UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

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BRIEFING ON MILLSTONE

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PUBLIC MEETING

Nuclear Regulatory Commission One White Flint North Rockville, Maryland

Wednesday, April 23, 1997

The Commission met in open session, pursuant to notice, at 10:00 a.m., Shirley A. Jackson, Chairman, presiding.

COMMISSIONERS PRESENT:

SHIRLEY A. JACKSON, Chairman of the Commission KENNETH C. ROGERS, Commissioner GRETA J. DICUS, Commissioner NILS J. DIAZ, Commissioner EDWARD McGAFFIGAN, JR., Commissioner

2 STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE: MARTIN BOWLING, Recovery Officer, Millstone Unit 2 MIKE BROTHERS, Vice President and Recovery Officer, Millstone Unit 3 STEPHEN BURNS JOSEPH CALLAN, EDO BUZZ CARNS, Sr. Vice President and Chief Nuclear Officer SAMUEL COLLINS, Director, NRR DAVE GOEBEL, Vice President, Nuclear Oversight EUGENE IMBRO BRUCE KENYON, President and CEO, Northeast Nuclear Energy Company WAYNE LANNING JACK McELWAIN, Recovery Officer, Millstone Unit 1 JAY THAYER, Recovery Officer, Nuclear Engineering and Support WILLIAM TRAVERS, Director, Special Projects Office, NRR

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[10:00 a.m.]

THE CHAIRMAN: Good morning, ladies and gentlemen. The purpose of this meeting is for the Commission to be briefed on the status of activities relating to the three Millstone nuclear power plants. The Commission will hear presentations today from both Northeast Utilities and the NRC staff.

PROCEEDINGS

Millstone unit one has been shut down for approximately 18 months, and units 2 and 3 have been shut

down for a little over one year. All three of the Millstone units were placed on the NRC's watch list in January 1996. The units were recategorized as category three plants in June of 1996.

This action necessitates Commission approval for the restart of each of the units. The NRC in November of last year created a new organization, the special Millstone special projects office, to have responsibility for all licensing and inspection activities at Millstone to support a NRC decision on restart of the Millstone units.

This Commission meeting is the second quarterly meeting to assess the status of activities at the sites.

The Commission is interested in the licensee's results from its recovery process, how the licensee is determining that the root cause deficiencies are being

corrected, a discussion of the role and the effectiveness of the quality assurance organization at the site, and finally, an independent assessment from the NRC staff regarding the threshold and the effectiveness of the licensee's corrective action programs.

The Commission also is interested in the status of restart activities and specifically desires comments on the problems with operator training.

The Commission has recently approved the selection of the party for the independent oversight of employee concerns, and so as such, the Commission also is interested in obtaining feedback beginning with this meeting at each meeting that we have on gains you're making in making the Millstone station an environment supportive of the raising and resolution of safety concerns.

Now, copies of the presentation are available at the entrance to the meeting, but I'd like to make a parenthetical remark so that you can address it as you go along. A member of my staff called your organization yesterday to inquire as to whether you had any backup slides for the presentation because the thought was it seemed to a bit thin, and we were given the understanding that you did not. And so my first impression is that the message on the slides, modular, you're fleshing them out as you talk, appear to be repeating goals as opposed to results. And as

you may recall, at the meeting we had on January 30th, I requested that you put more meat on the bones and more detail, and even though it's not evident in the slides, I hope that we have a full presentation not only of your plan, but progress relative to those plans.

And so that we can hear some results, because it's important whatever your interaction is with the staff that the Commission hears about where you actually are and results, because it is the Commission in the end that's going to have to take the vote.

So with that, Mr. Kenyon, please proceed.

MR. KENYON: Chairman Jackson, Commissioners, I'm pleased to have this opportunity to update you regarding the progress being made at Millstone.

Chairman Jackson, with regard to your comment on the slides, what we have done is identify what we believe are the most important success objectives and as we talk about them, we will indicate activities, in other words, what we have done, we will indicate results achieved, and we will indicate what concerns or challenges we have going forward.

So when we complete the presentation, I'd like to

circle back to the comment and get feedback from you as to whether or not you feel the content was good or we need to make further adjustments as we do future meetings.

I'm Bruce Kenyon, president and CEO of Northeast Nuclear. Seated with me are Buzz Carns, senior vice president and chief nuclear officer; Jack McElwain, who's the officer responsible for unit one; Marty Bowling, unit 2; Mike Brothers, unit 3; Jay Thayer, who is our vice president of engineering and support; and Dave Goebel, who is the vice president of oversight. Others in the audience that I wish to identify are Pat Loftus. She's our new director of regulatory affairs, formerly with Westinghouse, and George Davis. George chairs NCAT. NCAT is our advisory team for end use nuclear committee of the board of trustees.

All of the senior members of the Millstone leadership team were introduced to you at our previous meeting on January 30th, although Buzz Carns was just announced and not available for the meeting, but obviously here today.

The major purpose of this meeting from my perspective is to brief you regarding the progress we are making. At the last meeting, a considerable portion of my remarks were devoted to giving you an assessment of what caused the substantial deterioration in performance at Millstone. And as I indicated then, fundamentally it was leadership, and I reviewed for you what I considered to have been the most important leadership failures and what had been done at that point to place a new leadership team at

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Millstone.

I also, at that time, presented what I considered to be our most important success objectives, and thus as I talk about our progress and our significant challenges in this and future meetings, I will do so in terms of the success objectives, whose topics are presented on this slide.

Other topics that I'll address during the course of this meeting include our current schedules, the company's financial condition, and very briefly, some comments on public opinion.

In support of an efficient presentation, Buzz and I will share the presentation responsibilities but certainly the other officers here at the table are available to assist in answering questions.

The first success objective, and again we're going to do this on the basis of what's the objective, what activities have we done in relation to that objective, what results have we achieved, and what do we see as the challenges going forward.

responsibilities for units one and 2 respectively, and each is committed for a minimum of two years.

We also obtained a recovery team from CP&L for unit 3, but we're nearly completeed in phasing out this team, mostly with NU personnel and new hires.

This new leadership team has current knowledge of industry high standards and best practices, has considerable experience in changing the performance of organizations and is committed to doing what's necessary to bring these units back into operations.

Now, in terms of results achieved, I think we have a leadership team that is functioning very well. We have largely resolved the leadership issue of a lack of clear accountabilities. We did this by going to a unitized organization and by implementing further responsibility changes and clarifications. We've improved LER timeliness and quality. But I also think there clearly remains challenges in the area of high standards.

The general challenge is that the high standards we are seeking are only partially in place at this point. . 9 We are still finding and fixing problems. One specific example is that end use track record in meeting licensing commitments which historically has not been good at all has improved, but it still needs to be much better. What is in progress is an extensive review and compilation of past commitments, and as we go through that, we are continuing to find commitments made in the past that were not lived up to, and to the extent they're reportable, we are making reports as we go along.

So we're going to continue to have issues in that area until we finish reviewing all the documentation that we think is relevant and get in place a good commitment tracking system.

Another important example, and this goes to your question, is licensed operator training. This was identified by the unit 1 licensed operator upgrade failures and our subsequent reviews, and I think it's important that I make some comments regarding how I and the rest of the leadership team view this issue.

I've had nuclear responsibilities for almost all of my 32-year career, and Buzz's career is somewhat longer. It's our philosophy that you train your operators and the rest of your personnel to meet your own high standards. Satisfying NRC requirements should be a secondary issue, and in my experience, if you approach it that way, you should . 10

almost never have an examination failure.

The training program that produced such poor results began in June, was inappropriately adjusted along the way, implementation was poor, and that led to licensed operator upgrade applications being submitted in November. Now this was a month after the recovery teams had arrived and at a time when we were heavily involved in assessing a wide variety of issues, and we frankly had just not picked up on the fact that there were significant problems in the -- in operator license training.

Now, this is an explanation, but it's not an excuse. We were surprised. We were embarrassed. Particularly considering our philosophy. But we are determined to and are aggressively addressing the situation, in part through a very thorough root cause analysis. We've hired a new director of training and we have docketed a detailed corrective action plan, so we are working our way through the plan, but the licensed operator training that we will achieve is going to be based on the standards that I

described.

THE CHAIRMAN: Let me stop you for a minute. Given the problems that you found in your initial operator licensing program, what can you say in the way of the confidence that the Commission should have in your requalification, that your requalification program doesn't . 11

have the same problems?

MR. KENYON: We took a good look at the requalification program, and we're satisfied that the requalification and training program is in good shape. We're satisfied --

THE CHAIRMAN: What satisfies you?

MR. KENYON: Jay, I'm going to ask you to get into details of what we have done, but obviously when you see problems, recordkeeping problems, standards problems, attention line management problems and the whole litany of things that we saw in the initial licensing or upgrade training program, then you look for the same problems in the ongoing retraining programs, and other than some pretty relatively minor stuff, we did not find these major problems in the licensed operator requalification program.

Now, Jay, would you --

THE CHAIRMAN: Before he starts, you know, this is a significant issue, not just for the Northeast Utilities organization, but the Commission has under consideration the whole issue of initial operator licensing and having that in the hands of -- more in the hands of the industry itself, the individual plants, and so this kind of a problem to show up at this stage of the game is not particularly helpful.

This is in the broader-based sense, as well as not, of course, being particularly helpful to you, but let . 12 me hear from Mr. Thaver.

MR. THAYER: Just to go back to the

requalification training issue, we used the same approach on the requalification training program review that we did that was taken by the independent review team in their review of the unit 1 failures. That resulted, as Mr. Kenyon said, in several discrepancies to our own accredited training program.

For two of the four Connecticut units, we shut down the requalification program for one week each, fixed those that were mostly administrative issues, procedural issues, some process discrepancies, fixed those and then restarted each of the requalification training programs, one week later on schedule. Those programs are functioning now and we've had -- our review of those tells us those are sound training programs.

THE CHAIRMAN: Let me ask you another question. You talked about your first success objective being that you're an organization with high standards and accountabilities. If I go to your restart items, are each of those accountable to a particular individual or schedule setup and tracked for each one? Can you give us a few examples?

MR. KENYON: As a general statement, we know who's responsible for all of the items. Are there detailed . $$13\!$

schedules on all items? I mean, I would say probably not but most items are scheduled.

Let me ask -- go ahead, Jack.

MR. McELWAIN: The operational readiness plan for

unit 1, for example, every line item, including the significant items list, has a person responsible for it, a due date, and we track those deliverables on a weekly basis, and I believe it's the same for --

THE CHAIRMAN: Do you have an individual who is responsible for that?

MR. McELWAIN: Yes. For example, in the operating licensed training area, the unit director of unit 1 is responsible for the overall picture and the line items underneath that that came out of the IRT are responsible for the next tier down, which is the ops manager, and the assistant ops manager, and we also are continuing looking at that.

And if I might clarify a little bit, the license -- initial license training class that failed was designed, I would say, inadequately in that it was a six-month program for initial licensing, which is not something that any of us were used to seeing anywhere, or were aware that that specific activity was only taking six months. It was unit 1, and I'm the unit 1 person, so I'm accountable for that but --

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THE CHAIRMAN: You're saying there was a change in the length of the training program?

MR. McELWAIN: Yes.

CHAIRMAN JACKSON: And you were not aware of it? MR. McELWAIN: It started before we got here. It accelerated. When I got here, I naively thought that that was the end of a one-year or longer program. In reality, it was the end of a six-month program, and we put these people up for tests. That's the clarification. It was accelerated. It was not our normal licensing program and it was not done properly, and documentation aside, that program was not set up to be a success.

THE CHAIRMAN: Let me hear from the unit 2 manager.

MR. BOWLING: On the issue of operator training, as you know, unit 2 did conduct an initial operating license class in 1996. There were 12 candidates that took the exam, of which all 12 successfully passed.

Nonetheless, based on the unit 1 review, we looked into the adequacy of the program for initial operator licensing on unit 2. What we found was that a large percentage of the candidates did not successfully meet all of the program -- the internal program requirements. Several have been restricted administratively from performing licensing duties as a result.

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The -- on the matter of operator requalification and the adequacy of that program, which Jay Thayer has had reviewed, from my standpoint, it has to pass my standard as well, and as a result, I am observing operator requal on a weekly basis as well as the unit 2 director, and so senior management has to have the assurance that it's meeting our standards, which it is at this time.

On the scheduling of the restart items, that's in -- I'd like to talk about that in two parts.

First, the NRC has recently issued on unit 2 the significant issues list. We have that scheduled and there are accountable individuals, not just for each of the items on the schedule, but for the overall accomplishment, and that's tracked on a weekly basis and made available to the resident inspectors.

THE CHAIRMAN: Let me hear from Mr. -- are you

done? Want more?

MR. BOWLING: Well, I just wanted to make one other point on the restart items. What we consider as restart items is more extensive than the NRC list, and that's also tracked similarly.

THE CHAIRMAN: All right. Let me here hear from Mr. Brothers, and then I think Mr. Rogers has a question. MR. BROTHERS: With regard to the items if they're assigned individual responsibility and they're scheduled,

. 16 the answer is yes, for both significant items and all restart activities.

THE CHAIRMAN: And on the requalification.

MR. BROTHERS: Requalification was looked at by the same format on independent review, and it continues. We did find on the last licensed operator initial class, two individuals with minor discrepancies based upon the IRT from unit 1, they were removed and one person was removed from watch, and the deficiency was corrected and he was placed back on watch.

THE CHAIRMAN: What has changed about it? What level and who makes the judgment as to what the training program is as well as its duration, such that we would have assurance that what you're talking about would not occur --MR. CARNS: Chairman Jackson, if I may participate

in the discussion.

CHAIRMAN JACKSON: Please. You can participate as much as you want. I want to just understand, you know, the answer to the question.

