 9:00 o'clock at the Commission meeting -- information to people who are interested in our team evaluations.

The next slide is meant to give you a quick compilation of the things that we've completed since our last Commission meeting in December. One item that's not on the slide but the Chairman made reference to earlier is the fact that we've issued a letter recently that is a demand for information letter on the isolating the cynics issue that requires Northeast to provide us with information on their evaluation of the issue and handling of the issue and whether they think any of what happened involves a violation of 50.7 requirements.

Other than that, we have continued to meet with both the Licensee and Little Harbor periodically in public meetings near Millstone. As I mentioned, we have completed

our team evaluations and issued quick-look letters. We have ongoing and continuing site monitoring of their activities, both the licensee's and Little Harbor by NRC staff and contractors whom we have working with us, and the 4500 inspection is ongoing.

Right now, similar to what you heard from both the licensee and from Little Harbor, the Staff's assessment of employee concerns program status is that by virtue of things like staffing and training, numbers of people working in that department, the timeliness of resolution of issues, the quality of resolution of issues, the feedback to the originators, we find that that program is running at an acceptable level. We are going to, of course, continue to monitor that situation and document it in our report to the

Commission, but at the current time we wanted to provide you the benefit of our thinking, that this is an acceptable level of performance on the part of Northeast.

In the broader question of safety-conscious work environment, our activities are continuing to assess that and, again, similar to what you heard from both Northeast and from Little Harbor, we think there is some additional work that needs to be done, basically in the areas that you have already heard about.

Through April, we have projected at least that we would certainly continue to meet on a periodic basis to

discuss status and monitor the situation at Millstone. We expect to issue the formal team evaluation report, this follow-on, the quick-look, and that we would in all likelihood, depending upon whether or not the issues are resolved and completed, develop the safety evaluation that would document our conclusions with regard to both ECP and SCWE.

Of course, I put through April, but this will be when it will be, and it's just sort of a projection, a planning tool right now for estimating when we might be done.

Next slide, please.

The restart assessment plan for each of the Millstone units includes our NRC significant items list which identifies the individual and programmatic issues that are at issue, and we are now presenting these in a fashion similar to what you have already seen to make it clear, at least fairly clear, where we stand relative to the total issues and packages that need to be submitted.

NU is providing submittal packages for most of the significant items list issues, and together with our inspection reports -- rather, our inspection activities, our review of these packages are being used to close out these individual issues as we go forward. And as you can see, of the total 216 packages, we have closed out 168 and are

documenting our closure in inspection reports issued periodically by the Staff.

We have heard today that there are six packages as opposed to nine that are now remaining to be submitted. That's an update. And we have under review essentially all of the ones that haven't been completed.

CHAIRMAN JACKSON: Are there any items that are of more concern than others, particularly in the categories of remaining to be submitted or --

MR. TRAVERS: I'm going to ask Mr. Lanning to address a couple of them.

MR. LANNING: Well, there are some very critical issues remaining to be addressed by the licensee. A couple of more important ones are the submittal packages for Appendix R of vendor interface, inclusion of vendor information into procedures, are two examples of key issues yet to be addressed by Northeast.

CHAIRMAN JACKSON: Okay.

MR. TRAVERS: Next slide, please.

The ICAVP, which was required by an NRC confirmatory order, is intended, of course, to confirm that the NU collective actions have been effective in establishing that the units conform with their licensing and design basis. The ICAVP is, in our view, an extraordinary effort. In addition to the independent contractor

activities, the NRC staff is also carrying out a series of team inspections, and four of five of those inspections have now been completed at Unit 3. We have issued the formal inspection reports for two of those. Again, quick-look letters are being issued for the remaining. We have actually issued two quick-look letter reports for two of the inspections, and our fifth inspection, the corrective action inspection that is going to look at the corrective actions resulting from findings in ICAVP space, is scheduled.

Together with the Sargent & Lundy reviews, the ICAVP effort involves a detailed evaluation in tier 1 of 15 of the 88 systems reviewed by NU, and additionally, in tier 2, and tier 3, as you have heard before, the ICAVP will examine critical design characteristics of some 20-odd other systems. So it's quite an encompassing review and --

CHAIRMAN JACKSON: How many people are we talking about here?

