UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

Title: MEETING WITH NORTHEAST NUCLEAR ON MILLSTONE -- PUBLIC MEETING

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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

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MEETING WITH NORTHEAST NUCLEAR ON MILLSTONE

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PUBLIC MEETING

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

Friday, December 12, 1997

The Commission met in open session, pursuant to notice, at 9:00 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
EDWARD McGAFFIGAN, JR., Member of the Commission
NILS J. DIAZ, Member of the Commission

STAFF AND PRESENTERS SEATED AT COMMISSION TABLE:

JOHN C. HOYLE, Secretary

KAREN D. CYR, General Counsel

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

JACK McELWAIN, Vice President - Unit 1

MARTIN BOWLING, Vice President - Unit 2

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

JOHN HILBISH, Manager of Regulatory Compliance Activities on the ICAVP Project, Parsons Power

JOHN BECK, President, Little Harbor Consultants

JOHN GRIFFIN, Deputy Team Leader, Little Harbor Consultants

BILLIE GARD, Principle, Little Harbor Consultants

HUGH THOMPSON, Deputy, EDO

STAFF AND PRESENTERS SEATED AT COMMISSION TABLE:

[continued]

WAYNE LANNING, Deputy Director for Inspections, SPO, NRR

WILLIAM TRAVERS, Director, Special Projects Office, 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

[9:00 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 reactors.

The Commission will hear presentations today from Northeast Utilities, the contractors associated with both the Independent Corrective Action Verification Program and the Employees Concerns Program, and the NRC staff.

Millstone Unit 1 has been shut down for 25 months and Units 2 and 3 have been shut down for approximately 21 months. All three of the Millstone units were placed on the NRC's watch list in January of 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 fourth quarterly meeting to assess the status of activities at the sites. The Commission is interested in how the licensee is measuring and trackings its progress, and how well the site is function as a whole. For example, are they finding their own problems and enacting comprehensive fixes in a timely manner?

Once again, the Commission looks forward to the

updates from the contractors tasked with providing an independent assessment of the corrective action programs at the station, as well as the third party associated with the independent oversight of employee concerns.

The Commission is very interested in hearing the NRC staff's views regarding the effectiveness of the licensee's program, including an assessment of what areas appear satisfactory, what areas are tracking to acceptable, and what areas are unsatisfactory at this time. The Commission desires this type of feedback, satisfactory, tracking to acceptable, or unsatisfactory, from all of the participants today. So if you could phrase whatever you have to say in that context.

The Commission benefits from a candid discussion of both the results and your conclusions. For example, for the ICAVP contractors, and NRC staff, I expect not only to hear about the number of issues identified and resolved, but what the discrepancies are telling you. For the licensee, if you believe the contractors or NRC staff are unwisely spending resources sampling an area that is clearly acceptable, this is one forum where you should comment to that effect.

Finally, as I stated at the last Commission meeting, the Commission is interested in your comments on this process, in the midst of its implementation, so that

fine tuning can be accomplished, as appropriate. All parties should keep this in mind during today's discussions and questions. All parties should feel not only invited to but compelled to comment on questions asked of any group. So if your turn at the table has passed, please use the podium as necessary.

I understand that copies of the presentations are available at the entrances to the meeting. And so unless my colleagues have any opening comments they wish to make, Mr. Morris, please proceed.

MR. MORRIS: Thank you, Dr. Jackson. Good morning, and good morning to fellow Commissioners.

Before I begin the few slides that I have in the formal presentation, I would to make just a few comments about this week's announced enforcement action. And let me try to make clear to you that we fully accept the responsibility for the situation that led to that conclusion. We understand that the things that were found in that investigation were of great concern to you and to us. We, obviously, accept the judgment that you made and we will go forward and pay that.

We believe that we are making some progress, however, on improving our status and our standing, and our own standards, and today we hope to make that presentation to you. We will try to follow your lead with the

phraseology that you have suggested. You will see that we have chosen the words complete, not complete, those kinds of things, that really tracking with your satisfactory, tracking toward satisfactory, and unsatisfactory. And I think that you will see there are things are yet to do, obviously, and there are some things where we believe there is accomplishment that can allow us to focus on those other issues that need that kind of focus.

So, I hope with that, that we can make a presentation that will be helpful to you, and to us, to establish that progress has, in fact, been made.

With that, I will move to my first slide. And on this slide, I am trying to make some very simple points to the Commission. I think they are points that are fully understood by you and your colleagues. But it is clear to me, having been on this team now for four months, that there is a full commitment of this Board of Trustees to inject themselves into this process to ensure that the management team not only has their support and their guidance, their direction and their encouragement. And I can tell you, in the audience today, we have our lead Trustee, we have the Chair of our Nuclear Committee, and we have the Chair of our Corporate Responsibility and Affairs Committee. I think that is a testimony to the commitment that our Board of Trustees has to this very serious matter in front of us.

The second bullet is simply to indicate to you that I, as the Chief Executive Officer of this company, am equally dedicated to this assignment and have spent some time at Millstone, will continue to do that. I have full faith and confidence in Bruce and his team, but I do believe that it is important that the CEO of this organization take hands-on responsibility and involvement in this process if we hope to bring it to a reasonable conclusion for all of us as we move forward.

And, lastly, I would simply like to point out that, although things aren't as rosy as we wish that they would be, the financial resources are available to continue on this recovery process, they are committed to that end, and we will ensure that that continues to happen.

We, some time ago, decided that we were not going to concern ourselves overly with heading towards some absolute deadline schedule, but, more importantly, moving this process forward so that it is completed in a safe and appropriate way. And that is the path that we are on, and you will hear some of those comments in our presentations today.

Even though we talk in terms of a hoped-for meeting with you in the not too distant future, in the early part of 1998, and we are working toward that end, please don't overtake from my team our inability or our lack of

understanding that that date may float. We continue to work toward that end because it is an achievable goal, and an important goal, and we are going to continue to do that. But I don't want any of you to walk away believing that these folks really are working off of an unachieveable schedule, because what we are trying to do is get this process concluded. And it is more important to us to get it concluded in an appropriate method, clearly on the fastest time line that we can, but, more important, in that appropriate method, and that is what we are dedicating ourselves to.

The next slide simply points out to you who our presenters are, and most of these people are very familiar to you, of course. Bruce Kenyon, President and CEO of our Nuclear Activity. Mike Brothers. Mike Brothers will talk about the activities in our safety conscious work environment, a very important step for us as we move forward to create a more healthy environment at the Millstone stations. Marty Bowling will discuss with you a number of issues on the programs that he will be going through. Jack McElwain, of course, will talk about the readiness of Unit 3. And Dave Goebel, our Vice President of Nuclear Oversight, will give you an update on his activities as well.

So, again, let me close by simply saying I hope

that you see some progress today from our last meeting. It surely is there in the statistics. I hope that you see a substantial increase in power dedication to realizing the issue of the safety conscious work environment and progress that has been to date in that end as well. And I hope that, hopefully, the next time we do meet with you, we will be able to present to you the facts and figures that would allow you to recast your trust with us so that we can bring these units back on-line in the working environment that really is reflective of the safety conscious work environment that we are pursuing.

So, with that, let me turn things over to Mr. Kenyon.

CHAIRMAN JACKSON: Before Mr. Kenyon begins, let me raise a sensitive question. You mentioned that financial resources are available and committed, and I noted a press clipping last week that you had deferred raises for all your salaried employees pending unit restart and, of course, that is your decision to make, but the important point was presumably it was done in a way that still encouraged people to raise safety issues to management.

MR. MORRIS: I believe that that's the case. We gave that a great deal of consideration before we did that, but for us to stay on the track that we're on, that was a necessary step. And I would tell you that not only the

nuclear but the non-nuclear team at NU understands that and is supportive of that, and although that's never the best of news, it is something that the team is willing to understand and willing to dedicate themselves to.

CHAIRMAN JACKSON: Thank you.

MR. MORRIS: Thank you.

MR. KENYON: Good morning, Chairman Jackson and Commissioners.

I am pleased to have this opportunity to update you regarding our progress in recovering the Millstone units. I'd just add one comment to the question you asked. Virtually every major meeting we have on site, we remind our employees, or if it's a supervisory meeting, of the importance of raising concerns; that the last thing we want is to have an unrecognized problem show up later. So we continue to emphasize that.

This slide indicates our agenda, and there are several purposes to our presentation. First is to demonstrate that we have made substantial progress in bringing the various issues affecting the performance of the Millstone units to closure. It is also to convey our belief that physical readiness for Unit 3 will be achieved around the end of this year, and that clearly is a major milestone. We want to clearly demonstrate to you that we understand the remaining work to be accomplished, and thus we believe we

are on track for hopefully a March meeting to consider the restart of Unit 3. It is our expectation that Unit 2 can follow Unit 3 by two to three months, and certainly we are acknowledging that the schedule for Unit 1 is under evaluation, and this is pending having the financial resources to resume full restart efforts.

Substantially all of the material that we will be covering was included in the briefing book sent to you in advance of the meeting. We plan to focus on Unit 3 and site issues relating to Unit 3, but certainly we are prepared to address questions on other units, should you desire.

This slide and the next summarize the progress we are making in addressing the seven success objectives and the associated 16 key sitewide issues which are an essential part of our recovery. I am pleased to report that of the 16 issues, six now meet our success criteria for start-up readiness. I translate that into satisfactory on the terminology that you are using. We expect seven additional issues to reach satisfactory in January, and the remaining three to reach satisfactory in February.

All issues -- and this is looking at the totality of an issue -- all issues, in my judgment, are tracking to satisfactory, and that's different from our last quarterly briefing when I told you I thought there were six issues that were not tracking to satisfactory at that point in

time.

Now within an issue, there can be particular elements that we are not yet satisfied with. We are satisfied that the overall progress is coming together.

CHAIRMAN JACKSON: Let me ask you a question along that line. I note, for instance, that under the strong nuclear safety philosophy, in particular procedure quality and adherence, you say yes, it's a closed issue. Now I noted in an inspection report, 97-202, that was dated shortly after the last Commission meeting, there was an issue involving several failures to follow your own procedures for overcoating in the Unit 3 service water piping, and then there was a report that documented some --several examples of radiation worker violations, and it noted that this was of concern because it was a repetitive violation. And then there were, in the Staff's recent Commission -- paper to the Commission, that highlighted enforcement actions associated with a November inspection report. It talked about procedural inadequacies, emergency preparedness issues, training and failure to wear proper dosimetry. So the question becomes how do you square, you know, these findings in these various reports with the assessment on the success objective that you mentioned?

And I'm going to do this, you know, as you go through, because the issue is what does the record show

versus what you are telling us and, you know, what are you saying in terms of saying that it's a closed issue.

MR. KENYON: That's fine. Let me start by saying that in saying that an issue is judged to be satisfactory, it's our judgment, based on an ongoing evaluation of where we are -- and certainly inspection reports that come along that identify a problem in a procedure compliance area, not all of which you indicated in our judgment necessarily related to procedure compliance as opposed to a training problem, which is one of our other issues, or as opposed to emergency planning, which is one of our other issues. So we try and separate where the problems lie.

But we reached a judgment that we thought we were at an acceptable level. That does not indicate that we think there are absolutely no problems to deal with; it just means that in our judgment, we think we have reached a satisfactory state.

Now what goes on from there is we continue to take in -- and this applies to any issue. What goes on from there is that we continue to take in information as to what's happening.

One very important source of information is ongoing management self-assessments. So we use those management self-assessments, and obviously we could, if we got enough information of an adverse nature, we would change

our judgment on a particular issue.

Weekly oversight comes out with a very detailed report on this issue and all the other issues, and with a numerical score, and if that score drops below a certain level for a period of time, oversight would revise its judgment on where management is on a particular issue.

When you look at oversight scores, they bounce around because everything is going on is on, you know, a weekly basis, looking at attributes of what was going on in that particular week. So whereas we concluded procedure compliance was satisfactory, that's not uniformly satisfactory across the station. We are looking at those areas where we think it's weaker than others, and we will continue to assess it. But at the time we prepared this, and I think still today, unless Dave, you --

MR. GOEBEL: No.

MR. KENYON: We think it's satisfactory. And satisfactory is not, you know, perfect.

CHAIRMAN JACKSON: So this is a window-in-time snapshot as opposed to being closed, per se?

MR. KENYON: Yes. And I had previously included in my remarks, and then I took it out in the interest of time, the distinction between an issue reaching what we judge to be a satisfactory state and an issue being closed. We are not proposing to close any issues. What we are about

is a long term process to go from a situation where the processes and standards at the Millstone station were just nowhere near what they should be, bring them to a point that supports start-up. But we will want, at the next Commission meeting, to present to you a longer term plan that clearly recognizes that what we are about is on a long term effort to bring the plant not just to a satisfactory state for start-up, but to excellence. So issues are not closed for us. Issues are things that we are going to work on through start-up and beyond.

CHAIRMAN JACKSON: Okay. Well, I'm just referencing your own terminology here. And I would just like to say I would like all the parties, as appropriate, to comment on this and the next slide in terms of your assessment in these areas, and particularly the NRC Staff.

MR. KENYON: I'm ready to move to the leadership assessment slide, unless there are any further questions on this one.

CHAIRMAN JACKSON: Well, let me talk again for a minute about safety-conscious work environments, and you indicate, again using the terminology that you have here, you expect this progress -- or you want it -- you expect it to be closed in February. Now what does that mean? Does that mean that you will have demonstrated a safety-conscious work environment, or you will have achieved a

safety-conscious work environment? And there's a difference.

MR. KENYON: Well, we -- I hope I am not missing the distinction. We have four objectives that we feel we must meet in order to satisfy having demonstrated a safety-conscious work environment, and I think that means we have it.

One is that employees are quite comfortable in raising concerns. I think we have demonstrated that.

A second is that line management is effective in resolving concerns. We are on track there to achieve a satisfactory level of performance. That's very dependent on a corrective action program, and we are on track in corrective actions but not there yet.

The third area is an effective employee concerns program. I think we are very close, and thus we will be able to demonstrate that in February.

And, finally, we need to demonstrate that we can identify problems early enough in emerging problems, safety-conscious work environment problems, trouble areas, a building level, fully concerned, in a particular part of the organization. We need to be able to identify that early in the process, and we need to be able to solve that. We have not demonstrated that at this point. We have a lot of work in progress, and Mike Brothers will talk about that in his

presentation.

So against those four criteria, that's an overview of where we are, and I do believe we are tracking to satisfactory.

MR. MORRIS: But, you know, I am not certain, Dr. Jackson, that this issue really ever closes. This is an issue that needs constant vigilance and constant dedication on behalf of the management team and on behalf of the entire team at the station to continue to work to improve this area. And that is something that you'll see when Mike Brothers makes his presentation. Now we do not believe this is an "oh, great, this is done now." We fully understand that this is an issue that we will be working at forever. And I think it is true of all stations. So we want to join the rest of them in having that dedication toward that end.

CHAIRMAN JACKSON: Okay. Mr. Kenyon.

MR. KENYON: Recognizing that the fundamental cause of the performance problems at Millstone was leadership failures, I am pleased to report that the recently completed leadership assessment by employees and contractors of their supervision shows scores in all categories of at least 5.0, and based on my experience with a similar survey at South Carolina Electric & Gas, this indicates an organization with an overall healthy leadership climate. It also shows continued improvement over the

survey conducted this summer, and it shows an overall nearly 20 percent improvement over the first survey conducted in the winter of 1996.

CHAIRMAN JACKSON: Do you have another such assessment, leader assessment, scheduled or planned?

MR. KENYON: We do. We have been doing these on six month intervals. If this survey had not been as strong as it was, I would schedule another prior to the March meeting. Based on the strength of this survey, I am currently not intending to do one until the June time frame. We are on six month intervals. These are important surveys to us.

What you are seeing is aggregate data. Obviously, what we do is look particularly at those individuals who score very well, and those are the -- that is a good indication that these are the future leaders of the organization, and we also look particularly at those individuals who do not score well, and that suggests there is a problem between that individual and his employees.

And we use this and other input to identify problem areas. Once we identify a problem area, there is an action plan. In some cases it means removing the individual. In some cases, through training and coaching, the climate in that particular area is improved.

So, based on the strength of these scores, I am

comfortable with a six month interval.

CHAIRMAN JACKSON: As you indicated, this is aggregated data, and at the last Commission meeting, we discussed pockets.

MR. KENYON: Yes.

CHAIRMAN JACKSON: Where the performance was marginal. Can you speak to some of those pockets and to say what the progress has been?

MR. KENYON: Yes, I can, but the person who is closest to is Mike Brothers.

MR. BROTHERS: Right. We, when I talk about problem areas, Chairman Jackson, we will identify that. When we first identified problem areas, we had 33, what we call problem areas. Out of the 33, 17 were a direct result of leadership surveys. Now, out of those 17, approximately half of those people are no longer in that position. The other half are under different types of programs, action plans, remediation plans, to bring their leadership scores up to where they need to be. We have taken significant action on those 17 areas.

CHAIRMAN JACKSON: Okay. Thank you.

MR. KENYON: And while it is important for line management to demonstrate its ability to address issues, it is equally important for Millstone to have a highly credible, independent assessment capability in its oversight

organization. I am pleased to report that Millstone's Nuclear Safety Assessment Board concluded, through a very thorough five month process, and this process included an external assessment, that oversight was effective in the performance of its responsibilities.

CHAIRMAN JACKSON: Isn't it true that, in terms of that outside consulting firm that you engaged in July, that they felt that considerable progress had been made, but that significant additional improvement was required, both from nuclear oversight, as well as from Millstone Station senior management, before the oversight function was fully effective?

MR. KENYON: That is true, and the particular issue that was of biggest concern to me was the extent to which the line organization, and I am talking down in the organization, I am not talking about the senior folks, the officers, down in the organization recognize that the proper way to view oversight was in a partnership, not simply a regulatory requirement. And, thus, oversight, an effective oversight organization is involved in helping to set the standards, and then it is obviously involved in advising line management where standards are properly met and where they are not.

I think we have made very good progress in driving that understanding down in the organization, and part of

what the Nuclear Safety Assessment Board did was take -- to take the input from the external assessment and then, over a five month process, look at how this was playing out. And I am quite comfortable that oversight is now effective and line management use oversight in the proper way.

CHAIRMAN JACKSON: Could you speak to some of the areas where, according to the consultant firm, the feeling was that the greatest improvement still remained to be demonstrated?

MR. KENYON: Yes. My only -- my only question on that, are you talking about the initial assessment, or are you talking -- because we have had that consulting firm come back in.

CHAIRMAN JACKSON: Since July.

MR. KENYON: Yes. And we have had further input from then as to where the most attention is needed and --

CHAIRMAN JACKSON: Well, you should tell us what is -- whatever is the latest situation.

MR. KENYON: Okay. The latest information is that they felt oversight has made strong progress and, thus, had minor comments in the area of oversight. They had more significant concerns in the area of conduct of operations. That is an area that we are not satisfied with yet, and that is an area that we are working on. And, here, the situation is we have put in place, and I am principally talking Unit

3, we have put in place a strong standard for conduct of operations, and this particular consultant feels it is an excellent standard.

What he observed, and what we don't disagree with, is there is not uniform implementation of that standard within the operating groups. So that was one area of concern.

There was also an area of concern regarding standards for corrective action. And, here, the issue was more dealing to whether or not there are uniform standards across the station for how you evaluate a potential issue, how do you close a potential issue, and, you know, standards in those areas. And based on recent work, we feel the standards have been brought to a much more uniform level. But at the time that the consultant saw it, there was still some raggedness, different -- differing approaches among the three units. These were the two concerns that were most meaningful to me.

Dave, do you want to add on the recent report, or go back to the earlier report?

MR. GOEBEL: Well, the earlier report was very critical of us for not being fully integrated at the site and not having a strategic focus that supported the overall site mission. We were out doing our thing, and with some degree of success, but it wasn't in a focused manner. We

have restructured to create that focus, and set up a plan, which I will brief you on a little later, when it's my turn, that lays out the ability to fully integrate our own staff and in so doing provide a more meaningful feedback to the line in their endeavors.

They also felt previously that -- well, I guess those were the two things, lack of strategic focus by nuclear oversight and lack of integration among oversight itself, and both those areas in the follow-up report, they said they were very satisfied with.

The areas which they -- I've got the report right here. The areas which they said they were not satisfied with are -- two of the ones are -- two main ones are the ones Mr. Kenyon has already talked about, elements of the corrective action program and elements of the conduct of operations.

The other things which they said in particular they felt nuclear oversight had to concentrate more heavily on was we had to work harder to improve our plant knowledge. So what the individual did, would take my people out in the plant and see how much they knew about the actual systems, and he walked away feeling that among some of my team, they weren't sufficiently knowledgeable in the systems themselves. So across the board, they didn't know the plant well enough. And that's a true fact. I've got, out of my

entire team, I only have, I think, seven people that have licenses or something, at one time had been licensed.

So plant knowledge is one area they said we needed to put more emphasis. They said we needed to spend more time in the field; felt that we should really -- it wasn't a deficiency decided from the past, but basically we needed to put more emphasis on frank performance appraisals. We were not being critical enough to our own employees on how well they were doing and how well they were not doing, and the other area was they felt we needed to improve our communications between my organization and the NRC. They felt our communications were not very good.

CHAIRMAN JACKSON: I'd like for the NRC Staff, actually, to speak to these issues when you come to the table.

MR. GOEBEL: So those are the items that were pointed out.

CHAIRMAN JACKSON: Thank you.

Commissioner?

COMMISSIONER DIAZ: Yes, I just have a question. I'm sure that as all of these processes are evolving, they are always containing a clear separation between oversight and conduct of operations, that your oversight committee is not a management function and does not get directly involved in the conduct of operations, which at times appeared to

have been a problem, but actually performs its oversight functions in an independent manner. Is that --

MR. GOEBEL: And that is what we are doing. We have -- I have people in my organization who do go, spend days at a time in the control room, and just sit in the back and monitor and see who does what and how they do it, and then we provide that feedback. We have set up systems to go back and specifically monitor the conduct of operations. And we have brought people in from the outside to assist us in that, qualified operators from other sites.

MR. KENYON: But a clear separation --

CHAIRMAN JACKSON: I think the Commissioner's point is that the managers -- the management manages the station?

MR. GOEBEL: Right.

CHAIRMAN JACKSON: And at the same time, in order for oversight to be effective, it has to be independent.

MR. KENYON: Right.

MR. GOEBEL: Absolutely.

MR. KENYON: To wrap up my opening remarks, I wanted to indicate what I consider to be the most important remaining challenges, and this is beyond the immediacy of reaching physical readiness on Unit 3. One is demonstrating -- and I have already said this in response to one of your questions -- demonstrating both that we can identify

safety-conscious environment matters before they become major issues, and that we can effectively resolve them in a timely manner. You are going to hear much more about this in Mike Brothers' presentation.

Another challenge is to demonstrate that the corrective actions we are implementing are effective, and Marty Bowling's presentation will discuss our corrective action efforts in much more detail.

We also must demonstrate the effectiveness of our configuration management program, and certainly a key item in this regard is responding to the out-of-scope SSFI inspection results, and Marty will further address that in his presentation.

To summarize, I believe that satisfactory progress is being made on all key issues, which means the issues are either satisfactory for start-up, or tracking to satisfactory, recognizing, again, that there are certain elements inside those issues that still need a lot of attention. But on an overall basis, we feel all issues are on track, or there.

So I would now like to call on Mike Brothers to continue.

CHAIRMAN JACKSON: Before he continues, let me just ask you this question. This has to do with this issue of definition of satisfactory.

MR. KENYON: Yes.

CHAIRMAN JACKSON: Now I noted that on the Sargent & Lundy last slide, they noted that over half the closed deficiency reports were not identified by your configuration management program. And so what do you mean when you say it's satisfactory or tracking to satisfactory?

MR. KENYON: Well, satisfactory means two things to us:

One -- and we have placed a considerable focus on safety significance, and thus as we have gone about our activities, we have looked at what we have discovered from a safety-significance perspective, and we have also looked at what Sargent & Lundy has discovered from a safety-significant perspective, and I think we are in good agreement there.

But the other important area is compliance, and in that area there have been more items than we would have anticipated that don't necessarily represent true safety issues, but do -- are important from the perspective of compliance. I'm not at all trying to say compliance isn't important.