MR. CARNS: There are some very straightforward simple things that we have to do, and one is to get line management, ownership of training there. There has been a disconnect. We have training advisory committees now that are headed by the unit director and I'm going to chair an executive training advisory committee to make sure that the .

emphasis is there.

We have done some very simple things, like telling the training department they do not hold a graded evaluation of a simulator session without at least the operations manager there to witness it. In the past, training was done in a vacuum.

What we have decided is that we're not going to train the way we operate. We're going to operate the way we train. It's going to start at the training center and emanate from there.

CHAIRMAN JACKSON: Okay. Commissioner Rogers?

COMMISSIONER ROGERS: Yes. On the unit 2 initial exam, you mentioned that everybody passed. Now what was the duration of the training program that those people underwent?

MR. BOWLING: That was the -- the issue in question was the amount of on-shift time, and -- in terms of actually practicing the requirements of holding a license and that was the area that was cut short. All other program requirements, to my knowledge, were met.

COMMISSIONER ROGERS: What I'm trying to get at, though, was Mr. McElwain's observation that he thought that these operators that did pass the initial test in unit 1, had gone through a one-year program, and now you -- what about the ones that you -- that did pass it?

MR. BOWLING: My understanding was it was a

one-year program.

COMMISSIONER ROGERS: No, but the ones that passed for unit 2 were in a one-year program, not a six-month program?

MR. BOWLING: Yes. Right.

THE CHAIRMAN: So the problem was within the duration and being able to cover certain material, whatever, and activities and needing a certain amount of time to get that done, is that correct?

MR. McELWAIN: I believe in the pursuit of the timeliness to fill the pipeline that we went on the wrong path. You couldn't have the breadth and the width of what you needed in a real operator license program and have expected these people to be successful, had we looked at it from the big picture perspective.

COMMISSIONER ROGERS: I take it then that this six-month training was an accelerated one just for this group of people?

MR. McELWAIN: Yes.

COMMISSIONER ROGERS: But prior to that, the custom had been to have a one-year training program?

 $$\operatorname{MR}$.$ McELWAIN: Yes. This was the first aberration of this type.

MR. THAYER: If I could, that is correct. In

accordance with our accredited program, the requirements are specified. Any deviations from those requirements need a thorough documentation. The problem with the unit 1 program is that there were decisions, as Jack mentioned, to shorten pieces of that program that were made very low in the management chain. Those decisions weren't coordinated or verified by unit management or upper level training management and this program proceeded with some significant decisions about shortening being made without the cognizance of upper management.

THE CHAIRMAN: And so you're saying that what has changed is in fact both upper management's involvement as well as having the actual line management engaged in this process?

MR. CARNS: That's correct, Chairman.

MR. KENYON: And as maybe a final recap, where we believe we are on this issue is that we have an ongoing requalification program that's functioning well. We don't see any serious issues with that. We do have one licensed operator training class in progress on unit 3 and we are scrutinizing that very carefully, and based on what we've seen so far, we think the program is functioning well, but it obviously has our attention.

THE CHAIRMAN: Okay.

MR. KENYON: Moving on to success objective number

two, and that is that we demonstrate a strong nuclear safety philosophy as evidenced by careful adherence to high nuclear safety standards and conservative decision-making. The activities here have been that we have published a nuclear safety document modeled after Virginia Power's. It's based on four principles, which are the need to maintain a profound respect for the safety of the reactor core and the spent fuel, the need to focus attention and resources on proactively preventing events that compromise nuclear safety, the need for conservative decision-making, and the requirement to enforce high standards by doing the right thing, meaning that the quality and safety are paramount over schedule and production. Now those are four principles, but behind that there's a very detailed document.

The overall result is that I believe on an ongoing basis, we're demonstrating improved nuclear safety standards through day-to-day decision-making. Our challenge is that while this document has been put out fairly recently and is understood by senior management, we've got a lot of work to do to educate the work force, drive it down in the organization so it really becomes a part of their day-to-day activities, so we have the standard out. We are endeavoring to live up to that standard, but we're nowhere near where we need to be in terms of driving and understanding of that

down into the organization.

Success objective number three --

THE CHAIRMAN: Before you go to the next success objective, do you track adherence to procedures? And if so, how is it trending?

MR. KENYON: When we don't comply -- you know, when we have a problem with procedure compliance, it is picked up as a CR and the CR is a condition report, and those are tracked.

Now, I have to ask the unit officers on an individual basis to tell you how it's trending on their particular unit.

THE CHAIRMAN: Okay, can each of you briefly tell me, 1, 2, 3.

MR. McELWAIN: Sure. The procedure compliance issues of which there were many in '96, unit 1, have decreased dramatically. We have people with the mind-set now that if you can't do the procedure as written, you stop. And we have a lot of information. It doesn't get to be a corrective action request, or it's self-identified by the person that's actually doing the job.

We have several I&C people, for example, that have created their own condition report based on the -- not being able to proceed with the procedure without stopping and changing it. We've had shift managers stop operational . 22

activities because they need a clarification, and that kind of thing didn't happen in the past, and that kind of led to some of the procedure adherence issues. We would go down a path and outthink the procedure in some respects and not stop and not stop when there was a question, and then fix the problem and go on. And that's where we're at pretty much on the OR.

MR. BOWLING: The expectation is that procedure non-adherence will be documented in a condition report so that corrective action can be taken. The number of those is relatively low. I do not draw as much comfort from that as the number would indicate, based on the need to raise the standard, and the expectation, and a general weakness in the procedures set in terms of level of detail which we are working on.

THE CHAIRMAN: Okay, Mr. Brothers.

MR. BROTHERS: In the case of unit 3, we do track it. There is condition reports, procedure compliance, that indicator is low. I think that's primarily due to the number of procedures we're performing on unit 3 being relatively low at this time.

One issue that we have that's related that I would consider related to procedure compliance is a component manipulation and plant configuration control. That trend is 23

direction at Millstone unit 3. While not directly a procedural compliance issue, there's a personal error component associated with that. That combined, the procedure component -- error component is of interest to us and we're addressing it now.

THE CHAIRMAN: What about the quality of the procedures themselves?

MR. BROTHERS: The quality of the procedures is tracked. There is a, within the procedure group under Mr. Tray Kilpatrick, there is a quality of procedure indicator he has developed and that is going up.

THE CHAIRMAN: Okay. Thanks.

MR. KENYON: Number three has to do with effective self-assessment. This is very important in driving to the goal of improving performance. Self-assessment must be effectively accomplished by both line management and the various oversight mechanisms. I think the important test here is that significant issues are identified by NU rather than others. So I'm going to talk about each component of this, beginning with line management self-assessment.

We believe that line management self-assessment process has been established and results have been achieved. The activities have been the implementation of a self-assessment and work observation processes on all units. We've substantially lowered the threshold for writing 24

condition reports.

Now, the challenge is that there's not yet enough implementation history to demonstrate that our self-assessment activities are effective. So we just need to take more time and see how it goes, but the process is in place and we're using it.

THE CHAIRMAN: What's your metric for effectiveness?

MR. KENYON: That we are self-identifying problems as opposed to somebody else identifying them.

THE CHAIRMAN: Do you roughly track a ratio of self-identified versus externally identified?

MR. KENYON: Yes, we do.

THE CHAIRMAN: And how is that trend going?

MR. KENYON: Again, we've got to do it on the --

MR. CARNS: One of the results is that we're

identifying 25 percent more internally than externally now. THE CHAIRMAN: So that's one of your metrics?

MR. CARNS: Yes.

CHAIRMAN JACKSON: And how do you measure whether what's been identified as what's the most safety significant and/or correctly identify it?

MR. CARNS: Each of the units, when they have a condition report written, they screen those for significance level and for discussion at the morning meetings, and the . 25 significant ones are on a morning report on our Audix phone system and virtually each of us listen to that in the morning, and then when I hear something that raises a flag, I'll go right to the unit officer and discuss it with him. THE CHAIRMAN: Let me hear from each of you

quickly in turn.

MR. McELWAIN: Yes. We have the morning 8:30 management meeting where all the condition reports generated in the last 24 hours are gone over, and significance levels and personnel responsibility is assigned at that meeting. MR. BOWLING: Okay, Unit 2 is similar. I would just make one comment about self-assessment in general, and the effectiveness of the program, what we're looking for.

As you know, to have effective self-assessment, the organization and the personnel conducting self-assessment must be at a sufficiently high standard that they know what they're looking for and whether it's right. So two indicators of effectiveness would be the raising of the standard, which would primarily be done for benchmarking as to what is the correct way to be doing business, and the second is the number of programmatic issues that are identified by line management versus the oversight organization or external agencies such as the NRC.

MR. BROTHERS: From a ratio standpoint of self identification, in Millstone number 3, the trend is going in . 26 the right direction. For instance, in March, 248 items were identified. 26 identified by internal oversight, none by external oversight, and no events, for a ratio of approximately 98 percent per unit and two percent for internal oversight. That is going in the right direction.

The other aspect of this similar to unit 1 and unit 2 is that we also have conducted review of the condition reports. A management review team reviews the proposed corrective action and comes up with a quality indicator for that corrective action which is trending in the correct direction, going up.

THE CHAIRMAN: Okay.

MR. KENYON: Shifting to oversight's effectiveness, we believe that's improved as well. The activities have been development of an oversight recovery plan, the implementation of that is about 50 percent completed. I have communicated my expectations regarding the role of oversight, the importance of oversight to the entire organization. We have implemented in a new oversight organization with expanded resources to better handle the current challenges and this includes having put line experienced individuals in both permanent and rotational positions within oversight, and we've revised and implemented all oversight procedures.

Now, what have been the results? The results have .

been that I think we have a much better acceptance of the role of oversight within the broad organization. Historically that was not there. There's an improved working relationship with line management. I think what occurs now is a very healthy and constructive debate on issues, and I'm also pleased that the quality and usefulness of audit reports have improved substantially.

The challenges with regard to oversight is to do a combination of continuing the improvement process, because it's ramping up, but it's not totally where it needs to be, but provide very needed review and oversight of our preparations for ICAVP as a near term milestone.

I also think line management responsiveness to oversight-identified deficiencies, while improved, needs to improve further.

I also want to mention the NSAB, our -- its effectiveness has improved with established separate -- I'm talking activities now. We've established separate NASB's for Millstone and CY for increased focus. That's a change.

We've intentionally put senior management on NASB. That was not how it was done previously, so Buzz is on it, the unit officers are on it. We've doubled the number of external numbers from 2 to 4 so that we have some very independent review, discussion and dialogue taking place.

The result is that its performance has improved.

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I don't -- I'm not here today to tell you I think it's where it needs to be, but it is improving.

I also want to mention NCAT. NCAT, as you know, directly advises the nuclear committee of the board. At least monthly it comes to one of our nuclear sites. I think they do a very effective job at providing another measure of independent assessment which is useful both to me and the nuclear committee. While at least partially on the subject of ou r board's nuclear committee, I'm pleased to advise the Commission that Bill Conway, and many of you know Bill, and he's highly regarded for his nuclear operations expertise, is joining the board and he participated in his first meeting yesterday.

Overall challenges with regard to the issue of self-assessment. I think oversight is clearly adding value but it needs to continue to improve in order to become a fully effective organization.

I think the NSAB, although starting to improve, needs to reach a higher level of performance.

And I think line management needs more time to demonstrate the effectiveness of its own self-assessment activities, but the trends are good.

THE CHAIRMAN: Now, at the last Commission meeting, the Commission requested a more robust presentation on your site QA organization. Are you prepared to talk . 29

about that today?

MR. KENYON: We can certainly go into as much detail as you want. So let me turn to Dave Goebel and ask him to discuss with you in more detail the functioning of the oversight organization.

MR. GOEBEL: The oversight organization today is still in the building process. Not so much numerically, but in skills. Although we have made, I think, what Bruce has properly classified as good improvements in the audit area, the audit reports are having substantive findings, if there are such things to be found, and there is a good response to those finds from the line organizations, or whoever owns the individual item which has been audited.

The oversight organization also has played a very active role in monitoring the efforts to restore the configuration control to the units, to the 54(f) effort. We are actively involved --

THE CHAIRMAN: When you say actively involved, has the QA organization actually reviewed the scope and the implementation of the configuration?

MR. GOEBEL: We have reviewed the scope which each of the individual units are pursuing, have commented back to the units on the extent of their scope. In some cases that scope has then been modified. We have commented on each individual process that the units have prepared in order to . 30

help them to reestablish the configuration control, and when it is -- as we go through that process and we come out the other end, they will have a product to deliver and we will do vertical slices on that product.

THE CHAIRMAN: On the actual implementation?

 $$\rm MR.$ GOEBEL: On the actual implementation of the whole thing, we will do a vertical slice and we will then

comment on what we find or don't find.

THE CHAIRMAN: And what skills building did you -have you found that you've needed to do in the QA organization? You said you were still building.

MR. GOEBEL: There's an overall knowledge level that needs to be improved. There also -- which we are actively pursuing, some of that by bringing in knowledgeable people, people who have traditional backgrounds in the area from other utilities, people who --

THE CHAIRMAN: Permanently?

MR. GOEBEL: Permanent new people.

We have, in some cases, as Bruce has mentioned, where we've brought some line folks in, the line folks really don't have a QA background but they have a knowledge of impact, certain evolutions and things that are done on the line. The reason for that, why to me that's so vital, it puts us in a position where then we can anticipate problems and not go inspect them after they're done.

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I would like to know which evolutions performed at the plant are high risk evolutions. I want to make sure we have anticipated those and looked at them far enough in advance so there's not a -- and in that case serve as a backup to the line, so there is not a problem which is found by event which could have been precluded, had a knowledgeable person looked at it.

