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## UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

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BRIEFING ON OPERATING REACTOR OVERSIGHT PROGRAM AND STATUS OF IMPROVEMENTS IN NRC INSPECTION PROGRAM

PUBLIC MEETING

Nuclear Regulatory Commission
One White Flint North

Rockville, Maryland

Thursday, February 13, 1997

The Commission met in open session, pursuant to notice, at 2:05 p.m., Shirley A. Jackson, Chairman, presiding.

COMMISSIONERS PRESENT:

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

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STAFF PRESENT AND PRESENTERS SEATED AT THE COMMISSION TABLE:

 ${\tt JOHN}$  C.  ${\tt HOYLE},$  Secretary of the Commission

KAREN D. CYR, General Counsel

HUGH THOMPSON, JR., Acting EDO

FRANK MIRAGLIA, Acting Director, NRR

FRANK GILLESPIE, Director, Inspection & Support

Program, NRR

ROY ZIMMERMAN, Associate Director for Projects,

NRR

## PROCEEDINGS

[2:05 p.m.]

CHAIRMAN JACKSON: Good afternoon, ladies and gentlemen. We are pleased to have the NRC staff here to brief the Commission on the operating reactor oversight program. This is the first of three Commission meetings addressing different aspects of the operating reactor oversight program.

The subject of this meeting is the Status of Improvements in the NRC Inspection Program. The subjects of the other two Commission meetings are Analysis of Quantifying Plant Watch List Indicators, at which time the staff will discuss the Arthur Anderson review of the senior management meeting process, and the Millstone and Maine Yankee lessons learned as they relate to policy issues affecting the regulatory process.

These meetings are scheduled for February 18 and 19, respectively.

I would just ask you, the staff, as you discuss areas of improvements, please provide for the Commission the results which have been achieved and/or examples which demonstrate improvement or are aimed at demonstrating improvement, so that if activities are in progress, you can provide a time table. Please provide a time table for the completion of the activities.

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I understand that copies of the slides are available at the entrance to the room. Unless fellow Commissioners have any comments, please begin, Mr. Thompson.

MR. THOMPSON: Thank you, Chairman Jackson and Commissioners. Before we go into the presentation, I should remark for you and members of the public. In our efforts to upgrade the TV coverage of the Commission dialogue, we have downgraded. The motherboard didn't fit up and we burned it out. So we now have a camera in the corner over here. We will have a general view of the proceedings, but slides will still be presented. Hopefully the public will be able to follow along without much trouble.

With me at the table this afternoon are Mr. Frank Miraglia, who is the Acting Director of NRR; Mr. Frank Gillespie, Director of the Division of Inspection and Support Programs, and Mr. Roy Zimmerman, Associate Director for the Reactor Projects.

We are here to brief the Commission on the operating reactor oversight program, as you said. The reactor oversight program is continuously evolving. Self-assessments, both external and internal, have identified problem areas which are being addressed by a number of actions.

 $\label{theorem} \mbox{ These actions include improvement in inspector} \\ \mbox{training and guidance as well as our performance assessment} \\$ 

methodology and criteria. These actions, combined with initiatives that were underway prior to the more recent review, will enhance the staff's ability to identify safety issues and assess licensee performance.

In addition, the recent reorganization and appointment of the Deputy EDO for Regulatory Effectiveness, Mr. Ed Jordan, will play a prominent role in future oversight of the reactor program.

This completes my opening remarks. I would like to turn the briefing over to Frank Gillespie, who will do the major portion of the briefing dealing with inspection efforts, and Mr. Zimmerman will address those portions dealing with the project management.

CHAIRMAN JACKSON: Thank you.

MR. GILLESPIE: Since Hugh has already covered the objectives, if I could go right to slide three, which is just to outline the organizational structure of the overall program.

The focus today is on the inspection program. The other presentations next week are really going to touch upon licensing aspects and other aspects.

[Slide.]

MR. GILLESPIE: NRR as the headquarters function develops policies and procedures, but we are by our own procedures very closely integrated comment-wise at every .

step with the regional offices because they are the implementers of the program and they do the chief implementation and the real inspection.

 $\label{eq:the regions} \mbox{ do implement the majority of the } \\ \mbox{program.}$ 

Other organizations provide independent review.

The new Deputy Executive Director position is expected not only to continue doing what AEOD did with the lessons learned from DETs and lessons learned from case studies, but that will also be very much, we would expect, enhanced in our interface with them.

CHAIRMAN JACKSON: Let me ask you a question.

What are some of the feedback processes to which you refer,
or feedback mechanisms in the second bullet?

MR. GILLESPIE: The regions are not hesitant to tell us that we have made an error. We get feedback on the ability to carry out a procedure where we actually in coordination with the regions have published an inspection procedure and we are finding it's not getting an objective we need. We get feedback from the senior residents and residents. We periodically go out and talk to them individually and ask how are these aspects of the program going.

So we are going out trying to get direct feedback from the people carrying out the program, which will tend to lead us into maybe a more in-depth audit of what we are doing and how we are doing, and potentially then a rewrite of a procedure or re-promulgation of a manual directive.

MR. ZIMMERMAN: If I can add a thought. When senior managers from the region and from headquarters also go out and visit the sites it is typical for them to have dialogues with licensee management as well and receive feedback at that time on their view on the inspection program as well.

 $\mbox{ CHAIRMAN JACKSON: But you don't have formalized} \label{eq:chairman}$  feedback processes as such.

MR. MIRAGLIA: We have both, Madam Chairman. I think what Frank and Roy were talking about are somewhat informal. As part of the agency response to the reg impact survey, there are a number of mechanisms for getting feedback: requiring the inspectors' supervision to get out to the facility and explore with licensing managers their perspective of how the program is going, strengths and weaknesses, and there is a feedback mechanism.

Is it an annual report now, Frank, to the

Commission on some of those aspects as well?

MR. GILLESPIE: Yes.

 $$\operatorname{MR}.$$  MIRAGLIA: So we have formal processes as well.

CHAIRMAN JACKSON: But then you say other organizations provide independent review. What does this mean? Is this headquarters organizations reviewing the

MR. MIRAGLIA: I think Frank's intent and the intent on that slide is to say that we have other independent audits from, say, the GAO, our own IG, that also provide oversight, and we look at that, and that's a feedback mechanism.

CHAIRMAN JACKSON: We do have this new Deputy
Executive Director for Regulatory Effectiveness, et cetera,
and you said that this organization will play a prominent
role. Do you intend to have some kind of internal
assessment? There is self-assessment by the organizations
themselves, but do you intend for this organization to
provide --

MR. THOMPSON: Joe Callan and I have discussed some of the ways we would do our own assessments. As you know, in the materials area we do kind of impact program review where we go out and review against a set of criteria the regional offices. We are looking at potentially using

that model as an approach to go by and look at the regional offices with respect to the reactor program. We have not formalized anything specifically on that yet. I am looking forward to Joe coming up here so I can be looking at things like that. I have not had an opportunity recently to look at those type activities.

MR. MIRAGLIA: But we do have our own self-assessments. I think internally in the program we would go out and look at our program and self-assessments. We have done that on a periodic basis. That would include a visit to a facility or to facilities within a region, discussions with the residents, discussions with the licensees, and looking at headquarters.

So we do have those kinds of assessments as well, and I would think as a program office that we would continue to have self-assessments based upon routine self-assessments, and if there are indications from other places that we have weaknesses, that we would try to go out and look at them.

CHAIRMAN JACKSON: It strikes me -- and I think Commissioner Diaz has a comment or a question -- that what you have essentially described is a mechanism where the program offices assess what goes on in the regions, but the program offices themselves do those self-assessments. The question is, is there any regularized way of having a

quasi-independent review of the program offices' role in reactor oversight?

MR. THOMPSON: I believe the answer to that is yes. In the materials program we do look at some of the activities in headquarters as part of the overall programmatic review, kind of doing self-assessments with those same criteria we use to evaluate the regions and the agreement states.