MR. TRAVERS: Typically on each of the team inspections, the five inspections the NRC is carrying out, we have about seven people, and the inspections --

CHAIRMAN JACKSON: And how long do the inspections last themselves?

MR. TRAVERS: Typically they are four weeks on site?

MR. IMBRO: Four or five weeks -- yeah, four weeks

on site. Two with a week off, and then back for another two.

MR. TRAVERS: Next slide, please.

The results of the completed NRC team inspections are presented on the next few slides. The first inspection that we completed -- and I have actually discussed at previous Commission meetings -- involved our implementation inspection of Sargent & Lundy's performance against the NRC-approved audit plan that Sargent & Lundy is using to carry out its programs. This involved a fairly early-on NRC assessment and we have had others since, and I will talk about those in a moment, but largely this inspection confirmed that Sargent & Lundy is carrying out its program in accordance with that approved audit plan.

The first system safety functional inspection that we carried out, one of two, was completed in September, and we talked to the Commission about the results of that inspection last time. Basically from that inspection, which focused on the ECCS mode of the chemical and volume control system operation at Millstone 3, we identified 16 ICAVP significance level 3 issues. Last time when I came to the Commission, I identified a potential significance level 1, a fairly significant issue. Currently, based on information that the utility has provided to us in a predecisional enforcement conference, as well as information that we are

getting on the docket, this finding appears to be more appropriately classified as a level 3 in the context of our scheme for ICAVP level significance determinations.

Let me go on to the next inspection. The next inspection that we completed in January involved the look at both tier 2 and tier 3. In terms of tier 2, we are looking at accident mitigation systems and again in the context of tier 2, we are looking at plant change processes.

This inspection had another component of evaluating the performance of Sargent & Lundy, and in that context, the inspection concluded again that Sargent & Lundy

is performing their process and program adequately to support using their conclusions in our program for assessing the overall conformance with the licensing and design basis.

We did identify some issues, however, with Sargent & Lundy. They have taken on those issues and they have corrected or at least carried on some more activities in response to the concerns that were raised by that inspection team.

Again, we did identify some level 3 findings in this ICAVP -- in this case, six, and we can categorize or classify those further if you wish.

Last inspection that we have completed is a tier 1 In-scope SSFI. This is a system by In-scope that Sargent & Lundy has also examined, the RSS system.

We have also looked at the emergency diesel generator and the supplemental leakage collection and release system. Again, the component here relating to S&L; performance, since it is an In-scope system that they looked at, we looked at their performance by measuring what we found against what they found, and again our conclusion is that S&L; performed their program adequately.

Again, though, we did identify some issues, and they have taken on some additional reviews in response to those issues, not just for this system, but for other systems that they have reviewed in the context of their ICAVP reviews. So it is both a specific finding and a more broadly applied Corrective Action, if you will, on the part of Sargent & Lundy.

Again, the six preliminary ICAVP level 3 findings are identified in connection with this inspection.

Next slide, please.

Thus far, the most significant findings resulting from our NRC ICAVP inspections, and, in fact, from Sargent & Lundy's activities, as well, are at level 3. Although we are not -- although we are still in the process, really, of finalizing a number of these findings, and we have not yet initiated the ICAVP Corrective Action Inspection, the results today indicate that the licensee CMP, while not perfect, has generally been effective in establishing

conformance with the Unit 3 licensing and design basis.

In order to reach a final determination on this, of course, we are going to need to complete the program. You have heard that only about 30 percent, or 20 percent, depending on how you count the items being identified by Sargent & Lundy, have been run through the process. But I did want to give you an indication, based on where we think we are today, both from a standpoint of our assessment of what is coming out of the Sargent & Lundy review, and our own NRC team inspections, as to where we are at relative to this issue.

We are not at end game, but, by virtue of the lack of significance of the issues, we don't -- we think that, and, importantly, the review that we will ultimately complete on the Corrective Actions that need to take place, we think that today, at least, the findings suggest reasonable conformance with the licensing and design basis.