THE CHAIRMAN: So in reviewing the scope of the configuration management plan, then you are in fact reviewing it from the point of view of risk?

MR. GOEBEL: Yes. We are.

THE CHAIRMAN: Okay.

MR. KENYON: I would like to have Buzz Carns review the next two success objectives.

MR. CARNS: Success objective number 4 is that we have an effective corrective action process. The program is in place. Now we have to prove that we can effectively implement it. Units are sharing problems, Lessons Learned and progress made. The director level individual experienced in implementing a successful corrective action program at another utility has been hired and will be on board in the next several weeks. We believe that this addition to our management team will provide strong and necessary leadership for the whole process and help develop some consistency in our corrective action efforts across all .

three units. We believe that corrective action is based on a simple concept, find and fix your own problems, and follow up to ensure that they remain fixed. Inherent in this concept is a responsiveness to others, including the employees, the industry and the regulators. The characteristics of the healthy program we probably all could agree on are self-identification, a questioning attitude and an effective program that addresses problems and precursors in an aggressive manner. In the past we've been noted for precreating problems to solve our problems without effective follow-up implementation. The real message is that people solve problems when they work to high standards and are committed to do what is right. The value of an effective program is that it provides the lasting institutional framework for success.

We've improved the mechanics of the corrective action process to formalize documentation requirements and establish a dedicated staff to oversee the program. In addition, we have installed within each of the departments of the units corrective action coordinators to emphasize line ownership of the program and the problems. Performance monitoring and benchmarking are also being utilized to promote effectiveness.

The results we are seeing include -- and some of these have been mentioned -- in the last six months,

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approximately 25 percent more identification internally than externally. A decreasing number of open evaluations and improvement of evaluations completed within 30 days, which is the framework. We do have quite a few that fall outside that guideline right now, but if it needs a further extension, it has to go to higher levels of management. And the backlog is being managed and reduced. There is --

THE CHAIRMAN: How is it declining?

MR. CARNS: Let me give you to each of the units. They can tell you where they are on the declining. It's not as significant, but it's in the right direction.

 $$\rm MR.\ McELWAIN:\ On\ unit\ one,\ the\ backlog\ has\ been\ reduced\ over\ 200\ in\ the\ past\ month\ and\ we\ expect\ the\ next\ month\ --$

THE CHAIRMAN: You have to reference that to something.

MR. McELWAIN: From 900 and change to 700 and change, the backlog, that's the lower significance and the former program level C and D, created prior to '96, sometime prior to '96. That's where the big backlog came from; pretty much in place then.

MR. BOWLING: It's not easy to talk very quickly about corrective action, but let me try.

THE CHAIRMAN: Well, let me give you a background question that I'm interested in. What I'm interested in is . $\label{eq:gauge} 34$

in terms of resolving corrective action issues. Is the time for resolution appropriate to the safety significance?

MR. BOWLING: That's been our approach on unit 2. What we have done is taking all of the types of corrective action -- Jack spoke to the condition reports, but there are corrective actions in terms of procedures, design modifications, and the maintenance physical condition of the plant, through the work order program.

Our approach has been to organize all of the identified issues, of which there are thousands, into safety significant, and then we're systematically correcting by safety significance, and in the areas we're working in, we have made substantial progress in corrective action.

But for those items that are to be done later in the schedule, obviously they're still in the backlog.

THE CHAIRMAN: Right. But for those items that you by your own methodologies have attached the greatest safety significance to, do you have any significant backlogs that aren't -- backlogs in the sense of not having a specified place in the schedule, but just part of a backlog that you haven't addressed in some way?

MR. BOWLING: No, it's scheduled. And as we move through the schedule, our goal is to take those backlogs to industry standards.

MR. CARNS: Some of those obviously have to --. 35 depending on the significance, have to be solved when found or within a very short time period. There's others that we're discovering -- unit 3, maybe Mike can address that, that's a hardware fix that we have to fix before we go

further.

MR. BROTHERS: Yes. In terms of backlog on unit 3 for the non-significant items, from January, we've gone from 882 to, as of April 12th, 402, so a reduction of 441 on -- a number greater than 30 days old. In terms of significant items that have not yet been evaluated, we do have 51 items that are significance level one that have not yet been evaluated. Our goal is to have that to zero by July 5th.

THE CHAIRMAN: Okay. So when I talk to you next, you'll have that resolved?

MR. BROTHERS: That's correct. If it's after July 5th.

THE CHAIRMAN: Well, when I talk to you next is going to be three months from now, and by definition, that's after July 5th.

MR. CARNS: I think in the interest of time, let me just say the challenge for us --

THE CHAIRMAN: The point is, we'll ask -- you know, you don't just -- we allotted a lot of time to you today, so --

MR. CARNS: Then let me back up and pick up some

other items then.

[Laughter.]

MR. CARNS: We talked a little bit about grading our condition reports and we have these management review teams that do that, and I think that's significant because it really looks at the corrective action and assigns a numerical grade, and that trend is in the right direction, and trending obviously is very important. With the program just being established, we don't have a lot of information on trends, but we've seen some results already. We've seen the identification of issues in the area of operations configuration control, and adherence to fire protection requirements for materials storage. So while the program is yielding results in the prevention of recurring problems and the earlier identification of potential problems, we are not satisfied that any of the results that we have talked about today are where we want them to be in the long run.

The challenge obviously is to effectively implement a program to meet very high standards. That challenge still remains in front of us.

COMMISSIONER ROGERS: You mentioned your grading of your corrective action reports. What is the average grade?

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MR. CARNS: 2.87 to --
COMMISSIONER ROGERS: Out of what?
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MR. BROTHERS: 2.90 out of 4 on Millstone unit 3. MR. CARNS: There's a floor of 2 and a ceiling of 4 but it's gone in the right direction.

MR. BROTHERS: There is no floor. It goes from zero to 4.

 $\mbox{MR. CARNS: Well, I was -- 2 has been our minimum,} \label{eq:MR. CARNS: Well, I was -- 2 has been our minimum,} I think, of what we've had.$

MR. McELWAIN: 2.4 on unit 1, and it's increasing. THE CHAIRMAN: 4 is a good grade? MR. McELWAIN: 4 is perfect.

CHAIRMAN JACKSON: There is never perfection.

MR. CARNS: I don't think we'll be able to tell you we are at 4 in three months. but we should be really closing in on the 3 and slightly over 3.

The next success objective is the restoration of

the design and licensing basis or the 50.54(f) effort if you will. This is an integral aspect of the corrective action process at Millstone. We must be able to identify the discrepancies, capture and track them and effectively implement the fixes. The 50.54(f) project will accomplish this for each unit and the work will be validated by an oversight organization and then confirmed by the independent corrective action verification program.

The project is significant with nearly 700 people involved in the effort. We retained 3 different nuclear

steam supply system firms and each has put an experienced team in place to assist the units in their licensing and design basis restoration efforts. The team at unit 1 is General Electric, partnering with Raytheon and Stone & Webster. The team at unit unit 2 is Combustion Engineering partnering with Stone & Webster. And the team at unit 3 is Westinghouse partnering with the Southern Company.

There is still a great deal of work to be done before meaningful results are achieved. Our approach is to identify issues, initiate condition reports as appropriate and determine which of those condition reports should be licensee event reports and assess the safety significance and finally make any necessary physical modifications. To date, we've identified approximately 6,000 items that require further review. And out of this total we have identified about 40 physical modifications that are slated for units 2 and 3.

Clearly the challenges are to establish the licensing and design basis.

Another significant challenge is to transfer the knowledge base that's being created to the Millstone staff.

And finally, we need to develop a program to ensure that the configuration management is kept current in the future.

THE CHAIRMAN: Let me ask you this question. Of . 39 these 40 physical changes on units 2 and 3, have any of them

MR. CARNS: I don't know that we have any complete right now.

MR. BROTHERS: Yes, we do have a few. There's 30 on Millstone unit 3. Some of them, like, for instance, installing the target rock controller card, is done. I have a list and we can go through specifics of which ones are done. Out of all of them, out of the 30, probably about six have been done at this time.

THE CHAIRMAN: And have any design basis issues arisen after a system has been completed?

MR. BROTHERS: No.

been implemented?

MR. CARNS: From a 50.54(f) review completion?

THE CHAIRMAN: I'm talking about after you've actually done the physical modifications, you don't identify any further issues and there are no repeat violations with respect to anything?

MR. BROTHERS: No. Let me amplify on that, however. When we -- for instance, on one of our more significant modifications is the RHR flow control valve mod, associated with the failure mode of the air-operated valves and the subsequent heat load on the reactor plant component cooling water system. As we investigated that, we found other systems like CCE, which is charging pump cooling that THE CHAIRMAN: What are some of the oldest issues that you are wrestling with?

MR. BROTHERS: The oldest -- any of the issues we found are original design issues. In fact, the majority are original design issues that date back to original construction.

THE CHAIRMAN: And can you give me some examples of those that you would put in the safety significance category.

MR. BROTHERS: Yes, I could. At this time, the recirculation spray system, RSS system, has several problems that have been identified. They're all original construction and they are vortexing and containment with the flood-up level being potentially below the vortex preventer. The water hammer event on external containment that was a follow on from Generic Letter 9605, and finally the suction voiding that we have just recently identified as a potential and issued a prompt report last week with potential for suction voiding at saturated conditions and atmospheric pressure inside of containment.

COMMISSIONER DIAZ: For which component? MR. BROTHERS: The recirculation spray system pump. Those are the most significant.

COMMISSIONER DIAZ: So you have three major issues .

that definitely have safety significance? On Unit 3? MR. BROTHERS: Well, in the case of vortexing, the analysis is not yet complete. There was an analysis done at one time that showed the flood-up level was correct. In the case of suction voiding, we did make the prompt report. Based upon indications we had, the calculations are not yet complete but it could require a mod. In the case of water hammer, that's a real event.

There are a couple of other ones that have fallen into safety significance. The electrical separation issues that have been found, which were primarily associated with a main control board supplied by Reliance Electric in the original construction. We need to go back and quantify what our actual design basis is for electrical separation. And finally on the failure modes for air-operated valves that are the interface, if you will, between architect-engineer supplied systems and NSSS-supplied systems, in which RHS and CCE, which is is residual heat removal and the charger pump cooling, the two I just discussed earlier, will be indicative of that type.

MR. McELWAIN: You want to know -- you're looking at me --

CHAIRMAN JACKSON: Expectantly.

MR. MCELWAIN: The safety significant issues on unit 1 have been historical. For example, the intake . 42 structure ventilation, there are certain design parameters, the ventilation is inappropriate and we would lose that system. Obviously we need them for cooling, no matter what mode you're in. And the 7914 seismic letter, as well as the USIA 46 and 90.22, all relating to seismic issues, particularly the significant ones for us are relay chattering possibility on the diesel generator and gas turbine, and the 4 kV busses. Those designs are complete, and we are implementing them in the field so they are historical in nature but we are, based on their significance, attacking them very aggressively. We have 23 mods in progress, 6 complete and almost 40 left to go, but they're in various stages of being designed and planned and implemented.

MR. BOWLING: On unit 2, our discovery process of design licensing basis and its comparison with the actual plant configuration has resulted in the identification of around 8 modifications. However, through other areas of investigation, a larger number of modifications have been identified in order to restore the plant to safety standards and to regulatory compliance.

A couple that I'll mention, and one of which is a -- not only a recent discovery, but also had generic industry implications, aux feedwater under a single failure was determined to have the potential, when added to the .

containment analysis, to exceed the design limits of the containment during main steamline break which was a design basis postulated condition, and that's resulting in a modification to prevent that.

Also, main steam line under a single failure assumptions has resulted in overpressurization. That was determined by Combustion Engineering as a potential generic industry issue and they did issue a Part 21 on this particular problem. That also is resulting for unit 2 modification of the steam line.

THE CHAIRMAN: Of the 6,000 items that you said needed further review, what do you mean when you say further review? Is it parsing as to what they are, as to whether they're safety significant or --

MR. CARNS: Exactly. Whether they go into a condition report or turn into a LER. It turns out that they result in about 800 condition reports, and it looks like we have some left of about 5 dozen LER's that are coming out of that.

COMMISSIONER DIAZ: How much?

MR. CARNS: Somewhere between 4 and 5 dozen. CHAIRMAN JACKSON: About 60.

MR. CARNS: 50 to 60 is the ballpark. THE CHAIRMAN: But you haven't finished that review at this stage of the game?

MR. CARNS: No.

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MR. BOWLING: If I could add, this is the standard type of questioning that comes out of this type of process. As the engineers review the design licensing basis in the plant, they may well have any number of questions as they go along, or potential concerns, and this large number is that listing, and then after further investigation, it goes to whatever actual corrective action may be necessary, and in all cases it may not be.

THE CHAIRMAN: Okay. I think Commissioner McGaffigan has a question.

COMMISSIONER McGAFFIGAN: You're going to discuss later the schedule, but how does all of this -- in listening to this, it sounds like there's a fair amount of uncertainty in which you're trying to manage. You know, how does this affect the scheduling of ICAVPs and the -- you know, how do you make a schedule given the amount of uncertainty that you're dealing with here?

MR. KENYON: We have -- let me give you a short answer and then maybe a longer answer when we talk about scheduling, but we continue to believe that we can achieve the May 27th start of the ICAVP. We're watching it closely. We think the items that are relevant to that are all being tracked and worked. Clearly as we go through and -- you know, the challenge of the ICAVP is that you found the

issues, not that you have necessarily solved all the issues.

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So we continue to think that we're on track for that, but I'll say more about scheduling when I discuss it more completely.

THE CHAIRMAN: Commissioner Diaz, I think, has a question.