CHAIRMAN JACKSON: All I am really talking about is consistency of how assessments are done. There is self-assessment and then there is assessment by others, peer assessments. So you have described a food chain where everyone self-assesses and everybody is assessed except the program offices in terms of someone else assessing them.

 $\label{eq:mr.THOMPSON:} Obviously the Deputy EDO for \\ Regulatory Effectiveness is a --$ 

CHAIRMAN JACKSON: That's the intent here.

 $$\operatorname{MR}$.$  THOMPSON: That would not be the only thing. We would obviously be doing some of our own assessment. I

don't want to speak for Ed. He can obviously speak well for himself, but that is the intent. That organization would also look specifically at how the program offices are carrying out their functions, and that program is being developed now by Ed and his staff.

CHAIRMAN JACKSON: Commissioner Diaz.

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COMMISSIONER DIAZ: Just a comment on Mr. Gillespie's statement that the regions are very candid in providing criticism of the office. I hope that is not an open loop, that you close the loop by being equally critical of the regions. In this way you actually close that loop in the feedback, but it was not implied in your statement. They actually do come back to the regions; is that correct?

MR. GILLESPIE: Yes, it does.

CHAIRMAN JACKSON: Commissioner Rogers.

COMMISSIONER ROGERS: On that word "oversight" in the Deputy Executive Director of Regulatory Effectiveness, do you really mean assessment there? Is that what you mean by oversight?

MR. THOMPSON: That is my sense of it. It is not any kind of day-to-day oversight activities.

COMMISSIONER ROGERS: You really mean assessment when you say "future oversight"?

 $$\operatorname{MR}$.$  THOMPSON: Right. I think that's just the title.

 $\hbox{ {\tt COMMISSIONER ROGERS:}} \quad \hbox{It's just a question of what} \\ \hbox{the relationships are between the organizations.} \\$ 

CHAIRMAN JACKSON: You mean assessment.

MR. THOMPSON: Yes.

[Slide.]

MR. GILLESPIE: If we go to slide four, which we

have basically covered, we do have a formal process of assessing the regions with a team of people going in each year with predetermined criteria. We in fact generate a written report which we supply to the region for comment. We do this every spring.

We also are assessing not only the region but ourselves when we are looking at it, because inevitably you will find two types of problems when you are looking at someone implementing your program.

One is they have implemented the program and it is not the program you thought you wrote, and therefore you have program problems where clarifying guidance is needed or making some adjustments. On the other part you might just have problems with implementation.

We do visit, as Frank said, several facilities, interview people in the regions, the division directors, and we are getting two kinds of feedback. One is programmatic feedback and one is on the direct implementation in that region itself.

And we compare across regions to look at consistency in implementation to see ourselves if we are getting the depth and scope we thought we should get. That is done once a year with every region, and we do share the results. We are very open with them on that.

We do special reviews also where we see particular .  $\mbox{13} \label{eq:13}$  problems. An example would be we saw particular problems in

problems. An example would be we saw particular problems in how we as an agency were dealing in inspection space with safety assessment quality verification. So we did a look at safety assessment quality verification, how we are carrying it out, is it meeting the objectives, and we are now taking some corrective actions on that, and in fact recently issued some changes to inspection procedures where basically we felt that the program was being carried out more on a piecemeal basis. And the program allowed that.

The procedure allowed different pieces to be just added up to say we meet the whole, but from recent inspection results we are finding that when you had a group of people go out and do the procedure, all at once you had a much better picture of safety assessment quality verification of a licensee, and that came through in some inspections we did focusing on this at both Fermi and Crystal River.

So not only do we do the annual audit, but we do special audits where we see a problem starting to evolve or have some insights from some other source that we need to look at it. Then we also do follow-up on that to see that we are achieving the end we thought we got with it. That is done on a continuing basis.

We do do direct observations with SALP, PPRs.

This all comes from the same basic branch and organizational
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unit, and it is all integrated together. From those

CHAIRMAN JACKSON: Who actually performs the observations?

MR. GILLESPIE: They are all coming out of the inspection program branch. That is our primary focus. We also have all the managers. Basically division directors and above in NRR periodically go out and sit in on SALP meetings as observers to see how they are going on. We get feedback also from that process and we get feedback because anyone who is a SALP board chairman in any region is supposed to observe a SALP board in a different region. So we also get feedback from them. We have got it covered from different layers. When the information coming back from these people starts to correlate together, then we are off taking action.

 $\label{eq:Chairman Jackson: How do you solicit feedback} % The property of the control of the public from industry and the public? % The public from the pub$ 

MR. GILLESPIE: As Frank said, we have a formal process in a form. It is typically dominated by the regional managers who are going out to see what the residents are doing or visiting the site which asks them to sit down one on one with a licensee representative and basically try to ask him, does he have a problem?

CHAIRMAN JACKSON: Is this form used on a

consistent basis?

MR. GILLESPIE: I would not want to say it is used on a consistent basis, but it is used with regulatarity.

I'm not trying to evade your question, but it is spotty how we get it back. We annually put a Commission paper together and report the results of what comes out of those reported forms

At a higher level is the EDO's process, and each region has a process for very senior managers at nuclear facilities to call in if they have complaints about actions taken by residents or inappropriate actions or any problems at all with how we are carrying out our program.

 $\label{thm:chairman jackson: Is our solicitation of feedback} % \end{substitute} % \begin{substitute}(100,00) \put(0.00){\line(0,0){100}} \put(0.00){\$ 

MR. GILLESPIE: No, it's not.

CHAIRMAN JACKSON: Are you thinking about that?

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MR. GILLESPIE: I hadn't been. It is not.

MR. MIRAGLIA: It has been spotty.

MR. GILLESPIE: It has been spotty.

MR. MIRAGLIA: There have been broad procedures such as the maintenance inspection procedures. There were workshops. On some occasions we have had broad workshops on those kinds of activities.

MR. GILLESPIE: Out of fairness, the feedback from the public we get here is --  $\,$ 

CHAIRMAN JACKSON: And newspaper articles.

MR. GILLESPIE: No. Actually, it's a little more structured than that. It is things like the UCS write in and we get appraisals from them. They are happy to appraise us. There is a person at the University of Syracuse who quite frequently gets computer runs.

CHAIRMAN JACKSON: The real answer is that at this point in time it's not formal.

MR. GILLESPIE: It's not formal.

MR. MIRAGLIA: It's not formal.

COMMISSIONER DIAZ: Would you say that the feedback from the licensees, the industry is consistent in the sense that if there is a problem they do come and say "I have a problem with this"? Is that done on a consistent basis? Is that dialogue established and that feedback mechanism clear and unimpeded?

MR. GILLESPIE: I personally believe it's very unimpeded and it's very clear. What I would have difficulty answering is, does any particular utility have an inhibition for using it?

I think on our side we hope we have destroyed any blocks to someone calling up. In fact, only last week we had an immediate call where an inspector said something on site which was probably out of context and out of line. The call came in immediately, and we have taken care of the .

17 situation.

For the majority of licensees, I think it's both clear and unimpeded.

MR. MIRAGLIA: As a matter of context and history, the form and the feedback mechanism of managers going out was a result of the regulatory impact survey that we conducted back in 1989 and 1990.

One of the corrective actions of that is there was a concern -- industry voiced that concern -- about the retribution issues, and there is reluctance to complain because of their input to SALP and other things that affect licensee performance. So there is a reluctance. That issue is out there.

As a result of that survey, we took the corrective actions of having the survey form, the periodic report to the Commission. We had training sessions for our inspectors. We have upgraded the fundamental of inspections. There were a number of corrective actions.

Notwithstanding those activities, the Tower report came out in 1992 and raised the issue again of concern and reluctance to bring forth those kinds of issues to the agency. As a result of that, another level was put in, which is the management implications group where senior managers from the utilities were encouraged to call to the EDO and the EDO staff to raise issues at that level. That

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has been used and that has been in place for about a year or

two years and has been used in a limited kind of way.