In that mode, and an important element of our level 3 findings, in addition to assessing the significance of each finding, is our independent evaluation of the licensee's Corrective Actions. For all level 3 findings, the process we are using to determine whether or not to expand the ICAVP scope is focused on our assessment of the

Corrective Action adequacy, both narrowly and more broadly, and on our assessment of any trends in these findings.

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In effect, the licensee's Corrective Actions associated with ICAVP level 3 findings are resulting in an augmentation to the licensee's original CMP program, and to our own reviews of what they are doing. The process we are using would result in an additional ICAVP review if our independent evaluation determines that the licensee's Corrective Actions are inadequate.

To date, we have not identified negative trends in our inspection findings, but we have only begun our assessment of Corrective Actions. So, again, we must substantially complete the program before reaching a final conclusion on the effectiveness of the licensee's efforts.

The last bullet on this slide is meant to indicate that we have recently provided additional information on the process we are using to make judgments about ICAVP scope expansion or not. There is a lot of merit in doing that. We have documented that further in additional information and letters to NEAC, and you and the contractors, and we have had an opportunity to discuss it at our post recent public meeting. It has been an issue, and people in the area of Millstone have been concerned about this process and how we are applying it, so we wanted to put on the record more formally the types of considerations that we are working through in making these judgments.

Next slide, please.

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The ICAVP activities projected to be completed, again, through April, are the Unit 3 ICAVP Corrective Action Inspection, which is scheduled to begin the 23rd of February, on-site, the Unit 2 ICAVP Tier 1 out-of-scope. This is the first SSFI team inspection at Unit 2 and we expect, and this, again, depends upon where we are at, but the projection, at least right now, would have us completing our Restart Assessment Panel Evaluation of the Unit 3 findings from both Sargent & Lundy and from our own NRC team inspections and documenting our conclusions relative to the judgment we make regarding conformance or not with the licensing basis and design basis.

Next slide.

CHAIRMAN JACKSON: Let me make sure I understanding something. You talked about one inspection that was starting on the 23rd that was a four week on-site inspection. Is that the same as --

MR. IMBRO: That's the Corrective Action Inspection, you are referring to, Chairman Jackson. That is really -- that, right now, is scheduled for three weeks initially. We think we may have to, because the licensee isn't -- well, because the DR process is still ongoing, we may have to do part of the inspection and inspect what we can of the work that the licensee has already done, and then come back, you know, a week or so later and do the

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inspection of the Corrective Actions in response to the Sargent & Lundy generated Discrepancy Reports.

CHAIRMAN JACKSON: Okay. But I just want to make sure I am talking about the same inspection here.

MR. TRAVERS: Yes.

CHAIRMAN JACKSON: So the one you talked about, this fifth inspection, --

MR. IMBRO: That's it.

MR. TRAVERS: That's the Corrective Action.
CHAIRMAN JACKSON: And so these are both the same?
MR. IMBRO: That's it.
CHAIRMAN JACKSON: Okay.
MR. TRAVERS: I should point out one problem with this slide. I have been trying to indicate the on-site time in all of the dates I have been using. The second inspection includes, I think, prep. and documentation. There's -- it's too long a period for an on-site inspection, so I will just point that out now. Sorry.
CHAIRMAN JACKSON: Now, I don't mean to be picky, but this fifth inspection, when I asked the question, you said there were seven people and it would be four weeks on site.
MR. TRAVERS: This one, the team inspections to date on the System Safety Functional Inspection, the two systems, have involved seven people for four weeks on site.