In that regard, we have more than we thought we might have, even though the safety-significance level is not -- and as part of our process, because certainly before we, Northeast Utilities, present ourselves as ready to start up,

we have got to be satisfied that we not only have addressed the things that need to be addressed from a safety perspective, but we need to be satisfied that we have addressed things from a compliance perspective. And we are still evaluating, Chairman Jackson, what the Sargent & Lundy findings, or what the NRC SSFI findings say to us, particularly from the perspective of compliance. And we will be prepared to address that, but that's still open in our minds, and we need to pursue that.

CHAIRMAN JACKSON: You know, the Commission recently issued a statement on safety and compliance, and I commend it to you, for you to read it.

MR. KENYON: I have it.

CHAIRMAN JACKSON: And to share with all of your key people, and to use it as a template as you think about the extent to which what you are doing is consistent.

MR. KENYON: We will.

Mike.

MR. BROTHERS: Thank you, Bruce.

Good morning. My name is Mike Brothers, and I am the executive sponsor for establishing and maintaining a safety-conscious work environment at Millstone station.

Our definition of a safety-conscious work environment is a safety-conscious work environment is an environment where all members of the NU nuclear team feel

comfortable raising any issue important to them, with the confidence that the issue will be addressed with commitment, respect, and timeliness.

This definition is consistent with the NRC's position stated in their policy statement dated May 14th of 1996.

This presentation will present our success criteria and current progress towards establishing a safety-conscious work environment at Millstone station.

This slide gives our six high level success criteria which were used 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, employee concerns oversight panel and Little Harbor Consulting validation of our efforts, are independent verifications that are ongoing at this time.

Our assessment shows significant progress has been made and, although we do not meet our own high standards for two of our success criteria, we believe that we are on track to support the restart of Millstone Unit 3 in the area of safety-conscious work environment.

The first criteria that I will discuss is a willingness of employees to raise concerns. We believe that this success criteria is currently being met; to use your

terminology, we rate this as currently satisfactory.

This graph shows our current leadership results to support the success criterion of employees' willingness to raise concerns. As shown in the slide, our criterion is at greater or equal to 90 percent of people are willing to raise issues to their immediate supervisor. The current value is approximately 97-1/2 percent. This criterion is currently satisfactory.

CHAIRMAN JACKSON: What's your sample size?

MR. BROTHERS: The sample size is in excess of 2000 respondents; about 2600.

CHAIRMAN JACKSON: And that's out of how many people?

MR. BROTHERS: It's approximately 82 percent response rate in the survey.

This graph shows the culture survey results to 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 that current results in the overall culture survey, coupled with the percentage of people who are willing to raise concerns to their supervisor, meet our acceptance criteria for this success criterion.

CHAIRMAN JACKSON: What is the actual percentage?

MR. BROTHERS: 82 percent.

CHAIRMAN JACKSON: Is it going down or up?

MR. BROTHERS: It's approximately the same. It went up a statistically insignificant amount from one survey to another.

CHAIRMAN JACKSON: Same number of respondents?

MR. BROTHERS: Correct.

This 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 anonymous. Our criteria is that no adverse trend exist in this area.

Through November, this criteria is being met.

CHAIRMAN JACKSON: You don't have a criteria that actually relates to whether the number is acceptably low, or --

MR. BROTHERS: At this time, no. We believe that what we are primarily looking for is an adverse trend. It's consistent -- for instance, in November, the total number of concerns went down dramatically to six; yet the number that were received that were either confidentiality or requested anonymous was four. There's not a lot that you can gain from that immediately, but we know that if we detect an adverse trend, we'd act upon it. So it's really a trend indicator versus an absolute number.

CHAIRMAN JACKSON: Zero is not an appropriate goal?

MR. BROTHERS: Well, that's a goal; we don't think we can achieve that. We have some sort of frictional type of numbers coming in that we believe, this has probably evolved like an IST acceptance criteria, we develop a baseline. The baseline looks to be about three or four.

The second criterion that we will discuss is the effectiveness of our line management in handling issues. Like the first criterion, we believe that we are currently meeting this success criteria. Therefore, this will be judged as satisfactory.

This graph shows the timeliness of our CR evaluations, CR being condition report. The goal is 95 percent of all evaluations performed in less than or equal to 30 days. The lower line represents our actual performance. This indicator is a backward-looking indicator, since by definition it needs to be at least 30 days after the CR initiation to determine success or failure. There are currently 4.9 percent of all CR evaluations which have not had their evaluations complete within 30 days on the Millstone Unit 3. So the snapshot in time as of yesterday is it's being met. If current performance levels continue, this criterion will met for most of Unit 3.

CHAIRMAN JACKSON: What kind of evaluation is done within that 30 day time frame?

MR. BROTHERS: It depends upon the significance. A significance level 1 CR requires a root cause evaluation list, that is formally waived. A significance level 2 is an evaluation done and approved by a supervisor and a management review team, and level 3 requires only the supervisor's approval.

CHAIRMAN JACKSON: Are operability issues included in this number?

MR. BROTHERS: Yes.

CHAIRMAN JACKSON: So they are not dealt with or reviewed on a shorter --

MR. BROTHERS: A much shorter. The reasonable assurance of continued operation is 24 hour clock on operability call.

CHAIRMAN JACKSON: What caused that initial adverse trend?

MR. BROTHERS: The numbers coming in and our inability to keep up with them. And then we turned it when we started turning -- the numbers came down us, we completed discovery is what you are seeing.

This graph shows our current condition report evaluation score. The score is developed by averaging all CR evaluations which are reviewed by the management review

team during each month. A CR receives a 4 if its evaluation is accepted without comment; a 2 if it is accepted with comment; and a zero if it is rejected by the management review team. This criteria is currently satisfactory.

This graph shows the percentage of all action requests as a result of condition reports which are overdue. The goal is less than or equal to one percent. Currently, approximately 2.4 percent of action requests as a result of condition reports are overdue at Millstone Unit 3. Significant management attention is being devoted to this metric and we expect this goal to be at goal for Millstone Unit 3 prior to restart, so this would be tracking to satisfactory.

CHAIRMAN JACKSON: The scale that I am looking at, can you say what you -- relate what you said in terms of the small percentage to what looks like 30 percent on this scale?

MR. BROTHERS: Yes. These are -- what you are looking at here is the total number of overdue action item tracking and training systems, independent of whether they are CRs or non-CRs. The actual CR is much -- is a smaller subset of this. So this is all action item tracking and training systems overdues.

A third criteria that I will discuss is the effectiveness of our Employee Concerns Program. While

substantial progress has been made in this area, we do not yet meet our own high standards for performance in this area. This area will be judged as tracking to satisfactory.

This slide shows the concern investigation timeliness. The top line represents the 90 percent goal, in other words, that is simply 90 percent of the total number of concerns received per month, and the bottom line represents actual performance. Our goal is to have greater than or equal to 90 percent of all investigations complete within 45 days. If we were meeting this goal, the lower line would be at or above the 90 percent goal line. As you can see, this criteria is not yet being met.

While we are evaluating the validity of this as an indicator of the effectiveness of our Employee Concerns Program, we do believe that timeliness of investigations is a valid indicator of the performance of the Employee Concerns Program. We also feel that a focus solely upon investigation timeliness can result in a degradation of performance or responsiveness of the Employee Concerns Programs. We would just this as tracking to satisfactory.

CHAIRMAN JACKSON: Let me ask you a question. There seems to be a discrepancy between the title, which says within 30 days, and the legend, which says 45 days.

MR. BROTHERS: Yes. The slide is changed to 45 days on the overhead. That was error in the one that was

provided to you.

CHAIRMAN JACKSON: Okay. And also the numbers, the curve seemed to shift.

MR. BROTHERS: Yes. This is simply the most up-to-date values that we have. Throughout the slide show that you see, the values are as up-to-date as we can get them. They are updated on a weekly basis.

CHAIRMAN JACKSON: Okay.

MR. BROTHERS: This slide shows a metric which is still under development. What we are trying to measure is the number of employees who are satisfied with their experience with the Employee Concerns Program. The top line shows the number of employees who were surveyed to assess their degree of satisfaction with the Employee Concerns Program. The bottom line shows the number of employees who were expressing satisfaction with the Employee Concerns Program.

As I said earlier, we are evaluating the implementation of this metric. For instance, in November, 20 surveys were sent out, four responded, and, of those, three expressed satisfaction. Although a clear-cut success criteria is difficult to establish for this metric, it is clear that the current satisfaction index, to coin a term, does not meet our expectations.

CHAIRMAN JACKSON: What are your expectations?

MR. BROTHERS: We have set an expectation of 75 percent. We don't know yet if that is going to be achievable. And we have to evaluate what the large number of non-respondents means as well. So we are using the Employee Concerns Oversight Panel, in addition to Employee Concerns Program, to do that for us.

COMMISSIONER DIAZ: The difference between the two line is not responding?

MR. BROTHERS: Correct.

CHAIRMAN JACKSON: And that is a lower response than you have for these other?

MR. BROTHERS: Much.

CHAIRMAN JACKSON: Much lower.

MR. BROTHERS: Yes.

CHAIRMAN JACKSON: What is that the response rate again?

MR. BROTHERS: We had 20 surveys sent out and only four responded in November. And we don't yet know what that means.

The fourth criteria is our effectiveness in recognizing and remediating problem areas within the Millstone organization. Based upon our primarily reactive response to problem areas, we not currently meeting this success criteria. This would be judgment as unsatisfactory. Probably at the borderline towards tracking to satisfactory,

and you will see why, I believe in a few moments.

CHAIRMAN JACKSON: What is the duration of the training sessions?

MR. BROTHERS: Are you on the next slide?

CHAIRMAN JACKSON: Yes. I am going to move you along. You had 45 minutes and you gave us 61 slides.

MR. BROTHERS: Okay.

[Laughter.]

MR. BROTHERS: I can move faster.

MR. MORRIS: Believe me, he can. We all know he can move faster.

[Laughter.]

MR. BROTHERS: Let me -- let me address each of these --

COMMISSIONER DICUS: They have more information, so they have given it to us.

MR. BROTHERS: This, the Forum for Leadership Excellence is two weeks. The first one, the Managing for Nuclear Safety, is a one day course. Civil Treatment is a one day course. And 50.7 is four separate half days.

This slide, as I have said, shows a compilation of our current status of providing training to our supervisors and above at Millstone Station. Our criterion is that greater than or equal to 95 percent of all supervisors have been trained and demonstrate minimum required knowledge via

written testing. This criteria is not currently being met. It would be judged as tracking towards satisfactory.

We expect to meet this criterion by March 1998 to support the restart of Millstone Unit 3.

CHAIRMAN JACKSON: Was Little Harbor not satisfied with these percentages? Because I am going to read, in terms of -- from their reviews, they found that the Employee Concerns Program, the Safety Conscious Work Environment and the Management Activities were not adequately coordinated. I am going to ask them this question, too, but I want your perspective on it. And they stated that the training was not timely and that management training was lacking --

MR. BROTHERS: Right.

CHAIRMAN JACKSON: -- in the areas of protected activities, retaliation and chilling effects. So tell me about that.

MR. BROTHERS: The primarily was due to the slow start. I believe that they will express satisfaction now, but the slow start, and, I would agree, the lack of coordination earlier this year, is the main result of that.

MR. MORRIS: We may not have been listening as well as we should have early on, but the message is clearly home now.

CHAIRMAN JACKSON: Okay.

MR. BROTHERS: The next slide, this slides shows

the current trend for employee concerns alleging instances of harassment, intimidation, retaliation, or discrimination, with 10 CFR 50.7 implications. The top line shows the total number of concerns received and the bottom line indicates those concerns with 50.7 implications. Our criteria is that we do not have an adverse trend in this area. This criteria is currently met and will be judged as satisfactory.

It should be noted, however, that when we include other types of harassment, intimidation, retaliation, or discrimination, such as age, race or gender discrimination, that we did not meet our expectations in this area.

Extensive executive involvement in any confirmed cases of harassment, intimidation, retaliation or discrimination, regardless of whether or not there are 50.7 implications, will ensure that corrective actions up to and including reassignment or removal are effective in elimination of instances of harassment, intimidation, retaliation or discrimination at Millstone Station.

CHAIRMAN JACKSON: Is that how you intend to address, you know, meet your own standards in that area?

MR. BROTHERS: That's correct. These are communicated via ECP HR program to me. I communicate it to the executive team and we take action.

This slide shows our total number of problem areas at Millstone Station. A problem area is any area in which a

safety conscious work environment may not exist. Problem areas are identified by input such as Employee Concerns Program, Employee Concerns Oversight Program, Little Harbor Consultants, leadership survey or culture surveys.

Our success criteria is that the total number of problem areas be decreasing. While we meet that criteria, we have not yet demonstrated the ability to pro-actively identify and remediate problems prior to them becoming obvious problems. We have several examples of pro-active responses to potential problem areas in the recent past. In other words, we have successfully prevented 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.

CHAIRMAN JACKSON: Well, you know there is Delta X, I always say this, and there is Delta X Delta T. Right. And so what you have shown us is Delta X Delta T. But then one can look at Delta X and ask are you satisfied?

MR. BROTHERS: And the answer would be no.

Returning to our success criteria, we believe that we are meeting our criteria for employees' willingness to raise concerns, shown in green; line management's effectiveness in dealing with issues raised by employees,

also shown in green. The two shown in yellow -- or you can barely see it in yellow. While we have made significant and meaningful progress towards establishing an effective Employee Concerns Program, we do not yet meet our own high standards in this area with regard to timeliness of evaluations and satisfaction of employees who have used this program.

The fourth success criterion, our ability to recognize and address problem areas, is where we have made the least progress. Significant progress has been made over the last month, but, based upon our slow start, this area will be our focus going forward.

The remaining two success criteria, Employee Concerns Oversight Panel and Little Harbor Consulting concurrence are underway and expected to support the Millstone Unit 3 restart schedule.

CHAIRMAN JACKSON: Can you give us some sense of the significance of the issues that have been raised?

MR. BROTHERS: Within the Employee Concerns Program?

We have metrics, different types of significance. From a material significance standpoint, very low numbers. We tracked them as impact on maintenance rule and actual power block implications, very, very small numbers of employee concerns in that area.

The most significant aspects involve either 50.7 or other types of harassment, intimidation, and those are the most significant we had.

The percentages are, if you roll in all types of harassment -- intimidation, retaliation, discrimination -- are higher than what we want at this time, and that is where the significance is.

Finally, I want to address the organizational changes that we have made to address the establishment of a safety conscious work environment at Millstone Station.

To allow me to focus on this area, Jack McElwain has been placed in charge of the day-to-day operation of Millstone Unit III. This is a direct result of a need to continue the momentum we have towards establishing a safety-conscious work environment at Millstone Station.

In addition, Jack McElwain, taking over the day-to-day operation of Millstone Unit III, the reporting relationship of the Employee Concerns Program has been changed to report directly to me.

This change, along with the designation of a recovery officer to oversee the area of Human Resources and a more coordinated utilization of the Employee Concerns Oversight Panel, ensure that we have the organization in place to fully establish a safety-conscious work environment at Millstone Station.

The progress indicated in the metrics presented today and in more detail in your briefing information along with the organizational changes recently put in place give us the assurance that we are on track to support Millstone Unit III's startup in the area of safety conscious work environment.

If there are no further questions, I will turn the presentation over to Marty Bowling to discuss corrective action and configuration management.

CHAIRMAN JACKSON: Thank you.

MR. BROTHERS: Thank you.

MR. BOWLING: Good morning. Before I start my formal remarks, let me go back to your question on procedure adherence and let you know that our standard for procedure adherence has not been acceptable.

We have put considerable effort into revising and raising that standard and as of September 30th implemented a newer and higher standard commensurate with the industry.

We also have a number of metrics with which we are monitoring our procedural adherence so that we will have real-time feedback on what more we may need to do, but we have the right standards in place. They are implemented and now we need to implement them.

CHAIRMAN JACKSON: Let me ask you a question. Everything leads to another question.

You made an interesting statement. You said that as of September 30th you had put a new procedural adherence standard into place that is consistent with industry and then as we talk you talk about the various standards you have in place.

How do you determine those standards, and in fact are you using industry standards in all of these key areas, not just for procedure adherence but corrective actions --

MR. BOWLING: Yes. These key programs that Bruce listed for you, we have executive sponsors and issue managers for each one of those and part of our job is to make sure that our program area is at the right standard, at the industry standard or higher.

I want to talk about the radiological control area errors. I have a specific slide for that as well as the Sargent & Lundy issues.

MR. KENYON: But to continue with the question, this is a leadership team that came from the rest of the industry, so we have our individual perspectives on standards in the industry and we utilized that to a considerable extent, but there are also areas such as safety conscious work environment where I think by the time we get through with this we will probably have set a model for the rest of the industry, so we are very attentive to industry standards but, first and foremost, we must satisfy ourselves

that what we are doing is right and it makes sense.

I think by the time we finish the Millstone recovery others are going to come to us in a number of areas to see what -- the standard that we have set.

CHAIRMAN JACKSON: Right. I appreciate that point. The only reason I raised the question is because obviously you had a renormalization of your standard --

MR. KENYON: Yes.

CHAIRMAN JACKSON: -- in this particular area. You were not at or above the industry standard so that that is a relevant question. Why don't you go on.

MR. BOWLING: When I talked to you in August I discussed the status of corrective actions to restore configuration at Millstone.

Mike Brothers has just discussed the relationship of a strong Corrective Action Program for a safety conscious work environment.

Today I will update you on our progress. In doing so, I will review the major attributes of our program as well as overall effectiveness.

In general terms, it is my view that the Corrective Action Program is on track to fully support Unit III restart readiness.

This slide shows the four major programmatic elements and the supporting attributes of our Corrective

Action Program. I have color coded this slide to represent the current status which focuses on Unit III.

Overall, significant progress is being made but as you can see we are not yet complete. The two key elements of problem identification and problem evaluation are meeting expectations. They are satisfactory.

However, the key elements of problem resolution and corrective action effectiveness needs improvement, although they are on track for satisfaction.

We have action plans in place to meet expectations in each of these areas by the end of January of next year.

Let me further elaborate on some of the key attributes of the Corrective Action Program.

CHAIRMAN JACKSON: Let me look at that. I have this page A-73, okay?

MR. BOWLING: Yes.

CHAIRMAN JACKSON: And that is from your status book, and I noted that as of November, '97 you have 908 items to work off in three months, according to the schedule that you have laid out.

MR. BOWLING: Yes.

CHAIRMAN JACKSON: But if you look at, and now I am looking at delta x delta t, you know, if you look at the rate of work-off --

MR. BOWLING: Yes.

CHAIRMAN JACKSON: -- you know, per month or per three months, up to this point, it's not consistent with working off 908 items in the next three months.

MR. BOWLING: Yes. I have a graphic on the restart task, but just before I get there, some of that will --

CHAIRMAN JACKSON: Address --

MR. BOWLING: -- in terms of delta t, some of it supports physical readiness, some of it heat-up, and some of it actual criticality, so it does go over a number of months.

CHAIRMAN JACKSON: Okay. Why don't I let you do that.

MR. BOWLING: All right, okay. Next slide, please.

We have achieved a low threshold for reporting. So far in 1997 Millstone has identified and submitted over 9000 condition reports. Most of these condition reports have been internally identified by both unit and support organizations through activities such as the Configuration Management Project and the over 300 self-assessments that have been performed on all aspects of our operations.

In addition, over 30 audits and 319 surveillances have been conducted by Nuclear Oversight for key programs, processes, and activities.

As a result, the percent of self-identified condition reports, as opposed to being identified by the NRC or actual events, is very high and is achieving our goal of greater than 90 percent.

COMMISSIONER DIAZ: Yes, but what does "low" mean? Does that mean that it is satisfactory?

MR. BOWLING: Yes.

COMMISSIONER DIAZ: You could set a very low threshold and be swamped or you can set it -- you are satisfied with the low threshold that you are receiving?

MR. BOWLING: Yes. I think this is consistent with what you would expect to see at the best performing plants in terms of low threshold.

CHAIRMAN JACKSON: And I am going to ask Little Harbor Consultants, because apparently -- I mean the question is, is this an indicator that the employees are using this system to bring forth safety concerns, and I believe based on your response to Commissioner Diaz's question you would say yes.

MR. BOWLING: Yes.

CHAIRMAN JACKSON: But of course, you know, you look at all the slides and Little Harbor seems to be saying something different.

Do you have any sense of why the disparity?

MR. BOWLING: Well, let me just comment on the

information that I am providing.

A significant percentage of what we are identifying has to do with maintenance rule systems --

CHAIRMAN JACKSON: Okay.

MR. BOWLING: Organizational programmatic issues and process errors and so it is at the heart of our business.

CHAIRMAN JACKSON: Well, it is, but there is an issue related to people feeling that, you know, they have the freedom and flexibility to bring forth issues including issues that may relate to hardware, and so it is a relevant question in terms of what the nexus is --

MR. BOWLING: Yes.

CHAIRMAN JACKSON: -- between the two, okay, so it is not just a question of do we deal with hardware.

In the end you have people who run your station and the question is do they feel that, you know, that they can bring up the issues and get them resolved, so I am interested in some resolution between what you are saying about the hardware and what Little Harbor is saying about people's willingness to use the system.

MR. KENYON: And we believe they are and we do not believe there is a disagreement between us and Little Harbor, but certainly Little Harbor needs to speak for themselves.

CHAIRMAN JACKSON: Okay.

MR. BOWLING: Finally, no backlog of operability and reportability determinations demonstrates that our employees understand the importance of whether a potential condition adversely effects nuclear safety or compliance with the design and licensing basis.

Expectations for the third element of the Corrective Action Program, timely resolution, are on track. Management and programmatic issue resolution is an important indicator of an effective Corrective Action Program.

We are now on track to close all of the key management issues. As Bruce indicated earlier, six of the 16 key issues necessary for restart are now showing satisfactory results with the 10 remaining issues scheduled for January and February resolution.

As an example of an effective resolution of a key management issue, this slide shows the progress that has been made in reducing entry errors into the radiological controlled areas, a longstanding and recurring problem area at Millstone.

CHAIRMAN JACKSON: Let me ask you a question --

MR. BOWLING: Yes.

CHAIRMAN JACKSON: -- on an earlier slide, right, and I know they are the new ones, but you had overdue assignments for condition reports are being reduced, and the

backlogs.

MR. BOWLING: Yes. I am going to come back to --

CHAIRMAN JACKSON: You are going to come back to those two issues?

MR. BOWLING: Yes, ma'am.

CHAIRMAN JACKSON: Okay, very good.

MR. BOWLING: Achievement of these positive results require management standard-setting, accountability, and coaching of the workforce. We are now performing at an error rate much better than the industry with more than 750,000 entries into the RCA already in 1997. More detailed discussion of each key issue has been provided in our December 4th Progress Toward Readiness to Restart briefing book.

Coming back to overdue assignments, the timely resolution of issues are the number of overdue corrective actions which Mike Brothers has already discussed. I would just add that the overdue rate for the most significant, which we call the level one of the condition reports, is around 5 percent at this point and that is why it is not yet satisfactory. And the size and control over our backlogs.

Backlogs are being reduced on Unit 3 as indicated in the next slide.

Restart tasks include those items that must be completed to support the conduct of safe operation as well

as compliance with the regulations. Backlog performance indicators for the NRC significant items list and procedure revision backlogs are also provided in your handout and they show similar trends. Jack will also discuss maintenance and modification backlogs in his portion of the presentation.

COMMISSIONER DIAZ: Excuse me.

MR. BOWLING: Yes.

COMMISSIONER DIAZ: Are you tracking the time lag between an engineering issue being put into the task of the work orders and the actual initiation or completion of the process, the actual work? Is that a problem? Because I seem to see a time lag.

MR. BOWLING: There is a time lag.

MR. McELWAIN: The time lag from the engineering perspective, we put a corrective action in place that requires physical work. We track that very rigorously and we are aware of everything that is out there that may be physical work. If it's not, if it's a calculational change or if it's a study, we're not quite as rigorous in tracking the time from conception to completion.

COMMISSIONER DIAZ: You do realize that this last slide that you have in there, by some measure, you are tracking leniently down, which normally means you have a very rigorous and rigid process. Is that true?