COMMISSIONER DIAZ: Yes, going back to the 6,000 issues, how far along are you in the review and prioritization of these issues as regards being important issues or safety issues or what attempts at, you know, prioritization of the issues and separation so you can actually address them? How far along are you?

MR. BROTHERS: Well, let's talk unit-specific. On unit 3, basically the systems have been looked at.

The systems that are required to be complete prior to the start-up of ICAVP, that has been done. The schedule completion date for the unresolved item and open item report resolution or parsing is scheduled to be complete on May 3rd for Wave 2 and Wave 3 which accomplishes the prioritization that you're talking about for the remaining maintenance rule group one and two systems.

 $\label{eq:commissioner DIAZ: All right. That's precisely $$ the kind of information that we really need. $$$

MR. BOWLING: On unit 2, our ready for the ICAVP is June 23rd. At that time, we would have completed the

review of 24 of the 63 maintenance rule systems that we feel are necessary to validate, and when we're completed, we're also through corrective action, except for any modifications that would actually have to be constructed into the plant.

In answer to your question, we -- it would appear that the discoveries over the past year have been effective because on a week-to-week basis we're not identifying that many more items that reach that significance level that they have to be a condition report or go into a licensee event report.

MR. CARNS: Not all the corrective action requires training and procedures, but the discovery will be done by the 23rd.

MR. BOWLING: Right, and corrective action to the extent if a procedure change is required, it will be -well, it will actually be written for implementation.

COMMISSIONER DIAZ: Have they been characterized? Have they been prioritized into which bin they belong?

MR. BOWLING: They're binned broadly by the necessity to correct before restart or after, based on their safety and regulatory significance.

COMMISSIONER DIAZ: That is an important issue, whether they have to be done before restart occurred. This is an item the staff needs to be working on.

MR. McELWAIN: Unit 1 is using the same

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identification and prioritization process, and laying it out either post-restart, pre-restart, when we need the systems to be operable.

CHAIRMAN JACKSON: Okay.

MR. KENYON: The success objective number 6 is that we have an environment that supports the identification and effective resolution of employee concerns. In terms of activities, we developed and submitted a new employee concerns program, the basis of which was work by an employee concerns task force. We have increased the ECP staff to 12 from 3 which is where it was one year ago. We selected Little Harbor Consultants as the employee concerns contractor. That contractor was recently conditionally approved by the NRC and it has begun its site work. We've retained Paul Blanche, who is a former Millstone whistleblower, as a consultant primarily on employee concerns matters.

The results. We perceive that employees are more comfortable reporting concerns to NU, and this is as indicated by a significant increase in the number of concerns reported. We have achieved much greater involvement by line management in successfully handling employee concerns with a clear willingness to tackle difficult issues. We've reduced the average time to resolve a concern by almost an order of magnitude. It used to be a . 48

very long time, and we're now down to 29 days. The challenges are that we still have a lot of work to do to fully implement the new program.

Another challenge is that we do not at this point have good statistical information regarding employee attitudes. We recognize that this is needed. We will obtain it. We've been waiting for Little Harbor to come on board so we can agree on an approach that they're comfortable with.

So I think the climate has improved but we certainly know that there are individuals and pockets of distrust out there and we're working to resolve it. CHAIRMAN JACKSON: What about the significance of

the concerns that are raised?

MR. KENYON: Dave, why don't you address that.

MR. GOEBEL: Madam Chairman, the significance now, if we break all the issues that come to us and what we would have to say is that the majority of them are personnel issues. They're not safety significant. We bin anything that has even the remotest connection to a plant as a safety item.

We have no what I would consider significant technical issues that have come to us out of the work force into the employee concerns program. The most significant technical issue that we're working now is being worked with

in a line organization and that's being worked within engineering. An individual brought a concern forward and there's been a task force set up to try and resolve his concern and work with him to get the issues done, but it's strictly been done within the line.

CHAIRMAN JACKSON: So your numbers are going up but you view that as a positive sign?

MR. KENYON: Absolutely. Absolutely.

Success objective number 7, that we're committed to achieve excellence in nuclear operations.

The principal activities are that prior to startup, we will have defined excellence -- in other words, a definition of excellence that we believe in, we will have developed a plan to achieve it, we will have resolved those issues which we conclude are important to startup, and we'll have resource commitments which meet or exceed those of similar well-run units.

Now I'd like to turn to the subject of schedule. We had a --

CHAIRMAN JACKSON: Let me ask you a question. What indicators do you use to measure excellence? MR. KENYON: The indicators are going to be -- and we haven't done this yet -- but the indicators are going to be, we have defined what our standards are for excellence. In other words, we're not going to be chasing, however we

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perceive a SALP score, we're not going to be chasing however we perceive an IMPO 1. We're going to define those standards that we believe in and then clearly we will measure ourselves against those standards.

CHAIRMAN JACKSON: But you have not identified those?

MR. KENYON: We have not laid out those standards as of today. We will do it prior to startup so that we think we have an obligation -- you know, our management philosophy, this leadership team believes that our challenge is not simply to get the restart. It's not simply to get off the watch list. Our longer-range objective is to be a top-quartile plant, or series of plants, and thus we will, prior to startup, define those standards, and we'll let you know what they are. We will have measures against those. We'll have a plan to achieve. So we're not simply focused on what are the thousand things we've got to do simply to support restart.

MR. CARNS: Some of it can be anecdotal too. Just a simple example they told me people are getting, that is, when a shift manager at unit 3 declared both diesels were inoperable, he could have taken a less conservative route and said I have 24 hours to catch up on surveillance that was missed back in 1992. But to take the conservative route, that's an excellent decision. We need to advertise . 51

that as being a method of -- acceptable method of behavior. CHAIRMAN JACKSON: Commissioner Diaz.

COMMISSIONER DIAZ: Yes. I'm getting a feeling in here that -- it's a little uneasy. When you say that you're committed to achieve it but you're not ready yet to put the indicators out there, but, you know, there's a big ground to cover in between those. Do you have a program that is trying to establish these indicators, and are you pursuing it in a manner that they will be able to be known before you restart?

MR. KENYON: We have lots and lots of indicators right now that are relevant to what we're doing at this time. So I didn't want to leave you with the impression we don't have indicators. We have book of indicators. We will identify other indicators or the same indicators with different goals to go toward excellence.

MR. McELWAIN: As part of each of the operational readiness plans, we have milestones, responsibility for people to develop individual unit long-term improvement plans, including indicators to measure that, and they will all be done before startup as scheduled.

MR. KENYON: On schedule, we had a productive meeting with the NRC staff on the 17th. I think it was a good exchange of information.

CHAIRMAN JACKSON: Do you and the NRC staff agree 52

on all the restart issues?

MR. KENYON: That's a very encompassing statement. I'm not aware of any significant disagreement.

CHAIRMAN JACKSON: Okay. I'm going to ask them the same question. Don't worry.

MR. KENYON: I think the meeting that we had was

helpful in reaching a better understanding of the regulatory inspection and evaluation requirements and resulting schedule implications. I will offer the observation that the NRC staff had its schedule as to how they see the restarted unit 3 playing out, and frankly that was very compatible, a high degree of congruence with our current schedule, but it's obviously very dependent on our performance.

We agreed to provide the NRC with bi-weekly updates so that they're fully informed as to how we're doing against our indicators. They get our indicators more often than even bi-weekly.

My current overall judgment regarding our schedules is that it's the same as what I've said previously. In other words, I continue to expect that we will have one ready to restart in the third quarter, one unit ready to restart in the fourth quarter, and one unit ready to restart in the first quarter. I need to emphasize that ready to restart means that the -- that we, the . 53 licensee, have physically completed the important activities in support of a restart decision.

It does not mean that I think the NRC will have completed all that it needs to do in evaluating what we have done. So this is more a definition relevant to our activities.

Thus I continue to believe that we can restart one unit near the end of this year, and that's consistent with the schedule that the staff laid out.

Now, there are schedule issues which are a matter of ongoing evaluation, and I want to just indicate to you what some of these are.

We are in the process of developing a site schedule which will integrate unit site and major regulatory activities. We need this. We have unit activities that are very close together and perhaps too close together. This will become the official schedule, and thus what we have referred to as unit schedules will continue, but they will be internal schedules trying to meet or beat the site schedule.

Work -- so that's one issue.

CHAIRMAN JACKSON: When do you expect to have that

MR. KENYON: Middle of May. The second issue is that work accomplishment

done ?

have

rates, although improved, are not yet at levels which will sustain the current internal schedules. The productivity is coming up but it's not yet at a level that will support the scheduling assumptions that we've got, so we clearly have to improve productivity in order to hold the schedule that we

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CHAIRMAN JACKSON: So isn't it somewhat of an oxymoron then if you say that the work accomplishment rate won't sustain the schedule on the one hand but the units will be ready for restart by a certain quarter of the year? That's somewhat of an oxymoron?

MR. KENYON: No, because there's some contingency between the internal schedules and the quarter, quarter, quarter, but because productivity has been lower, coming up, but lower, the contingency -- the difference between what the internal schedule will produce and what I've said is a high-level quarter, quarter, quarter, that difference has decreased. CHAIRMAN JACKSON: Have you been meeting your schedule?

MR. KENYON: Some but not all. The other point I'd make, and we talked about backlog, and the backlog is starting to move in the right direction, but it is -- I think it's also very true that the net backlog of work items for startup is continuing at levels higher than what had . 55

been assumed in the schedule, and this is in part a productivity matter, but it's also in part that we're continuing to discover a lot of stuff. So as we work off stuff, we're adding to what needs to be done at the same time.

I think my overall point is that we are working to an aggressive game plan. That's what I think we need to do. We are constantly pushing to improve our performance, but fundamentally the most important to us is that we meet our standards first and schedule second.

CHAIRMAN JACKSON: Well, the things I see in the press seem to suggest that you're really focused on the schedule and the need to -- in your mind, to have one of the units started by the end of the year.

MR. KENYON: Well, I'm pleased that you're making that comment, because it gives me an opportunity to address it.

We have -- there is a tendency on the part of the media to focus on schedule, and I am not saying that schedule isn't important to us. It is. But we have repeatedly in employee meetings, you know, told -- I mean, the last thing I want is for employees to feel that the right thing to do is not raise a concern, the right thing to do is to take a shortcut. I mean, that is the last thing we want, because (a) it's wrong, and (b) it will just cause us . 56

problems down the road.

So we have repeatedly internally in our meetings with employees emphasized high standards, doing what's right, but work hard on the schedule, and I can tie this in with my next point, which is on the financial situation of the company.

What I want to emphasize to you, to the public, and I've already emphasized this to employees in a series of meetings, and this follows the company's decision to suspend its dividend, that within a reasonable range of assumptions -- and this is based on the actions that the company has taken and is taking -- we have the financial support to bring those units back without compromising our standards, without taking shortcuts, without ignoring problems, none of which we would do.

So however the media characterize it, I'm here to assure you we're going to do what's right.

CHAIRMAN JACKSON: Have you had to supplement your teams in place to try to adhere to the schedule?

MR. KENYON: Ask that again, Chairman Jackson. CHAIRMAN JACKSON: Have you found that you've had to supplement the teams that you have in place?

MR. KENYON: We have done -- any of the -- we bring in people as needed, and frankly as we continue to assess our situation, we may make adjustments between the

units in order to make sure that the lead unit gets to its startup point. So we're continuing to assess it is what I'm saying. CHAIRMAN JACKSON: Let me ask you one last question which actually goes back around to the operator issue. You know, a region 3 plant uncovered some problems with let's call it operator competency, and you have these units shut down. So how are you keeping your operators trained for operational conditions and problems?

MR. KENYON: I'm going to give a high-level answer, and then I'm going to ask the unit to talk. We have simulators. They are going through the requalification program. We need to do some intensive things prior to startup because they will have not actually been at the controls of an operating plant for a considerable period of time, but a lot of that we deal with through the simulator. Jack?

MR. McELWAIN: Yes, we're putting together an operator refresher course outside the normal requal program to address not just the modifications that are happening now, because it is going to change the plant significantly, but to make sure they're up to speed on the skills that they need to run a plant on a daily basis, and we're developing that now, and it will be implemented prior to restart.

MR. BOWLING: I consider this a most significant . 58 issue in that we are going to have to put together and we're in the process, as Jack indicated, of working on such a plan to insure that the qualifications are where we need to be when we do restart.

 $$\rm MR.$ BROTHERS: Millstone 3 is consistent with units 1 and 2.

CHAIRMAN JACKSON: Is there fidelity of the simulator? I mean, you're making some major changes in the plant. How are you -- since you have tied a lot of this to simulator training -- how are you addressing the issue of the fidelity of the simulator?

MR. BROTHERS: The design control process is very strong in terms of the link to simulator fidelity. There was, however, a recent audit that perhaps Dave wants to talk about concerning simulator facility. It did uncover some programmatic issues with simulator fidelity.

MR. GOEBEL: The recent audit that was done possibly a month and a half or so ago uncovered the fact that although the fidelity of the simulator was being generally maintained very good, there was no programmatic system in place to insure this would be maintained good. It was maintained well by people who knew what had to be done and the engineers would get hold of the simulator people and tell them they needed to make changes, and do this, that, and the next thing. As a result the simulator was kept . 59 fairly well up to snuff, but had you taken an individual out of the system someplace who played a key role in it, that back-door process would fall on its face.

CHAIRMAN JACKSON: So what are you doing about it? MR. GOEBEL: The folks that own the simulator and the engineering folks are in the process of formalizing that arrangement because it also has to include training. So as the mods are adjusted into the simulator it cycles through training so the courses in training can be changed so that not only does the simulator behave like the plant behaves, but the instructors instruct to the right quality of operation of the plant.