This last inspection -- and if I misled you, I apologize -- the Corrective Action Inspection is right now, and it may take longer, but it is right now nominally scheduled for three weeks on site with -- how many people?
MR. IMBRO: About seven people.
MR. TRAVERS: About seven people.
CHAIRMAN JACKSON: Okay. So the first was historical?
MR. IMBRO: Yes.
MR. TRAVERS: Yes. And this is the follow-through. Just to give you an overall sense of all of the inspections, at least the ones we have identified that need to take place before we could be in a position to consider a restart recommendation, we have put them all down on this slide, beginning with the ongoing Corrective Action, or 40500 inspection leading off. This is a seven person inspection and it is two weeks on site.
We have inspections in motor operated valves. The major team inspections listed here are the, again, the ICAVP Corrective Action Inspection, the Operational Safety Team Inspection, which is very much an important determination for the licensee's transition from a shutdown plant to an operating plant. This is an inspection that needs to be tied to their entry into Mode 4 and if that slips, our inspection will slip to appropriately cover the activities

that we need to observe in connection with those operating mode and operator actions.
CHAIRMAN JACKSON: So it could be impacted by this -- what turned up today?
MR. TRAVERS: That's my point, yeah. The Deferred Items List, this is an important one because we have, to date, conducted three inspections of the Deferred Items List.
CHAIRMAN JACKSON: Now, is this another check of the Open Items List?
MR. TRAVERS: That's exactly right, it's just a different terminology for the same thing.
CHAIRMAN JACKSON: Okay.
MR. TRAVERS: We have been periodically received detailed lists from the licensee of all of the items that they consider both necessary for restart, as well as the items that they intend to defer, and we have been inspecting those periodically. And I think, as the Chairman pointed out, we have identified an issue most recently with the adequacy, in part, at least, of the most recent list.

CHAIRMAN JACKSON: And did that -- was that surfaced through this kind of inspection?

MR. TRAVERS: Yes, that very inspection is the one that surfaced that -- that issue. On the whole, though, I have to tell you that we have, in pulling the string on some

of these, even though this turned up a question and it may ultimately be a serious one, the inspections that we have conducted against the deferred items have identified a fairly low threshold for inclusion of many, many things on this list and appropriate deferral of items that don't have particular safety significance and are not issues that affect the licensing or design basis.

CHAIRMAN JACKSON: Now, will you be giving particular attention to issues that the licensee is adding to the list late in the game?

MR. TRAVERS: Yes, we have one more, or depending on how many days go by, weeks, we have as many as it takes, but we are going to perform at least one more of these types of inspections before coming to the Commission.

CHAIRMAN JACKSON: Please.

COMMISSIONER DIAZ: I have a quick question. Now that my brain is starved.

CHAIRMAN JACKSON: The day is young.

COMMISSIONER DIAZ: There will be no level 3 items in the deferred list, correct?

MR. IMBRO: That is probably true because --

MR. TRAVERS: Level 3 items need to be addressed, and that is the agreement.

COMMISSIONER DIAZ: Need to be resolved before --

MR. TRAVERS: Resolved, I shouldn't say addressed.

COMMISSIONER DIAZ: And that is -- that is a clear distinction?

MR. TRAVERS: To meet your licensing.

COMMISSIONER DIAZ: Level 4, that will be considered, and could be or not?

MR. TRAVERS: Yes. Many of those --

MR. IMBRO: Likely would be deferred.

CHAIRMAN JACKSON: Depending upon what you find in terms of looking for adverse trend.

MR. TRAVERS: Yes.

CHAIRMAN JACKSON: But no level 3's. That is an important distinction.

COMMISSIONER DIAZ: That is an important distinction. And I guess you now realize that we have been sensitized to the Deferred Items List, so expect to see it in great detail.

MR. TRAVERS: I think I recognize that. Each -- the last point I will make on it is that each of these inspections cover issues that are encompassed in our Restart Assessment Plan, so that that plan, again, you know, sort of captures all of this and is our method for documenting closure in part.

Licensing restart issues are identified on the next slide. The two additional issues that need to be submitted are issues that affect Mode 2 and not Mode 4. But

to a large extent, our best sense of where we are relative to the ones we have under review is that they are being processed reasonably, on a timely schedule.

CHAIRMAN JACKSON: So are they likely to be critical path? Because normally there is a 30-day Federal

Register notice of license amendments.

MR. TRAVERS: That's right. In fact, if you look at the schedule for the earliest possible treatment of even a nonsignificant issue, it's about 45 days in terms of the processes that we have to utilize, Federal Register notice and so forth. So it could be, but right now the indication we have from the licensee is they expect to get that in very soon.