MR. BOWLING: The process is efficiencies

obviously could be improved. But one of the things that you have to consider is that some of the tasks are interrelated. So a lot of corrective action because of our controls, that is, you can't close out until all the work is done, is tied to physical work.

So we would expect, with reaching the milestone of physical readiness, which is projected later this year, that a significant amount of these will go to closure. Presently there are 46 percent of these activities that are coded to completion of physical work completion review.

COMMISSIONER DIAZ: Okay.

MR. BOWLING: Next slide, please.

The last element of the Millstone corrective action program is resolution effectiveness. We are using a number of attributes to judge effectiveness in this area, including the NRC's seal closure quality, self-assessments of completed corrective action and the ICAVP review results.

With respect to the NRC's significant items list, more than 80 percent of the required closure packages have been provided to the NRC for review. As is documented in the NRC inspection reports, the quality and completeness of these packages has been good.

CHAIRMAN JACKSON: Let me ask you a question, Mr. Bowling.

Have you had examples or do you track whether

there are any design basis issues that continue to arise after the system has been completed? Do you keep track of that?

MR. BROTHERS: Yes, we do. One of the first questions that we ask, when a condition report comes up for the management review team is, should this have been discovered, this discrepant condition, and if it is, in most times, not only is there a CR written on that fact, but there is also a CR on the actual condition. So we track that.

MR. BOWLING: And we are also keeping the staff as well as the ICAVP contractor informed when we have those misses.

CHAIRMAN JACKSON: What are some of the most significant technical issues that you are grappling with?

MR. BOWLING: Now?

CHAIRMAN JACKSON: Now.

MR. BOWLING: Well, let me just give you that from the things we found that are most significant at Millstone Unit 3, the most significant item is a generic industry item which was the emergency core cooling system throttle valve erosion that we found. It is now a generic industry issue that most plants are resolving by putting orafaces in to get the valves out of the cavitation range. That's one.

I would say the aggregate impact of all the eight

problems we found with the recirculation spray system was significant, although the system would still have been able, we believe, to perform its safety function. There is a final evaluation going on to in fact prove that we found a number of issues on RSS and the SBO station blackout diesel battery capacity was significant in our minds as well. Those were the most significant items that we found.

CHAIRMAN JACKSON: Okay.

I note, you know, it's always interesting to me, and I know that you prpeare your slides and, you know, you get your final form but what's interesting is what's missing.

[Laughter.]

CHAIRMAN JACKSON: And in your previous set of slides related to this in this category about corrective action resolution effectiveness, one of your criteria was that longstanding problems are being addressed.

MR. BOWLING: Yes.

CHAIRMAN JACKSON: But yet it is removed in this current set. Can you just explain that removal?

MR. BOWLING: Yes. This was an administrative change. I tried to address the effectiveness in the third element and my example of radiological controlled areas was meant to address that.

CHAIRMAN JACKSON: Okay, so you're saying --

MR. BOWLING: But it's certainly not lost from our program.

CHAIRMAN JACKSON: It is subsumed?

MR. BOWLING: Yes.

CHAIRMAN JACKSON: Okay. Thank you.

MR. BOWLING: Okay, we are also performing our own self-assessments of the completed corrective actions that are most important to nuclear safety and overall organizational effectiveness. We have not found any technical deficiencies with completed corrective actions that will be considered of high safety significance. However, I want to take just a minute to elaborate on this point because we have found more deficiencies than expected with completed corrective actions, especially for those corrective actions that were completed prior to implementing our current standards.

As a result, we are verifying the quality and completeness of the most significant corrective actions we have completed during the last two years. This extra effort will provide additional confidence that past corrective actions meet today's standards. And with respect to corrective actions being completed now, we are setting a high standard and our assessments show that corrective action quality has significantly improved.

Finally, our assessment of the ICAVP review

results today are telling us that the corrective actions taken to restore the design, licensing and operating basis have been effective in identifying both safety and programmatic issues. A characterization of the issues found by the NU during the configuration management project are summarized in your handout.

The next slide shows the significance of what has been found. This slide shows the licensee reports submitted under 50.73 that have been submitted by Millstone Unit 3 as a result of the corrective actions taken to restore the design licensing and operating basis. The safety significance is based on risk-informed qualitative insights. As you can see, most of the 101 total items are classified as low safety significance.

We have also reviewed approximately one-third of the potentially safety significant discrepancy reports identified by the ICAVP contractor. These are the level 1, 2 or 3 discrepancy reports. Out of that we have confirmed, out of that one-third, that only three low safety significant issues, and no moderate or high safety significant issues have been missed by the NUCMP effort. And so if you go to the Sargent & Lundy slide, you will see that two of the three that I am talking about are indicated there.

CHAIRMAN JACKSON: You mentioned that you use

risk-informed qualitative insights. Have you been able to apply more analytical, quantitative analytical methodologies for certain key systems to get a sense of the relative risk significance?

MR. BOWLING: We have not done a quantitative. We are extending the qualitative assessment to look at the aggregate impact to the extent that we can, and this is certainly something that has not been undertaken, but we are trying to look at, from a total aggregate standpoint, what is the safety significance.

CHAIRMAN JACKSON: Okay.

MR. BOWLING: Okay. Although we must still complete our reviews of all of the identified potential discrepancy reports, and have them confirmed by both the ICAVP contractor and the NRC staff, we believe that the Configuration Management Program has been effective in finding and addressing safety significant issues.

With respect to the NRC inspections, the tier 1 out of scope safety system function inspection has been evaluated on Unit 3. Their tier 2 and 3 inspections are in progress. As you know, these NRC inspections are resulting in a number of potential violations. Although we do not believe that the findings, in themselves, are of high safety significance, they do indicate some program weaknesses and absolutely do not meet our standards for compliance.

From the NRC tier 1 inspection report, we are addressing the identified program weaknesses now. The first deals with the design and operating interfaces between systems that are relied upon to perform a safety function.

With respect to design and operating interfaces, we have utilized a multi-discipline functional review team. This effort expands what we have already done on CMP by addressing accident mitigation and the dynamic interactions of stand-by systems with operating systems during a transient.

Conceptually, we are looking horizontally at an overall system response to accidents and integrating that with our CMP, which was a deep but graded system-specific vertical slice.

Therefore, our functional review is a reasonable self-check of the effectiveness of CMP from a safety and design basis perspective, and provides a higher assurance that safety systems will function in concert during any plant transient.

This review has not found any significant safety issues or non-compliances with the design or licensing basis. Lower significant items have been identified and are being assigned for corrective actions.

The second weakness identified in the tier 1 inspection report deals with the accuracy of procedures to

meet the technical specifications surveillance requirements. With respect to compliance with the technical specifications, we are currently conducting further reviews and no new reportable non-compliances have been identified.

The NRC tier 1 inspection report also indicates that additional attempt to FSAR accuracy and procedural compliance issues are warranted.

Finally, the NRC preliminary tier 3 inspection results have been debriefed with us.

CHAIRMAN JACKSON: Let me ask you question about this.

MR. BOWLING: Yes.

CHAIRMAN JACKSON: In terms of technical specification compliance. I mean you say no new non-compliances have been identified. Have you done a full scope of assessments?

MR. BOWLING: This project is still ongoing and is scheduled to finish in early February.

CHAIRMAN JACKSON: You mean have not been identified to date?

MR. BOWLING: To date. Right.

CHAIRMAN JACKSON: And that is based on what kind of a scope of review?

MR. BOWLING: That is looking at all of the surveillance procedures that are used to meet and adhere to

the tech spec surveillance requirements, and that has been in progress since we -- our own self-assessment showed that we needed to re-look at that, and so that has been going on for several months.

CHAIRMAN JACKSON: Okay.

MR. BOWLING: Okay. With respect to the tier 3 inspection, the design -- the NRC has debriefed with us and indicated that the design control program meets Appendix B requirements and is able to effectively maintain configuration.

In summary, the actions that have been taken to date to restore and maintain configuration, and to address longstanding safety and programmatic issues, are being effective. Still, we recognize that all the corrective actions necessary to restore full compliance have not yet been completed. This will be completed prior to restart.

Also, we must make sure that our organization demonstrates, going forward, --

CHAIRMAN JACKSON: Prior to your coming to ask us for a restart decision.

MR. BOWLING: Yes, ma'am. Going forward -- also, we must make sure that our organization, going forward, demonstrates a healthy respect for regulations, from both an intent and a compliance standpoint. However, I do believe that our Corrective Action Program will support the conduct

of safe operations.

If there are no further questions, I will turn it over to Jack.

CHAIRMAN JACKSON: Commissioner Dicus has a question.

COMMISSIONER DICUS: It's another case where the slides, the packet we had, that I studied, changed a little bit from the packet that we have in front of us. The slide didn't, but its location did.

I would like for you to go to back-up slide No. 7, please.

The slide is entitled, "Radiation Protection," and it says, "Progress. Radiation protection practices continue to improve and oversight will continue to monitor performance." But the graphics don't show that on the slide, from my -- my viewpoint, and it is over only about a four month period of time, but the graphics basically show a steady state, fluctuating somewhat, but a steady state.

It is back-up slide No. 7.

So my question is, your statement, radiation protection practices continue to improve, but the graphics don't show it.

MR. BOWLING: Okay. This -- this is from the Nuclear Oversight assessment of the Radiological Protection Program, from a total program concept, and Dave Goebel can

address that more. But from my standpoint, what I was trying to show was the actual violations of procedural requirements or regulatory requirements on performance in the RCA, radiological control areas. And, so, based on that trend, we have shown substantial progress. But that is only one element of the overall Radiological Protection Program.

COMMISSIONER DICUS: Okay. So there are other aspects of it that are keeping this from being higher?

MR. BOWLING: Well, the other thing about this.

COMMISSIONER DICUS: That would be my point.

MR. BOWLING: Right. The other thing about this graph is that you can see that, even though it is at stable trend, it is well into the satisfactory area. So it is meeting expectations.

MR. KENYON: Commissioner Dicus, I think it would be helpful that when --

COMMISSIONER DICUS: Okay.

MR. KENYON: -- Mr. Goebel gets to his presentation and takes you through what these kinds of slides mean, that then we can talk specifically about that one and put it in context.

MR. McELWAIN: Good morning. I am Jack McElwain, I would like to give a present status on Unit 3.

We are on track for Unit 3 physical readiness by the end of December. The key issues are completion of

motor-operated valve work, restart modifications, and restart maintenance backlog.

The next two slides, I will explain why I believe we are on track.

This slide represents the total start-up related automated work orders. As you can see, the first vertical bars on the left are representing monthly totals and the right side are further broken down by week through the end of December. This was done to illustrate clearly what remains to be done prior to being physically ready.

There are currently, on the slide, there are 677 automated work orders required for physical readiness. This is broken down into those three categories, MOVs, MODS and maintenance.

The slide depicts our continuing plan which shows the effort required for these three areas relating to AWO closeout.

As you can see in the motor-operated valve area, there are 97 completed and 46 remaining, which will close out -- of the 46 that are remaining, when we finish that work, we will close out 171 automated work orders. That is what this slide is intended to show us.

COMMISSIONER DIAZ: What is the difference? I got lost between the 143 and the 171.

MR. McELWAIN: There is no one-to-one ratio for

143 valves and 143 work orders. There have been about 400 work orders for motor-operated valves, for the 143 valves. There is no one-to-one, bean for bean. But that just shows when we close out those last 46, we will close 171 of those automated work orders.

CHAIRMAN JACKSON: Now, does completed or closed out mean that the drawings are updated?

MR. McELWAIN: The red line drawings are updated. The testing is complete. The analysis has been done for operability. For example, in the differential pressure testing, dynamic testing, you have to go through an operability determination analysis before we say that that valve and that work orders are complete. And that will happen.

Of the 46, all but four are issued to the field today, and work is approximately 40 percent complete. And the four that are not issued to the field are boundary valves for the alpha training that we are in now. We need to get five valves back before we can issue those last four.

In the MOD area there are 127 of 182 complete. The remaining 55, 35 are in progress and will complete with the present alpha training outage, and the remaining 20 are scheduled to be completed prior to 12/24/97.

CHAIRMAN JACKSON: Let me go back to -- well, it doesn't matter, you can pick either category. But if we go

back to the MOVs, you said 97 are complete, and I appreciate what you say about the number of automated work orders versus the number of valves, but in terms of getting some sense of, you know, of a match-up between the two, if 97, the work, I presume you mean, on 97 MOVs is complete. How many of the automated work orders does that -- none of them are done, related to that, or --

MR. McELWAIN: About 300 of the automated work orders relating to motor-operated valves are done with those 97.

CHAIRMAN JACKSON: With those 97.

MR. McELWAIN: But the number might be 250, but it is --

CHAIRMAN JACKSON: I understand.

MR. McELWAIN: It is in that range. And it is not just the physical work, is through testing complete also.

CHAIRMAN JACKSON: So the 171 are associated with the 46 left?

MR. McELWAIN: Yes.

CHAIRMAN JACKSON: Okay.

MR. McELWAIN: In the corrective maintenance area, the work for alpha training has been issued and performance is on schedule to meet completion prior to 12/24/97.

CHAIRMAN JACKSON: Now, again, you know, you always have steep work-off curves. I asked the question

about stress when you were here before, you know, stress on your manager and stress on your people.

MR. McELWAIN: Yes.

CHAIRMAN JACKSON: Do you want to make some comments along --

MR. McELWAIN: Well, I will tell you that if you looked at the people responsible for these activities right now, they are the opposite of stressed. They are excited because they see the end of their very, very long effort. That is purely my personal judgement, but that is what I see.

MR. MORRIS: My team always gets a little upset with me when I raise this issue, but if we don't finish this work till after the holidays, so that people can enjoy some time, that would be acceptable with us. But they don't like me to say that.

MR. KENYON: And it is not that we don't like him to say it. It's really okay.

But just to add another comment, Chairman Jackson, the difference between what you are seeing now and what you have seen in previous presentations is that we have had previously a big backlog of work, some of which was scheduled. What we have now is a much smaller backlog of work.

CHAIRMAN JACKSON: Still big though.

MR. KENYON: But this is very do-able. What --

CHAIRMAN JACKSON: But is it scheduled now?

MR. KENYON: It is all scheduled and that's -- that's the key point. What Jack has taken you through is categories of work orders, but they are into an outage schedule that comes to completion before the end of this year. And, you know, if we have a valve testing problem, or whatever, that carries us over into January 5, but everything is scheduled and this is very do-able, and the employees who are doing this work absolutely believe that this can be done in the time frame that is laid out. So this is very achievable.

CHAIRMAN JACKSON: You know, I asked you this before, and I will ask you every time, and that's why I asked the question about if you complete things and you find problems after you have completed them, do you feel that you are appropriately balancing scheduler concerns with comprehensive resolution of the issue?

MR. McELWAIN: Yes. I can give you what I think is a concrete example. When we have come out of the two major evolutions we were in prior to the alpha training, which was the VCT outage, which was a very lot of work involved in that, we did not put pressure on getting into the bravo training outage from a transitional point of view. We just stayed away from having any perception that we had

to force the evolutions to go to meet a certain time frame.

It took longer than it would normally take in an outage situation, but that is the situation we are in, so we didn't make a lot of noise about that. The same with going from the bravo training to the alpha training. It took longer than it should have, but where we are at in time, that's okay, and we didn't put any pressure on operations or anyone else to speed it up, to make it happen quicker.

CHAIRMAN JACKSON: Now, again, you know, you had a slide 50, which is the current set, and a slide 47, which was the previous, and it mentioned is the key activity complete for the OSTI readiness inspection, safety system reviews and alignments?

MR. McELWAIN: Yes.

CHAIRMAN JACKSON: Why did you remove that?

MR. McELWAIN: It is part of what is scheduled. Every system walkdown, system review and the procedure that evaluates that system for readiness is in the schedule. They have been working them off.

CHAIRMAN JACKSON: Presumably, the pre- -- these other three bullets are in the schedule, too.

MR. McELWAIN: Yeah, but these are really relating to the physical work end.

CHAIRMAN JACKSON: I see.

MR. McELWAIN: The system readiness reviews,

although they are ongoing, are not going to complete prior to physical work, you wouldn't expect they would.

CHAIRMAN JACKSON: Okay. So this is physical readiness.

MR. McELWAIN: Yes.

MR. BROTHERS: The system readiness reviews will be completed prior to the system being required by tech specs, so, in other words, when we go, transition to mode 4, where most of our tech specs kick in on Unit 3, the system readiness reviews will be done for all the systems required. The same thing for mode 3, mode 2.

CHAIRMAN JACKSON: Okay. Well, when you talk about, you know, readiness for the operational safety team inspection, --

MR. McELWAIN: They will be done before that.

CHAIRMAN JACKSON: Right. Then you need to, you know, be comprehensive, as opposed to kind of lifting it off and then saying to me this only has to do with physical readiness. If it has to do with physical readiness only, then you should say it is such.

MR. McELWAIN: Yes.

CHAIRMAN JACKSON: If it really has to do with the OSTI, then you should say, you know, --

MR. McELWAIN: Although they aren't related, certainly.

CHAIRMAN JACKSON: Obviously, they are related, but you want to have done the systems reviews and alignments.

MR. McELWAIN: Yes.

CHAIRMAN JACKSON: And that is the point.

MR. McELWAIN: This slide introduces the topics to be covered in the next several slides is all this is for.

Marty talked about the significant items list. This is just a graphic representation of where we are at. We are on track to meet the unit schedule.

The next slides shows our current organizational assessment for Millstone Unit 3. Our current assessment shows that we do not currently meet the overall unit organizational performance levels required to support a return to operation today, but we believe we are tracking to satisfactory and will be at that level, in all departments, to support the current unit schedule. Therefore, as you can see from the slide, our overall organizational self-assessment is yellow.

We have shown significant progress over the first two quarters in basically all of the areas that we have been monitoring. So we have been doing it by quarter and now we are doing it monthly. Dave will tell you we also get the same look from oversight from their perspective. Next slide.

Operational readiness is on track to support OSTI. As you brought up earlier, there are some questions about where we are with operations and I'll get to that as I go through this a little bit.

CHAIRMAN JACKSON: Are you going to talk about how you addressed the issue with the operator performance? As I recall, a year ago you had six of seven license applicants who failed examinations.

Are you going to speak to what has been done to correct that and how that plays into the numbers here?

MR. McELWAIN: We could. We recognize that was one issue, but yes.

CHAIRMAN JACKSON: Well, that would be helpful.

MR. McELWAIN: Sure.

Presently on Unit 3 the requal program is judged to be satisfactory.

CHAIRMAN JACKSON: You are Vice President, Unit 1, right?

MR. McELWAIN: Yes, ma'am.

CHAIRMAN JACKSON: Okay.

MR. McELWAIN: I understand. Staffing is adequate. We presently have 41 licenses, 28 of which are SROs; 13 are reactor operators.

We also have, it's not shown on the slide, 30 plant equipment operators.

We have a new conduct of operations, which was kind of talked about before. It was approved and issued on September 5th and we are making strides to have everyone embrace that and understand exactly what it means, and that was one of the things that the consultant that you mentioned earlier had given me personally as well as Mike some feedback on, and that's the kind of issues he is talking about in operations now, and going to watch the operators perform, it's the same thing you would see if you did it or I did it.

We have also started to perform at power familiarization at other power plants including Comanche Peak, Vogel, North Anna, and Seabrook. Eleven of the 28 SROs have participated in this familiarization and the remaining are scheduled for that.

We also have experienced SROs from other utilities working with our operations management, particularly one from Virginia Power that's been there for awhile doing I would say a standards intervention.

We also have recently lined up an intervention from a person who was formerly the Senior Manager of Operations at Peach Bottom when they went from a SALP 2 to a SALP 1 and that area is working directly with Ops Management and they are having a hands-on, face-to-face time away from the plant intervention so everybody gets to understand

clearly what all the expectations are going forward.

So we are taking some direct interventions to have an impact on the perception of operator readiness.

To go back to the original question, six out of the seven failures on Unit 1 license exam in December of '96, we have taken actually a very thorough look at the Licensed Operator Initial Training. We have spent the last nine months of '97 looking at the systematic approach to training and how it applies to the LOIT class.

We have looked at every task, analyzed them all.

Dave analyzed the organization. The training people worked very well with the unit to develop and get ready to implement in February, probably late February, early March of 1998, another Licenced Operator Initial Training class for Unit 1.

MR. KENYON: But I think what needs to be added here is that as a result of those training failures and a lot of work we had a class go forward on Unit 3, a total of eight.

MR. McELWAIN: Eight for eight.

MR. KENYON: And eight out of eight passed at either the SRO or our reactor operator level that they were put up for.

CHAIRMAN JACKSON: Let me give you some advice.

Now you are here -- you are talking to us and you

want us to focus on Unit 3 and we are certainly here to hear that, because that is the station that the reactor you have lined up for early start, but all three of your reactors are shut down because of some systemic issues, and therefore it is important, you know, if you are asked a question about it that you think about it within the context of all your units.

MR. McELWAIN: Thank you.

MR. KENYON: Thank you.

MR. McELWAIN: Next slide, please.

The following significant milestones have been achieved, particularly in the area of Operations.

The reactor coolant system fill, sweep, and vent was done very well. This was perceived to be very well done and event-free by both the line and the oversight organizations.

The spent fuel pool anti-siphon modifications are complete, and the implementation was very well performed, but we did not, going into it, have it clearly, well-planned, as well as it could have been planned, from both a tech spec perspective as well as an actual execution.

The reason I bring that us is because it is accurate and to tell you that the input we got from oversight in the pre-planning process made this evolution happen as well as it did. It speaks very well from my

perspective to positive intervention from oversight and adding value to something that is a very complex process, but the end result was it was very well executed.

The containment basemat physical work is complete and the preliminary core bore results are acceptable, and as I mentioned earlier, the Bravo train outage is complete and the Alpha train is in progress.

The last slide shows the Unit 3 milestone schedule. I have already talked a little bit about the Tier 2, Tier 3 -- Tier 2 and 3. The plant will be physically ready or on track to meet this milestone by the end of the year. The NRC in-scope SFFI is scheduled for January as well as a 40,500 ready for Mode 4 operations presently scheduled in January also and ready for OSTI in 2-98 timeframe.

In conclusion, I believe we are on track to meet all these milestones in support of the Unit 3 schedule.

CHAIRMAN JACKSON: Where do you stand on emergency preparedness? There was an inspection report, 97203, that noted some problem areas.

MR. McELWAIN: Having participated in a graded exercise and looking at the results of the programmatic look I was encouraged by the results of the graded exercise itself and the level of performance of the participants, recognizing that from the dose assessment piece as well as

some of the procedural issues about maintenance of those procedures and of facilities that was more disheartening, but it is fixable.

We have been working diligently since the exit, not waiting for the report to come out, to have plans in place to remedy the issues that were brought up during that inspection.

CHAIRMAN JACKSON: So you are saying you are developing plans to specifically address all of those?

MR. BOWLING: Well, I'll just add we will be speaking with the Region Staff next week on this subject.

An extensive amount of corrective action on the program has taken place. However, we did have some dose assessment calculational issues.

In the currently ongoing Tier 2 inspection, the inspectors have brought up some issues in this area. Our own self-assessment tells us we need to look more at this area and we have formed a team that's already just started to -- actually brought an external consultant in, into this area, to make sure that what we have is correct and meets all the requirements.

MR. KENYON: I would like to give a little broader answer though, because we are working on certain very discrete issues in the emergency planning area, but in terms of the performance of the overall exercise and how the

individuals involved in responding to the situation and dealing with it and the performance of outside agencies and so forth, I am quite comfortable sitting here today saying we have an effective program. We just have certain things we need to address.

CHAIRMAN JACKSON: I'm sorry, please.

COMMISSIONER McGAFFIGAN: Can I ask one question about what morale is like back at Unit 1 at the moment?

Have other workers also been assigned to the other two units to do work, and what is the situation there?

MR. McELWAIN: Morale honestly ebbs and flows on Unit 1 depending on where we are in time and what the latest analyst says in the Wall Street Journal and things like that do have a direct and immediate impact.

Yesterday we had an all-hands meeting from the entire unit staff, and we went over the Vision and Mission for 1998 and all of the questions centered around finances and the ability to support what we need to do to get Unit 1 ready in 1998.