MR. KENYON: Quickly on public confidence, we also realize that part of our challenge is to rebuild the confidence of the public. The best way I know to do that is to be totally open and candid regarding our activities, what goes well and what doesn't. Part of rebuilding public confidence is rebuilding employee confidence, and thus we're committed to being very honest and forthcoming with our employees as well.

In the interest of improving public communications, and I just want to indicate some activities, we've begun a series of NU-hosted community discussions. We've conducted two thus far. The topics were employee concerns and leadership development. The next meeting will 60 be held in May. They have been well received. The last one even ended with applause. We've preceded each of these with an employee meeting so that we are keeping our employees well informed. Shortly we'll be announcing the membership of a Millstone advisory committee. This will be a cross-section of individuals from the public with varying backgrounds and expertise, volunteers. It will include some of our sharp critics, and the intent is that we will interact with this group and engage in extensive dialogue on matters of mutual interest.

I've invited Members of the public to witness my weekly staff meetings. I don't expect everyone to understand everything that is said but I do expect there to be a recognition of the sincerity, the candidness and the commitment to high standards. We're obviously regularly involved in media activities to discuss the status of our recovery efforts, and we have greatly increased the number and quality of management-employee meetings in the units and across the site. You know, face-to-face communication is just very important.

Results. We have been taking professionally conducted surveys for quite a number of months, long before I got here. The recent survey shows a marked improvement in the believability and credibility of NU Nuclear. That is good. We all recognize that opinion polls are just that, . 61

they're opinions, and what really counts is our performance. Let me just make some closing comments.

In summary, we have a new and experienced leadership team in place. They are aggressively addressing the issues. We are acknowledging the problems as we find them. We're applying high standards and a commitment to do what's right. We have promulgated new safety standards, and education regarding these standards is in progress. The effectiveness of our oversight has improved, but we have more to go. I think we have made clear progress in the area of employee concerns, but we have a lot more to do in terms of fully implementing the new program. We have put in place what I think is a good corrective-action program. The issue now is to execute it, make it work well. We are aggressively preparing for the start of the first ICAVP on May 27. We recognize that's a key step toward a restart decision.

We have the financial resources to do what is right within I think a reasonable range of scheduling assumptions, and our belief is that public confidence in Millstone is improving. So we would be pleased to address any additional questions.

> CHAIRMAN JACKSON: Commissioner Rogers. COMMISSIONER ROGERS: I have nothing. CHAIRMAN JACKSON: Commissioner Dicus.

COMMISSIONER DICUS: I have one question, please. In the previous briefing I think, Mr. Kenyon, you indicated making great progress with leadership and upper management and so forth, but I think that you indicated that you thought you had problems in leadership in middle management, and I notice -- I don't think today that you addressed that particularly. If you did, perhaps I missed it, or maybe I need a clarification. But do you still perceive you have problems in middle management -- I think that's a critical area -- and if so, what is the status of addressing?

MR. KENYON: Thank you for the question. I did mention that we had problems in middle management. I think we have made progress on that. I indicated in my -- early on in this presentation that the next level down from officers, only about 25 percent are in their original positions based on when I came.

But beyond that, we did a leadership assessment, and I think I mentioned that last time around, but the purpose of that was for employees -- I mean, it is fine for us as senior officers to look down and reach some judgment as to whether an individual is or is not doing a good job from a leadership perspective, but I think an excellent measure of whether or not an individual is a leader is what the employees being led think, and thus we implemented a . 63 survey technique. We call it a leadership assessment.

There are 26, 28 questions, leadership attributes where the employee can rate their supervisor on these attributes ranging from strongly agree to strongly disagree.

Out of that, we got leadership assessment scores. From those scores, we looked really hard at the bottom 10 percent, and quite a number of the bottom 10 percent are either no longer at NU or not in a leadership position.

We will be doing another leadership assessment in the June-July time frame. My expectation is that we ought to see a very measurable improvement in leadership scores. We will look at those who scored low and then scored low again and, you know, was the rate of progress adequate or not, and thus we'll continue to make changes.

So that's our -- that's a key aspect of what we're doing on an ongoing basis, have not only our assessment of how the individual performs, but have the employees' assessment of how the individual is performing.

COMMISSIONER DICUS: Thank you.

CHAIRMAN JACKSON: Commissioner Diaz.

COMMISSIONER DIAZ: Yes, I'd like to go back to the beginning, and I think I want to express my strong support for the initial comments of the Chairman regarding the specificity and quality of your presentation.

I definitely am not pleased with the amount of . 64 specific information that was provided. I don't see myself having been better informed now than I was when you began, and I think there is a serious issue in here, and that is that the Commission needs to know specifically where you stand from your viewpoint.

I think the philosophy is fine. I think you have stated that clearly, but I think we're beyond that philosophy at this point, and I really believe that we need to see from you some specifics. Some of them have been coming in the discussions, but I like to see charts, I like to see tables, I like to see bar graphs, I like to see a real engineering in-progress assessment of where you are. And we don't have that.

The staff has done a much better job than you have as far as I know in addressing where you are, and I am disappointed. I thought that the Chairman of the Commission was very clear to you in our last meeting that we want specific details. We want how -- the number the issues has been characterized. Where have they gone? How many belong in the good management rules? How many are issues that implies equipment? I need to see where they belong in a progress path, and I haven't.

You know, we're going to wait now three more months to see something. Madam Chairman, I don't know whether there is a possibility to request in writing a . specific response from the licensee that addresses these issues.

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CHAIRMAN JACKSON: Well, I think that's a fair comment. In fact, what I was going to say in my closing remarks, but I'll say it to you now, and that is that I would have expected at least a presentation that -- with respect to each of those objectives that I went through and asked you questions very specifically, that you would have told us that without my having to draw it out. That's why in fact we've used up actually the allotted time for the meeting and we haven't heard from the staff yet.

But it would have been the kind of information that would have allowed us to get into the degree of specificity that Commissioner Diaz is talking about, because this is very similar to what we heard the last time.

You're talking about having a unit in your minds ready, quote unquote, for restart, unit 3, and as Commissioner Diaz says, we're not scheduled to have another meeting until July, and you said after July 5 or whatever, and that would be when the meeting would be scheduled. Three months after that is October, and yet the Commission is supposed to be in a position to make a decision.

You had also indicated to me at the last meeting that you didn't want to be judged on what any of your predecessors had done, but on what you had done. But we . 66 have to see what that is, and we haven't seen what that is. So there is a problem there, and so unless we can see, for whatever it is, positive or negative, in terms of the real degree of progress, it's very difficult to see ourselves coming to a decision point, and then to say that you're tracking to having a unit ready by the third quarter but yet you yourself say, and this is a quote, "That the work accomplishment rate won't sustain the schedule," then I don't know what that means. You tell me it's not an oxymoron, but I don't know what that means when I don't see specific things.

I'm not trying to, you know, drag you over the coals. I'm trying to talk about our responsibly being able to carry out our role in this, and high-order kind of statements about goals are not what we're going to need in the end to reach a decision point, and so you're going to have to come back with something that has a much, much greater degree of specificity if there's going to be any movement at all, and the kinds of categorizations in terms of the significance of the issues and really how they are being worked and whether they are real fixes, et cetera, et cetera, and what are the restart issues that both you and the staff have agreed on versus a larger universe of restart issues that you have for yourselves, what kind of scheduling there is for those that are left over, et cetera, et cetera,

et cetera.

I mean, we haven't seen anything like that, and that's why a member of my staff had called to Northeast Utilities, because when we saw the viewgraphs, then we knew it was not going to give the Commission that kind of information that it really needed, but no further viewgraphs were forthcoming.

But before you speak, let me make sure that Commissioner McGaffigan -- do you have any --

 $\label{eq:commutation} \mbox{COMMISSIONER McGAFFIGAN:} I have questions, but why don't you let him --$

COMMISSIONER DIAZ: I was just going to say that we need a coherent, comprehensive, well-identified series of issues, one by one, their correlation to a startup schedule, or restart schedule, you know, that we can actually see, not that you've completed, but where were you, where are you, and where are you going in a time scale. This will allow us to do our job, and then we can consult with the staff and say where are we, where do we need to go? Because this is an important issue, and we want to give it the proper attention. I personally don't have the information to proceed with it, and I would like to see it in black and white.

CHAIRMAN JACKSON: And there's an issue for me of allocation of staff resources. We have this special project . 68 office, but, you know, we have many things to do. Having this process and have us discharge our responsibilities relative to it properly requires our having the kinds of information that Commissioner Diaz is talking about and I've been talking about.

MR. KENYON: If I might respond, first of all, I'll accept responsibility for that. Earlier drafts of our presentation had quite a number of charts in them and we concluded that -- and again, I'll take responsibility for it -- but we concluded that given all the issues that we thought were relevant and the fact that any particular chart can and typically does require a fair amount of explanation, that we could not adequately cover the spectrum of issues that we thought needed to be covered in the kind of detail that gets down to a lot of charts.

Now, we have the charts, and I want us to be

supportive of what you need, so --

CHAIRMAN JACKSON: Well, you can't get a decision out of us if you're not.

MR. KENYON: I don't debate that. The question that I have is, would the appropriate -- and I'm just -this is off the top of my head -- but would the appropriate response be that we have one meeting that narrows down to just one of the Millstone units and that we talk about in detail to satisfy --

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CHAIRMAN JACKSON: We may need to discuss that relative to the next meeting we have.

MR. KENYON: My only concern is that -- we made the judgment, right or wrong, that in 45 minutes, employee concerns, oversight, you know, all the things --

CHAIRMAN JACKSON: No, that's true. But the point is, you could have shown us a ratio of self-identified issues to externally identified issues, how the trending was going. You could have identified to us for us out the 6,000 issues how have they been parsed down in terms of the number that have resulted in condition reports and where do they stand in terms of LER's, how does it affect each unit, and where are they in working on those units.

MR. KENYON: And those are isolated --

CHAIRMAN JACKSON: You could have had the

information relative to the maintenance rule classification of systems and how that tracks into the issues and the work that has to be done on the systems, and how much of them require physical work or not.

I mean, those kinds of things with some judgment applied, without inundating us with sheets of paper, are helpful.

COMMISSIONER DIAZ: Could we just get a written report prior to a meeting, like in the next 30 days? Could we have a report sent up to us that then we can have time to look through it and maybe provide some questions that will be channeled through the Chairman's office to you that would allow us to get into this issue in depth? Is that possible?

bit different.

CHAIRMAN JACKSON: Yes, that's possible.

We may submit you some questions that we want you to address for us.

MR. KENYON: Well, clearly we want to be responsive to what you need, and our challenge is to present you the information in a format that allows you to look at it to the degree that you want, covering a fairly wide range of issues. I'm happy to do that. We just -- again, I'm repeating myself.

CHAIRMAN JACKSON: Okay. That's fine.

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MR. KENYON: We made the judgment that for a $45\,\text{-minute}$ meeting, we backed away from the degree of detail that we started with.

CHAIRMAN JACKSON: Right. But we don't want to end up with bones and no meat in the interest of streamlining, because we've actually already spent an hour and a half because we didn't have any meat, and we had to kind of dig through it and pull it out.

Commissioner McGaffigan.

COMMISSIONER McGAFFIGAN: I'd like to associate myself with both the Chairman and Commissioner Diaz, and one thought I have from the Congressional process, we will have hearings on the Hill that are an hour and a half long and vast amounts of information are provided to us through our staff -- you know, through the staff, which I once was, a week or so ahead. We get more and more information, and then that allows the individual Members of Congress to focus on issues with well-informed questions, rather than trying to draw the information out. So I think there has to be some mechanism --CHAIRMAN JACKSON: I think that what we need is more than just the slides. We need some backup documentation that needs to come to us in an earlier time frame, and err on the side of more rather than less. COMMISSIONER McGAFFIGAN: If I could also ask a

question.

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You went through the schedule impacters, as you saw them. You didn't mention the ICAVP itself. I mean, once it gets started on May 27, the unit 3, and I guess it's June 23 you said for unit 2, there's another element of uncertainty that gets added at that point, namely what are they going to find and how many issues are you going to -does your schedule presume that they'll find little, find a lot, find somewhere in between? How do their findings affect your post-ICAVP schedule?

MR. KENYON: Our assumption is not that the ICAVP contractor won't find anything, but our assumption is that the ICAVP contractor will not find major significant generic issues. Otherwise we haven't done our job.

COMMISSIONER McGAFFIGAN: And that's at the heart of predicting what you did with regard to when units will be ready?

MR. KENYON: Yes.

COMMISSIONER McGAFFIGAN: Is the overlap between the four-week delay -- the last time we talked, I think you were still in a horse race between the units and -- its turned into a little bit of a procession, but with one, you know, still -- the Kentucky Derby coming up -- one's still got a shot at coming out ahead of the other. Is that overlap with only a four-week delay workable? You implied . 73

that that was an issue. Or how do you -- or is it possible that unit 2 will end up ahead of unit 3, and that's why you're keeping them that close? What is in your mind? MR. KENYON: What's in my mind is that it is

important that we get one unit running as expeditiously as we can. There's only a modest difference in schedules between unit 3 and unit 2. We are assessing the manageability of that. Our understanding from the staff is that they can, in fact, support two ICAVPs in parallel and consequently our desire is, since we don't know what -totally what's going to be found or whether we're going to find a show stopper, our desire is to keep this unit 2 as close to unit 3 as we can such that if there is any stumbling, unit 2 can be moved forward. So that is the thinking.

COMMISSIONER McGAFFIGAN: So that's the heart of the philosophy?

MR. KENYON: Yes.

COMMISSIONER McGAFFIGAN: Thank you.

CHAIRMAN JACKSON: Thank you.