MR. THOMPSON: We don't get lots of calls in that context. I think each utility executive as they have their communications links established with the regional staff and with headquarters staff probably make their own judgment as to whether they raise issues and select what issues they raise. I think if there is a truly serious issue, they don't hesitate to raise it. It is those that are kind of borderline, would be my guess, that some may have reluctance to raise.

COMMISSIONER DIAZ: Are you satisfied that we have provided guidance at every level that it is important and necessary for the licensee to communicate reservations that they have and that is all we can do?

MR. MIRAGLIA: The answer is yes. We say there are many vehicles. We encourage the licensees to use those vehicles, and for these other cases here's another mechanism to be used.

COMMISSIONER DIAZ: Thank you.

MR. GILLESPIE: Going to slide five.

[Slide.]

MR. GILLESPIE: There is almost a continuous, ongoing relationship between the Inspector General and the program, because there is almost always some aspect where 50

percent of the agency is being reviewed. So there is actually a very good relationship in the suggestions made by the Inspector General on the program as they look at different aspects and to try to understand the interrelationships between one recommendation that they make on one more limited scope investigation or audit as it might be applied across the board.

The General Accounting Office, that was only yesterday. We always seem to have a GAO audit of some kind going on. In fact, one of the people working on the one that is going on right now was also on the South Texas one. So we have periodic feedback almost of a constant assessment nature coming from GAO also.

Industry and public feedback. Predominantly industry feedback. Public feedback is very indirect. It tends to be different groups that come in. It is not systematically collected.

[Slide.]

MR. GILLESPIE: Going to slide six, this list in bullet form are the issues I was going to try to cover today to give some sense of what we are doing to improve the program in both a problem statement in each of these areas and some idea of short- and long-term action, in some cases a short-term action having already been achieved.

[Slide.]

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MR. GILLESPIE: Slide seven, the identification of design issues. We have broken down the problem into several pieces here to somewhat try to align with the actions we are taking.

Insufficient design considerations in the inspection program and lack of design of expertise in the staff. I will split that as I discuss it into both a long-term and the front part of that problem that we are trying to deal with a little more in the short term. The last part of that sentence is a longer term aspect.

Lack of systematic incorporation of design inspections into the core or our regular inspection program so that we have a repetitive nature of going back with some

periodicity and looking at design.

problem.

CHAIRMAN JACKSON: Is there an inspection module that is in fact focused on design inspection?

MR. GILLESPIE: Yes, there is.

 ${\tt MR.\ MIRAGLIA:}$  There is one in development.

The next one is insufficient information from licensees on the status of design basis reconstitution. It goes down to the 50.54(f) letter which we have recently put out, and we are starting to get responses back.

And lack of availability of design information, which is something we see when we do visit the sites, the ease of even the licensee coming up with his design information for us to review.

CHAIRMAN JACKSON: Who performs engineering inspections in the regions?

MR. GILLESPIE: We start from the top down. There are two divisions in each region. There is a Projects Division and then there is the Reactor Support Division, which is basically the engineering division. So engineering inspections are really focused on regional specialists.

Our residents are more generalists. We are focusing and are continuing to keep them focused on day-to-day operations where the idea that avoiding a transient, the idea of stable operations is a very important aspect of what we do and is a significant contributor to the improved industry performance as we look at the performance indicators that have come down so much in the last ten years. So we are really dealing with the engineering

inspections being done out of the regions with regional specialists in this area.

That will get me to my last bullet on long-term actions, the basic tools that we have been able to give these people.

The other piece is we tend to supplement these people with contractors, which I will discuss as I go through the short-term actions here on the first bullet.

 $\label{eq:Chairman Jackson: We have decided that is the best way to proceed?}$ 

MR. GILLESPIE: I think as a short-term decision we have decided we definitely -- lessons learned from everything we have seen is, if we don't look at something, then there is a chance that the industry is going to back off and not look at it. So initially, and not wanting to lose the gains we have made in operational safety, we have maintained that and we are trying to maintain that resident core of generalists focused on operational safety.

In addition, the types of problems that have come out of Haddam Neck, that have come out of Millstone and Maine Yankee and Crystal River really were identified by the narrow specialists taking the time to really dig into something. So the nature of the problem that we are finding in the design area calls for a different kind of person than

the resident also by background, training and by current .  $\begin{tabular}{ll} \hline \vdots \\ \hline \vdots \\ \hline \end{bmatrix} \label{eq:current}$ 

capabilities.

COMMISSIONER DIAZ: Using the language I will use with the licensee when we assess an area, we find strengths and weaknesses. Would you quickly tell us what is the strength that we have in our identification of the sites? What are the main strengths where we say we can do this? I know you have identified the problems, but what are our strengths? What are our capabilities?

MR. GILLESPIE: I think our strength is definitely operational safety.

 $\label{eq:CHAIRMAN JACKSON: No. He's asking what are the strengths in the design area. \\$ 

COMMISSIONER DIAZ: In this design issue.

MR. GILLESPIE: Let me jump to some of the results. I believe the EDO recently sent a short note up on the result of the architect/engineer inspections. Actually the results are very consistent with results of past safety system inspections, which are very design-oriented, that we have done. They are not atypical type results.

The strengths we are finding --

CHAIRMAN JACKSON: Identify whether the strengths you are finding are licensee strengths or our strengths.

He's interested in our strengths.

 $\mbox{\sc COMMISSIONER DIAZ:} \quad \mbox{You said we have these problem}$  areas. What are our strengths?

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MR. GILLESPIE: Our strengths right now as we are carrying the program out, I think is using the, quite honestly, limited number of people with design background that we have as team leaders to organize how we leverage ourselves, which is my first bullet here on the architect/engineer inspections. We have leveraged ourselves tremendously with contractors on these inspections.

MR. MIRAGLIA: I think maybe your question is more our strengths and our focus has shifted to operational safety and that is where our strengths are. The residents have that operational focus. Their training is in the operational safety focus. At one point in time, when we were doing lots of licensing, lots of construction, we had more design specialists within the context of the agency, and we are drawing on those now.

CHAIRMAN JACKSON: I think the simple way to answer the question is, do we have any strengths in that

MR. MIRAGLIA: In design?

CHAIRMAN JACKSON: Yes.

MR. MIRAGLIA: Yes.

CHAIRMAN JACKSON: What are they?

MR. MIRAGLIA: I think we have a large number of qualified engineers who have worked at AEs, but they are smaller in numbers than they were perhaps years ago. The .

question is, how can we use that smaller amount and how could we augment those?

 $\label{eq:commissioner} \mbox{DIAZ:} \quad \mbox{Are we getting them somehow so}$  they become a strength?

MR. MIRAGLIA: Yes. And the longer term issue is, if we need to get more, how do we -- the training. You will hear we have to get there from here.

 $\label{eq:ChairMan Jackson: Maybe a strength is that we have a few good men or women. \\$ 

MR. MIRAGLIA: Yes.

CHAIRMAN JACKSON: Is that what you are telling us? I don't want to put words in your mouth. That you have learned how to leverage them through these architect/engineer enhanced inspection teams? Am I putting words in your mouth?

MR. MIRAGLIA: That's absolutely correct.

 $\label{eq:Chairman Jackson: I don't know if that answers} \\$  the question.

 $\label{eq:commissioner} \mbox{COMMISSIONER DIAZ:} \quad \mbox{That certainly answers my} \\ \mbox{question.}$ 

CHAIRMAN JACKSON: He wanted it from you.

MR. MIRAGLIA: Yes.

COMMISSIONER DIAZ: The identification of problems must come from a strength. I think it is very important that we assess our strength even before we assess our .  $\begin{tabular}{ll} 26 \end{tabular}$ 

weaknesses.

MR. MIRAGLIA: Yes. As an indication of that, Commissioner Diaz, some of the special teams that we sent had those strengths on it to look at the design areas. In terms of the special teams that we sent to Millstone and Haddam Neck, special teams that we sent to Dresden, and the special teams that we sent to Maine Yankee, they had NRC specialists in that area and we augmented those as well with contractors. So, yes, we have. We are not totally absent of that strength within the context of the staff.