But to answer the other part of your question, currently we have approximately 40 maintenance I&C people working on Unit 3 so they are having that sense of accomplishment. They are very busy.

At the same time, we have been able to maintain our shutdown risk status as Green while still doing some

work. For example, we had the gas turbine outage and earlier this week we had a very brief planned diesel generator outage, so we are doing a lot of things but mostly right now the physical workers are supporting Unit 3 and what is currently happening on the ICAVP or CMP for Unit 1, so morale does ebb and flow.

Yesterday it wasn't nearly as bad as it was a week before, but it does change depending on the kind of information they get, and most of it is from outside.

COMMISSIONER McGAFFIGAN: Is that a distraction to the site as a whole at all, the ebb and flow?

MR. McELWAIN: I think my perception is that the Unit 3 people for example understand the impact of what we are doing on 3 and not doing on 1 has, and I believe the interaction is very positive and they do ask me routinely the same question you asked me, which is good. This is an issue that we are all very aware of. As Jack says, you can imagine the impact on the people when they read and hear things about Unit 1 but it is an issue that we are trying very hard to be straightforward and open with so that they have a clear picture of where we're going. But it is something that we are tuned in to.

CHAIRMAN JACKSON: Okay. Anything else.

MR. McELWAIN: That's it.

Dave?

MR. GOEBEL: Good morning. Today, we will provide you a synopsis of nuclear oversights, readiness for restart and how I am assessing the readiness of the Millstone units for restart.

First, I will discuss senior management's success criteria for nuclear oversight and then I will discuss the nuclear oversight restart verification plan or NORVP and some of the specific results from that plan.

Let me start with the success criteria for nuclear oversight. There are three success criteria.

First, that the Nuclear Safety Assessment Board or NSAB has confirmed the effectiveness of nuclear oversight. They have done that. The NSAB has reviewed oversight's performance and stated that oversight has effectively performed its 10 CFR 50 Appendix B functions.

Let me make it clear however that this vote of confidence means to me that we have met the minimum expectations for recovery and I intend on making additional improvements to our current state before restart.

The second criterion is problems that are being identified by Millstone organizations prior to external agencies well before events occur. Last month, looking at the station, about 90 percent of all condition reports were identified by Millstone nuclear organizations. Marty has already addressed that. Over the past six months, 92

percent of all condition reports have been self-identified by NU. Oversight, that is the line and nuclear oversight, are therefore meaningless success criteria.

The third success criteria is that management embraces oversight's assessments. This chart shows that the unit and support organizations have been working to address the nuclear oversight to generate the condition reports. You can see that the total number of condition reports that are open, that is need evaluations and corrective action plans, have dropped significantly since the first half of the year. The number now is less than 35.

I might add that I am still assessing our ability to close out the corrective actions associated with the CRs which are being written and by closed out, I mean the necessary corrective actions have been completed and were effective in addressing the initial problem. Marty has talked to the team which the line organizations have set up in order to go back and look at old CRs. I have a separate team which is doing a similar effort to show that we have an independent view of what the success rate is in that area.

Thus far, my initial look says that the conditions have improved. We have gone back and looked at 44 condition report packages and within those packages are 257 individual actions that had to be taken and our evaluations on a grading system went up above 15 percent on capability and

put clearly into the satisfactory range.

Let me now turn to how we are assessing unit readiness for restart, the nuclear oversight restart verification plan. First, we identified 22 key issues such as corrective action, leadership, self-assessment, training and then some functional areas such as security and emergency preparedness and that provided us the strategic focus for the plan. Then we developed a list of critical attributes to examine for each issue. The attributes were drawn from NRC documents such as inspection guides and manual chapters. Such as, for instance, manual chapter 0350, which are staff guidelines for restart approval and from industry guidance. For instance, the INPO performance objectives as criteria for operating nuclear generating stations. We also took attributes from the NU success criteria and the NU standards and management expectations.

To assess and score these attributes, we developed a score sheet to grade all activities to perform on a zero to 100 scale. The form we use is in the backup book. In brief, the way the scoring works is this. Fifty points relate to the quality of the task performed so that if there is a programmatic weakness in the task that is being performed, it would get a very low score and if it is an industry strength, it would get a high score. And 50 points are allocated to the human side of the equation, with a

clear expectation for trained people, clear procedures, was there teamwork involved, was there good self-checking and self-assessment involved.

We then take the scores developed throughout the entire organization and create a report for each issue. The report includes a numerical score and very specific review of strengths and weaknesses which are identified during that particular evaluation period. On the report that we provide back to the line organization, we also list those attributes which specifically require attention in order to move the issue into the satisfactory overall range. This information is then shared throughout the line and support organizations.

On the next slide, what you see is results, the nuclear oversight restart verification plan for Unit 3 for the past several weeks. We are now actively viewing 20 areas for both Unit 3 and Unit 2. Five of the areas are common or site-wide issues such as emergency preparedness and security.

As is aid, we use our normal audit, surveillance, field observation and other processes as part of our verification plan, grade each of the activities on a zero to 100 scale and then average the scores on a bi-weekly basis. Last week, we had over 450 observations.

In order to improve our observation of oversight

activities, I have also grouped the issues into three areas. Readiness for the 4500 inspection of corrective actions and self-assessment, physical plant readiness and readiness for the operational safety team inspection and I will provide my recommendation to the president and the CNO as to whether nuclear oversight believes the unit is ready for the NRC to come in and conduct its inspections.

What I would like to do now is go over a couple of these issues with you. Conduct of operations. This is one of the most important issues. As you can see, there is a standby for each evaluation period which represents the average score of all the attributes which were assessed in that period. And you can see that the trend of the scores over several weeks is generally upward.

You can also see the scores required to achieve a color. For example, a score between 70 and 100 is green or satisfactory. You can see that operations is hovering near green or satisfactory performance.

We have some strengths in operations. For example, control room decorum is very good. There are few distractions allowed and communications is a notable improvement area. Enunciated response is also meeting industry standards. But there are also some areas that need attention.

We feel that there is inconsistency in performance

between the operating crews. Maintaining configuration control is not as rigorous as we want them to be and, by that, I mean valve mispositioning and that sort of thing. Operators in the field need to actively monitor the housekeeping industrial safety practices of other departments that are in the field. We take those and then after each grading period feed that back to the line and have a lot of discussion between my lead person and the lead people on the line.

The next slide shows work control and planning which is also another critical issue. Here, you see again there are some ups and downs over the past few weeks and generally you can see that work control process is improving.

Now, the areas in which improvement is needed here are greater focus on completing the PMs and surveillances on time, ensuring that work is not released to the field with wrong or insufficient parts and ensuring the post maintenance testing requirements are not changed without proper authorizations.

CHAIRMAN JACKSON: How are you saying on this slide and the previous one that it's improving? I mean, it seems like the bar graphs are going the other way, but maybe it's my imagination.

MR. GOEBEL: Chairman, these are individual,

bi-weekly forms.

CHAIRMAN JACKSON: So you are saying if you have more integrated data

MR. GOEBEL: Right, and it's gradually as a whole coming up.

CHAIRMAN JACKSON: Okay.

MR. GOEBEL: I mean, for instance, there may be 10 pages of attributes. We don't get them all every week so it's --

CHAIRMAN JACKSON: Okay.

MR. GOEBEL: Then when you look at procedure quality and adherence, you can see that there has been steady improvement in the degree and range.

Now, if you go back and take Marty's comment that there was a procedural change in the standards back near the end of September and you compare that against the chart, what you see is it took a little bit of time for that to take hold but as those improved standards took hold, then the performance improved. So there is a tie -- unknowingly, there is a tie in the process. I mean, if there are improvements made, the process is able to pick that up. That's the point I'm trying to make.

What I've tried to do is just present a sampling of the results from the verification plan process and what I've provided you in your backup materials is all of the

issues from both Unit 2 and Unit 3.

In conclusion, I would like to state that nuclear oversight believes that restart readiness is within reach. The NSAB has confirmed that nuclear oversight is effective in carrying out its 10 CFR 50 Appendix B duties and we are continuing to improve our performance through internal self-assessment, external assist visits from industry experts and improvement plans. Line management is listening to our findings and appreciates the insights provided by oversight.

I can conclude therefore that, based on the objective evidence being provided through our verification plan assessments, audits and surveillances that we do, field observations and inspections, that the station is focusing management attention on the correct issues and is demonstrating improvement in the key issue areas and a restart of Unit 3 in the first quarter of '98 is an achievable goal.

Subject to any further questions, I will pass it back to Bruce.

COMMISSIONER DICUS: Back on slide 7, I assume that your response to my previous question would be I guess the same as the response to the Chairman's questions on the previous graphs. Again, the statement and the graphs just don't quite seem to meet.

MR. GOEBEL: Right. In the radiation protection area, again, we don't get all the attributes on any one week. And, for instance, the latest one, just to give you an example of the type of information we go back with on the observations we had, positive points that got fed back to the organization was a good team spirit within the RP organization, when they interface with other departments, good ALARA practices are present, a lot of proactive planning briefs and coaching for rad work and practices improvement, positive self-assessment planning for the three-year to complete the RP program review so there are some positive long-range things that we are looking at to make themselves better.

But we did find a problem as well in this particular week and one of those problems was that there was a meeting that determined a certain performance criteria which they are setting for their own windows evaluation, their own criteria needed some buffing up, that it wasn't as strong a criteria set as we felt you ought to have. It was not as -- it was more subjective than we would like to see.

The types of things which we recommended are major areas to continue strong work on is basically continue there from and have people comply with the various RP controls and you have to constantly stay at that and continue to work synergistically with the rest of the organization.

So those are the types of things that we feed back to the organization on a biweekly basis. And then I, in my interface with the officers at the frequent meetings we have, I point out either in writing or verbally those key areas that I see really need work if they want to get on to the time lines which they have set.

CHAIRMAN JACKSON: You mentioned earlier at an earlier point when we were talking about oversight a lack of familiarization with people in your organization with the plant. Where do the people in your organization come from? What are their backgrounds? I don't see their backgrounds --

MR. GOEBEL: No, I understand.

CHAIRMAN JACKSON: I mean, where do they fit within the overall corporate organization.

MR. GOEBEL: A lot of the folks -- I'm not even sure I can qualify a lot. Some of the folks have been in oversight for some time and are not licensed operators and they have had -- they may have come from engineering, have an engineering background. They may have come out of a function associated with a plant which does not put them in the direct licensing path so they don't get the true operational feel for the plant. And we have some folks that we've -- some of the skill that we've brought in from the outside, we've particularly tried to go after people who

have had increased experience in all the key issue areas where we have to have expertise. So when I've gone out shopping for people, I've looked at it from the standpoint of what skill sets we need to fill and I've gone after those particular skill sets. And some of those folks, although they have an individual specialty skill set, they don't know these systems because they came from someplace else.

So the outside consultants' comment to us was not that your folks are not knowledgeable because they are knowledgeable but, on these particular systems, you need to get them out so they really understand these systems and that was the tenor of the comment -- that was the tenor of the conversation.

CHAIRMAN JACKSON: Does the line organization respect your organization?

MR. GOEBEL: I think the answer to that is yes, but I will say that it is up and down.

It has been up and down and we -- it's something that we all have to continue to work at.

I have it work at it on my side so that -- I think in this business you earn respect and I have got to provide a quality product so that the line has a reason to respect my product.

On the other side, on the line side, if they don't respect it they need to come back with constructive

criticism on how to make that work and we are making that dual loop work for us.

MR. MORRIS: I would tell you that that respect is growing from points that I have been checking on, that very issue. It is very important to us that that be the case and it is there and it is growing, but there is work to be done.

MR. KENYON: In closing, I would like to restate our challenged somewhat differently.

First, to directly address the leadership challenges at Millstone it was necessary to establish a new leadership team and to regain the confidence of our employees. This has been achieved. I have a lot of confidence in this leadership team.

Second, our challenge has been to set the proper standards, and in so doing address the various site issues which have been the major performance problems at Millstone, and I want to pause here to really acknowledge our receptivity to the advice that you gave earlier in the meeting.

These are site issues. Some of these site issues can only be looked at as site issues -- emergency planning, security. I mean these are clearly issues that there's no way to subdivide.

There are other issues such as the restoration of the design and licensing basis where the standards that must

be met are site standards, but you can talk about where a particular unit is in relation to those standards -- issues of work backlog and effectiveness of how we do business.

We want to have a common way of doing business but then you can talk backlog on a particular unit, so we are very sensitive that what we are about is to some extent it is getting a particular unit ready but what I have said from our very first meeting is that the fundamental problem at MIllstone was leadership and the ensuing issues that are site issues in terms of how leadership functioned.

So we recognize that what we have to do even though we are getting ready to say to you that we think a particular unit is ready to go, we have to have addressed the site issues in order for a unit to be in a reasonable place to start up, so we certainly acknowledge the advice you have given us.

With regard to the site issues, I want to make two points.

First is that in contrast to my last briefing with you, our last briefing with you, I do believe we are on a success path, tracking to satisfaction, for all of the issues, and as I indicated earlier, most of the issues are going to reach satisfaction in January and the remaining three in February.

But I really want to emphasize something I said

earlier in response to one of your questions, and that is that we absolutely recognize that reaching satisfaction for startup is not the end of the road for us. This has got to be part of a long-term effort toward excellence.

Taking safety conscious work environment as an example, we absolutely know that the training that we have in progress, which we think is excellent training and it is what our management team needs, this can't be the end of training on this issue. This can't be the end of emphasis on this issue.

This has got to be part of our ongoing how we do business.

The same thinking applies for all of the other site issues that we have. Improvements must continue as part of a long-term plan to achieve excellence. This plan is under development and will be addressed to you at our next meeting.

A third challenge has been to reduce the large backlog of work to a manageable level with the achievement of physical readiness around the end of this month. I think that challenge will have largely been met.

The fourth and final challenge I want to mention is to prepare the unit for operation.

In January, following achieving physical readiness, we'll be ready for Mode 4. That will allow us to

heat the plant up.

That will allow us to really exercise operations and we need to do that to satisfy ourselves that the operating folks are really ready to go, because up to now they have been largely dealing with not only a shut down plant but it's been mostly system lineups and what do you do to support work over here versus work over there, and we have really got to get them back into an operating mode for our own purposes in preparation for startup and to achieve readiness for the NRC's operational safety team inspection in early February.

Chairman Jackson and Commissioners, I truly believe we are on the home stretch for Unit 3 in recovering our first Millstone unit, and I look forward to our next meeting.

CHAIRMAN JACKSON: Thank you. Mr. Morris, do you have any final comments you wish to make?

MR. MORRIS: No, I do not, Chairman Jackson. Thank you very much for your time and attention and the questions.

I think our team learned a lot today.

CHAIRMAN JACKSON: Thank you. While the next group, which I believe -- I see the various consultant groups coming forward. We are going to take a five-minute break.

[Recess.]

CHAIRMAN JACKSON: Good morning. I think it is still the morning.

I think we will hear in turn from Sargent & Lundy and then from Parsons Power and why don't you just begin. You can identify yourselves and proceed.

MR. ERLER: Good morning Chairman Jackson and Commissioners. I am Brian Erler, Senior Vice President, Sargent & Lundy, and Project Director for the ICAVP.

As we did last time, we will be going through some of the general information that applies to both Parsons and our work and then a report in detail on the status of where we are at.

With me is Don Schopfer, Vice President and Manager of the Sargent & Lundy ICAVP and he will be presenting the data in detail.

MR. SCHOPFER: Good morning.

The first slide.

We have some background information and some refresher information on the structure and the processes used on the ICAVP for both units. As described in the commission paper written by the staff, the ICAVP is being performed in a three-tiered process. The tier one reviews or, excuse me, verifies that the system meets the licensing and design basis and system functionality. The tier two

review verifies that the system design parameters relied on to mitigate the consequences of accidents analyzed in Chapter 15 of the FSAR are consistent with the performance of the current system configuration. And the tier three review verifies that the configuration control processes used by Northeast Utilities at Millstone have not introduced any changes that have put the unit in nonconformance with its licensing and design basis. The majority of the work is being performed in the tier one, that is where the majority of the effort is being spent.

The NRC staff and Sargent & Lundy and Parsons have developed a common process for reporting the findings identified during the review process. These findings are called discrepancy reports. As I go through, this is how we stepped through that discrepancy report process.

An individual reviewer initiates a preliminary DR. It then undergoes an internal review process within Sargent & Lundy or Parsons, as the case may be. Upon completing that process, the preliminary DR is issued to Northeast Utilities, the NRC staff and the NEAC, Nuclear Energy Advisory Council of the State of Connecticut and it is posted on the web site.

Northeast Utilities evaluates that preliminary DR and submits a response back to us and we then review that response and either return it to them with additional

comments or we may close it at that time based on their response.

CHAIRMAN JACKSON: Did you look at proposing any alternatives, for example, in sampling? You know, based on what you find?

MR. SCHOPFER: We have developed sampling programs for certain aspects of the review. When we do that, we submit that to the staff for their acceptance.

CHAIRMAN JACKSON: Right. But, I mean, are they renormalized by what you find? Did you suggest additional samples, enlargement, different techniques?

MR. SCHOPFER: We have not made a change in those things that we have sampled as a result of that.

DRs are closed based on our review and acceptance of the NU responses. The NU response to a discrepancy report, a preliminary discrepancy report is, it expected to include whether they agree with the condition that we have identified as a discrepancy, whether they have previously -- had previously identified that during their configuration management program and, if they have not previously -- if they agree that it is a discrepancy and they have not previously identified it, they identify what action has been taken or will be taken to correct that particular discrepancy. And whether they agree with the significant level that we have established for the DR and if

there is any impact, specifically on plant hardware. And, in the case of generic or programmatic issues, the response should address the extent or condition that may exist with the discrepancy.

CHAIRMAN JACKSON: How does this discrepancy report process allow you to get at the tier three aspect? I understand that in doing the discrepancy report you could verify that the system -- whether it meets its licensing or design basis, you could verify that the system parameters correspond to the actual performance. You know, the design parameters correspond to the performance.

But how do you verify in this process that the configuration control processes have not introduced changes that would put or that have put the unit into nonconformance?

MR. SCHOPFER: Well, part of the tier three as we will show a little bit later what the scope is, part of the tier three is review of corrective actions and we review the corrective action process to see that they have done an adequate job in resolving the issue that is identified.

On some of the past changes, we look at did they make that design change appropriately and not -- this is outside of the tier one systems -- did they make those design changes or those procedure changes without making the other appropriate changes to the design basis and licensing

basis.

CHAIRMAN JACKSON: Does that get captured in the discrepancy report?

MR. SCHOPFER: Yes, it does. Everything that is in noncompliance with what our expectations are, our checklists and the scope of the review plan, is identified as a discrepancy report.

CHAIRMAN JACKSON: So you are actually looking at process as well as looking at the actual confirmed DR with design and licensing? Okay.

MR. SCHOPFER: The DRs, when they are closed, based on the review of the NU response, may be categorized into three different areas. It may be a confirmed DR and that is one that is not -- a discrepancy that has not been previously identified by the Northeast Utilities configuration management program, or it may be identified as previously identified, categorized as previously identified, which means they did in fact identify it prior to the start of the ICAVP and we were not able to discern that during our review process, or we may agree that it is, in fact, a nondiscrepant condition based on some additional information they submit with their response.

CHAIRMAN JACKSON: Are you going to talk about how your discrepancy reports break out between the tier one, tier two and tier three categories?

MR. SCHOPFER: I have some of that --

CHAIRMAN JACKSON: And are there any conclusions, even preliminarily, on the strengths and weaknesses of the licensee's programs as a consequence that you can make?

MR. SCHOPFER: And I will address that.

CHAIRMAN JACKSON: Okay.

MR. SCHOPFER: There are four levels of discrepancy report significance that have been established for the ICAVP. They are noted here on this slide. A level one is a discrepancy that results in a system not meeting its design licensing basis and cannot perform its intended function when both trains of that particular system are affected. Level two is similar except that only one train of a redundant system is affected.

Level three is a discrepancy that -- under which the system is also not meeting its design and licensing basis but it does not render that system incapable of performing its intended function.

A level four DR is a discrepancy that is a minor technical error in a calculation or a procedural change that is not significant in terms that it made -- allowed someone to do something incorrectly on a large number of processes, or it is inconsistency perhaps between documents.

CHAIRMAN JACKSON: Let me ask you this question. In looking at the level three significance level, do you

look at -- if a system doesn't meet its licensing and design basis but is capable of performing its intended function, are you reviewing as part of that or evaluating as part of that whether the licensee has done an analysis to in fact demonstrate that the system is capable of performing its intended function?

MR. SCHOPFER: We are not doing the analysis -- an analysis, per se, to verify.

CHAIRMAN JACKSON: No, no, no. I'm saying, are you verifying that they have done that?

MR. SCHOPFER: Yes. Yes, that is part of our expectation of receiving a response on a level three, that they have done that review and convinced us that -- and provided the results of that analysis to show that that discrepancy in fact does not render that inoperable.

CHAIRMAN JACKSON: And are you keeping track of whether that analysis was already existing or whether it is analysis that is done in response to your query?

MR. SCHOPFER: Yes, we are looking at that.

CHAIRMAN JACKSON: And my last question is, are you overlaying on all of this a risk ranking in terms of in the various tiers and looking at what you found? That's probably reflected in the systems in fact that you are reviewing?

MR. SCHOPFER: Yes. We have not done that in

terms of risk ranking but the selection of the systems was based on risk ranking.

CHAIRMAN JACKSON: And then one last thing. When you look at what the licensee has done in terms of its analysis, do you -- do you review whether that analysis is done from the point of view of capturing the things that have the greatest risk or safety significance?

MR. SCHOPFER: Yes.

CHAIRMAN JACKSON: Okay, thanks.

MR. SCHOPFER: That is basically the last of my comments on the overall ICAVP process for both units and this will begin the discussion now of Unit 3 specific ICAVP. As a background, again, the scope of the tier one review for Unit 3 is as shown here. The systems identified, servicewater, QSS, RSS system, three HVAC systems that includes the supplemental leakage collection and release system, the aux building ventilation system and the emergency diesel generator room ventilation system. And the fourth system, fourth set of systems is the diesel generator and associated support systems.

The -- each of these systems, and this constitutes I think about 14 of the 88 maintenance rule group one and two systems at Millstone Unit 3. The designations at the bottom of that slide are the shorthand notations we have used for that grouping of systems in our -- in our process.

In addition to the systems, the specific systems listed there, the review also includes the electrical power feeds from each component up to the first motor control center feeding that and then a load path review which is a somewhat less detailed review from that particular motor control center back to the diesel generator. Also, the INC signals that interface with these systems from other systems are also included in that review process.

CHAIRMAN JACKSON: Let me ask you this quick question. Can you describe a couple of the DRs that were not identified by the licensee's Configuration Management Program and what significance you would attach to them?

MR. SCHOPFER: Sure. We have one that is in process right now that was submitted. We responded and we returned it back to them, asking for additional -- to address other aspects. That was a containment penetration design that is fixed on both ends of the inside and outside the containment, plates that are welded on and this penetration is welded at both ends.

The RSS system temperature went up as part of some of the changes in the RSS modifications that was talked about previously, went up to 257 degrees and that temperature change on that penetration itself being welded at both ends was not addressed.

It is a calculation error that we identified that

needs to be addressed, and that is a safety or significance level 3 item, a significance level 3 item where a corrective action was done. This is a Tier 3 review. The corrective action document we reviewed did not address everything that needed to be addressed including the procurement of environmentally qualified terminal blocks. That was a level 3.

Level 4s -- you probably don't want me to identify level 4s. There's multiple examples of those but is that sufficient?

CHAIRMAN JACKSON: If I jump ahead to your last slide, that's not to say you can't talk about the ones in between --

MR. SCHOPFER: Thanks.

[Laughter.]

CHAIRMAN JACKSON: I note that over half of those, the DRs, that were acceptable and closed were not identified by the licensee's Configuration Management Program and you heard me talk about that earlier.

MR. SCHOPFER: Yes.

CHAIRMAN JACKSON: Is there any significance that you attach to that or that we should attach to that?