I think we'll go on and hear from the NRC staff. Thank you. Because we do have another Commission meeting. Mr. Callan.

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MR. CALLAN: Good morning chairman, commissioners. With me at the table are Sam Collins, the director of the . 74

Office of Nuclear Reactor Regulation, Bill Travers, the director of Special Projects Office, Wayne Lanning, the deputy director for inspections for the Special Projects Office, and Gene Imbro, the deputy director of Independent Corrective Action Verification Program. This is the second of our planned quarterly update briefings. As you recall, the Special Projects Office was established -- established within NRR in November 1996 to focus on the inspection and licensing activities required to support an NRC decision on the readiness for restart on each of the three Millstone units. Dr. Travers will lead us through the staff's briefing.

MR. TRAVERS: Good morning. Our principal focus today to is to provide the Commission with an update principally focused on our activities and planning for assessing improvements which the licensee will need to accomplish before there's any consideration of a restart authorization.

In particular, and in this overview slide, I point out that I'd like to touch on our restart assessment plan, the independent corrective action verification program, a status report on employee safety concerns program issues, licensing issues which have been identified as requiring or needing to be addressed prior to restart, and also a sense of the staff's own project planning and the steps that we . 75 see as fundamental and the kinds of NRC activities that need

see as fundamental and the kinds of NRC activities that need to be scheduled before we can get to the point where we can come to the Commission with a recommendation.

Before proceeding to go discuss the topics listed here, however, I would like to make a brief comment on our current view of the status of licensee activities at Millstone. I think you have heard quite a lot from them in this morning's session, and most of indicates that it's quite early yet in the process. But since the NU management restructuring that took place in October, we have seen positive action in a number of areas.

The licensee, for example, has initiated program improvements in the area of quality assurance -- and I emphasize initiated -- program improvements in the area of quality assurance, procedure upgrades, self assessments and prioritization, scheduling and completion of work activities.

At unit 3, they have provided us with schedules for resolving restart issues which are identified in our restart assessment plan. These schedules thus far are generally being met and the licensee submittals have been determined to be acceptable.

If I can give you a specific in that regard, I would point out that we have about 87 line items, restart assessment plan on our significant items list. They have 76

completed -- actually, they have submitted and we have completed a close out on 12 to 14 of those, and they have generally done it on the schedule that they told us they would do it.

CHAIRMAN JACKSON: When you say close out, you mean that if there were any significant physical work to be done, it's been done and all the documentation is done? What do you mean when you say close out?

MR. TRAVERS: Close out can range from it actually being completed to our having addressed the engineering package that goes along with it. And I'm not sure, I'd have to look at each individual item.

CHAIRMAN JACKSON: I mean, you have a specific definition for what close out means?

 $$\operatorname{MR}.$ LANNING: Let me try. The completed packages must have completed the identified corrective actions for

that issue before we start to inspect it.

CHAIRMAN JACKSON: And when you say that you've closed out twelve items, that means you've finished your inspection?

 $$\operatorname{MR}.$ LANNING: We have completed our inspection of those items.

CHAIRMAN JACKSON: And you have reached a documented conclusion with respect to it?

 $\ensuremath{\mathtt{MR}}\xspace.$ LANNING: Those are documented in our

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inspection reports.

CHAIRMAN JACKSON: Okay.

MR. TRAVERS: NU, as you heard this morning, is also in the process of establishing their employee safety concerns program and in carrying out their review of the design licensing basis of safety related or risk significant systems at all three units. Additionally, they have been implementing the initial requirements of the NRC orders for establishing an independent corrective action verification program and a third-party organization to oversee their employee concerns program.

As I indicated at the start, though, it's quite early in the process. In fact, the most significant volume of the information that we will need to review before coming to the Commission has yet to be reviewed because principally their program is not far enough along to allow us to begin to initiate many of the very significant inspection activities that we have planned.

CHAIRMAN JACKSON: Now, I note that there are 22 licensing issues required for restart; is that right? MR. TRAVERS: There are varving numbers of

licensing -- and I was going to cover that in --

CHAIRMAN JACKSON: Okay. Fine.

MR. TRAVERS: Okay. If I can turn now to touching on the status of the staff activities and give you some . 78

specifics as to where we think we are relative to our activities and planning. At the last Commission meeting, we described our use of manual chapter 0350, and I don't plan to go through that again, but suffice it to say it's really a tool that we're using to put ourselves in a position of having compiled, identified and ultimately document the issues that we think have a nexus to the restart decision.

The key issues we have identified have been published in our restart assessment plants for all three units. In fact, since our last meeting, we revised the restart assessment plan for unit 3 and have published the first restart assessment plans for both units 1 and 2.

The reason we had one for unit 3 last time and not one for unit 1 or 2 is previously, they were in the mode of identifying a lead unit; that was 3. At the last time you met with NU and us, they had identified a more or less parallel track. So we began efforts to expedite our compilation on these issues.

The restart assessment issues are generally covered within the topical areas that I've listed on the slide. Today, I plan to focus updates for the first 3 indicated areas, but I don't mean to underemphasize the extent of the number of issues that are contained in the other areas, for example, corrective action programming. We heard some from them today on that. Our significant items

list, I may touch on some numerics associated with how many we have and so forth. But I $\ensuremath{\text{--}}$

CHAIRMAN JACKSON: I'd also like you to talk about personnel training and performance.

MR. TRAVERS: We can certainly talk about the issue. In fact, maybe we should just do that now. You had a discussion earlier this morning about a number of issues that were identified by the licensee and reported to us regarding their operator training and licensing program, their qualification program.

In the short term, the staff has issued a confirmatory action letter which really documents the commitments they've made to reassess root cause and assess the status of the individuals who are currently licensed at Millstone, and they've also committed to develop a corrective action plan as well.

We have been getting some information from them periodically in conformance with their obligation stated in the commitments they've sent to us.

In the longer term, though, and I think it's important to state, we have a specific element of our restart assessment plan that envisions the use of a special inspection to assess the status of the operator, In fact, non-licensed training program at Millstone as well. So we have a number of issues that speak to that.

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I think another aspect of our program that really addresses these issues as well, and I'll talk about it a little more later, is the fact that we expect to carry out an operational safety team inspection, which is designed to assess the readiness for NU to operate the plant towards the end of the process. It's something that we -- typically uses six to eight inspectors for a couple of weeks on site to, further along in the process, closer to restart, give ourselves an assessment of where they stand.

CHAIRMAN JACKSON: Let me ask you one other question about work planning and control.

MR. TRAVERS: Yes.

CHAIRMAN JACKSON: Is that going to also look at issues of radiological controls? I mean, there was this recent confirmatory action letter to Haddam Neck. Are we going to be taking a look to see that there aren't any similar issues at any of the Millstone units?

MR. TRAVERS: We are aware of the problems at Haddam Neck and they are significant ones that are being addressed outside my organization.

CHAIRMAN JACKSON: No, I'm saying they're being addressed for Haddam Neck. I'm asking you will you be making an assessment in the same area for Millstone as part of your restart?

MR. TRAVERS: The answer is yes, and it's . 81 currently part of our core program to look at radiological programs. But I will tell you that we have not evidenced the kinds of problems that you've seen at Haddam Neck. There have been a number of incidents, failure to wear monitoring equipment and small items that keep that issue in the forefront of our thinking. So it's an item that will continually be addressed as we go along.

CHAIRMAN JACKSON: Okay.

MR. TRAVERS: Before going forward to talk about the first three items that I've indicated, I thought I'd make mention of the fact that we are continuing to meet our commitment to make our process a very public and open one, and in that realm, we have been conducting every four to six weeks a meeting specifically with the public in addition to the meetings we've been carrying out that are open to observation between us and the licensee. Typically when we do those, we go in the evening so that people from attend, and we present a status report from our perspective to members of the public. We haven't gotten any applause at those meetings, but I think it's worked rather well to continue to give people a sense of the issues as we see them and some of the success as well, as we see it.

Ultimately, of course, the whole process is designed to put us in a position to have documented a basis for coming to the Commission with potentially restart

authorization.

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A significant element in our restart assessment plan is the conduct of an ICAVP or an independent corrective action verification program. The ICAVP is required by NRC order and it's intended to help verify the licensee's efforts as a starting point to confirm its design licensing basis. It's really a verification step; it's not viewed as part of the regulation process.

The principal elements of the NRC activities related to the conduct of the ICAVP are listed on this slide. By order, for example, the NRC must approve the organization proposed by the licensee to carry out the ICAVP. By NRC order --

CHAIRMAN JACKSON: You have done that.

MR. TRAVERS: And we have recently done that for units 1 and 3, and the contractor proposed and improved is Sargent & Lundy. We have under review a proposal to use Parsons Power or Parsons Engineering at unit 2. The NRC, by order, must also review the audit plans prepared by those ICAVP contractor organizations, and we have under review audit plans from both Sargent & Lundy and Parsons.

CHAIRMAN JACKSON: So audit plan review and approval doesn't presuppose approval?

MR. TRAVERS: That's right. It does not. In fact, we expect, based on what we've seen to date, that . 83 there will be modifications prior to NRC approval of the audit plan.

Additionally, in the context of our own responsibilities related to ICAVP, we, the staff, will select the tier 1 systems, and I can refresh you as to what tier 1 and tier 2 and tier 3 mean, but let me just state that staff will select the systems that will be encompassed within the third party contractor review. It's a sample and there has been some concern about keeping them close and who's going to pick them and who makes the judgment, and it's going to be us.

CHAIRMAN JACKSON: How many?

MR. TRAVERS: And how many, exactly right.

If it's helpful, I could briefly state that the approach we're using for our expectation of the contractor in carrying out the ICAVP is that it's going to be a three tiered approach. The first tier, at least for unit 3, we've identified that four systems would be evaluated in a deep vertical slice review of the design, all of the design aspects of those systems.

In tier 2, we focus on critical design aspects needed to insure the functionality of systems relied upon to mitigate the consequences of accidents. So it's less deep, but it cuts across and captures critical design aspects of many systems.

In tier 3, we expect the contractor will review the implementation of various change processes that are used at Millstone to modify the facility.

So you can think of it as layered. The licensee is going to carry out its program; the party contractor under the auspices of ICAVP order will carry out a verification step; and our efforts listed further on this slide, at least the most extensive piece of our efforts will involve NRC conducted inspections.

CHAIRMAN JACKSON: Now, will we be doing that at Sargent & Lundy or we're doing that at Millstone?

MR. TRAVERS: Both. And I can explain that. The NRC-conducted inspections, and there are four of them at each unit as currently plan, involve team inspections. The first one involves a focus on the conduct of the ICAVP contractor, Sargent & Lundy.

Since Sargent & Lundy expects to do much of its work in Chicago, that's where we'll go. We may complete some initial walkdowns on the site, but much of what we expect is going to happen is going to be happening in Chicago. And I've given you an indication of the composition at least in terms of size and the duration period for -- just to give you a sense of the extent of the effort that we are planning for the ICAVP review.

CHAIRMAN JACKSON: Commissioner McGaffigan has a

question.

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COMMISSIONER McGAFFIGAN: The four weeks implementation inspection, if the ICAVP for unit 3 starts on time on May 27th, is that the clock starting for you, or does it start with some delay? Or how --

MR. TRAVERS: There are linkages and I'll be glad to explain them. The first linkage is, in the onset of ICAVP, is that the third party contractor review won't start until the licensee has completed at least 50 percent of the group 1 systems as defined by the maintenance rule, and those, of course, are safety related and risk significant. So a flag has to go up in terms of what they've been able to achieve in their readiness for beginning the ICAVP inspection. So there is some overlap; it's not entirely a series event.

Our effort is one that -- Gene, you might want to explain the linkage there.

MR. IMBRO: Well, the implementation inspection as planned will occur when the ICAVP contractor is about a third or halfway through their reviews. And the idea of the implementation inspection is to assess their implementation of the audit plan that we approved, but I would also point out that it's going to be not a programmatic look, but a technical review where we will actually look at products, design products, calculations that the ICAVP contractor has 86

reviewed and assess whether or not we find additional problems that are there that perhaps they have missed. So it's an over-check on the thoroughness of their review.

So, again, that's going to be about halfway through, and we anticipate for unit 3, that would be sometime in the July time frame.

COMMISSIONER McGAFFIGAN: So in July, this fourweek inspection would occur?

> MR. IMBRO: That's right. COMMISSIONER McGAFFIGAN: What are the dates for

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the other three, if -- I know it's hard.

MR. IMBRO: They're all somewhat tentative at this point, but the out-of-scope system review will be conducted after the licensee completes their configuration management plan for the particular unit. So for unit 3, to date, that's been stated as July 14th. So sometime July 14th or shortly thereafter, we would actually do an SSFI type inspection on a system that's part of the -- one of the systems that's either group 1 or group 2.

CHAIRMAN JACKSON: How are you going to make decisions? I notice you don't put a S on that. You don't put an S on out-of-scope systems.

MR. IMBRO: Well, it's really only one system. CHAIRMAN JACKSON: I know. And I'm saying, so how do you decide on expanding scope or potentially expanding . 87

scope?

TRAVERS: We have established a success criteria and termed it, quote, unquote, a defect for lack of a better word. And fundamentally, it relates to an expectation that the licensee's program will be or should be successful in eliminating issues that might be uncovered in our subsequent steps that put their unit outside of its licensing basis.

We intend, if we find items of that sort, to look at the significance of those items. For example, we would really not expect, and we might consider it a significant finding if we found an issue that raises to the level of an unreviewed safety question.

So the success criteria that we have in mind in our verification phase is one that hopefully documents that their effort, Northeast's effort, has been successful in eliminating areas where their plant is outside of its licensing design basis.