MR. ZIMMERMAN: I would add that in addition we guide those contractors and take their findings that may be raw and put them into regulatory context and determinations on whether enforcement is appropriate or not. We deal a lot with the raw findings that the contractors provide.

 $\label{lower_commutation} {\tt COMMISSIONER\ DIAZ:} \quad {\tt I\ see\ that\ as\ a\ strength.} \quad {\tt It\ should\ be\ clearly\ spelled\ out\ as\ a\ definite\ strength.}$ 

COMMISSIONER ROGERS: Before we leave that, you say we put these into regulatory context. Does that involve a relative risk consideration?

MR. ZIMMERMAN: I would say yes, and we are getting better with the training that we are providing to our staff, our ability to use risk insights and also know their limitations are improving. So we try to always look at things from a risk perspective, take the findings and

marry the two, but there is clearly room for us to continue to grow in that area.

MR. MIRAGLIA: And I think risk is a factor in a number of areas, Commissioner Rogers. In terms of deciding what systems to inspect, we try to use the risk informed insights to look at those issues.

In terms of regulatory space, one has to try to say safety significance, risk significance. That is a part of the enforcement policy, and we are looking at ways of enhancing the enforcement policy with respect to risk significance.

 $\mbox{So risk is a factor and an element at the various} \\ \mbox{stages of the regulatory process.}$ 

COMMISSIONER McGAFFIGAN: One of the things
Mr. Gillespie just said, and I took it down, is if we don't
look at something, industry will tend to back off and not
look at it. That's a fairly profound insight and it says
something about risk. Maybe you could say something about
the compounding of things. If we only look at the most

safety-significant, the most risk-significant systems and they were working perfectly, can things fall apart by looking at non-risk-ignificant things that compound and turn out to be more safety-significant?

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MR. MIRAGLIA: That's a challenge. The challenge is another balance. I think we cannot focus strictly on risk-significant things.

As an example, spent fuel pool cooling, which was an issue that got pulled at Maine Yankee. From a risk-significant point of view, we perhaps should have been paying more attention to that area, and we were focused on other areas. That's a lesson learned.

There has to be a balance not only between operations and safety, but you have to have enough in your program that is sampling enough areas, both risk-significant and perhaps less risk-significant, but providing insights to the robustness of licensees' programs and their ability to comply with the regulations. We have to look at both, and that's another balance that is going to have to be looked at in terms of the inspection program. It can't be absent and just risk dominant only. You have to look at a little bit of everything.

MR. GILLESPIE: We've got a bullet that isn't in my viewgraphs. I will try by way of example to illustrate. One of the things that we are looking at is the basic inspection procedure that most of the resident activities are covered under in operations. We require the residents to do some things, and we will hear anecdotally back from the residents: Why am I looking at this? I never find .

We have tried to maintain this balance that Frank talked about in the program of touching all the necessary activities and relate that same philosophy to the engineering of the facility and just take a risk analysis and recognize that some of the major weaknesses in our risk analysis are the cumulative assumptions that went into it.

Every resident and every senior resident basically some place in their office will have the IPE chart that has been generated on risk-significant system, least to most to most to least risk-significant system. Yet when you look at that, if you spent all your time on the top two systems, you might have a highly risk-significant problem because the support systems that are assumed to work are going to be flawed.

It is clearly not, to me, a simplistic argument. In achieving this balance people sometimes take us to the extreme. Well, that is not a risk-significant system. Yes, but HVAC happens to be a very important support system, if you have an accident, to maintain the environment in the control room.

Other things that we might be looking at, for example, the maintenance rule, is looking at the reliability of a particular component. Well, there are some assumptions in the risk analysis that reliability of that component is

X. If the reliability isn't X, then it trickles through the whole thing. It may in fact be almost as important to look at the underlying assumptions in the risk analysis and make sure the assumptions are valid as it is to look at the specific most risk-important system it identifies.

There is a real balance there. So we have got to be real careful that we approach this with the same type of

balance of what is the information telling us, what are the assumptions. I'll use the example of the sleeping operators at Peach Bottom. If we weren't going into the control room basically each day with a resident or a senior resident as part of their tour observing staff turnover, we might not have seen that.

You will find very few items of noncompliance or statistics generated from control room observations, but it's a very important element of what we think an inspector does each da, particularly the resident.

That same principle needs to be carried over into engineering. Right now we are basically looking at the most risk-significant systems, and quite honestly, we try to pick the two or three systems that are risk-significant to look at and analyze. I recognize that we may have a flaw in our system, because we are not necessarily looking at as much detail in those systems that might get ignored.

COMMISSIONER DIAZ: What you are really saying is .  $\label{eq:commissioner} 3$ 

that the entire process falls in the area of systematics. In other words, it is this system of risk you are going to be working with rather than the risk of any one component or area.

MR. GILLESPIE: Yes. It's a compounding just because we have a complex machine and everything is interrelated. So it's not a simple solution. You might say that the entire QA process in a risk analysis isn't modeled. It is all included in this little beta factor that the risk people like to put in front because we don't understand it real well. Yet the failure of a complete QA program would be very risk-significant in our opinion.

The limitations of the mathematics give limitations to the applicability, and I think we have got to keep that insight in the back of our mind as we approach inspection.

CHAIRMAN JACKSON: It strikes me that all of this is tied together. Commissioner McGaffigan spoke of where you could have cumulative effects. You spoke of looking at what you think may be the most risk-significant things but if you ignore some others, you may be ignoring the effect or the implication of that.

MR. GILLESPIE: Exactly.

CHAIRMAN JACKSON: Commissioner Diaz spoke of having systematics. So the whole thing requires an .

integrated and systematic approach that has risk insights built into it, because that helps with the systematics. I think that is all they are really saying. Sometimes we fall into traps where we think we are talking about something here or something here, and it just doesn't work that way, because in the end the plant is an integrated entity itself.

MR. GILLESPIE: Jumping to the short-term actions, quit honestly the short-term actions we have significant leveraging of the staff. We have three AE teams with five contractors on a team; two team leaders assigned from the NRC so that we can keep the paperwork going when the team goes out again and we can maximize our use of the contractors. I think we are leveraged to the maximum extent possible.

We also have a significant program where we supply engineering specialists to the regions when they have a particular problem to do a safety system functional inspection, which is our traditional reactive procedure for doing a vertical slice or really digging into a specific system, which we are also supplying. This did not push off the more routine efforts. This was clearly an addition to what we were already doing.

Regional inspections of engineering. We are trying to address now getting this incorporated rather than in a reactive way, which it was before. I am talking about

the engineering aspects of design versus when we were looking at engineering more traditionally. We were looking at engineering in support of operations: were they being responsive when the operator said he needed assistance?

It was the responsiveness to operations, not maintaining the integrity of the basic design itself and the basis for that design. So it's a different aspect of engineering that we are looking at now. We are not throwing out looking at the other piece, but we are looking at this right now in the short time. It's all an addition.

COMMISSIONER DIAZ: Where are the senior specialists? We place two in each region and two in here?

MR. GILLESPIE: That's our senior risk analysts.
I do have a whole separate slide on that.

COMMISSIONER DIAZ: All right.

CHAIRMAN JACKSON: Let me raise one other thing, which is basically a comment on your comment. I recall, if I can paraphrase him, Commissioner Rogers always emphasizing the point that it's not just looking at design per se, but you want to look at how design and design changes get propagated into operations and plant changes and into procedures. I assume that when you speak about that that in fact is what you are looking at.

More goes into the robustness of the solution. So we are going kind of backwards down the stream flow of information.

Longer term actions --

get these other things?

CHAIRMAN JACKSON: Before you go, I can't let you go by the 50.54(f) letter follow-up. You have already worked out who is going to do that and that the resources are available? Is it going to be in the headquarters where the reviews are?