MR. SCHOPFER: Well, I think we have to sort that out in total when we are finished here, but at this point a couple things to note, I guess.

Of those 38, only two have been confirmed as level 3's. I did mention one of those, which was a terminal block EQ.

The rest have been level 4s.

Many of them have been calculation errors. The last slide is in fact the slide that is on the screen now, which is a couple slides added to what perhaps was submitted earlier, but that summary shows the type and discrepancy level of the 38 closed DRs.

You can see that they are mostly in the calculation area. There are some in the basically as-built configuration, the installation implementation, and some in the licensing documents, but what this may indicate is that the Configuration Management Program and the ICAVP are not a one-for-one that they did exactly the same thing and exactly the same depth.

I think particularly in the calculation area, we have done a detailed review of all the calculations on these systems and the CMP program performed by NU did not necessarily go to that level of detail for all those calculations.

That is why you will see a number of those as not previously identified.

CHAIRMAN JACKSON: Okay, thank you.

MR. SCHOPFER: Okay. The slide that shows the

scope of Tier 1 system review has the four system designators, the shorthand designators, at the top and it identifies the magnitude of the scope of the review really, and I am not going to go through any of these numbers other than the fact that these are the system requirements for each system. The numbers of calculations are the numbers of the various documents including the corrective action documents in the NU system that were reviewed as part of this.

Again, this is where the majority of the ICAVP process has been.

The Tier 2 review scope included all of the accidents analyzed in Chapter 15 of the Millstone 3 FSAR. It included 22 systems that are used to mitigate the consequences of an accident and 230 critical characteristics that were identified from the review of the accident analysis and verified.

Those critical characteristics were submitted to the Staff for their acceptance and they concurred or commented on those.

The intent of the Tier 3 review is to review various changed processes on a greater number of systems than the Tier 1 does and to verify that the design and licensing basis has in fact been maintained.

We reviewed the current NU change processes and

that included 11 changed processes, 20 procedures, and 8 chapters of their Design Control Manual.

We also reviewed the implementation of those current processes, and those procedures basically were new as of earlier this year.

We had some additional corrective action reviews that were selected, sample selected by the NRC Staff outside of the Tier 1 systems and some 280 changes that were done in the past at various times, all the way back to the 1985-86 timeframe to see that changes made then did not adversely impact the licensing and design basis.

CHAIRMAN JACKSON: Now I noted that the Tier 1 review is scheduled to be completed on Monday. Are you going to make that schedule? It's the 15th of December.

MR. SCHOPFER: The Tier 3 review.

CHAIRMAN JACKSON: Tier 3, right.

MR. SCHOPFER: Tier 3 review, yes. Yes, in fact, we are, and the tier -- and the next slide shows that the Tier 2 review is in fact complete from the discovery phase, and I'll just mention that.

That is the discovery portion of the reviews that we are talking here. Obviously we have to get the responses from NU for the discrepancy reports and evaluate them, and then basically analyze the results and submit a final report, but our review process will be done on the dates

that are shown here in terms of identifying issues and writing the discrepancy reports that may have to be written.

CHAIRMAN JACKSON: Mr. McGaffigan.

COMMISSIONER McGAFFIGAN: Could I ask, the schedule that we had back in August obviously was about three months --

CHAIRMAN JACKSON: Your mike is not on.

COMMISSIONER McGAFFIGAN: The schedule we had back in August contemplated dates about three months earlier than these dates.

Was that always -- you hinted at the time that there were problems and maybe with additional resources you could keep to it, but it was going to be a stretch.

Was it always close to "mission impossible" to have kept to anything like that schedule?

MR. SCHOPFER: During the August meeting we said we were evaluating the schedule. We had just gotten the additional systems and we were evaluating what it would take to do that.

We did in fact change by about two months, I believe, from the date that we established after this meeting in August. We established I think an October date at that time -- or, excuse me, a November date, and now it is two months beyond that.

COMMISSIONER McGAFFIGAN: Since I have the floor,

I will ask one other question that is a hypothetical question and those are probably always -- your counsel would tell you to avoid answering it, but let me ask it anyways --

[Laughter.]

CHAIRMAN JACKSON: That never stops Commissioner McGaffigan.

COMMISSIONER McGAFFIGAN: I'll ask you -- it would help me if you could answer it.

If we took a top quartile plant, you know, INPO 1, SALP 1, or 1.24-5 plant and subjected them to the same inspection that you have been doing, how would Millstone be different? Do you mean compare? How would Millstone compare? We have gone through a very extensive process and there are relatively small numbers of discrepancies, or levels -- levels of the discrepancies are not very significant, it looks like. I mean two level 3's and 30-odd level 4's.

Take a top plant, you know, that you may have some experience with. If they went in -- I mean --

CHAIRMAN JACKSON: Would they look the same?

COMMISSIONER McGAFFIGAN: Would they look the same?

MR. SCHOPFER: No, they wouldn't necessarily look the same, but you would have -- you would still have a number of discrepancy reports written on the basis that this

program was set up on. The level of detail, and looking back at calculations done, I said -- I talked about changes made in -- processes made in '85 and '86. We are looking at calculations done perhaps in '70s and early '80s, and other plants that are in that category would have some issues with calculations done at that time also.

That doesn't mean they are not significant. But there would -- I am sure there would be some differences in terms of the numbers and the type. But there would be issues like this.

COMMISSIONER McGAFFIGAN: Would Millstone be comparable to a -- at this point, having -- not every plant has invested what Millstone has over the last year to get ready for you all, but would Millstone now be comparable to a pretty good plant, if you were to do a similar inspection at -- at one of the top quartile plants?

MR. SCHOPFER: I guess, based on the review to date and, as you can see, the number of responses that we have actually looked at in terms of -- or closed, I would use the term that they are on track. Their configuration control, their design and licensing basis has been restored, I think, relatively well, based on the Configuration Management Program, which is what we are basically reviewing. So, as it stands today, they are on track to satisfactory, if that was the terminology that you used

earlier, Chairman Jackson.

COMMISSIONER McGAFFIGAN: You are doing a good job avoiding the question.

MR. SCHOPFER: Thank you. Thank you. I was successful.

[Laughter.]

CHAIRMAN JACKSON: Why don't you go on.

MR. SCHOPFER: Okay. Where was I? I guess I was on the project milestone schedule. As we said the discovery completes on the date shown there.

There were three specific areas that were included in the scope of the ICAVP for Unit 3 that had significant NU engineering activities continuing this summer and fall, and that was, as Northeast Utilities personnel mentioned earlier, a significant number of -- or a number of significant modifications that were made to the recirculation spray system, some revisions to the service water system hydraulic calculations and the motor-operated value work in accordance with Generic Letter 89-10.

Those -- those things, issues were completed and -- from an engineering standpoint, and most of that information was submitted to us in mid to late November and we are in the process of finalizing that, and that is what has pushed that tier 1 date, or the -- the date out to 1/15/98, that's the primary basis for that.

And, as noted here, our final report date is somewhat dependent how well we do, "we" meaning both Sargent & Lundy and Northeast Utilities, in responding to the discrepancy reports and getting that -- those issues closed out.

The next slide, which is not really my last slide, but it was previously submitted last slide, is a summary of the closed discrepancy reports. As noted earlier, we have the process that issues preliminary discrepancy reports and then end-user response and the closure process. There have been about 500-plus preliminary DRs issued to date, and about 220 of those have been responded to by Northeast Utilities. And of those, we have completed the review as of last week on 74, with 38 of those as confirmed DRs, 20 previously identified and 16 undiscrepant, the 38 show a significance level here of primarily, almost entirely level 4's, with the two level 3's DRs.

CHAIRMAN JACKSON: How many total do you have yet to review then? I mean to close out in the sense that you have closed these.

MR. SCHOPFER: We have issued 550.

CHAIRMAN JACKSON: Five fifty.

CHAIRMAN JACKSON: Five hundred and fifty to date. In fact, -- and that's, the next slide probably provides that information. And I have tried to break it up by tier

1, tier 2 and tier 3, to give a sense of where we are on the closure process. Those numbers should add up to about 547, I believe, on the issued numbers, and those preliminary DRs, the NU responses, again, as of last week, it's 184, and I think that number is probably about 220 or 230 now, and the 74 that have been closed.

As you can see, tier 1 is most complete in terms of the DR responses provide by NU and reviewed by Sargent & Lundy. NU has responded to something over 80 percent of the tier 2 DRs and we have completed the review on about 75 percent of those. And the result is that we have found nothing significant there. Basically, we have, you know, a handful -- a handful, some more to get responses on and some more to be reviewed, some, including some level 3's, but we believe that, what we have seen to date, that we can conclude that their systems that are needed to mitigate the consequences of an accident are, in fact, in the correct configuration and design basis for that.

Tier 3 is the next most complete with about half of NU responses, and our review being about half of that. Part of that being there are various pieces of a tier 3 review, as we went through earlier, and the NU -- the comments that we have -- or the conclusions that we have reached, similar to what was reported today on the NRC tier 3, is that we do believe their design control process is --

meets 10 CFR 50 and is an adequate, satisfactory process for going forward.

And their corrective action reviews and past changes appear to be satisfactory also.

So we have no -- no significant findings coming out of either the tier 2 or the tier 3 at this time.

COMMISSIONER DIAZ: Is this tracking which is scheduled, the number that are still to be responded and closed, how does that track with the proposed schedule?

MR. SCHOPFER: The -- I'll tell you that I also will have a steep work-off rate, but the resources are truly being focused on finishing the discovery. And when they are finished, and as the schedule slide showed, next week, basically, we will be able to spend more time on the responses. We have done that as we go along, but those resources will then be allowed to focus more on the responses and take a large updraft. So I think we will be able to meet the dates that we are talking about here.

CHAIRMAN JACKSON: So you are saying there are no show-stoppers to this point?

MR. SCHOPFER: That is correct.

And the last slide, I think we talked about earlier, is basically a breakdown of the levels and types of the confirmed DRs of the closed -- excuse me, of the confirmed DRs that are discrepant and calculations and

as-built configuration being a couple of the primary areas, but nothing significant found in those areas.

CHAIRMAN JACKSON: Okay.

MR. SCHOPFER: That's all I have.

CHAIRMAN JACKSON: Thank you very much.

MR. CURRY: Good morning, Chairman Jackson.

CHAIRMAN JACKSON: Good morning.

MR. CURRY: My name is Dan Curry and I am the Vice President of Nuclear Services for Parsons and I am also acting as the Project Director the Unit 2 ICAVP. I have John Hilbish with me today. John is the head of our regulatory review portion of the ICAVP project.

I would start, addressing the agenda, and tell you that there is a difference between these two units, if you think about the age of these two units, and that will cause some significant changes to the volume of work that we will be talking about, that we will be doing. And, certainly, as we would recognize the difference between a plant that went on-line in 1975, when we talk about calculations, these are calculations that in some cases have been done back in the '60s. So some of the things have been moving ahead. And some of our reviews, of course, encompass, in some cases, ten years more than what you have heard about on Unit 3.

We are performing this, primarily this review at our headquarters in Redding, Pennsylvania, supported by our

site walkdown team at the site. The tier 1 review, as has been discussed previously, a deep vertical slice. Our two systems, the last time I was here, we had just completed the boundary review for those first two systems. We have now a second set of systems selected by NEAC in the middle of September. Each one of these selected systems, as Sargent & Lundy had indicated, have significant interfaces and it averages about 14 additional systems of the maintenance rule systems would interface with each one of these.

If I talk about the tier 2, again, a very similar process. We have identified, to give you a further idea of the extent, about 56 of the 63 maintenance rule systems are affected by things that we must look at to validate the tier 2 requirements. The process here is one that we identify the critical design characteristics and then go through a validation process.

Of interest, and we will discuss it later, is the fact that eight of the analysis, that it will impact or need to be reviewed as part of the tier 2, have been self-identified by the licensee, that require re-performance and so that is going to -- we will discuss that slip to the schedule later.

Our tier 3, again, is a historical review, and, as I had mentioned, that takes us back numbers of years, and we are doing that in five year increments to look at their

ability to continue to assess the adequacy of the CMP.

You asked earlier, Chairman Jackson about any changes that we might have had, and, although this was not a normalization based upon a sample, some of the things that we have seen in our tier 1 reviews have led us to propose some things to the staff saying that we have -- we will have seen enough in some areas that we can propose limiting, if not eliminating, some of the samples done in their particular tier.

Moving to the overall tier status, I would like to tell you the first thing we have done is we have focused our reviews starting off with the high pressure safety injection system, tier two and tier three, so that we can prepare for the staff's implementation audit which is applied to the approved audit plan. Last week, that audit was completed successfully and so, as you see, the numbers for HPSI in tier two and tier three are reasonably focused in those directions.

I would also point out by doing one system in tier one, that has allowed us not only to do the deep vertical slice but it allows us to branch into a related system so that the baselines for the programs that support all systems will be evaluated as the work that we do in the high-pressure safety injection. So that as we move forward, we will have gotten the baseline requirements for all those

19 major topical areas in the plant complete so that we expect, if you will, I won't say it was a pilot but it will essentially function as a pilot for us to move ahead more rapidly in the other areas.

CHAIRMAN JACKSON: So this all relates to Unit 2?

MR. CURRY: Yes, ma'am.

CHAIRMAN JACKSON: Is the unit doing better than you expected? In terms of moving along and completing --

MR. CURRY: I think, and we have identified and had meetings with the licensee and the staff on that. Because of the age, issue of retrieval of documents has been significant and certainly the process by which we are independent of the licensee makes it such that you would ask for information and maybe it doesn't come back complete so you must ask for something else.

And we have been working through a process that we have included now formal conferences twice a week which I think, all parties would agree, have tended to aide that process so we can say, when you send us the answer to this REI, make sure that you include something that deals with this. And I think we would all agree that it has been a learning process of how to retrieve documents on a plant of this age.

And also a priority between the Unit 3 plant and Unit 2. As you can imagine, there is a focus. And they

have assured me that they love me but not necessarily am I the first one in their heart.

CHAIRMAN JACKSON: At least you're loved.

MR. CURRY: Well, as was previously mentioned, maybe some days it wanes up and down.

On AFW, if I could comment about that, early on one of the reasons we did focus with HPSI is the fact that the licensee had self-identified that there were significant modifications to be done that would affect the main steam line break and the loss of coolant accident analysis. And rather than trying to be inefficient and jump back and forth from changes they might be making, we decided it would be more efficient to focus on that one particular system and proceed directly.

As you see, our current schedule for a final report is now April 7. Again, part of that depends upon completion of corrective actions, completions of DRs and, particularly, also some completions of the things they have to do with AFW for us to be able to complete our review.

Our Unit 2 discrepancy report status is, of course, they are much less mature from a numbers standpoint. As you see, all the confirmed DRs in our particular case, although the percentage is about the same, they are all level fours right now and they are -- it would be too early for me to try to draw a conclusion based upon what I see on

their responses from level fours.

We do now presently have about 118 in progress, 132 have been posted on the web and, much as Sargent & Lundy, we are working through that process.

CHAIRMAN JACKSON: Any other questions?

Okay, thank you very much.

We will now hear from Little Harbor Consultants.

Mr. Beck, you are leading the discussion?

MR. BECK: Thank you, Chairman Jackson. Good morning, Commissioners.

I am John Beck, President of Little Harbor Consultants and team leader for the Independent Third Party Oversight Program at the Millstone site. With me this morning is John Griffin, who is my co-team leader, and Ms. Billie Gard, who is a principal on our team.

As you are aware, Little Harbor has the responsibility to oversee Northeast's efforts to establish a safety-conscious work environment at Millstone. We have been acting in this capacity since approximately March of this year. During this time, we have reported our findings to Northeast and your staff at eight public meetings. Little Harbor has maintained essentially a full-time presence at Millstone, typically with five or six team members at the site, depending on the requirements of the particular oversight activities that were being conducted.

Our next major activity will be to conduct a second round of structured interviews with the work force at the Millstone site. This will add a set of data points to those which we gathered last June. The purpose of the interviews is to determine how people at Millstone feel about all facets of a safety-conscious work environment. Those to be interviewed will be chosen by Little Harbor to be representative of the work force and will be a different set of people from those interviewed in June. The results will be available prior to the anticipated Commission vote and we will also continue our oversight of the various Northeast programs supporting a safety-conscious work environment with a particular emphasis on the effectiveness of these programs.

CHAIRMAN JACKSON: Let me ask you some overarching questions. And if you are going to get into them with your specific slides later, please say so.

The first is, have you sensed or detected an improvement in leadership on site as the leadership assessment that the licensee spoke about indicates? And, if so, or if not, you know, what specifics support your conclusion?

MR. BECK: We are going to have some specific comments that will directly address that question about leadership, particularly with respect to the criteria

relating to retaliation and so forth.

But, in general, I would say that there has clearly been an improved understanding by the management team at Millstone, vis-a-vis a safety-conscious work environment, particularly over the last three months. And we can perhaps illustrate that better in a few minutes.

John, would you like to add?

MR. GRIFFIN: No, I agree.

CHAIRMAN JACKSON: Do you find that employee concerns rise as Millstone nears its deadline with the steep work-off rates? Is there any detectable change?

MR. BECK: There has been a slight increase in December over the month of November. But I wouldn't particularly associate that with approaching a deadline. That is always a question. What do the numbers, in and of themselves, mean. Frankly, we are far more interested in looking at the issues that are involved and looking at the quality of those concerns. And, in particular, with respect to any questions of retaliation or 50.7 issues.

One of the questions you raised earlier, and perhaps I can respond to it now, was with regard to the correlation between the corrective action program and employee concerns issues. If I heard you correctly, we have not, for example, none of us can recall a technical issue that went to ECP that had not already been a CR and the

concern was either unsatisfactory resolution of the CR by the management team or untimely resolution of the CR and that's not a --

CHAIRMAN JACKSON: Not that it wasn't addressed?

MR. BECK: Not that it was not addressed.

CHAIRMAN JACKSON: Do you have a way of measuring or of detecting the overall stress on the managers and the employees? Do you have experience with other sites to make a comparison?

MR. BECK: Being on site essentially full time, we cannot help but have our finger on the pulse of the organization. The stress levels we have seen ebb and fall or rise and fall depending on particularly what's going on and who's affected by it. It is certainly not an unexpected phenomenon to see people, when they are working as hard as they are, show some signs of stress. I have seen on the part of management a recognition that this is a fact of life and some pretty careful attention being paid to stress in general.

For example, if you go back to the MOV incident, there was a lot of stress in that organization prior to the retaliatory action that was taken. The stress level, in our opinion, subsequent to that change in management, in the group, although they are working very hard, appears to have diminished somewhat.

CHAIRMAN JACKSON: Okay, why don't you go on.

COMMISSIONER DICUS: If I may ask a quick question?

CHAIRMAN JACKSON: I'm sorry. Go ahead.

COMMISSIONER DICUS: This round of interviews that you have scheduled for February. What is the sampling size?

MR. BECK: we are going to sample approximately 280 to 300 individuals and they will be chosen across the organization and up and down, excluding directors and above in this particular case.

COMMISSIONER DICUS: Is that about the same sampling size?

MR. BECK: Yes, it will be.

CHAIRMAN JACKSON: Okay.

MR. BECK: There have been -- slide number 3 -- two events at Millstone since our last meeting for which we performed an independent investigation per the provisions of our oversight program. The first involved potential retaliation against contractors in the MOV department by their immediate management who also happened to be contractors. The second incident involved an allegation of retaliation claimed by one of the individuals disciplined by Northeast as a result of the training department investigation.

In the first instance, we verified and agreed with

the conclusions reached by the company investigation of the ECP investigators of the MOV issue that retaliation was, in fact, a factor in the termination of two contract engineers. In the second case, we concluded that there was no evidence of retaliation by Northeast management in the disciplinary actions that they took.

Moving on to our evaluation of Northeast's progress, with respect to establishing a safety conscious work environment, our oversight plan contains 11 attributes which we think are critical to an ideal safety-conscious work environment. Since the plan was published in June, we have added another attribute to cover incidents related to harassment, intimidation, retaliation or discrimination.

Little Harbor continuously monitors these attributes through interviews, reviews, investigations and observations. As information dictates, the Little Harbor team members working in a particular area meet to discuss data and reach consensus for relative attributes. As changes occur in the future, we will communicate these changes to the NRC staff, Northeast Utilities and the public.

CHAIRMAN JACKSON: What was the additional attribute that you --

MR. BECK: It relates to the question of harassment, intimidation, retaliation and/or discrimination,

specifically.

CHAIRMAN JACKSON: And how do you weight the -- do a relative weighting? You talk about doing program reviews, interviews and then you have these attributes. How do you -- is it you have a weighting system or you do one to kind of check the other?

MR. BECK: Some of them are relatively straightforward and simple and it is easy to make the evaluation. Others involve a lot of subjective evaluation, discussion by the team members who are involved in various reviews or investigations and that consensus reaching demand which we place on ourselves results in the weighting taking place.

As we -- and I will go into later -- roll up our 12 attributes, if you will, to be consistent with the four that you heard from the company on earlier this morning, you will see how they --

CHAIRMAN JACKSON: Stack up?

MR. BECK: Yes.

This next slide shows our approach to evaluating the status of Northeast's safety-conscious work environment implementation efforts. And I will relate that to your desire for satisfactory approaching expectations and not meeting them in a moment. We have chosen to use five gradations for evaluation of each Little Harbor attribute or

roll-up to end use success criteria.

Green meets all expectations. Red, on the other hand, requires significant improvement. And we use three levels within the yellow band, as indicated on the slide.

We also evaluate our view of the current performance trend for each attribute as indicated by an arrow in the box. It is the consensus of the Little Harbor team that each of the four Northeast success criteria, which you heard discussed by the Company this morning, must be rated neutral yellow or better to be considered ready for restart of the unit at Millstone. Therefore, if you drew a line below neutral yellow, a horizontal arrow, above that line, you would have to be at that point or above to be satisfactory.

The next slide, the status reports which we will be sharing in a moment are based on our evaluation of progress to date. Little Harbor opinions are based on our initial structured interview results, initial reviews of the employee concerns program and corrective action program and other activities. We are continuing our review of the comprehensive plant effectiveness, another round of structured interviews, closure of our employee concerns program and corrective action program reviews and continued observations of site activities.

I am not going, due to the limited time available,

to go through each of our 12 attributes but rather focus on the four end use success criteria this morning. We did include those other evaluations in our advance package, however. If you have any questions about any of these, we would be pleased to respond.

Going to the first end use success criteria, willingness to raise safety concerns, we rate this satisfactory today, a neutral yellow with a holding steady. It is based on a roll-up of our attributes 2, 6, 7, 9 and 12, which were in your advanced package.

While there continue to be some problem areas at Millstone, we believe that this attribute has improved and workers at Millstone are willing to raise safety concerns via one of the available mechanisms. Resolution of the existing problem areas coupled with the ongoing training of the work force should provide further improvement in this criteria in the future.

The next criteria, issues are effectively resolved by line management, which is really the corrective action program, is also evaluated as neutral yellow but with an improving trend. It is based on our attribute number 10 and the evaluation of it, the corrective action program which we reported on in September. We performed a comprehensive review of the program and completed it as I said in September.

We concluded that Northeast has established an excellent corrective action program which is being aggressively implemented. Our continuing review in this area will focus on the effective resolution of problems addressed by the program.

The next area, effectiveness of the ECP, we do not consider to be satisfactory today. It is a minus yellow with an up arrow. And it is identical to our attribute number 11. Northeast, however, has made significant strides in improving the employee concerns program. We feel that this rating would be up at least one notch to neutral yellow, improving or satisfactory, but for the apparent high percentage of persons who have used the program and who indicate that they wouldn't use it again.

We are not satisfied today that we totally understand why users of the employee concerns program feel this way and will develop that understanding over the next few weeks. Thus, our conservative rating at this time.

Overall, we feel that NU management and the employees and contractors in the employee concerns program have made significant strides over the next few months and the program is continuing to improve but for that one aspect.

And, finally, the last NU success criteria, recognizing and dealing with harassment, retaliation,

intimidation or discrimination we rate as red today. This is a roll-up of our attributes 3, 4, 5, 8 and 9. The sources of input were the Little Harbor reviews of end process training, observations in the work place, specific investigation of Millstone incidents, employee concern follow-up interviews, validation of comprehensive action plan action items and walk-in interviews.