CHAIRMAN JACKSON: So let me understand. When you say at both, you mean you will go to Sargent & Lundy along about the period you say, assuming everything tracks according to schedule, and you review what they've done?

MR. TRAVERS: Yes.

CHAIRMAN JACKSON: But you're going to do your own SSFI at the station?

MR. TRAVERS: That's right.

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CHAIRMAN JACKSON: And you're going to do it on the same or different system, or that's to be decided? MR. TRAVERS: And I can describe that on this

slide.

CHAIRMAN JACKSON: Okay.

MR. TRAVERS: The second inspection that I've indicated lists an out-of-scope system inspection. That would be a system review, a deep vertical slice, that would be a system outside of the scope of what the ICAVP third party contractor --

CHAIRMAN JACKSON: I understand.

MR. TRAVERS: But certainly within the scope of what NU has had to do in assessing itself.

CHAIRMAN JACKSON: Okay.

 $$\rm MR.$ COLLINS: And that's the intent, Chairman, is to have able to have that view, be able to get NU's work without that additional --

CHAIRMAN JACKSON: Without that. And then what the in-scope means, it's what the ICAVP has done, but you'll do our own independent look at it.

Mr. COLLINS: Exactly.

CHAIRMAN JACKSON: And so there's a cross check.

COMMISSIONER McGAFFIGAN: Could I get back to the question about timing on the last --

MR. IMBRO: I offer that because I think for the in-scope system, timing would be after the ICAVP contractor has completed its work. So it's necessarily after they've done their four systems.

COMMISSIONER McGAFFIGAN: I'm using arithmetic here. Is that September? You said in July, you thought they'd be a half to a third of the way through, and you go in for the four weeks. Is the expectation that Sargent & Lundy would be finished in --

CHAIRMAN JACKSON: See, it really is a linked system. I think that's what you're trying to tell us.

MR. IMBRO: That's exactly right. As I recollect, Sargent & Lundy had proposed initially about a 14-week duration for their reviews, so that would put completion of ICAVP something like the end of August or early September.

MR. TRAVERS: Perhaps it would be helpful to flip to the schedule slide and give you evidence of --MR. IMBRO: Slide 10.

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MR. TRAVERS: Slide 10. And it's our project planning schedule. And basically this slide, you know, presents our current best effort to project a schedule based . 90 largely on information that the licensee is projecting about its ability to accomplish work.

If you look in the context of Commissioner McGaffigan's question, the most relevant lines are the first four, the first one being the dates or duration over which the licensee's effort, termed CMP, will take place.

The next line is the current projected date for initiation and completion of the ICAVP third-party contractor effort, and you can see there's overlap based again on this 50 percent group 1 system completion linkage. The third line gives you an indication of the

duration and the initiation and expected completion of our effort to carry out inspections.

The fourth line, just to finish, is a time frame over which we expect be in a period of in-office review of some findings and the final documentation.

CHAIRMAN JACKSON: But this is all predicated on the schedule the licensee has laid out to you and they're actually stepping their way through that schedule.

MR. TRAVERS: Yes. It's based on that and one other significant assumption, and that is that what we find, what the ICAVP contractor finds firstly and what we find in our own verification effort is largely successful and the success criteria generally met.

CHAIRMAN JACKSON: Does that answer your question? . 91

COMMISSIONER McGAFFIGAN: Yes.

MR. TRAVERS: Again, these are significant activities. They're not 100 percent reviews of what the licensee is having to go through at Millstone, but we think the program will give us a high level of confidence that we will --

CHAIRMAN JACKSON: That, coupled with the 0350.

MR. TRAVERS: Yes. This is just a piece of it. Just to give you a little bit more detail on the kinds of resources and sort of the make up of the kinds of inspections that we expect to complete at Millstone, we have been carefully planning our effort. There is a potential for significant NRC resources to brought to bear and used in connection with these projects.

Currently, our planning base is to field two 13person inspection teams essentially in parallel. This would support ICAVPs at two units, as Mr. Kenyon indicated earlier.

CHAIRMAN JACKSON: So it's one team per unit, and so de facto focusing on two.

> MR. TRAVERS: That's the current plan, yes. CHAIRMAN JACKSON: And you would switch over.

MR. TRAVERS: We considered the need to plan for three, but largely based on uncertainties in the licensee's own schedule and admittedly impacts to our own program, our . 92 planning base right now is to field two teams.

CHAIRMAN JACKSON: What regions are supporting these two?

MR. TRAVERS: Region I is not looked at for resources in connection with our ICAVP oversight. CHAIRMAN JACKSON: So this is -- the Region I is excluded --

MR. TRAVERS: Correct.

team

CHAIRMAN JACKSON: -- from either -- from any

MR. TRAVERS: Except to the extent that they've already given up people like Wayne Lanning and Jack Derr and all of the residents to our temporary spent -- yes -- spent fuel special projects office.

So Region 1 has already committed resources to our efforts in that regard and, of course, many activities for closing out issues will be supported by region-based inspections. So there's quite a lot of activity that we're looking to Region I to for continued support.

MR. CALLAN: Chairman, that's an important issue, and we're keeping a close eye on the impact that this resource expenditure is going to have on the other regions. It will have an impact on Regions II, III, and IV.

COMMISSIONER DIAZ: Could I ask what is the present impact? Right now, you have deployed people from . 93

the regions to these efforts. Is that actually curtailing our ability to perform core inspections? What is that issue now even before going to this?

MR. CALLAN: Commissioner, as part of the solicitation for resources from the regions, they were asked to itemize expected impacts, and I'll have to defer to Bill or Wayne to give you some examples of the types of impact that they expect.

MR. TRAVERS: Well, we have gotten a -- in terms of additional support, we're already utilizing some Region I resources, but in terms of identifying additional support for ICAVP in particular, we actually asked the regions, given certain assumptions about the numbers of people who would be utilized, what their assessment -- the impacts of their program would be, and they largely fell in the realm of discretionary inspections, maintenance team inspections, deferrals, but not core. Not core.

COMMISSIONER DIAZ: Okay. I understood that -and maybe I misunderstood -- that there was some impact already going to be felt this quarter on core inspections because of deployment from the regions.

MR. COLLINS: That has not been expressed to us, Commissioner. The way the process was envisioned -- and I also want to be responsive to a complete answer to the Chairman's question about the other regions. As Bill Callan . 94 indicated, we went out with a solicitation based on a worst case man loading, which was three teams, knowing that some of those resources would be coming from other offices besides the regions, including NRR, AEOD and Research.

We have had to revise those numbers and we're further revising those numbers based on the availability of resources within NRR and AEOD without impacting the region. Our ultimate goal is to minimize the impact on the regions.

The responses we have received have varied. We made a decision up front that we would provide for a minimal impact on Region I. We have since concluded, based on the inputs from the regions, that we would also have a minimal impact on Region III. That's because primarily of the plant situation in Region III.

So the preponderance of resources are coming from Region II and Region IV. We have about half the amount of resources that we originally proposed coming from the regions. We have made up that gap with resources from NRR. At this time, we have no indication that we are reducing the core inspections, the core themselves. They are at the contributing regions.

Now, there was a view if we went with three inspections at one time and we eliminated Region I and Region III from consideration, that impacting the core was a possibility; but at this time, based on the current schedule . 95 and the loading from the regions, we do not envision that. COMMISSIONER DIAZ: Well, I'm sure you're very

concerned about not decreasing operational safety inspections in the other regions with this work. You know, I think it's a very important issue, and there's a time problem in here. You know, you can do these things for a small period of time. If you do them for a large period of time, you start covering holes and not doing it.

Thank you.

MR. CALLAN: I'd like to add one other perspective to this issue. As you know, both Sam and I both managed inspection resources in the region a few months ago, and we contributed a fair number of inspectors to support several large team inspections, Maine Yankee, Millstone team inspections, and a large inspection at Dresden. And it's my experience that the inspectors that come back from those efforts are far, far more useful to the regions than before they went.

Participation on a high level team inspection like this, in my view, is more beneficial than just about any kind of training course that we could come up with to develop them as inspectors. Obviously, if you carry that too far, it will have negative effects.

CHAIRMAN JACKSON: When you're talking about these teams in terms -- and you note that -- and you don't have to . 96 go into, unless someone wants to ask you, great detail about the team position. But -- and you specify an amount for contract support. In terms of the team composition, what's the breakdown in terms of contract support versus NRC staff? MR. TRAVERS: One other means we're using to minimize NRC program impacts is to utilize contractors. If I took a typical team composition -- in fact, I'll use the first team, the one we're putting together for Unit 3 as an example of that. Typically, the team leader and the system leads would be NRC-led employees, and we have contractors currently identified for team 1 for mechanical systems, electric power, instrumentation control and piping and support. Again, NRC staff would be used in the operations assessment, those last two.

This is really viewed as a value added process. We're utilizing contractors who have significant experience in design, and so we're taking advantage of past experience in identifying some of those people who have supported us in the past.

CHAIRMAN JACKSON: And so then the 16 FTE staff effort beyond that, that's for --

MR. TRAVERS: That's a total rack up, if you will, of the NRC staff resources that would be called into play sometimes for the --

CHAIRMAN JACKSON: Okay. To support all -- the 97

three units?

MR. TRAVERS: That's right. CHAIRMAN JACKSON: Okay. COMMISSIONER DIAZ: This is only for the ICAVP? MR. TRAVERS: That's correct. COMMISSIONER DIAZ: What is the total effort? MR. TRAVERS: I don't have a projection. COMMISSIONER DIAZ: It would be nice to have it

sometime.

MR. CALLAN: We don't count management resources. COMMISSIONER DIAZ: Maybe you should.

MR. TRAVERS: Moving on, I thought I would give you just a quick status of some of the things since we had a list last time that indicated what we hoped or expected we would achieve. We have been meeting with members of the public to obtain input, as we said we would, on several things, on the proposed ICAVP contractor that was submitted by NU, and on the proposal to utilize Parsons Power at unit 2.

We've actually completed, as the Chairman indicated earlier, an organizational approval for Sargent & Lundy for units 1 and 3, and I think significantly I'd like to point out that we got a number of comments from the public and we, in our approval, took efforts to address those in the actual approval.

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Principally they related to questions about independence, was the organization truly -- could it be truly viewed as independent from Northeast as opposed to technical qualifications and that sort of thing.

Lastly, at least on this slide, we carried out subsequent to our organizational approval an interview of the Sargent & Lundy team members to get a sense of their technical confidence --

CHAIRMAN JACKSON: So that was actually part of the approval process for the organization of their audit plan?

MR. TRAVERS: It actually followed, but there was certainly linkage. We looked at organizational approval in our interviews as related but somewhat separable. So we traveled to Chicago and met with the proposed team members subsequent to the overall -- CHAIRMAN JACKSON: If you had found some egregious

problem, you would have --

MR. TRAVERS: I would point it out right now.

CHAIRMAN JACKSON: -- post facto somehow had them removed?

MR. TRAVERS: Yes.

CHAIRMAN JACKSON: Tell me about the NEACC's observation. What did they have to say about the organizational approval process?

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MR. TRAVERS: Again, that's the state's chartered Nuclear Energy Advisory Council. And we have a memorandum of understanding with that group to actually participate or at least observe significant aspects of our process related to ICAVP and other Millstone oversight.

The co-chair of that group, Terry Kincanen, represented -- an elected official of the state, traveled with our team to Chicago and sat in on the interviews and some discussion of the audit plan and, in fact, we expect some level of participation as we go forward, perhaps in inspections and so forth, at the discretion of NEAC.

They have some people who are quite technically competent, and they may decide that they would like to observe some of the work we do in carrying out our inspections.

CHAIRMAN JACKSON: Have they had any initial observations or comments?

MR. TRAVERS: In fact, I believe I saw a draft press release that was issued by -- so I hesitate to say. I don't know if ever was finalized. Maybe Gene knows.

MR. IMBRO: Well, I've only seen the draft also. I'm not sure if it was finalized. It was my understanding that Ms. Kincanen was going to present that to a meeting of the NEAC about a week or so ago. But I think it would be fair to say, I think it wouldn't be out of line in

. 100 characterizing Ms. Kincanen's at least impression was that the ICAVP, at least in her estimation, was very thorough and far-reaching in scope.

CHAIRMAN JACKSON: Okay.

Dr. Travers.

MR. TRAVERS: Another important aspect of NEAC that we mentioned last time but I'll briefly make note of is that we have and are working with them to give them an opportunity to perhaps pick as many as one or two systems. We aren't just turning over that responsibility 100 percent to them; we expect to provide them with a list of systems that we think are appropriate and could be selected. And this is largely to address a question and a concern that we've had in some of our public meetings about the secrecy or how well kept the actual systems will be since they're only samples, a small number.

What do we expect to do in the next three months relative to ICAVP? Well, we expect to complete our review of the Sargent & Lundy audit plan for units 1 and 3. We expect to complete the staff review of the Parsons organizational proposal. We also expect to complete the staff review of the Parsons audit plan for unit 2. We also expect to carry out our interviews with the Parson team members similar to what we did with Sargent & Lundy. Lastly, if the schedule holds, we expect to begin our own . 101

first inspection at unit 3 of the implementation. You know,

this is one where we would largely go to Chicago to effect a review of what the contractor --

CHAIRMAN JACKSON: You expect that to be toward the end of that period?

MR. TRAVERS: That's correct. It right now looks to be the last week of June, first week of July, according to the linkages in the current schedule.

CHAIRMAN JACKSON: Okay.

MR. TRAVERS: Next slide.

CHAIRMAN JACKSON: Yes, Commissioner?

COMMISSIONER McGAFFIGAN: Could I ask, on unit 2, just outside -- if they stay on schedule, on June 23rd, just outside that three-month window, we're talking July 23rd, three months from today, would you be -- is the plan at the moment to be able to give us, at the next meeting, a project planning schedule for unit 2 as well and will you be ready if they're ready to start at the start of August?