MR. MIRAGLIA: We are having a conference call. Hugh, did you get it set for tomorrow?

MR. THOMPSON: It is tomorrow afternoon. We will reach a final position with respect to how we will integrate the review process between the NRR and the regions in order to assure that the right people look at this in a timely

CHAIRMAN JACKSON: Have you worked out what any follow-on regulatory actions would be?

MR. MIRAGLIA: We are looking at those elements as . 35 well. We just started to get some of the input from the licensees. I think the due date was the 9th of February,

licensees. I think the due date was the 9th of February, and the letters are coming in. But yes, one would have to say, given those letters, what appropriate action should

there be for follow-up inspection questions or enforcement, and that all has to be part of our evaluation.

CHAIRMAN JACKSON: And you have developed criteria for review, that is, what it is you are looking for?

MR. MIRAGLIA: Yes.

COMMISSIONER ROGERS: Before we leave this, if we could back up one half bullet or so to the new inspection procedure, what are the dollars and FTE resources that are going to be required in addition to what we have devoted to our inspection activities to carry out this new inspection procedure?

MR. GILLESPIE: The reason this is short term is we are actually trying to achieve that within some limits that we placed upon ourselves. Our first question is those limits, and the limits that we have placed upon ourselves really are this would be done with existing staff.

So I would have a diversion, and at a budget level dollar support-wise for contractor support at about the same that we have right now. Right now, for this element of it we are spending at the rate of about \$2 million a year for individual contractor support.

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 $\label{eq:condition} \mbox{If you would like, I could outline what we are looking at.}$ 

COMMISSIONER ROGERS: I don't need it right now, but if you could supply us with that, it would be interesting to look at it.

MR. GILLESPIE: Yes.

CHAIRMAN JACKSON: Are you comfortable with the

MR. GILLESPIE: For the short term I'm comfortable with the trade-offs. I'm speaking from a prejudiced position, because I'm seeing immediate gratification from the results of the architect/engineer inspections, what you might call the safety severity or safety significance of the findings.

I feel comfortable right now with the trade-offs in that I am not giving everything away and I am not diverting from some of the things that we are doing that are well. Current engineering, which we had just beefed up last year relative to the resources and the core inspection program in engineering, we had raised the number of hours and adjusted it. We are trying to work within that volume.

It would be the kind of approach that says if you haven't had anyone look at a specific system in detail, in the vertical slice kind of sense, in the last two years you haven't had one of the architect/engineer inspections, then

you should consider them for this procedure. If you have, then you should carry out the old core procedure.

What we would do is end up like on an every second SALP cycle first looking at engineering one way and then looking at engineering from a more design detail way.

We are exploring that. That is conceptually how we are going. Will everyone be satisfied with the pace that that is? I'm not sure. I can only say this is the kind of thing we are exploring, because you have to have a baseline for people to comment on.

MR. MIRAGLIA: This is the first attempt. In fact it's out for regional comment. The goal would be to utilize the resources from the region, augment from headquarters if necessary, or use contractors. When you use the regional resources, perhaps they are not doing something else that

they would have been doing. So those are the trade-offs. And to really assess what that impact is. Or if we use headquarters people. These are the trade-offs that are yet to be determined. We are going to have to try the procedure, apply the procedure.

CHAIRMAN JACKSON: Within the overall head count numbers, you had people who were doing design reviews relative to design certification. Is there any fungibility of people?

MR. MIRAGLIA: Yes. What has also happened in that area is we have been ramping down in terms of those resources over the last few years as design certifications for the evolutionary designs have come to conclusion. There is only one design under active review. So those resources have been coming down and we have been applying those resources that were there, as well as our staffing levels

CHAIRMAN JACKSON: You have been shifting them? MR. MIRAGLIA: Yes, and that's how we have been able to keep up with lots of the initiatives that we have had. The increment that is left from that to roll over to that is much smaller than it was two years ago.

CHAIRMAN JACKSON: I understand.

Okav, Frank.

MR. GILLESPIE: Long term actions. We are going to have a presentation next week on Millstone lessons learned. The major policy question that comes up here is the licensing basis, what it's called, is it tabulated.

In the simplest sense it might be. If an inspector was going to go out and do an inspection on the auxiliary feedwater system at a plant, does he have a list of all of the commitments and requirements for that system easily available to him? Right now the list is not easily available to either us or the licensee. That is going to be a major focus of our discussion next week. So I am going to try to not do it today.

The other one is long term, the balance between operations and design inspections as it applies to our own

staff. Quite honestly, I think it's very well known.

I just mentioned we are putting about \$2 million a year into contractor support for engineering type support for the regions on a reactive basis. The  ${\tt A}$  and  ${\tt E}$ inspections are budgeted at about \$4.5 million a year to keep three teams going. That's \$6.5 million.

That's a big resource, and at some point we have to step back and say can we continue to pay for that for contractors or do we have to bring our own staff talent to bear on it and recruit people with maybe different skills than we had before, and how do we do that and how do we factor them in.

That's why it's long term; it's not something we would do overnight, and requires some planning out, and a different resource base, a different recruiting base, quite honestly. Our focus for recruiting has very much been the resident type person operations, former operators.

[Slide.]

MR. GILLESPIE: The next topic is inspector qualification and training. This came up. The basic question the IG was asked: Are we following our own rules on how we are documenting our training?

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Management expectations for performance-based inspections were not clearly communicated. Let me go through the list, if I could, and I would like to address the difference between performance-based inspection and inspecting performance-based rules. I find that our own inspectors get confused, and I would like to take a shot at at least trying to distinguish between those two.

A combination of NRC organizational changes. We eliminated 40 section chiefs in the regions. What those section chiefs provided was an integration function, in a sense, of some of the results coming out of their individual reactors. That integration function in some cases got pushed down on the resident inspectors. You will hear resident inspectors say, I'm doing administrative tasks.

What we have got is inspectors, seniors particularly, who are fulfilling two roles. There is information collection and then there is diagnostics. The traditional inspector really enjoys information collection and he may not enjoy diagnostics, and that is preparing for PPR, preparing SALP packages, preparing for senior management meetings. So we are really going into that right now and trying to understand it, which gets us to one of the other actions down here.

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Short term actions. We have republished our manual chapter. You will hear in the staff the acronym 1245, like everyone in the world is supposed to understand it. That is our Inspection Manual Chapter which covers training. It reflects our current policy on training, meaning it added some new training courses in.

In addition, a significant change which is now going around the halls, because I held a training session for 250 people in NRR yesterday on this, is that it makes inspector classifications generic. What we found in the regions was that the regions very much comply generally with our program; they have inspector qual journals that are signed off by different people; it is very structured, very disciplined.

In NRR we turned around and we have evolved to a program office with many, many people supporting the regions in doing inspections. In fact, we at least equate to one if not two division equivalents for the engineering divisions in the regions in supporting inspections in pieces here and there and everywhere when you add them up: fire protection, maintenance inspections, PMs filling in for seniors that go on leave or take vacations. My people do special team inspections, the architect/engineer inspections.

What we have done is taken the word "region" out of inspector and now we are looking at making sure that
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4. people who carry out functions have the same qualifications

independent of their geographic location.

We are creeping into this right now. We are working with our partnership and we are working with NTU. You will see our new postings going up. Yesterday two postings went up in NRR which now have a new page on a position description that says you are expected to be qualified to one of these categories in 1245, and you may be called upon to have as much as 10 percent of your duties as supporting inspection activities. So we are trying to be open and honest with people, and we are getting into that now.

This is a very big change. It's a cultural change within the organization in integrating the two functions of licensing and inspection together.

A new inspector training course was developed.

And now let me address performance-based inspection before I
try to address inspection of performance-based rules.

Performance-based inspection and the way we were viewing it -- and we started this back in 1988 when we published our first NUREG on this -- is basically an inspector looking at the system, understanding first what the system's function is supposed to be and first looking at the system as actually a hardware system installed and functioning and saying, is this system carrying out or

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capable of carrying out its basic function, and what does it have to do that?