I should add that we have observed positive movement by Northeast management in this area very recently. Some examples include the 10 CFR 50.7 training effort which you saw as in progress. We were involved in communicating our expectations of such a program while it was being developed. We have monitored the training sessions as they are under way and we think it has significant potential to raise the level of awareness from first line supervisors up within the Northeast management chain.

We also have witnessed some behavior on the part of management responses to recent issues involving potential retaliatory behavior and it has been very positive and significantly better than it had been in the past. The consolidation and addition of management resources under Mr. Brothers regarding all matters associated with a safety-conscious work environment at Millstone we think is a very positive step and is beginning to show positive results.

That concludes our prepared remarks.

In summary, we have seen improvement in the last few months with respect to the safety-conscious work environment. The employee concerns program in particular has made significant strides but requires some effort to improve the perception of its users. The most difficult task facing Northeast management is clearly the need to improve its performance with respect to harassment or potential retaliatory actions in the work place. We are going to in particular monitor very closely these areas.

We would be pleased to respond to any questions you may have.

CHAIRMAN JACKSON: The first one is an informational one. I didn't take down the roll-up. If you go back through the 1, 2, 3, 4, tell me how your criteria roll up into the different ones.

You're saying that NU's Criteria 1 is a combination of which ones of yours?

MR. BECK: Their Criteria 1 involves our Criterion 2, which is employee perceptions of the policy that NU has established for a safety-conscious work environment.

CHAIRMAN JACKSON: You can just give me the numbers.

MR. BECK: Okay, I'm sorry -- 2, 6, 7, 9, and 12.

CHAIRMAN JACKSON: Okay, and number 2?

MR. BECK: Number 2 is number 10.

CHAIRMAN JACKSON: Okay.

MR. BECK: Number 3 is number 11.

Number four is three, four, five, eight, and nine again.

CHAIRMAN JACKSON: No, I appreciate your doing that grouping, but essentially what you are saying is that the ability to grapple with alleged instances of harassment, intimidation, retaliation or discrimination -- they really have a long way to go yet, and then the very thing that is the subject of your existence, namely the Employee Concerns Program and its effectiveness they have some improvements to make.

MR. BECK: That's correct.

CHAIRMAN JACKSON: Okay. All right. Are there any additional questions? Yes?

COMMISSIONER DICUS: In the presentation that Northeast Utilities made on their program they analyzed themselves and they indicated, as you are well aware, that you concurred with where they felt they stood in the issues that they were dealing with with the program.

Do you concur completely or is there an area, a significant area not a minor area, a significant area where maybe you don't concur with their own analysis?

MR. BECK: If I may, Commissioner, I interpreted

that "LAC concurs" as another criteria they are setting for themselves.

Today we do agree on those four elements, namely the first two are satisfactory, the last two are not today, so we are in synch at this point in time.

CHAIRMAN JACKSON: Okay. Thank you very much.

Now we will hear from the NRC Staff -- last but not least.

MR. THOMPSON: Good afternoon.

CHAIRMAN JACKSON: Yes, I guess it is. Good afternoon. You sure it is not tomorrow?

MR. THOMPSON: Chairman Jackson, Commissioners, as you know, this is an effort that the NRC Staff has put a major focus on. This is our fourth presentation and I think you know the gentlemen at the table with me.

Before I turn it over to Bill though, I would like to indicate that we are recognizing the importance of where we are in this program -- I'm sorry --

CHAIRMAN JACKSON: We know who you are.

MR. THOMPSON: We have our tent cards here.

Before we get to having Bill go through and summarize what we believe are the important elements of our 0350 process, and that is our restart assessment program, I would like to indicate that this is a time we recognize that there are lots of activities that are ongoing at the site.

There are a lot of activities that the Staff will be doing at the site and we need to keep the Commission currently informed of those programs and previously we had given reports on kind of a quarterly basis, but we think it is important that we do that more on a monthly basis now.

The next report we believe would be in January and it would obviously be toward the middle or the end of January, depending on the site activities but it is part of the process that we need to keep you currently informed of the status and we intend to do that and with those brief remarks I would like to turn it over to Bill, who will hit the highlights of some of our activities as well as address your concerns with an overall summary of where we are with our evaluation of the status.

CHAIRMAN JACKSON: Thank you.

DR. TRAVERS: Good afternoon.

My first slide simply presents an overview of what I would like to cover. It is very similar to the topics that we have touched on in previous briefings.

I'll move right on. In the second slide I'll mention that the Special Projects Office was formed just about one year ago, just one year and one month ago, to focus on the Millstone issues and we have been continuing to implement the Millstone review plan that we described to the Commission in SECY 97-003.

Of course we have based our plan on Manual Chapter 0350, which provides the guidance that we typically use to assess the restart status of plants that are facing troubles, and we have at Millstone developed Restart Assessment Plans for each of those units.

I have indicated in bulletized form the principal elements, so I am going to touch on probably each one of those. I have some, more in detail in some than others, but this listing includes the principal areas that we have identified as those issues which we expect to identify improvements and issue resolution prior to coming to the Commission for an ultimate decision on restart of any of the three units.

An important element that I would like to mention right upfront, and we have been doing this in the past, of our program is the fact that we have a commitment up in the Millstone area to make our process a very public and open one.

We think we have been meeting that by virtue of a number of activities that we have been carrying out that are somewhat extraordinary, somewhat above the norm.

Just mentioning a few of those, we have continued to brief the public in evening sessions every four to six weeks or so. We have been carrying out most of the technical exchanges that we have had with the utility in

public forums at the Millstone site or near the Millstone site such that those meetings are observable to members of the public.

We have had a very close working relationship, a continuing one, with the State of Connecticut Nuclear Energy Advisory Council. You may recall that we have an agreement with the Council to participate at least as observers in our conduct of ICAVP design basis, licensing basis verification activities, and they have been expending quite a lot of effort to participate with us, observe our process and provide their own sense of how we are carrying out our activities in their own public meetings.

So those are sort of the principal elements of our public -- I'll call it outreach program for lack of a better term.

Before I turn to a more detailed discussion of some of the elements that we have listed in our Restart Assessment Plan, I would like to tell you that our overall assessment is that the licensee is continuing to make progress in their efforts to bring about needed change at Millstone.

Led by essentially a new Senior Management team since late 1996, NU has initiated a rather broad scoped effort to identify problem areas and to implement corrective actions.

Although progress has not kept pace with the licensee's initial schedules, our oversight program is identifying improvements in essentially all of the elements of our NRC Restart Assessment Plans for Units 3 and 2.

Despite this progress, I think it is important to point out that NU has not yet completed some significant work. You have heard enough about that. We will talk some more about it as well.

As a result though, a number of our most important inspections have not yet taken place.

For example, of a total of eight team inspections that are planned at Unit 3, two are complete, two are in process, and four are planned.

Examples of some of the planned inspections include ones which will assess corrective actions, work planning and control, quality assurance, and the operational readiness of both the plant and operations personnel.

These NRC evaluations are necessarily focused in the latter stages of the licensee's improvement program and we are planning to initiate a number of inspections following the licensee's own determination that they are ready.

I think it is fair to say thus far that our planning for the conduct of our own verification activities has not resulted in delays. We have been pretty efficient

at rescheduling in the face of some of the slips that have occurred in their schedule and the necessity of rescheduling some of the important team inspections.

With that as an overview, let me turn to some of the specifics.

DR. TRAVERS: The next slide provides a listing of the significant items list. That list, which is a portion of our restart assessment plan, contains a detailed listing of both the programmatic and specific issues that we have identified for each unit that we think are important for resolution before we come to the Commission.

To facilitate our review, NU is providing us with packages or submittals that address each of the -- or most of them, most of the significant items list. Some of the issues do not require packages and we are handling those without. But this rack-up includes the total number of the SIL items identified at unit three, for example, is 86. The number of packages, and these -- this number specifically addresses the number of completed -- complete packages as 58. And the fact that at Unit 3, at least, to date, we have closed 30 of those.

This chart, the more I thought about it, the more I think about it, does not provide a very good indication of the overall status of where we stand in carrying out our assessment at Unit 3 particularly, in that because of the

fact that we are getting and have reviewed, in fact, a number of partial submittals of packages, we would estimate that the percent completion is closer to about 70 percent and that really is not -- this slide could throw you off from that considerably if you didn't know the fact that we are reviewing partial submittals, we have closed a number of those at least in part.

CHAIRMAN JACKSON: How are you documenting staff review and closure of the SIL items?

DR. TRAVERS: Each of the significant items that are identified here as closed, and the future items as well, are being identified and documented in NRC inspection reports. The reason I haven't added the fact that we have closed an additional 10 at Unit 3 is because we haven't issued the inspection report yet that will in fact document our closure of those items.

CHAIRMAN JACKSON: Okay, so that's the fundamental documentation?

DR. TRAVERS: Yes, that's right.

CHAIRMAN JACKSON: And what issues on this list do you believe pose the greatest challenge for the licensee at this stage?

DR. TRAVERS: I think you are going to hear something similar to what's been said already but let me take off what I see as the most significant challenges that

lie ahead. In the area of safety conscious work environment, we have heard from Little Harbor and we are certainly relying on their expertise to a great extent, that focus on the need for substantial improvement in the area of HIRD issues and we concur with that.

We have also identified some issues that I am going to be discussing in a minute related to the verification of design basis/licensing basis issues. We see that as a challenge.

We see the corrective action program, at least our assessment of it, as adequate to be a challenge. We have -- I don't want to mislead you about the future inspections that we have planned. They are certainly important. We have, although relying on those to a great extent in the future, been carrying out assessments in all of these areas and we have, as I indicated generally, identified improvements in even the area of corrective actions. But if you look at backlogs, if you look at the physical modifications that are still required to be completed before restart, certainly these pose a number of challenges for this utility.

I also agree with what Mr. Kenyon said about the importance of the transition to an operating state. These plants have been shut down two years or more or less in some cases. But it is an awfully long time and an important

aspect of what they have to accomplish is to move into a period where they can establish an operational confidence that translates into safe operations.

CHAIRMAN JACKSON: Let me ask you this question now. You have identified as, you know, among the greatest challenges, the backlogs and physical modifications. But when we heard from the licensee, they were indicating, at least for Unit 3, that they expected to have -- you know, be physically ready at the end of the month. And so how do you square those two?

DR. TRAVERS: Well, they may very well be. But as I look at the data, I look at it the same way as you. I'm sort of in a "show me" mode. I think that's less important, frankly, than doing it right. But, nevertheless --

CHAIRMAN JACKSON: I understand.

DR. TRAVERS: -- we understand what you've been told by NU and we think we understand, for example, that many of the items that they have to complete are simply lacking some element as, for example, testing. So many of these may fall in rather quick succession.

But by virtue of the numbers not falling for so long, we are sort of in a conservative mode and want to list that as an example of something we think is a challenge still.

CHAIRMAN JACKSON: Thank you.

DR. TRAVERS: Sargent & Lundy and Parsons have given you a summarized version of their activities and under the ICAVP order, the NRC staff is carrying out related but independent activities as well, as you know. And we wanted to list several of the activities that have been completed since last we met with the Commission and they are included on this slide.

The first item has to do with the fact that we carried out a team inspection to evaluate the implementation of Sargent & Lundy of its NRC approved audit plan for the conduct of their activities. Our findings were generally positive. We did note in our inspection that when we went in, it was fairly early. We didn't have an opportunity to review everything we would have liked to at that time. But we will have an opportunity in our subsequent tier two and three inspections.

So we have completed this inspection. We have generally found positive results. Those minor findings that were identified have been acted on by Sargent & Lundy and corrected, in our view, and we still have an opportunity and we expect to exercise that as we carry out some of our remaining team inspections.

CHAIRMAN JACKSON: So when you say then that it was completed, you mean it was completed relative to what there was for you to inspect at that point?

DR. TRAVERS: That's exactly right.

CHAIRMAN JACKSON: But there are some additional inspections you would have to do?

DR. TRAVERS: We have been having an opportunity, as we have gone on, really, to have a pretty -- a very close understanding of the way Sargent & Lundy is carrying out its activities. At the time this inspection was ongoing, they weren't there yet.

CHAIRMAN JACKSON: I see. Okay.

DR. TRAVERS: The second bullet has to do with an inspection that has been referenced briefly here and I am going to cover it in my next slide but it fundamentally has to do with our first system, safety system functional inspection at Unit 3.

Additionally, completed over this period is the fact that the Nuclear Energy Advisory Council selected the final two systems to be reviewed by Parsons at Unit 2.

And, lastly, we have also, similar to the first inspection I mentioned, carried out a team inspection at Parsons of their implementation and, again, we found positive indications of their conformance with the NRC-approved audit plan.

At Unit 3, the NRC staff has completed the first of two team inspections which involve a detailed evaluation of an important safety system. These NRC inspections are in

addition to the ICAVP reviews being carried out by S&L with one inspection focusing on one of the systems being reviewed by S&L and one system focusing on a system outside the scope of S&L's program. The staff's first safety system functional inspection focused on a review of the emergency core cooling system mode of the chemical and volume control system. And a number of issues were identified and documented in a recently issued inspection report, and I have listed the principal issues resulting from that.

CHAIRMAN JACKSON: But these appear troubling. I mean should I be troubled?

DR. TRAVERS: I would characterize them as raising a concern, perhaps a fundamental concern, that we feel we can address in subsequent inspections by --

CHAIRMAN JACKSON: Would you say what that fundamental concern is?

DR. TRAVERS: The fundamental concern is, goes back to what the purpose of our verification inspections really are here. A little while ago there was a question about where Millstone is, or maybe where it was, relative to industry standards. What we have, and are dealing with now, is a situation where we have asked, by virtue of a number of problems that were identified several years ago, for Northeast to go in and carry out a very rigorous assessment of their licensing and design basis.

They have completed, essentially completed that program, and we are now coming in at the end of that. Sargent & Lundy, NRC staff, Parsons at Unit 2.

The question that the findings raise, and I don't think they answer, is whether or not the licensee's program for identifying on its own where they stand, relative to licensing basis and design basis, was adequate, and whether or not we should rely on it by virtue of the sampling program that looks at a very limited, or somewhat limited, set of systems.

CHAIRMAN JACKSON: Because of the findings in your out of scope SSFI?

DR. TRAVERS: That's right.

CHAIRMAN JACKSON: Commissioner.

COMMISSIONER McGAFFIGAN: Did you intentionally not adopt the same vocabulary as Sargent & Lundy, and Parsons, with regard to level -- the levels? How would you assign these issues to the levels that the contracts are using? Are these level 3's, are they level 4's, are they -- what are they?

DR. TRAVERS: Well, I should point out that they are preliminary findings at this point, and -- but they potentially could be --

COMMISSIONER McGAFFIGAN: Level 1's?

DR. TRAVERS: Level 1, the first one at least.

COMMISSIONER McGAFFIGAN: At least the first one, sure.

DR. TRAVERS: But the reason I say they are preliminary is because we have identified them with the team. We will be attending an enforcement conference, because of the significance of this issue, with the licensee in January. And, at that time, they will have an opportunity to provide us some additional information on what -- what they think the issue is or isn't, and what they are doing about it.

Now, we have heard today, and we have heard before today, that they have implemented a number of activities that are directed at addressing this issue, not just in this system, but across the 88 maintenance one and two systems that were covered in their own program.

So that's why I say I don't think this finding, and where we are at today, answers the question that has been raised. And rather than suggest to you that it does, what I would suggest is what we intend to do as follow-on to pursue this fundamental question and, that is, simply to evaluate the information that the licensee provides to us, in whatever mechanism, whether it is the enforcement conference, or through whatever means, and to garner the information that we will obtain in three remaining team inspections that also, essentially, address the same issue,

you know, whether or not we can rely on what was done as a good and rigorous assessment of licensing basis and design basis.

CHAIRMAN JACKSON: Yes. Commissioner Diaz.

COMMISSIONER DIAZ: In other words, you believe that the remaining inspections should give you assurance that the Configuration Management Program of the licensee is adequate to not have this kind of problems in other safety-related systems?

DR. TRAVERS: I think it certainly will provide additional data for us to assess the overall question.

CHAIRMAN JACKSON: To make that judgment.

DR. TRAVERS: To make that judgment. And since this is one of four, and if you recognize the very substantial effort that Sargent & Lundy is going through, we really think that we have to integrate all of that information before we make a conclusion.

But -- excuse me. But there is an indication, and even at this early stage, that, based on these findings, which we think were a good find on the part of our team, it was a very good team, very -- very capable people who were working on it, that the licensee has identified on its own a need to assess across the other systems whether or not the implications identified apply to those other systems.

Now, they are going to be telling us more about

that. We have had some preliminary information. I think they told you that activity is not complete yet. So, we will certainly be interested in that information and include it in our assessment of the fundamental question.

CHAIRMAN JACKSON: Okay. Thank you.

DR. TRAVERS: In the next three -- I didn't mention the other issue. The first one is the most significant. I will mention the second issue just briefly.

CHAIRMAN JACKSON: Let me make sure I understand something before --

DR. TRAVERS: Yes.

CHAIRMAN JACKSON: Is the licensee going to revisit, they are going to revisit their Configuration Management Program, or are they going to be waiting on the results of your other SSFI?

DR. TRAVERS: They are not waiting. They are, in fact, carrying out analysis which, ultimately, may render the issue not to be very significant. The question has to do with air entrainment and the possibility of binding of pumps.

CHAIRMAN JACKSON: Right.

DR. TRAVERS: But there is a possibility that when the analysis is conducted, that it is judged to not be significant.

CHAIRMAN JACKSON: Right.

DR. TRAVERS: But the expectation we would have had, of their program, is that they would have identified it and triggered the analysis. So, as a minimum, that is what we see as --

CHAIRMAN JACKSON: So it is the identification of the issue, and the significance of that, as well as the significance the issue turns out to have in and of itself.

MR. THOMPSON: That's exactly right.

DR. TRAVERS: Yes. That's exactly right.

CHAIRMAN JACKSON: Okay.

DR. TRAVERS: The last -- the second two issues, principal issues from that inspection finding, the second one has to do with an identification of the fact that tech spec requirements that should have resulted in a number of valves being tested for leak tightness, did not result in those valves testing. And so that is an issue that they are looking a little bit more broadly at as well.

And, lastly, we found a number of fairly minor, but nevertheless discrepancies from the as-found condition of the plant with the description in the FSAR.

In the next three months, we expect to complete all of the remaining ICAVP inspection activities at Unit 3, and they are listed here as the tier 2 and tier 3 inspection which is underway, the Unit 3, tier 1, in scope inspection, our corrective action inspection at Unit 3, and we also

expect, at Unit 2, to have completed the tier 1 out of scope system review and the tier 2 and tier 3.

At Unit 2, three of five ICAVP inspections will be complete, we expect, within the next three months.

An extremely important element of our restart assessment plan is the issue of Employee Safety Concern Program and safety conscious work environment, more broadly. You have heard from Little Harbor, and, as a matter of fact, in this area, we are relying to a great extent on this independent contractor's expertise in assessing these issues. The staff is, nevertheless, however, acting independently as well to assess the status of improvements in this area, and this slide is meant to give you a summarization of some of the activities that we have completed since last we met with the Commission.

CHAIRMAN JACKSON: Now, are the project officer, special project office managers and staff making any observation on a day-to-day basis as they go about in documenting those in any way?

DR. TRAVERS: Documenting, I think not. But what we are certainly doing is observing and garnering a view in this area.

But, as I was going to mention, in a formal sense, we are just this week --

CHAIRMAN JACKSON: You are going to develop a plan

to assess what, the ECP?

DR. TRAVERS: We have actually developed a plan that we forwarded in the recent SECY.

CHAIRMAN JACKSON: SECY paper, that's right. As well as the safety conscious work environment.

DR. TRAVERS: Exactly right.

CHAIRMAN JACKSON: Right.

DR. TRAVERS: And to a very great extent, the parameters that we are think are reasonable to assess these issues are the ones you have heard about today. We don't have any suggestions for major changes. We are looking at them on our own and, to the extent that we have had a continuing audit, a few personnel up at the site looking at these issues. Just this week, we have implemented the first week of a two week on-site inspection team -- or on-site evaluation team, to assess both Northeast's progress and ECP, and, more generally, safety conscious work environment. But also to get a sense of the implementation of Little Harbor in conduct of its NRC approved audit plan. You know, this is very similar to what we are doing, evaluating Sargent & Lundy and Parsons.

CHAIRMAN JACKSON: It is useful that, if your own folks are on kind of a -- you know, as you go about, you do have the opportunity to observe. Typically, when people know there are inspections, there are various things. And

programs are as programs do. You know, my mantra. So --

[Laughter.]

COMMISSIONER DICUS: Based upon these observations that you have, do you generally concur at this point with what Little Harbor and the licensee are saying?

DR. TRAVERS: Yes, we do. Particularly, -- well, in just about everything Little Harbor said, they provided a very detailed assessment of the situation. Improvements in the ECP program, for example, with needed improvements yet. But a significant effort still remaining in the area of safety conscious work environment. And we certainly do concur with that assessment.

Now, we are going to be getting this week, and in our second team inspection week, a little bit better assessment, from our own perspective, on these things. Right now we generally track with the findings you have heard from Little Harbor.

I'll move to the next slide. In the next three months, similar to what we have been doing, we expect to continue to monitor both the licensee and Little Harbor. We are attending meetings that are again observable to the public to discuss these issues including some of the major missteps that have occurred, the MOV issue and so forth.

We expect to carry out the second week of the team inspection that I mentioned at Unit 3. This is really a

site issue, by the way, even though today we are mostly focusing on Unit 3. We believe that this issue certainly is one which needs to be considered in a site-wide sense.

In addition to that focused team inspection on ECP and safety-conscious work environment and in recognition of the importance of effective corrective action programs, we are also going to include in our conduct of the 4500 inspection, that inspection again focuses on the corrective action program, a particular focus on safety-conscious work environment and the resolution of concerns raised by employees. So we think there is a good fit there to get an even better assessment of this issue in the context of that team inspection. That is upcoming.

Of course, we will continue to track the program measures that we have identified in our program planning.

In the licensing arena, we have identified here sort of a rollup of a number of issues that have been identified as important, and the only thing I will say about this is that we believe today that based on what we have in-house and where we stand with these reviews that we don't see a major pitfall to March or April kind of a timeframe for our assessment and completion.

In some cases some of these license amendments need to be done in January timeframe, I guess, to support Mode 4 operations.

DR. TRAVERS: Mode 4 operations.

DR. TRAVERS: But we don't see a major problem with what the licensee today thinks it can do by virtue of its programs.

CHAIRMAN JACKSON: The only question I really have in terms of your project planning schedule, which is the next slide -- I'm jumping ahead -- I see that in the -- all right.

When you talk about these calendars, these quarters, and these are calendar year quarters --

DR. TRAVERS: Yes, they are.

CHAIRMAN JACKSON: For instance, I note that you have, you know, a Commission briefing, this is for Unit 2 --

DR. TRAVERS: Oh -- Unit 3 I think is scheduled similar to the --

CHAIRMAN JACKSON: Well, yes, the schedules are basically similar except that what is on the planning schedule tracks a little bit more.

I am looking, for instance, at license amendments for Unit 2, and you have those tracking all the way out till -- you know, in the summer.

I guess --

MR. THOMPSON: In May, end of May.

CHAIRMAN JACKSON: End of May, so you nonetheless feel that this is a reasonable tool to support the projected

Commission briefing in June of '98 --

DR. TRAVERS: With a caveat, always a caveat, and that caveat simply is that we recognize the possibility in the midst of some of the discovery that still is continuing of the need for as yet an unidentified license amendment.

CHAIRMAN JACKSON: The only reason I raised that one, particularly for that plant, is because that is the older one, where there could be some more design basis issues --

DR. TRAVERS: Exactly.

CHAIRMAN JACKSON: -- that might arise, but okay, that's fine.

Any other questions? Comments? Commissioner?

COMMISSIONER DIAZ: As the planned start is getting toward restart and you look at the amount of resources that we have in Millstone, are you planning to start phasing out some of those resources into other needs, or is there a schedule being made of --

MR. THOMPSON: We are looking at that very closely right now. Obviously, we have the resources available. It's a very important time that we make sure that we have the resources available to accomplish it.