CHAIRMAN JACKSON: It depends on what they get in and your assessment of what they get in.

MR. TRAVERS: Getting it in triggers the action that we take in handling it.

CHAIRMAN JACKSON: Okay. Very good.

MR. TRAVERS: The last two slides are slides that I have typically presented to the Commission in connection with these briefings, and they are our project planning schedule. They are the schedules we use to schedule our resources, and it's always important to recognize that the activities that are indicated on here are largely dependent upon the licensee completing the actions that they need to

complete for us to come in and carry out an important inspection.

CHAIRMAN JACKSON: So it's a planning tool.

MR. TRAVERS: It's a planning tool.

CHAIRMAN JACKSON: It does not presuppose any particular judgment.

MR. TRAVERS: It certainly does not, and one thing that I have changed in the presentation this time is we've removed any -- because this is a planning tool and we don't plan for the Commission, we've taken out the Commission meeting date from this slide. We don't want to lead to any misunderstandings about the significance of any date we might list in such a planning tool. So we've removed that from the schedules. I think you could infer when the staff though will -- could at the earliest be ready to come before the Commission with a recommendation.

CHAIRMAN JACKSON: Right. But I think in the end as you say it's the Commission's meeting date, and you have to come and present the case, and you have to indicate when you're ready to do that.

MR. TRAVERS: I think the best indication of our not using schedules to drive anything is the fact that these schedules have changed over time, and you can go back historically and look at them, and they've changed because of the need on the licensee's part to complete important

activities to support us coming behind.

CHAIRMAN JACKSON: Very good.

COMMISSIONER McGAFFIGAN: May I ask --

CHAIRMAN JACKSON: Please.

COMMISSIONER McGAFFIGAN: You've effectively amended the Unit 3 slide as it pertains to license amendments in your last remarks, right? At the moment it carries -- finish 3/6, and I interpret your last remarks to mean finish around 4/1.

MR. TRAVERS: Whenever.

COMMISSIONER McGAFFIGAN: If you get the application tomorrow.

MR. TRAVERS: That's right. It would take 45 days min.

Chairman, you asked us to address a question about operability of RSS and if --

CHAIRMAN JACKSON: Yes.

MR. TRAVERS: I'll just do that very quickly now.
CHAIRMAN JACKSON: Please.
MR. TRAVERS: The answer from our view is that we believe that the modifications that have been made to the system were necessary to make that system operable. The licensee itself has issued at least we believe on four occasions LER reports that indicate a question about functionality of that system. We documented in an NRC

inspection report a potential escalated enforcement issue associated with operability of the -- functionality of that system. So the answer simply is that we believe that that system was not operable.
CHAIRMAN JACKSON: Before the modification.
MR. TRAVERS: Before the modification. Of course it's required to be operable in Mode 4 and above.
CHAIRMAN JACKSON: Right.
Commissioner?
COMMISSIONER DIAZ: I was just going to go on that. Operability meaning the capability to perform a safety function according to requirements of the license.
MR. TRAVERS: Right.
CHAIRMAN JACKSON: Is that correct?
MR. CALLAN: Not necessarily.
COMMISSIONER DIAZ: No?
MR. CALLAN: A system can be operable -- I mean, can be functional but not operable.
COMMISSIONER DIAZ: Correct. Correct. Correct. That's what I'm saying. Operability defined as capability to perform a safety function.
MR. CALLAN: Operability as defined by tech specs.
COMMISSIONER DIAZ: Yes.
MR. CALLAN: Right. Which does not always necessarily imply --

CHAIRMAN JACKSON: Right. So you don't want to give a universal. You're saying it's --
MR. CALLAN: No, no.
CHAIRMAN JACKSON: Relative to this particular --
MR. CALLAN: In fact, that's one of the reasons we --
CHAIRMAN JACKSON: In this particular --
MR. CALLAN: That's why we call it a safety system functionality inspection and not a safety system operability inspection, because of that distinction. It's a very important distinction.
COMMISSIONER DIAZ: I just wanted to bring it out. There is a distinction. Sometimes I get --
MR. CALLAN: Right. And that distinction is crucial. It's very important. Right.
CHAIRMAN JACKSON: And you don't want to go on the record as saying one thing and something else is in the tech specs.
MR. CALLAN: Right.
CHAIRMAN JACKSON: Good.
MR. LANNING: Speaking of which, may I clarify my response to you on the --
[Laughter.]
MR. LANNING: Significant items list?
They have submitted packages to us for the vendor

information. That's just a critical issue that still remains to be resolved with additional packages coming. Whereas with the Appendix R submittal we have not received any of those packages necessary for inspection of that item.