MR. TRAVERS: Yes. In fact, when we get to the schedule, I can mention what the dates would be for unit 2. COMMISSIONER McGAFFIGAN: Okay.

COMMISSIONER MCCARTIONN, Only.

MR. TRAVERS: But that's the objective of our planning now, is to be prepared to field two teams when they -- Northeast -- say they'll be ready to begin those inspections.

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I'd like to turn now to a brief status report on our activities related to employee safety concerns issues at Millstone. Of course, as you recall, a separate NRC order was issued relating to employee safety concerns, and a key element of that order requires Northeast to hire a third party organization to oversee Northeast's program to address employee safety concerns.

Since our last meeting with the Commission, we have met publicly with the public to obtain input on both the proposed third party organization which has been proposed and a submittal to NRC of the licensee's employee safety concerns program plan. So we've met with the public and had an opportunity to brief them on these proposals and documents and soliciting comments.

We've carried out an interview of the third party organization team members. I should point out that we approved Little Harbor Consultants as the third party oversight for employee safety concerns, and we've carried out an NRC staff review of the Millstone employee safety concern program plan and provided Northeast recently, just a day or two ago, with our comments on that plan.

I should point out significantly that we've begun our planning for a special inspection and our thinking on what we really need to look at to make a judgment ultimately prior to coming to the Commission with a recommendation on . 103

employee safety concerns, and I actually have a backup slide, if you're interested in seeing it, but if you're not, I will take advantage of --

 $\label{eq:CHAIRMAN JACKSON: Sort of take advantage and keep moving, right.$

[Laughter.]

CHAIRMAN JACKSON: Let me just ask you this question. In terms of your reviewing the Millstone employee safety concerns program and providing comments, were there any significant comments that you had to provide?

MR. TRAVERS: Well, I'll point out an important aspect in sort of an administrative sense, the order requires NRC review but not approval of that plan. But in direct response to your question, we did point out a number of issues that we felt needed to be better fleshed out in their program plan for employee safety concerns.

Much of what we've received in their initial submittal includes an outline of specific aspects of their program that need further development. They have recognized that they've -- they've included some key attributes that would be necessarily incorporated into that plan, but we haven't seen that plan yet. So it is, in some respects, and I think Mr. Goebel pointed out, it's developing as we speak. So we need to look further.

CHAIRMAN JACKSON: Can you give your own

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assessment or do you feel comfortable, you know, summarizing the number and significance of allegations, any trends that you see to this point?

MR. TRAVERS: In terms of -- and I'll let Wayne Lanning speak to this in more detail, but in terms of overall rate of NRC receipt of allegations, it's been tracking fairly steady, still on the order of four or so a month.

Maybe, Wayne, you would like to add something to that.

MR. LANNING: Well, you know, we've placed a great emphasis on the receipt of technical issues through the allegation process. We continue to receive allegations pretty much at the same rate as Bill indicated, about four per month.

In terms of significance, there have been technical issues that have -- now appear on our restart list. There also continues to be an important percentage that deal with alleged harassment, intimidation. So from that standpoint, it's pretty much what we've seen in the past, and that's true for the last six months, also.

CHAIRMAN JACKSON: Okay.

Mr. Travers?

MR. TRAVERS: In terms of what we expect will be accomplished before the next time we meet with the . 105 Commission, or at least within the next three months, we expect to complete our review and approval of the third party oversight plan -- I'm sorry, audit plan. And that again --

CHAIRMAN JACKSON: As appropriate.

MR. TRAVERS: That again assumes that we have gone through the process of commenting and revising if appropriate, that's right.

We expect -- and again, I'll point out that there's a public element to this. We fully intend to go and solicit comments from the public in this process.

We expect to begin monitoring the Millstone employee safety concerns program and the workings of third party oversight organization through periodic NRC site presence. We also plan to have conducted at least a meeting and perhaps two meetings with the third party oversight organization to assess the status of their efforts and any recommendations they are feeding to the licensee.

COMMISSIONER McGAFFIGAN: Is that a public meeting?

MR. TRAVERS: Yes. All of our meetings of this sort are at least open for public observation, and typically we provide on a monthly basis an opportunity to make them even more directly accessible to public comment. encompassed in our restart assessment plan for Millstone and it addresses licensing issues that either have been identified or rather are already in-house and being reviewed by the NRC staff or have been identified by the licensee as submissions that will be required prior to restart.

This is really a summary of a number of these issues that have been identified or are under review, and we expect it will take some significant NRC effort to work off some of these.

I think it's important to note and really the point I wanted to make here was that since they are still largely in the discovery phase of their efforts, there is a potential for additional licensing actions which will be required before restart to be identified.

COMMISSIONER DIAZ: Could you give us a flavor of what is the largest, you know, licensing issue and the simplest, just to get an idea of where we are? The most complex or, you know --

MR. TRAVERS: I don't think we've identified at least the ones under review as being very complex. And if I say that, I will give you a time estimate for the typical time it takes to process. Typically, for a not too complex licensing amendment, the staff takes between four to six months. They have been accomplished without exigency in a shorter time frame, and that's about two months.

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So there is definitely a lag, and it's in part due to the process, the very formal process, the process that we use in assuring that there is a public component to our licensing action consideration.

COMMISSIONER DIAZ: Right. But you haven't seen any issue of a complexity sufficient to say it's going to take a year to resolve it?

MR. TRAVERS: I may have to get back to you on that but I don't think so. Much of what we have identified in terms of the actions before us are clarifications to technical specifications and so forth, that kind of detail. COMMISSIONER DIAZ: Nothing that involves a major

change in a system or would take considerable time for --MR. TRAVERS: No, but that's what I'm concerned about in some sense happening -- or not concerned, but I want to be aware of it in terms of the possibility of it affecting the --

COMMISSIONER DIAZ: It might be worthwhile to --CHAIRMAN JACKSON: Yes. I noted there was a press clipping from Northeast Utilities -- this was kind of a follow on on April 18th -- stating that there may be show stoppers and, you know, there was commentary about the concrete basement erosion.

MR. TRAVERS: Yes.

CHAIRMAN JACKSON: But I had thought that was not . $$108 \end{tabular}$

a restart item but a -- excuse me? It is? MR. TRAVERS: That particular issue is a restart issue in the sense that it needs to be addressed and a

resolution identified.

CHAIRMAN JACKSON: A resolution. And similarly the recirc spray system.

MR. TRAVERS: That is also a restart. It's specifically contained in our significant items list and, depending on the outcome of their review, it could require a major modification of the plant, and I think that's, you know, first a concern to them.

CHAIRMAN JACKSON: Okay. And then I noted that the unit with the most additional issues to be submitted is in fact unit 3, which is the one that's supposedly at the front of the queue.

MR. TRAVERS: Yes.

CHAIRMAN JACKSON: And have you gotten any submittal dates and have these been factored into the schedule?

MR. TRAVERS: In fact, they're late. Much of -- I think we -- actually, they're not late. I think they told us in April, either this week, I think by the end of this week they were due in. I think all of the ones that I have on here as -- or maybe three short of those, at least 16 are under development by them and should be submitted shortly. . 109

CHAIRMAN JACKSON: And you have this all factored into the schedule and in terms of -- and into the resource loading?

MR. TRAVERS: We do. We do, although, I'll be honest with you, there is an element of uncertainty in terms of the resources that will ultimately be required.

CHAIRMAN JACKSON: Because you don't know.

MR. COLLINS: I think it's important to note too that the window that we currently have allows us the time to process these typical amendments. As we get closer towards the restart date itself, then these will become much more significant in their progress and status.

CHAIRMAN JACKSON: Okay.

Commissioner McGaffigan I think had his hand up, and then Commissioner Diaz.

COMMISSIONER McGAFFIGAN: In terms of these numbers, is it because they're focused on unit 3 that you have a large number of numbers or is it because unit 3 was licensed later and, therefore, it has a more complex licensing basis and more items come up because it's a -it's just a bigger volume of paper that they needed to update?

MR. TRAVERS: Since it's initiated by their own self-identification of what is needed, I honestly don't know the answer, but each one has a story, and I don't know if . 110

there is a general heading under which you could make reference to the different numbers.

MR. LANNING: Probably resulting from the configuration management program on unit 3, they're having more findings than they have found at unit 2, for example, and there are more modifications involved at unit 3.

CHAIRMAN JACKSON: Commissioner Diaz?

COMMISSIONER DIAZ: Yes. But definitely this is an issue in which the licensee needs to provide us with information as soon as possible so we can clearly identify the timetable that is involved.

 $$\operatorname{MR}$. TRAVERS: And that's exactly what we've been urging.$

MR. BURNS: I might add, just to make sure I understand the staff, my assumption in hearing them is -from their description -- is the types of licensing actions that they have identified would involve a no significant hazards consideration, which means their timetable is constructed on a no prior hearing type circumstance, and -- MR. BURNS: Should that change, that would be a different matter because of the hearing requirements under the regulations and the statute.

COMMISSIONER DIAZ: That was precisely the heart . 111 of my question.

MR. BURNS: Yes. I want to make sure I address

MR. TRAVERS: Actually, my last slide presents again our best effort to project --

CHAIRMAN JACKSON: Why don't you speak to Commissioner McGaffigan's question about the other unit.

MR. TRAVERS: In terms of unit 2 -- well, I'll just point out that if this holds, this would result, with many steps, in us briefing the Commission for unit 3 on or about the 19th of December; and the unit 2 project planning schedule that we've actually developed but weren't as confident in would project the same endpoint, the Commission briefing, on or about early to mid-March.

COMMISSIONER McGAFFIGAN: Why the two-and-a-half month difference given the four-week difference in the ICAVP initiation date? How does it end up two-and-a-half months behind?

MR. TRAVERS: I'd have to look at it and --

MR. IMBRO: I think part of it is due to the fact that the length of the ICAVP proposed for unit 2 by Parsons is on the order of perhaps ten weeks longer than what's going to be done at units 3 and 1.

COMMISSIONER McGAFFIGAN: Okay.

MR. TRAVERS: I'll be honest with you, I think

that it's largely problematic in terms of, you know, the unfolding events of their effort, the ICAVP, and our effort in terms of the schedule.

> COMMISSIONER McGAFFIGAN: Madam Chairman? CHAIRMAN JACKSON: Yes?

COMMISSIONER McGAFFIGAN: My only comment is I think it's useful to establish baselines at these meetings so that we can compare them, knowing all of these schedules are very uncertain.

CHAIRMAN JACKSON: Right.

Let me just say the following to you,

Commissioner. I think it's unfair for us to establish too definitive baselines for our staff when it's linked to what the licensee has to come forward with and their actually being able to step through their work completion process to support the schedules that they have, in fact, submitted, because the two are work linked.

> COMMISSIONER McGAFFIGAN: Right. I understand. CHAIRMAN JACKSON: Please.

MR. COLLINS: Excuse me. Just to be complete, we have a very detailed schedule, including a number of postulated conditions, that we can certainly share if that would help be responsive to your question.

CHAIRMAN JACKSON: Yes, that probably would be useful.

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Commissioner Dicus.

COMMISSIONER DICUS: The comment I want to make, and this is unusual because I usually very much believe in schedules and I do in this case as well, but a caution I think that backs up on what the Chairman said: let's not be too schedule driven on this at the expense of other issues.

CHAIRMAN JACKSON: Any further comment?

Are you done?

MR. TRAVERS: I think I am.

CHAIRMAN JACKSON: Hold on. Sorry. Commissioner Dicus has a question.

COMMISSIONER DICUS: One quick question. It should have an easy answer. I think you previously indicated that the ACRS will participate at some point in the Millstone restart. Are they participating yet?

MR. TRAVERS: We've actually been in contact with ACRS. We had initially gotten word from them that they would meet in May -- no, in April; but they have since indicated that they would like to hear from us following restart as opposed to earlier on in the process. So right now, we don't have any immediate plans to go forward and brief the ACRS, largely on their own initiative.

COMMISSIONER DICUS: All right.

CHAIRMAN JACKSON: Well, thank you. I'd like to thank both Northeast Utilities and the NRC staff for . $$114\end{tabular}$

briefing the Commission on the progress in assessing readiness for restart of the Millstone units.

The Commission recognizes that it is difficult to condense the substance of the reviews performed either by the licensee or the staff into briefings like this, but that's the primary reason that the NRC in fact has created the special projects office, in order to provide direct oversight of all of the licensing and inspection activities and to tailor the NRC staff guidelines for restart approval, the manual chapter 0350 process, to specifically assess the efficiencies and their resolution at the Millstone units.

As we've clearly indicated through the briefing, the Commission is not only interested in how the recognized efficient startup issues are resolved, but equally importantly in whether the Millstone organization is functioning in total with the proper perspective on safe operation, whether that relates to employee concerns, operability determinations, operator training, competency and readiness, or any of a myriad of issues.

As I stated at the last meeting and as I think Commissioner Dicus has just reinforced, the Commission does not presuppose that any of the three plants will restart by any certain date; however, the Commission must be prepared to assure the allocation of adequate staff resources to this process and to its oversight of the Millstone facility; and . 115

as such, at subsequent meetings, the Commission will continue to assess whether adequate progress is being made in the readiness for restart of the Millstone units and whether the NRC assessment process is both comprehensive and timely, but not overly rushed.

I would reemphasize to the licensee what you've already heard without my going into chapter and verse again with respect to the degree of specificity the Commission expects to have in the presentations and in documentation provided beforehand going forward.

So unless my fellow Commissioners have any further comments, we're adjourned.

[Whereupon, at 12:33 p.m., the public meeting was concluded.]