Likewise we also look at the operating plant and we go through and update that, so we will be looking at those elements and giving back to the Commission, if we see

a need, to change, increase, decrease or whatever the appropriate aspect is with respect to those resources, so we recognize that is a very important element for us to be sensitive to and to communicate with the Commission on.

CHAIRMAN JACKSON: Right. Thank you.

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 the readiness for restart of the Millstone units.

Once again I will state on behalf of the Commission that we recognize how difficult it is, as you can see from some of our own questions, to condense the substance of the reviews performed by each of the groups into briefings like this. That is why it has been a marathon session, but this is the primary reason, of course, that the NRC in November of last year created the Special Projects Office headed Dr. Travers and to provide for direct oversight of all licensing and inspection activities and to tailor the manual chapter 0350 process to specifically address the issues at these units.

So I was going to ask, but Mr. Thompson, you in fact preempted me, that the Special Projects Office keep the Commission informed on a more timely basis, and what you are suggesting about the monthly reports sounds reasonable.

I believe the next Commission meeting should be in the mid-February timeframe in order to better assess the results of some of the significant inspections, but that can be adjusted, as appropriate.

MR. THOMPSON: Okay.

CHAIRMAN JACKSON: And the Commission values these sessions to focus all of us on the results to date and to gauge the effectiveness of the process being utilized, because that is a big issue, and so I encourage all the parties to remain steadfast in their various tasks and not, even though there is a schedule, not to be so schedule driven that we aren't results-focused, because in the end, when it comes to coming to the Commission for a decision, the decision is going to have to rest on what the results are and the verification of those results by all the parties involved.

The Commission is appreciative of the insights from the contractors as well as from the licensee in obtaining honest feedback on the challenges and successes in making the Millstone station a safe station with an effective corrective action program and an environment that is supportive of raising and resolving safety issues.

As I state at each meeting, the Commission itself does not presuppose that any of the three plants will restart by any certain data because it is results-dependent.

However, the Commission must be prepared to assure the allocation, as you have just heard the discussion of, of adequate staff resources to the oversight of the facility and its restart progress, and for that reason the Commission will continue to assess whether adequate progress is being made in readiness for restart of the units and whether our own, the NRC Staff assessment process, is effective, is comprehensive, and is timely, and so unless there are any closing comments, which I hope there are none --

[Laughter.]

CHAIRMAN JACKSON: -- I would like to wish all of you a safe and wonderful holiday season and a healthy and happy New Year.

We stand adjourned.

[Whereupon, at 12:44 p.m., the meeting was concluded.]

CERTIFICATE

This is to certify that the attached description of a meeting of the U.S. Nuclear Regulatory Commission entitled:

TITLE OF MEETING: MEETING WITH NORTHEAST NUCLEAR ON MILLSTONE PUBLIC MEETING

PLACE OF MEETING: Rockville, Maryland

DATE OF MEETING: Friday, December 12, 1997

was held as herein appears, is a true and accurate record of the meeting, and that this is the original transcript thereof taken stenographically by me, thereafter reduced to typewriting by me or under the direction of the court reporting company

Transcriber: Ronalie J. Gresham

Reporter: Mark Mahoney

STATUS OF A SAFETY CONSCIOUS WORK ENVIRONMENT AT MILLSTONE

Little Harbor Consultants

Presentation to

NRC Commissioners

December 12, 1997

LITTLE HARBOR CONSULTANTS OVERSIGHT ACTIVITIES

Structured Interviews of Workforce

- **Second Round of Interviews Scheduled for February**

Review of:

- **Program Design (e.g., NU Comprehensive Plan, ECP, CAP)**
- **Program Implementation**
- **Program Effectiveness**

LITTLE HARBOR CONSULTANTS OVERSIGHT ACTIVITIES, cont'd.

Special Investigations

- MOV Dept. Event Involving Allegation of Retaliation Against Contractors
- Allegation of Retaliation in Discipline of Training Dept. Staff

LHC APPROACH TO EVALUATION

- Oversight Plan Identifies 11 Attributes Usually Present When Strong Safety Culture Exists
- One Additional Attribute Added Based on LHC Observations
- LHC is Continuously Monitoring These Attributes Through Interviews, Program Reviews, and/or Observations

LHC APPROACH TO EVALUATION, cont'd

- LHC Team Meets Periodically to Discuss Information Gathered That Provides Insights into Each Attribute
- Consensus Regarding Status of Each Attribute Is Reached Through Group Analysis of Data and Information
- Updated Status Will Be Periodically Communicated to NU and the NRC Staff

STATUS INDICATORS FOR NU'S SCWE IMPLEMENTATION EFFORT

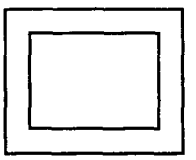
Meets Expectations	(Green)	
Requires Management Action	(Yellow) +	Approaching Expectations
	(Yellow)	
	(Yellow) −	Marginally Acceptable
Exhibits Significant Weakness	(Red)	

Trends: ↑ Improving → Steady ↓ Declining

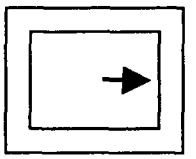
STATUS REPORT IS PRELIMINARY BASED ON PROGRESS TO DATE

- Key Activities Completed
  - Initial Structured Interviews
  - ECP and CAP Initial Reviews
- Ongoing Oversight Activities
  - Comprehensive Plan Effectiveness Review
  - Additional Structured Interviews
  - Closure of ECP and CAP Reviews
  - Continuing Observation of Site Activities

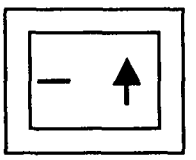
SAFETY CONSCIOUS WORK ENVIRONMENT ATTRIBUTE STATUS

LHC Expectation	Status
1. Senior management endorses a policy that places priority on nuclear safety, supports the workers' rights to raise safety issues and ensures that workers will not be subjected to harassment, discrimination or intimidation if they do so.	 (Green)

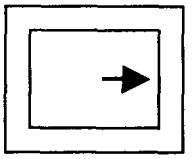
SAFETY CONSCIOUS WORK ENVIRONMENT ATTRIBUTE STATUS

LHC Expectation	Status
2. Employee perceptions of the policy and its implementation are favorable.	 (Yellow)

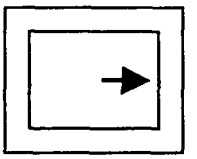
SAFETY CONSCIOUS WORK ENVIRONMENT ATTRIBUTE STATUS

LHC Expectation	Status
3. Senior management provides training to all managers and supervisors to ensure that they understand and employ good management practices when dealing with employees who have safety concerns and do so with understanding.	 (Yellow)

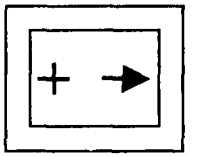
SAFETY CONSCIOUS WORK ENVIRONMENT ATTRIBUTE STATUS

LHC Expectation	Status
4. Members of the workforce have a sense of identity and are committed to the publicly stated goals and objectives of the organization, have respect for each other, communicate effectively both horizontally and vertically, and feel responsible for their own behavior.	 (Yellow)

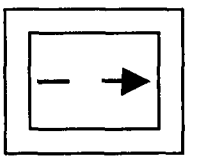
SAFETY CONSCIOUS WORK ENVIRONMENT ATTRIBUTE STATUS

LHC Expectation	Status
5. People at all levels of the organization treat each other with mutual respect.	 (Yellow)

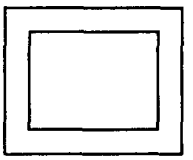
SAFETY CONSCIOUS WORK ENVIRONMENT ATTRIBUTE STATUS

LHC Expectation	Status
6. Employees exhibit a "questioning attitude" toward work and the work environment with respect to nuclear safety.	 (Yellow)

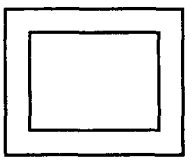
SAFETY CONSCIOUS WORK ENVIRONMENT ATTRIBUTE STATUS

LHC Expectation	Status
7. Positive recognition is given to employees who identify safety issues.	 (Yellow)

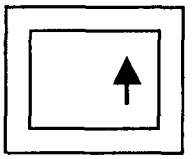
SAFETY CONSCIOUS WORK ENVIRONMENT ATTRIBUTE STATUS

LHC Expectation	Status
8. Incidents leading to allegations of harassment, intimidation, retaliation or discrimination rarely occur, and management is timely and effective in taking action for resolution and prevention.	 (Red)

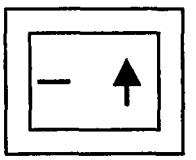
SAFETY CONSCIOUS WORK ENVIRONMENT ATTRIBUTE STATUS

LHC Expectation	Status
9. There is no evidence that an atmosphere exists that has a "chilling effect" on the willingness of employees to report safety issues.	 (Red)

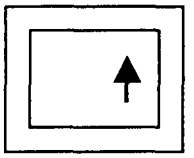
SAFETY CONSCIOUS WORK ENVIRONMENT ATTRIBUTE STATUS

LHC Expectation	Status
10. An effective and efficient corrective action program is functioning and all employees recognize the the normal (and preferred method) for addressing safety issues is through the line organization.	 (Yellow)

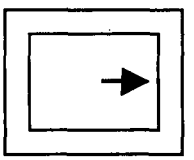
SAFETY CONSCIOUS WORK ENVIRONMENT ATTRIBUTE STATUS

LHC Expectation	Status
11. Senior management recognizes that some concerns may not be addressed through the normal line organization and has established an [effective] Employee Concerns Program (ECP) for handling such concerns.	 (Yellow)

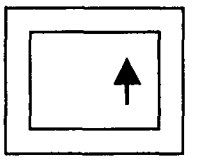
SAFETY CONSCIOUS WORK ENVIRONMENT ATTRIBUTE STATUS

LHC Expectation	Status
12. Independent and self-assessments are performed periodically to monitor performance and correct identified deficiencies.	 (Yellow)

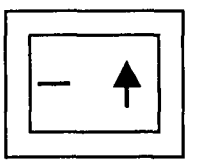
STATUS OF NU SUCCESS CRITERIA BASED ON LHC ATTRIBUTES

NU Success Criteria	Status
1. Demonstrate the willingness to raise concerns.	 (Yellow)

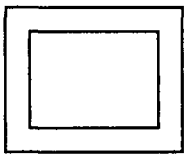
STATUS OF NU SUCCESS CRITERIA BASED ON LHC ATTRIBUTES

NU Success Criteria	Status
2. Demonstrate that issues are being effectively resolved by line management.	 (Yellow)

STATUS OF NU SUCCESS CRITERIA BASED ON LHC ATTRIBUTES

NU Success Criteria	Status
3. Demonstrate that the ECP is effective.	 (Yellow)

STATUS OF NU SUCCESS CRITERIA BASED ON LHC ATTRIBUTES

NU Success Criteria	Status
4. *Demonstrate that management* can recognize and effectively deal with alleged instances of HIR&D, or other circumstances which have created a chilling effect, which collectively are referred to as problem areas	 (Red)

COMMISSION BRIEFING

Millstone

December 12, 1997

OVERVIEW

- Restart Assessment Plan (MC 0350)
- Independent Corrective Action Verification Program (ICAVP)
- Employee Safety Concerns Program
- Licensing Issues
- Schedule

RESTART ASSESSMENT PLAN (MC 0350)

- Independent Corrective Action Verification Program (ICAVP)
- Employee Concerns Program
- Licensing Issues
- Corrective Action Program
- Work Planning and Control
- Procedure Upgrade Program
- Quality Assurance and Oversight
- Significant Items List
- Operational Safety Team Inspection
- Enforcement
- Personnel Training/Performance

- Public, State (NEAC), Local, Congressional, other agencies input

SIGNIFICANT ITEMS LIST STATUS
(As of November 14, 1997)

	Unit 3	Unit 2	Unit 1
Total Number of Items	86	51	108
Submitted to NRC*	58	26	1
Closed	30	11	1

* The numbers represent complete SIL item submittals. Partial submittals have been received and reviewed by the staff on a number of other SIL items for Units 3 and 2.

ICAVP STATUS

Activities Completed since Last Commission Meeting (August 6, 1997)

- **Unit 3 ICAVP Implementation Inspection (9/19/97)**
- **Unit 3 ICAVP Out-of-Scope System Inspection (SSFI) (9/19/97)**
- **NEAC System Selection of Last Two Unit 2 Tier 1 ICAVP Systems (9/18/97)**
- **Unit 2 ICAVP Implementation Inspection (12/5/97)**

ICAVP OVERSIGHT INSPECTION RESULTS

Unit 3 ICAVP Tier 1 Out-of-Scope SSFI

INSPECTION SCOPE: Review of the ECCS Mode of Chemical and Volume Control System (CVCS) Operation

ISSUES:

- **Potential Damage to Charging and Safety Injection Pumps Due to Air Entrainment**
- **Failure to Leak Test Valves Isolating the RWST Following a LOCA**
- **Discrepancies in the Unit 3 Final Safety Analysis Report**

Follow-on: Staff Will Assess CMP Effectiveness Using Current Findings and Planned Additional Inspections

ICAVP STATUS (con't)

Activities Projected to be Completed through March 1998

- Unit 3 ICAVP Tier 2 & Tier 3 Inspection*
- Unit 3 ICAVP Tier 1 In-Scope SSFI*
- Unit 3 ICAVP Corrective Action Inspection
- Unit 2 ICAVP Tier 1 Out-of-Scope SSFI*
- Unit 2 ICAVP Tier 2 & Tier 3 Inspection

*At the August 6, 1997, Commission meeting these activities were projected to have been completed by December 1997.

EMPLOYEE SAFETY CONCERNS PROGRAM STATUS

Activities Completed Since Last Commission Status Briefing

- Met with LHC and Licensee on Status and Results of Activities
- Developed Plan for Assessing Employee Concern Program (ECP) and Safety-Conscious Work Environment (SCWE)
- On-site Monitoring of Licensee and LHC Activities
- Preparation for NRC Team Evaluation of ECP and SCWE

EMPLOYEE SAFETY CONCERNS PROGRAM STATUS

Activities Scheduled for Next Three Months

- Continue NRC On-site Monitoring of Licensee and LHC Activities
- Meeting(s) with LHC and Licensee on Status and Results of Activities
- Conduct Team Evaluation of Licensee ECP and SCWE
- Participate in Team Inspection of Corrective Action Programs and Oversight (Focus on Assessment of SCWE)
- Track and Assess Program Performance Measures

LICENSING RESTART ISSUES

Unit 3: 21 Completed and Closed in 1997
14 Issues Currently Under NRC Review
1 Additional Issue to be Submitted

Unit 2: 6 Completed and Closed in 1997
9 Issues Currently Under NRC Review
5 Additional Issues to be Submitted

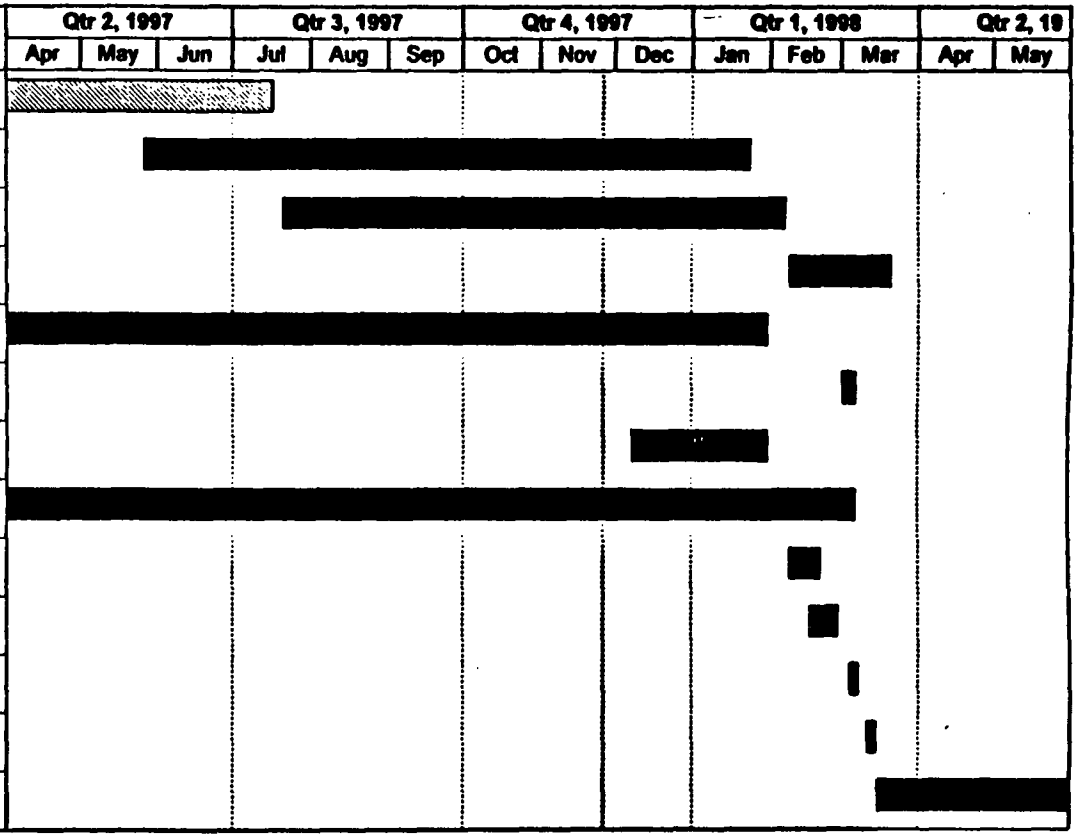
Unit 1: 3 Completed and Closed in 1997
2 Issues Currently Under NRC Review
9 Additional Issues to be Submitted

Additional Licensing Issues may be Identified as the Licensee Continues Design Bases and Licensing Bases Problem Identification.

PROJECT PLANNING SCHEDULE

MILLSTONE UNIT 3
11/26/97

ID	Task Name	Start	Finish
1	CMP UNIT 3 IMPLEMENTATION *	6/3/96	7/16/97
2	ICAVP UNIT 3 IMPLEMENTATION **	5/27/97	1/23/98
3	NRC ICAVP INSPECTIONS	7/21/97	2/6/98
4	NRC ICAVP IN-OFFICE REVIEW/ DOCUMENT	2/9/98	3/20/98
5	INSPECTION PROGRAM	2/14/97	1/30/98
6	FEMA NOTIFICATION	3/2/98	3/6/98
7	EMPLOYEE CONCERNS PROGRAM INSPECTION	12/8/97	1/30/98
8	LICENSE AMENDMENTS	3/5/97	3/6/98
9	OPERATIONAL SAFETY TEAM INSPECTION	2/9/98	2/20/98
10	RESTART ASSESSMENT PANEL REVIEW	2/17/98	2/27/98
11	EDO/DIR NRR BRIEF	3/6/98	3/6/98
12	COMMISSION BRIEFING	3/13/98	3/13/98
13	POST-RESTART INSPECTION PROGRAM	3/16/98	6/5/98

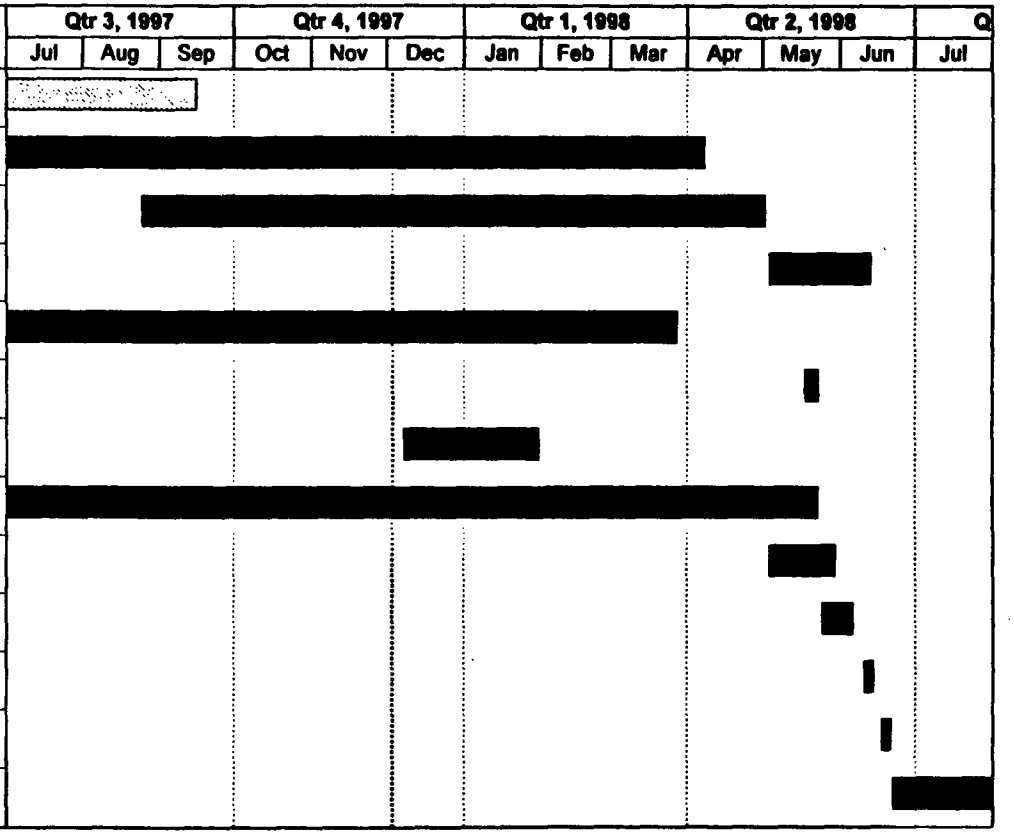


* Configuration Management Program (CMP) carried out by the licensee.
** ICAVP carried out by Sargent & Lundy contractor.

PROJECT PLANNING SCHEDULE

MILLSTONE UNIT 2
12/3/97

ID	Task Name	Start	Finish
1	CMP UNIT 2 IMPLEMENTATION *	6/3/96	9/15/97
2	ICAVP UNIT 2 IMPLEMENTATION **	7/1/97	4/7/98
3	NRC ICAVP INSPECTIONS	8/25/97	5/1/98
4	NRC ICAVP IN-OFFICE REVIEW/ DOCUMENT	5/4/98	6/12/98
5	INSPECTION PROGRAM	3/3/97	3/27/98
6	FEMA NOTIFICATION	5/18/98	5/22/98
7	EMPLOYEE CONCERNS PROGRAM INSPECTION	12/8/97	1/30/98
8	LICENSE AMENDMENTS	5/21/97	5/22/98
9	OPERATIONAL SAFETY TEAM INSPECTION	5/4/98	5/29/98
10	RESTART ASSESSMENT PANEL REVIEW	5/25/98	6/5/98
11	EDO/DIR NRR BRIEF	6/12/98	6/12/98
12	COMMISSION BRIEFING	6/19/98	6/19/98
13	POST-RESTART INSPECTION PROGRAM	6/22/98	8/28/98



* Configuration Management Program (CMP) carried out by the licensee.
** ICAVP carried out by Parsons Power Group, Inc. contractor.

COMMISSION MEETING
DECEMBER 12, 1997

MILLSTONE UNIT 3
INDEPENDENT CORRECTIVE ACTION VERIFICATION PROGRAM STATUS REVIEW

Structure of ICAVP

Tier 1 - Verify system meets licensing/design bases and system functionality.

Tier 2 - Verify that system design parameters relied on to mitigate the consequences of postulated accidents analyzed in the FSAR are consistent with the performance of the current system configuration.

Tier 3 - Verify that the configuration control processes have not introduced changes that have put the unit in nonconformance with its licensing and design bases.

Discrepancy Report Process

- Initiation of Preliminary DR
- Internal DR review process
- Issue Preliminary DR to NU, NRC, and NEAC and post to Internet WebSite
- NU evaluate DR and respond
- Review NU response

Discrepancy Report Closure Process

- DR closure based on review and acceptance of NU response and proposed corrective action
- Categories of Closed Discrepancy Reports
  - Confirmed DR (not identified by NU CMP)
  - Previously identified
  - Non-Discrepant

DR Significance Level

Level 1 - the system does not meet its LB / DB and cannot perform its intended function (affects redundant trains)

Level 2 - a single train of a redundant system does not meet its LB and DB and that train cannot perform its intended function

Level 3 - a system does not meet its LB / DB but the system is capable of performing its intended function

Level 4 - a system meets its LB / DB however there are minor errors that do not affect the results of a calculation or there are inconsistencies between documents

Scope of Tier 1 System Review

SWP	QSS	SLCRS	EDG
	RSS	Aux Bldg HVAC	Fuel Oil
	RWST	EDG Rm Vent.	Lube Oil
			Starting Air
			Exhaust
			Sequencer
			4160 volt syst.