That would lead you hopefully into things like if you have a pump and the tank and the suction of the pump is on the same level. Do you have a problem with that positive suction head, yes or no? Then it leads you into possibly looking at the paper and tests.

In fact, I'll use a success. The senior resident at Fermi, who has recently moved to Zion, asking this type of question, found a tank that should have been three levels higher for net positive suction head. He approached it this way, and in fact they had to nitrogen load the tank to make sure that this surge tank would work.

That is a techniques course, because we hire people in with the technical expertise of being a good mechanical or electrical engineer, but we have not necessarily hired someone with the conceptual idea of how to approach a system.

So while we had a performance-based inspection course already there, it wasn't good enough, and this is our next step, to try to provide input insights and conceptual insights on how to approach inspecting a system and trying to get at the root cause of the problem.

Well, the first question on a heater exchanger is, look at the nameplate data. I think this was something that came out of Millstone. They looked at the nameplate data and found out the Btu rating was significantly lower than the expectation. That is a performance-based inspection independent of what the rule says.

Inspecting a performance-based rule is more like what we are doing now on the maintenance inspections. The first go-around on the maintenance inspections is more programmatic, quite honestly, to make sure the system is in place that can deal with this: How are they using PRA? How are they classifying system?

After the first go-around, which is really looking at the paper, then we will hopefully use our performance-based approach to inspection techniques on the systems when we are inspecting the rule.

I am trying to make sure that it is clear.

Performance-based inspection is not superimposing anything different on a licensee; it's how the inspector actually approaches his day-to-day work.

We are going to continue to emphasize this. We are putting a new training course in place, and it's really

a thought process rather than a cookbook. You can apply

this conceptually to an electrical system, to a mechanical system, to an instrumentation and control system. Now we are trying to work to that point. It is not something I can write an inspection procedure for and use a checklist. It really is a mental process to try to get into the program.

COMMISSIONER ROGERS: I like what I am hearing you say here. It sounds like a very sensible way to proceed. How much of this is all written down someplace that somebody can take a look at? What you are saying seems to make a lot of sense, but I haven't seen it written down anywhere in anything that has come before my eyes.

CHAIRMAN JACKSON: Do you have it in terms of any of your inspection modules? Is it part of some training course?

MR. GILLESPIE: As it happens, I had that same feeling, because I've been working in this. My mind has been working this way since I was an inspector. It is not written down in a real visible way, but I went back and got our performance-based inspections report, which was a NUREG that was completed in March of 1988. The words are still valid today. Have we pulled it together the way I articulated here in a policy document? No.

 $\label{eq:commissioner rogers: I think that would be very useful to do. \\$ 

MR. GILLESPIE: We have put the training courses . 40

in place. What I have just articulated is the inspection begins -- I am reading from the abstract -- "the inspection begins with a performance-based observation and then the inspectors let discrepancies or uncertainties lead to the inspection of other areas such as quality verification, organizational . . ." And you start looking at the system, and then you go on.

CHAIRMAN JACKSON: I would put it in the realm of more explicit guidance for your own people and ensuring that there is consistency between what is in the training courses and what is in that guidance.

MR. MIRAGLIA: As Frank said, back in 1988-89 we started to talk with the inspectors, that you need to inspect performance as opposed to programs. We were articulating that in the broad context in the training program and in broad context within fundamental of inspection. Perhaps not everyone had the same mental picture of what we were talking about.

CHAIRMAN JACKSON: The way Frank just explained it is very well articulated, and I think that articulation perhaps needs to be written down somewhere.

COMMISSIONER ROGERS: I wouldn't want to just see this buried down in inspection manuals. I think this is a very important point of view that ought to be very clear as to how we view our activities here. Your connection between

inspecting for performance versus inspecting against a performance-based rule and drawing that distinction in the context, I think that is very important, because we have to be clear on what it is we are talking about. I thought what you said was very good. It sounded excellent to me.

 $\label{eq:Chairman Jackson: We may want to see it surface as this is the NRC approach. \\$ 

COMMISSIONER ROGERS: This is our concept.

CHAIRMAN JACKSON: Right. This is the concept. I

think he is saying to elevate it, and we can promulgate it.

MR. MIRAGLIA: We will certainly do that.

COMMISSIONER DIAZ: I do agree that it sounds very good. I just want to make one observation of your points. We are talking about training and you said that inspectors are more prone to do information collection than to do diagnostics. I take that as a value judgment on your part. That might very well be true, but in training, to be able to streamline the information process you have to introduce diagnostics at that very first level.

The fact is it is diagnostics that allow him to go from one component to a system. So it is critically important in the training that, even if they like more to do information collection, diagnostics is an indispensable element, and maybe we should put an emphasis on that in our training programs.

MR. GILLESPIE: And we do. I was drawing a more distinct diagnostic line, and I will go through that when I have a diagram here. You often hear residents when you visit the sites saying, I spend too much time at my computer. I'm drawing the line of diagnostics at preparing for senior management meetings, preparing for plant. That is performance-based inspection as you just described.

Yes, is the answer. I was drawing a different line just from what we are finding in interviewing people and the job task analysis is also finding that we are going around and doing, which is coming close to an end.

CHAIRMAN JACKSON: Let me ask you this question.

It's kind of a judgment question. Given what you have outlined in terms of this increased focus on definition of the distinction between doing performance-based inspection versus inspecting performance-based rules, have you been able to do a survey or detect how much of a problem it is in terms of a lack of understanding of that by our own inspectors?

MR. MIRAGLIA: I think Frank referred to an IG audit that looked at our training. The maintenance rule audit brought the performance-based issue not being well understood into focus.

CHAIRMAN JACKSON: How comprehensive was that audit?

MR. MIRAGLIA: I'd have to go back and look at that report, Madam Chairman, but they talked to lots of inspectors and regional people and headquarters people.

CHAIRMAN JACKSON: Does that square now with your own judgment?

MR. GILLESPIE: Yes, it does. The people were focusing on the phrase, and the phrase "performance-based" had "rule" after it when it was used once and "inspection" after it when it was used again. Then you had the question of, well, why are we looking at the inspector question? Why are we looking at paper with the maintenance rule on the first go-around?

Well, the first go-around you have to make sure that the processes and systems are in place by which you can judge performance. If an inspector sees a component failing, he then says, okay, that component is failing. Are you treating it correctly? That way the inspector is not trying to second-guess the system and the paper. He doesn't have to reinvent the look at the paper.

We had to tell the inspectors, yes, this is still performance based, because you have to make sure the

performance process is in place so that when you do performance-based inspection you don't have to go back and do that all over again.

MR. MIRAGLIA: With some of these concepts I think
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it would be preferable for us to be cartoon type characters,
so when you use a phrase you have the little balloon over
everyone's head and everyone can say, what is the mental
picture?

I think what we will find on some of these concepts is we have talked past one another; we are not fully communicating because the definitions are a little bit different. I think that is an element that is here.

Even if we have this broad statement, Commissioner Rogers, that is the start. It has to permeate the training programs; it has to permeate the communications.

 $\label{eq:commissioner rogers: It shouldn't be so broad} \\$  that it leaves out what you are seeing.

 $$\operatorname{MR.}$  MIRAGLIA: I understand. That's the starting point, and then it has to permeate.

 $\mbox{ CHAIRMAN JACKSON: You are talking about different tiers of the same thing.} \label{eq:chairman}$ 

MR. MIRAGLIA: Yes.

CHAIRMAN JACKSON: You can have the overarching thing that is some broad-based kind of point of view, but in the end, if it isn't inculcated into everything that helps our inspectors do what they need to do, then we haven't accomplished anything.

MR. GILLESPIE: I felt very good when I was at Fermi and met with the senior and he showed me this, and I .  $\label{eq:senior}$ 

said, aha, I at least now know we have reached one.