CHAIRMAN JACKSON: Okay. Thank you very much.

Any additional questions from the Commissioners?

We've been here a long time. I would like to thank Northeast Utilities, Sargent & Lundy, Parsons Power, Little Harbor Consultants, and of course the NRC staff for briefing the Commission on the progress in assessing readiness for restart of the Millstone units.

And once again I will state on behalf of the Commission that we recognize how difficult it is to condense the substance of the reviews performed by each of you into briefings like this. And that is the primary reason that the NRC in November of 1996 created the Special Projects Office to provide for direct oversight of all licensing and inspection activities and to tailor the NRC staff's guidelines for restart approval to specifically assess deficiencies at the Millstone units.

And as I state at each meeting and I'll state here, the Commission does not presuppose that any of the three plants will restart by any certain date. The Commission is primarily concerned in ensuring that the Millstone station is a safe station with an effective

corrective action program and an environment supportive of the raising of and resolution of safety concerns.

Now with respect to the schedule for the next Commission meeting on Millstone, I think it is important to recognize that when a plant has been shut down for an extended period of time, even under a confirmatory action letter, which is more narrowly tailored typically, for example, the licensee will usually establish dates to facilitate its planning and scheduling of activities in support of plant restart, and it is used as part of what the staff may use in planning its work.

However, licensees quite often take longer than they expect to complete their restart activities, leading to concomitant adjustments or delays in the schedule for the staff's reviews, inspections, and assessments of a plant's readiness for restart.

And in the case of Millstone, given the scope, complexity, and significance of the issues there, it is natural to expect that the resolution of the issues may take a little while longer.

The NRC staff, and I said this when I was in Connecticut, has been directed to stay focused on doing objective assessments and to call it as they see it.

In preparing for any subsequent Commission meetings and in reports to the Commission, I would like to

ask the staff to give particular attention to and to provide information in the following ten areas which has already been transmitted to the staff through a tasking memo from me to Mr. Callan, the EDO. But I will list them.

First, crisp, clear analyses of the issues with recommendations where appropriate for the Commission. And that's because you're talking to the Commission, not to yourselves.

Second, a summary of independent NRC actions, for example, inspections or any other assessments, supporting staff decision making. But this requires a layout of the

criteria that you're using to make those assessments.

Third, impartial evidence that Northeast Utilities has made sufficient progress and fixed the underlying problems in both employee concerns and the corrective action processes or not. Yet impartial evidence that the licensee for instance has addressed problem identification. Root cause evaluation. Resolution for the individual issue. The evaluation of and resolution of any generic issues that are captured by that as appropriate. And the timeliness and comprehensiveness overall of problem resolution.

Fourth, an objective discussion of what the aforementioned items indicate about the effectiveness of the licensee employee concerns program and corrective action and configuration management processes.

Fifth, a discussion of and conclusion of acceptability of the resolution of any and all existing or previous open items including any specific employee concerns issues raised and any of the previously identified open items.

Sixth, the strength of quality assurance and management oversight.

Seventh, resolution of issues related to enforcement, allegations, and petitions.

Eighth, the screening process and acceptance criteria for reaching conclusions including any justifications or basis for allowing any open items at the time of plant restart.

Ninth, an appropriate staff-recommended regulatory tool for enforcing a schedule for resolution of any open items at restart.

And tenth, a discussion of issues impacting operational readiness for restart, along with a discussion of the stability of the organization for continued safe operation upon restart in light of resources being diverted to other units.

And so unless my fellow Commissioners have any additional comments, we're adjourned.

[Whereupon, at 1:37 p.m., the hearing was concluded.]