Scope of Tier 1 System Review

	SWP	RSS	HVX	DGX
Syst. Req.	655	1485	480	602
Calcs	455	488	310	362
Drawings	173	201	230	319
Mods	74	7	23	47
Procedures	294	435	117	398
Walkdowns	1148	857	579	655
CA Docs	464	402	90	578

Scope of Tier 2 Accident Review

- Reviewed all 38 accidents from Chapter 15 of FSAR
- 22 Accident mitigating systems touched
- 230 Critical Characteristics identifed and verified

Sargent & Lundy

Scope of Tier 3 Programmatic Review

- Current change process review
  - Completed review of all 11 processes
  - Review covered 20 procedures and 8 chapters of the Design Control Manual (Rev. 5)
- Current change implementation reviews
- CMP corrective action review
  - 71 CA documents selected by NRC
- Past change reviews
  - 284 changes

Sargent & Lundy

Project Milestone Schedule

• Tier 1 System Review	12/19/97
• RSS Modifications & SWP/MOV Calcs	1/15/98
• Tier 2 Review	Complete
• Tier 3 Review	12/15/97
• Final Report Issue*	2/01/98

* Depends on DR resolution time

Sargent & Lundy

Discrepancy Report Summary

- 74 Acceptable and Closed DRs
  - 38 Confirmed (Not identified by NU CMP)
  - 20 Previously Identified by NU
  - 16 Non-discrepant conditions

- Of the 38 Confirmed DRs
  - 2 Level 3
  - 36 Level 4

Sargent & Lundy

Progress at Millstone Station

Northeast Utilities Presentation
for the
U.S. Nuclear Regulatory Commission

NRC Headquarters
Rockville, Maryland
December 12, 1997

Mike Morris

Chairman, President & CEO
Northeast Utilities

NU Continues Its Strong Commitment to Nuclear Power

- NU Board of Trustees Fully Engaged
- Executive Management Focused on Millstone Recovery
- Financial Resources Available and Committed

NU Representatives

- Presenters
  - Bruce Kenyon — *President & CEO - Nuclear*
  - Mike Brothers — *VP - Nuclear Operations*
  - Marty Bowling — *VP - Unit 2*
  - Jack McElwain — *VP - Unit 1*
  - Dave Goebel — *VP - Nuclear Oversight*

Bruce Kenyon

President & CEO
Northeast Nuclear Energy Company

Agenda

♦ Station Readiness	*Bruce Kenyon*
♦ Station Readiness - Key Issues	
– Safety Conscious Work Environment	*Mike Brothers*
– Corrective Action / Configuration Mgmt.	*Marty Bowling*
♦ Unit 3 Readiness	*Jack McElwain*
♦ Oversight Assessment of Restart Readiness	*Dave Goebel*
♦ Closing Remarks	*Bruce Kenyon*

Success Objective Progress

Success Objective	Issue	Closed or When Expected
♦ High Standards	•*Leadership*	Yes
	•*Regulatory Compliance*	Feb (U3)
♦ Strong Nuclear Safety Philosophy	•*Oversight*	Yes
	•*NSAB*	Yes
	•*Emergency Planning*	Jan
	•*Rad. Protection*	Yes
	•*Proc. Quality & Adhere.*	Yes (U3)
♦ Effective Self Assessment	•*Self Assessment*	Jan
♦ Effective Corrective Action	•*Corrective Action*	Jan

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Success Objective Progress

Success Objective	Issue	Closed or When Expected
♦ Restored Licensing and Design Bases	• *Configuration Management*	Feb (U3)
♦ Employee Concerns	• *Safety Conscious Work Environment*	Feb
♦ Excellence in Operations	• *Work Control*	Jan (U3)
	• *Training*	Jan
	• *Operator Readiness*	Jan (U3)
	• *Security*	Yes
	• *Environmental Compliance*	Jan

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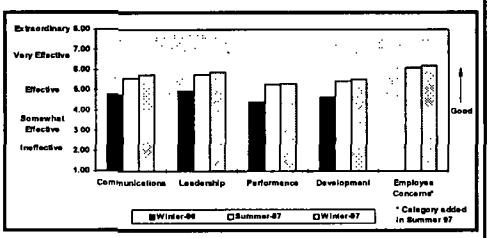
Leadership Assessment

Millstone - November 1997



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Oversight is Effective

- Nuclear Safety Assessment Board (NSAB) review
- External Independent Review

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Key Challenges

- Safety Conscious Work Environment "Problem Area" Prevention, Identification and Resolution
- Corrective Action Implementation
- Configuration Management Program Effectiveness

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Safety Conscious Work Environment

Mike Brothers

Vice President
Nuclear Operations

Northeast Nuclear Energy

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Millstone's Safety Conscious Work Environment ...

A safety conscious work environment is an environment where all members of the NU Nuclear team feel comfortable raising any issue important to them with the confidence that the issue will be addressed with commitment, respect, and timeliness.

We Have Rigorous Success Criteria for SCWE

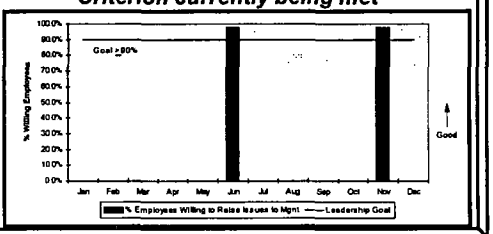
- Employees raise concerns
- Line management handles issues effectively
- Employee Concerns Program effective
- We recognize and address "problem areas"
- Employee Concerns Oversight Panel (ECOP) concurs
- Little Harbor Consultants (LHC) concurs

We Have Rigorous Success Criteria for SCWE

- Employees raise concerns
- Line management handles issues effectively
- Employee Concerns Program effective
- We recognize and address "problem areas"
- ECOP concurs
- LHC concurs

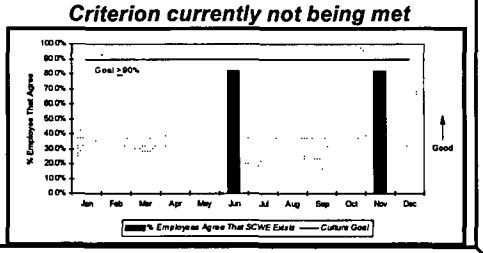
Criterion: Leadership Survey Shows ≥ 90% of People Willing to Raise Issues to Their Supervisor

Criterion currently being met



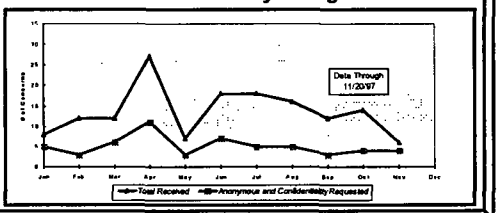
Criterion: Culture Survey Shows ≥ 90% of Total Respondents Agree There Is a SCWE in Their Area

Criterion currently not being met



Criterion: Concerns Requesting Confidentiality or Received Anonymously Do Not Indicate an Adverse Trend

Criterion currently being met

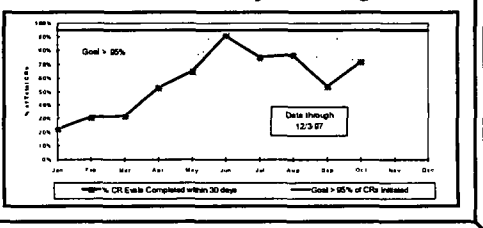


We Have Rigorous Success Criteria for SCWE

- Employees raise concerns
- Line management handles issues effectively
- Employee Concerns Program effective
- We recognize and address "problem areas"
- ECOP concurs
- LHC concurs

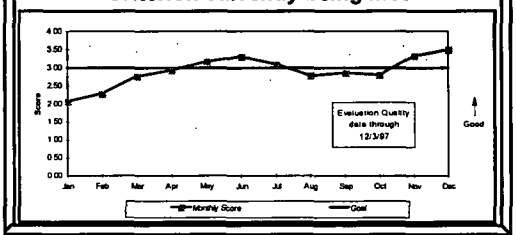
Criterion: Condition Report Evaluation Completed Within 30 Days

Criterion currently not being met



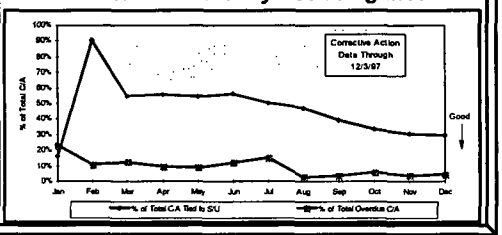
Criterion: Quality of Condition Report Evaluation Is ≥ 3 on a 0-4 Scale

Criterion currently being met



Criterion: Number of Overdue Assignments is Fewer Than 1% of Total

Criterion currently not being met

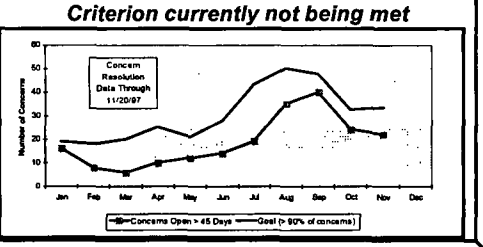


We Have Rigorous Success Criteria for SCWE

- Employees raise concerns
- Line management handles issues effectively
- Employee Concerns Program effective
- We recognize and address "problem areas"
- ECOP concurs
- LHC concurs

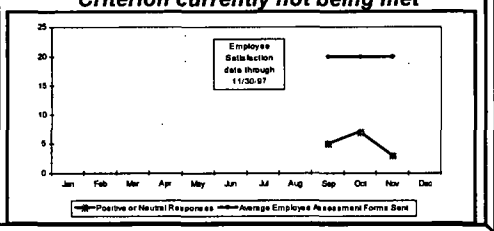
Criterion: The Number of ECP Investigations Completed Within 45 Days is ≥ 90%

Criterion currently not being met



Criterion: Employee Satisfaction with the Employee Concerns Program

Criterion currently not being met



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We Have Rigorous Success Criteria for SCWE

- Employees raise concerns
- Line management handles issues effectively
- Employee Concerns Program effective
- We recognize and address "problem areas"
- ECOP concurs
- LHC concurs

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Criterion: ≥ 95% Of Supervisors Have Been Trained to Effectively Handle Employee Concerns

Criterion currently not being met

Forum for Leadership Excellence	71.4%
Managing for Nuclear Safety	95.1%
Civil Treatment	86.2%
50.7 Familiarization	Ongoing

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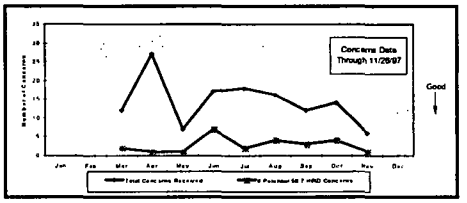
Criterion: Concerns Alleging HIRD Do Not Indicate an Adverse Trend

Criterion currently being met



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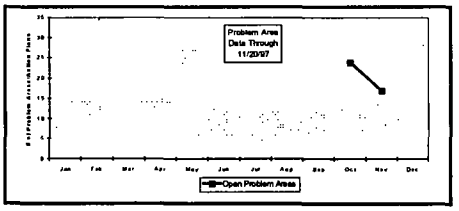
Criterion: Number of Problem Areas is Decreasing

Criterion currently not being met



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We Have Rigorous Success Criteria for SCWE

- Employees raise concerns
- Line management handles issues effectively
- Employee Concerns Program effective
- We recognize and address "problem areas"
- ECOP concurs
- LHC concurs

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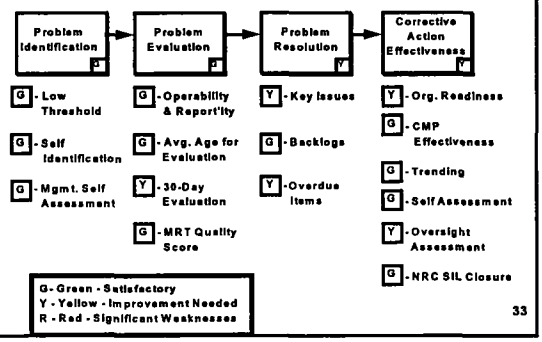
We Have Made Progress...

- Organizational Changes Responsive to SCWE Needs
- On Track to Support Unit 3 Startup

Corrective Actions and Configuration Management

Marty Bowling
Vice President
Millstone Unit 2

Corrective Action on Track to Support MP3 Restart Readiness



Expectations for Problem Identification and Evaluation Are Being Met

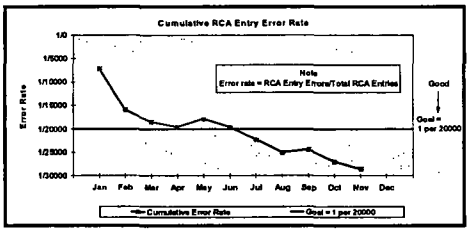
- Low threshold achieved (>9000 Condition Reports generated to date in 1997)
- Nearly 300 Self Assessments performed to date in 1997
- Over 30 audits and 319 surveillances conducted by Nuclear Oversight
- Overall, more than 90% of Condition Reports are internally identified
- No backlog for operability and reportability determinations

Expectations for Timely Resolution of Issues Are On Track

- Management issues are being addressed
  - 6 key issues are satisfactory
  - 10 remaining issues on track for Jan / Feb 1998 resolution

Cumulative RCA Entry Error Rate

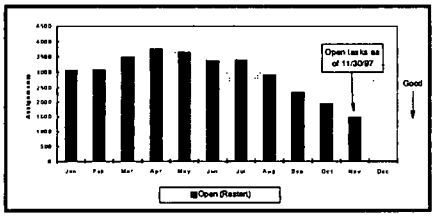
Millstone 3 - November 1997



Expectations for Timely Resolution of Issues Are Being Met

- Management issues are being addressed
  - 6 key issues are satisfactory
  - 10 remaining issues on track for Jan / Feb 1998 resolution
- Overdue assignments for Condition Reports are being reduced
- Backlogs are being reduced

Unit 3 Restart Task Backlogs are Being Reduced



Corrective Action Resolution Effectiveness is "Acceptable" Based On:

- NRC Significant Items List closure quality
- Self Assessment of completed corrective actions
- ICAVP review results

MP3 Safety Significant Identified Items (1/96 - *12/5/97*)

Safety Significance	*50.73 LERs*
Totals	101
– low	92
– moderate	5
– high	4

We Are Addressing Identified Weakness From NRC Tier 1 Inspection Report

- Design and operating interfaces between systems relied upon to perform a safety function

Our Approach to Addressing Design and Operating Interfaces

- Multi-discipline functional review team
- Horizontal look at our system response to accidents - integrating with the deep vertical slice of our CMP
- To date, no significant safety issues or non-compliances with design or licensing bases

We Are Addressing Identified Weakness From NRC Tier 1 Inspection Report

- Design and operating interfaces between systems relied upon to perform a safety function
- Accuracy of Technical Specification surveillance requirements

Our Approach to Technical Specification Compliance

- Currently conducting further reviews
- No new non-compliances have been identified
- Additional attention being directed to FSAR accuracy and procedural compliance issues

Millstone Corrective Action Program Will Support the Conduct of Safe Operations

Unit 3 Update

Jack McElwain

Vice President - Unit 3 (Acting)

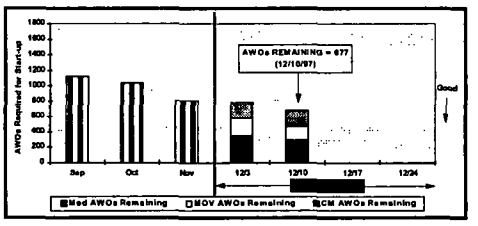
We are On Track for Unit 3 Physical Readiness by End of December

KEY ISSUES:

- Motor Operated Valve (MOV) Work
- Restart Modifications
- Restart Maintenance Backlog

Start-up AWO Backlog

Millstone 3 - December 1997



Plan for Reducing AWO Backlog

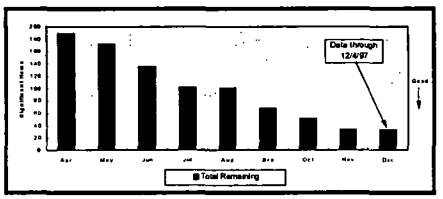
Activities (12/10/97)	# of AWOs that will be Closed Out
♦ MOVs	171
– 97 complete	
– 46 to go	
♦ MODs	292
– 127 complete	
– 55 to go	
♦ Corrective Maintenance	214
Total	*677*

Key Activities to Complete for OSTI Readiness

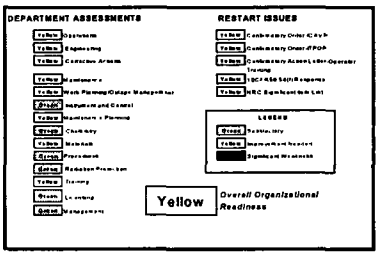
- ♦ NRC Significant Items List (SIL)
- ♦ Organizational and Operator Performance
- ♦ Mode 4 Task Completions

Significant Items List

Millstone 3 - December 1997



Progress is Being Made On Organizational Readiness



Operator Readiness is on Track to Support OSTI

- ♦ Requalification Program is satisfactory
- ♦ Staffing is adequate
  - – 41 Licenses
    - 28 are SRO (6 Admin)
    - 13 are RO
- ♦ Benchmarking and refamiliarization visits to other plants are being conducted

Significant Milestones Have Been Achieved

- ♦ Reactor Coolant System Fill, Sweep, and Vent complete
- ♦ Spent Fuel Pool anti-siphon modification complete
- ♦ Containment basemat physical work complete - preliminary results are acceptable
- ♦ "B" train outage complete. "A" train in progress

Unit 3 Milestone Schedule

♦ ICAVP NRC Tier 2/3 Inspection	In Progress
♦ Plant Physically Ready	12/97
♦ NRC In-Scope SSFI	1/98
♦ Ready for 40500	1/98
♦ Ready for Mode 4	1/98
♦ Ready for OSTI	2/98

Nuclear Oversight

Dave Goebel

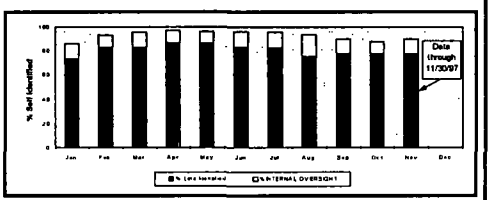
Vice President - Nuclear Oversight

NSAB Confirmed Oversight Effectiveness for 10CFR50 Appendix B

- ♦ Effectiveness confirmed - 10/30/97
- ♦ NSAB will continue to monitor

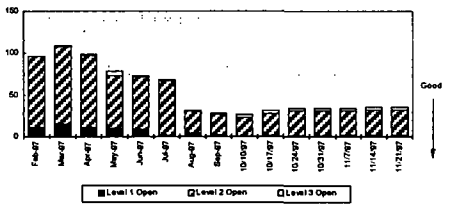
Problems are Identified by Millstone Nuclear Organizations

Millstone Station Condition Reports



Management Embraces Oversight Assessment

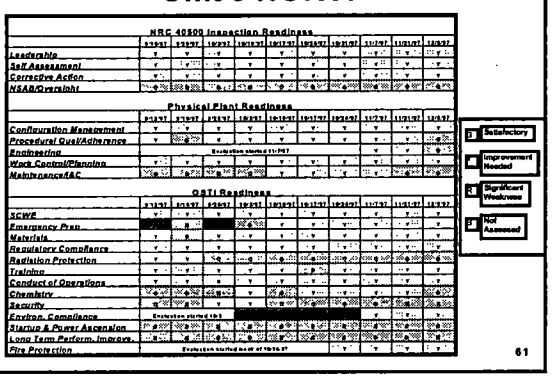
Unit 3 is Actively Addressing Oversight-Identified Issues



Assessing Readiness: Nuclear Oversight Restart Verification Plan (NORVP)

- ♦ Identified 22 key issues
- ♦ Developed critical attributes
- ♦ Assess and score attributes
- ♦ Report key strengths and weaknesses
- ♦ Provide areas where improvement is needed

Unit 3 NORVP



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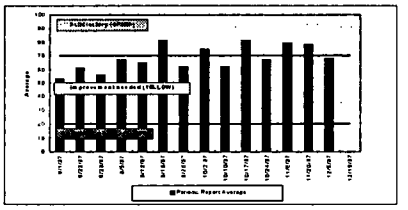
Conduct of Operations - MP3

Progress: Performance is improving; however, greater consistency in applying the new conduct of operations standards is necessary.



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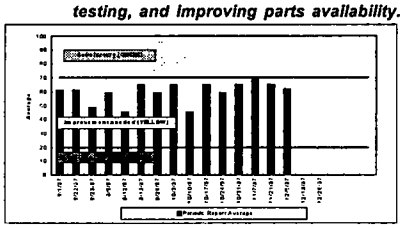
Work Control and Planning - MP3

Progress: Process shows improvement. Additional effort necessary in performing PMs, conducting post-maintenance testing, and improving parts availability.



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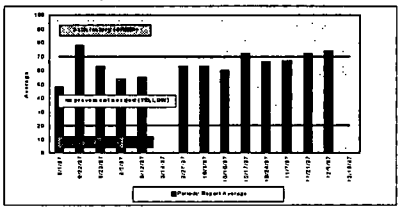
Procedure Quality and Adherence

Progress: Improvement is still needed in procedure adherence and consistent application of standards and expectations.



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Restart Readiness is Within Reach

- Nuclear Oversight has been confirmed as effective
- Line management is listening
- MP3 restart in the first quarter of 1998 is achievable

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Concluding Remarks

Bruce Kenyon

Northeast Nuclear Energy

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MILLSTONE UNIT 2
STATUS OF ICAVP

Dan Curry

John Hilbish

Parsons Power

December 12, 1997

PARSONS

Agenda

- Status of Tier 1, 2 & 3 Review Activities
- Unit 2 ICAVP Schedule
- Discrepancy Report Status

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Tier 1 Review Process:

- Tier 1 Systems (First Group)
  - High Pressure Safety Injection (HPSI) with Refueling Water Storage Tank (RWST)
  - Auxiliary Feedwater (AFW) with Condensate Storage Tank
- Tier 1 Systems (Second Group)
  - Emergency Diesel Generator and supporting systems (fuel oil, ventilation, 4160 VAC and fast bus transfer, and EDG Load Sequencer)
  - Enclosure Building Filtration System and Containment and Enclosure Building Purge System

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Tier 2 Review Scope:

- Review all FSAR Chapter 14 Accident Analyses
  - 29 individual events (some with multiple analyses)
  - 56 affected systems
  - ~ 300 "unique" components
  - ~ 200 Critical Design Characteristics
- Verify Active Component Critical Design Characteristics (CDC) that must exist to support the Chapter 14 Analyses

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Tier 3 Review Scope:

- Assess adequacy of CMP to identify & correct past change process configuration management deficiencies
- Inspection Sample of approximately 440 items has been selected
- Reviewing changes and revisions to:
  - Engineering and Licensing Documents
  - Parts Dedication, Substitution, and Safety Classification
  - Operations & Maintenance Procedures

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Tier Review Status (as of Dec 10, 1997)

Status	Report Completion
Tier 1	
❖ HPSI - 68 % Complete	2/03/98
❖ AFW - 32 % Complete	3/23/98
❖ EDG - 10 % Complete	3/23/98
❖ HVAC - 15 % Complete	3/23/98
Tier 2 - 48 % Complete	2/13/98
Tier 3 - 54 % Complete	2/25/98
Final Report	4/07/98

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Unit 2 Discrepancy Reports

- 14 Discrepancy Reports Closed
  - 6 Confirmed Discrepant
  - 6 Previously identified by NNECo
  - 2 determined to be non-discrepant condition
- 6 Confirmed DRs are Significance Level 4

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