Long term we have a job task analysis which will be completed this March by the contractor. One of our questions was this question of diagnostics in the sense that I had used it earlier. We have made some changes to the organization. We shifted a lot of things around.

What has been the impact? Are we really getting what we think we are getting? If someone is doing something, do they have the necessary training to do what they are doing? The split of work: what is done at a site and what is done at a region.

That is all we are looking at in this job task analysis. It is not one of specific positions. It gets to that, but it is one of the division of reactor projects in the regional organizations, and we have looked at all four regions, because all four regions carry out the same program slightly differently and functions get allocated differently even within a region between branches.

We are looking for the most efficient, effective process through the whole thing to deal with it: How should we split functions? Where should they be? Who should be in charge of it? Signature authority.

CHAIRMAN JACKSON: What kind of time line have you laid out for yourself with milestones or for getting the whole thing done?

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MR. GILLESPIE: The contractor effort will be completed in March. I've got some informal insights back from them. Just like any anxious person, we call them up and say, what are you generally finding?

We are generally finding some of the things I have actually already said. The level of discussion about time

at the computer, probably there is more discussion to it than there is the actual time. We went out and put expert panels together and said, how much time do you really spend that goes with this anecdote?

What we were trying to do is take all this anecdotal information that everyone had gotten and put it into a total perspective so that we are not underinflating or overinflating what a particular problem might be in the whole system. So weighting is what we are hoping to get out of this report to pull it all together.

All the regions participated; headquarters participated; there were many, many meetings. So it's going to be, I think, a very beneficial rebaselining.

MR. MIRAGLIA: The output from this is going to be useful in many ways. As Frank said, it's a function, an assessment of the function. We have many changes in the program or contemplate in the program improvements. We'll have to also say, given those changes, where are we today and what does that mean to assessment of functions and .

CHAIRMAN JACKSON: I guess it still is important that we get some sense of when you are hoping to really see some of this reflected in the inspection program.

MR. GILLESPIE: It will be. I have no problem coming back once I get the report in hand and we can deal with it and get people's opinions again.

CHAIRMAN JACKSON: All right. Is a similar thing being done for the project management organization?

 $$\operatorname{\mathtt{MR}}$.$  MIRAGLIA: That brings us to the next slide. The Chairman is moving us along.

 $\mbox{MR. GILLESPIE:} \quad \mbox{Roy is going to cover this slide} \\ \mbox{and I get to have a rest.} \\$ 

[Slide.]

training?

MR. ZIMMERMAN: There are areas for noted improvement with regard to project manager training and qualifications. The Inspector General issued a number of reports over the past year indicating areas where we needed to improve our activities as well as our own self-assessments.

Although there were some findings where individual staff performance could be improved, mostly the areas where we needed improvement were for management to provide clear expectations to the project managers on what we wanted them to do and to provide the necessary training and tools to . 54 accomplish that job.

To that end, in the short-term actions we issued expectations on the interactions with the regional office.

It became very clear from lessons learned from Millstone and from Maine that there needs to be a very close linkage between the project manager, the resident inspector and the region-based inspectors. They need to talk often about activities that they are both working on.

The inspectors in the field benefit from the insights that the project manager has from the licensing matters that they have been involved with both of a plant-specific nature and also the benefit of being here in headquarters and having a generic knowledge.

CHAIRMAN JACKSON: How in fact are you implementing this shared safety responsibility? How are you ensuring or enforcing this integration?

MR. ZIMMERMAN: This is one of the first key messages that we have articulated a number of times. I

personally have done it as well as my direct reports. We have had discussions in workshops in the auditorium to go over the issue that our job is early identification of problems at facilities and declining performance, trying to find those problems early. That is not just the region's responsibility; that's all of our responsibility.

CHAIRMAN JACKSON: How do you ensure that this
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kind of interaction and interaction with the desired outcome

kind of interaction and interaction with the desired outcome occurs in fact?

MR. ZIMMERMAN: We have put a feedback mechanism in place. We have indicated that these phone calls should take place with the region no less often than three times a week. It is documented in our PM handbook.

We have in our process improvement plan a feedback mechanism for the project directors to be able to come back and say that they have monitored these phone calls, they have reason to believe and to support their reasons that in fact we are having success in this area. It is not enough to put out the expectation; there is a need for feedback to test it, to see if it is actually occurring, and we have built that into our process.

CHAIRMAN JACKSON: Have you also built that into your accountability and your expectations in terms of people's actual performance?

MR. ZIMMERMAN: To a degree. We are moving in that direction. We are working on our elements and standards. We see there are some areas that need to be improved so that it is in line with the expectations that I'm going over. We need to do the necessary activities in a coordinated way with our partnership group. That is where we are headed. We are headed to element and standard changes to reflect the points that currently aren't in the .

COMMISSIONER ROGERS: How many times per year would a project manager actually visit the project?

MR. ZIMMERMAN: It varies, depending on the particular site and geography to an extent. Typically it's about four times a year. If it's a plan that is having more difficulties with us and there are more management meetings, SALP meetings, PPR meetings, I would expect the project manager and his supervisor to be making more visits to the site and to the regional office.

COMMISSIONER ROGERS: Okay.

MR. MIRAGLIA: There is broad guidance out on that in terms of the numbers that Roy indicated. There are reasons why that may change because of specifics on the project.

COMMISSIONER ROGERS: I understand.

 $$\operatorname{\mathtt{MR.}}$  MIRAGLIA: There are those kinds of guidelines out there.

MR. ZIMMERMAN: One of the lessons that we clearly learned out of Millstone and the partial core offload is that we have blind spots, and we have to do our best to avoid those blind spots via the communications between the project manager, the resident and the region-based asking for input from the region that we are closing a licensing matter; we are ready to approve this; and talking to the

region and to the inspector in the field about that.

They've had a chance to think about it. They can provide us thoughts that maybe we haven't thought of. We can provide

insights to them on where they can inform inspections, that we have been looking at some activities here that make us think that this particular system might be one that warrants sampling during your next inspection.

That is the coupling that has been there in the past, but we are trying to make it front and center heavy emphasis that that needs to be done. That was a clear lesson over the past year.

Another area has to do with the fact that we have also issued expectations on maintaining the FSAR current. We have put out an internal requirement that the project managers are to update their version of the FSAR with the latest revision within 30 days after they receive that revision, and that we expect that fSAR will be used as they carry out their licensing matters and other readily available portions of the current licensing basis.

Again, not all portions of the CLB are readily available, but there should be a reasoned attempt to add to the FSAR as they go through looking at licensing actions and licensing activities.

Sensitivity to the way we treat and deal with allegers is an area that we have also had significant emphasis in our training to not repeat some of the problems that we have had in the past.

Other issues that have come up -- and we track them actively in our process improvement plan -- get into areas of how do we handle E-mail that we get in. In this day and age we get a lot more E-mail than we used to get from various stakeholders. We have put out guidance about if it's a professional record that needs to be maintained, how it needs to be maintained; does it need to go into the PDR? Answering questions about, is it like a phone call or is it like a letter? We have come a long way in providing guidance in areas like that.

Another lesson learned that we had was if a licensing manager were to call up a project manager and indicate that there is a concern that they are working on and "we just want to let you know about it." What is the expectation of the project manager?

that project manager would let his or her supervisor know,

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get the word to the region so they're aware of it, and mark
it down, that that is an item that maybe is owned right now
by the licensee, but we need to follow up on it in a
reasonable amount of time. That's to stay on our radar
screen.

We have gone over the fact that we would expect

This was really separate from the Maine Yankee and Millstone lessons learned, but we recognized the benefit of rotating project managers on about a five-year period similar to what we do with resident inspectors. A fresh set of eyes is always good to have over a certain period of time.

We have seen benefits clearly in the regions when this has been done. We have been doing it in my organization for probably the last six to eight months, and I will expect the same dividends. Take your knowledge and expertise to another facility. It helps consistency as well.

CHAIRMAN JACKSON: When was this implemented? MR. ZIMMERMAN: I believe it was about six to eight months ago. In our process improvement plan we have the closure date. I have that with me and I would be glad to provide it to you.

CHAIRMAN JACKSON: Do you assign more experienced PMs to more challenging facilities? Do you factor that in? MR. ZIMMERMAN: Yes. We are trying to put our

stronger, deeper individuals on the plants that we find most challenging. I think we have made headway in that regard, but there is still more that we can do.

The process improvement plan, just to mention it again. I believe a few months ago we sent a draft of that document to the Commission. It's a very active document. We are going to continue to add issues to that for us to track, big and small. It seems to be working well.

We have a project manager, project director advisory board. As we look at making changes we provide those changes to this group, almost like an internal partnering group, to give them an opportunity before we update procedures: is there something from their vantage point, from their perspective that maybe we haven't thought of that we need to consider before we make the change? Because changes can be a challenge for people to adapt to. So we have tried to have a grass roots movement that I think has been very successful.

In the long-term actions, we spoke a moment ago about the job task analysis out in the field with the residents. We are getting ready to undertake a similar activity here with the project managers. We are working currently on a statement of work that should be issued shortly. It's approximately a six-month effort, and we will likewise be monitoring it very closely.

We are aware that AEOD is working on a knowledge, skills and abilities developmental activity, and we have had dialogue with AEOD. We want to coordinate closely. We see how this could be a good fit between what we are planning on doing and the larger agency action, and we will incorporate those

CHAIRMAN JACKSON: It seems to me one has to be a part of the other.

MR. ZIMMERMAN: Right. There is a natural feed

MR. MIRAGLIA: We had some activities underway that were related. So there is a clear understanding to make sure that they do fit and there is no unnecessary duplication.

MR. ZIMMERMAN: We try to minimize duplication and build off it.

I quess my closing message on this would be that we are not waiting for the job task analysis, we are not waiting for the knowledge, skills and ability review. We will work in parallel as items come up. We are going to be looking for ways to improve our performance.

CHAIRMAN JACKSON: The jobs task analysis for the PMs has already begun?

MR. ZIMMERMAN: No, ma'am. The statement of work should go out within the next week or two. Right now we are hopeful that it will begin in March. It's the same contractor.

MR. MIRAGLIA: It's the same contractor. So when they are finished with the residents.

CHAIRMAN JACKSON: How long do you think again?
MR. ZIMMERMAN: Six months.

CHAIRMAN JACKSON: Thank you.

[Slide.]

MR. GILLESPIE: Going to the next slide, PRA applications in the inspection program. Here I want to both discuss where we are and the limitations of where we are based on our own regulatory structure and how we are approaching it and how it fits into the overall PRA implementation plan.

We do recognize that there are areas for increased improvement in using PRA in the inspection program. The basic use over the most recent past has been in the prioritization of what we look at, particularly in design inspections, or when you select a sample.

If you select a sample within what safety system am I going to look at for maintenance, what system am I going to look at for this observation or test, then that is where that one chart that seems to come out of all the IPEs generally will get used in the resident offices and by our team inspections. That could be said to be a simplistic .

use, but that dominates how we do use it for right now.  $\qquad \qquad \text{The evolving use gets me into the short-term}$ 

CHAIRMAN JACKSON: Can you give us some examples or at least an example of where you see an opportunity for increased use of PRA in the inspection program?

MR. MIRAGLIA: I think we are going to get into it. Frank is going to talk about the senior reactor analyst and trying to get someone with a little deeper knowledge in risk assessment, having two individuals within each region. Those individuals now are assisting and participating in the maintenance team.

CHAIRMAN JACKSON: That tells me people. You gave an example of how we are using it today in terms of selection of safety systems to review. What else would you be using such people for?

MR. GILLESPIE: I think what we are going to need to do in the future is be significantly more articulate and, to use a term that we have used here before, transparent on how we use risk relative to the balance between support systems and primary systems; how do we allocate things.

The primary source of our information for enforcement is the inspector. As risk gets more inculcated into our enforcement policy as a measure of severity or weighting factor, it's actually the inspector who is the

primary person writing down those initial words on what his observation was. So it is going to be important in the future as we get risk into things like the enforcement policy past what we look at, get involved in how much we look at it.

But the inspector is the source. He is the guy that pulls it together. It all comes together at the bottom, quite honestly, rather than coming together at the top.

MR. ZIMMERMAN: That's happening. We had a meeting just yesterday on a particular plant that we are considering escalated action on. We had the region on the

phone, Office of Enforcement involved, and we were talking about what we do know from the IPE in this particular case, what insights does that give to us. So it is something that is being actively used now.

MR. GILLESPIE: A specific example is, as we change our own rules, it's going to be the maintenance rule. In fact, the SRAs were actively participating in what I will call the risk element of the maintenance rule, which has become kind of a critical element: which systems are classified in what class, how are they characterized, because that leads to what actions will be taken later if the reliability values are found to be deficient.

The other thing is now the inspector, once that

. 6
rule is out there in place, process approved, is going to
have make judgments as to, is this component failing
consistent or inconsistent with the guidelines in place?
That's one rule, and in fact the inspector is now going to
be inspecting against that.

Our approach here. What you see in the slide is two years ago when we proposed the senior reactor analyst program we had also proposed in the risk implementation plan the three level diagram on training. The SRA is the middle level diagram. It's a practitioner who is expected to apply something but not expected to necessarily have the skills to go out and completely do a PRA himself, to get that analytic view in the regions.

He coincidentally hit, if you will, or got in place at the same time the maintenance rule was happening. It came together very nicely and they participated on them.

In addition, to make sure that they did have the analytic background, 29 of the 39 presentations on the IPE results were given by the SRA when they were doing their rotation through Research, when they were giving it to both the PMs and the regional staff, to make sure they were familiar with the facilities that were going to be in their regions. So we really through the training program have tried to elevate them to that second level.

I will go to the last bullet, which is the PRA .  $\\ 6 \\ \text{development course for inspectors on long term. Basically} \\ \text{what we have got is a course we are putting together with} \\ \text{TTC which is going to treat PRA as a basic technology that}$ 

should be known by each inspector and reviewer.

Much the same way we have a GE or Westinghouse or B&W basic technology course we expect inspectors to have gone through, we are looking at a two- to three-week course which takes the individual courses and lessons learned from the SRAs going through it and comments and puts them together in a two- to three-week comprehensive course that is intended to be the bottom level of what was on the risk implementation plan.

That's a person who knows enough about it and how it's applied so as he sees it applied in a 50.59 review he might be doing, as he sees it used in a continuing categorization of a failed component, or he sees it as part of the justification for a change to the plant, he has the wherewithal to either make a judgment that he can say, yes, that looks okay, or "I need to call the SRA who is my backup back at the region who is at the next level in the thought process and the reference period."

So what we are trying to do is have the people in place with the talents to keep pace with the change to what

they are inspecting to, because, quite honestly, we still have to inspect to the rules that are in place today and the .  $\qquad \qquad 67$ 

license that is in place today. But as that becomes more risk oriented or risk has an application of compliance or inspectability, we have to really have the people there with the tools.

That is where our focus is now, getting them prepared. We were right there at the right time with the SRAs, which was a very nice coincidence to have occurred. I would like to say we planned it that way two years ago, but it worked out very, very well.

 $\mbox{CHAIRMAN JACKSON:} \quad \mbox{There are some pilots going on} \\ \mbox{on risk informed tech specs, ISI, IST.} \quad \mbox{Do we expect those} \\ \mbox{to have} \\$ 

MR. MIRAGLIA: As those programs are developed, then we will have to say if the rules are changing in that area, then that has impact on how we have to train and how we have to prepare the people.

MR. GILLESPIE: Absolutely. The engineering inspector in the region who traditionally inspects ISI now has to have this other tool in his background. Once you say the program is okay, the implementation of the program is left to that engineering inspector in the region. He is now inspecting a different technology, a different set of records, a different approach, and making judgments as to reduced frequencies because of lack of flaws found or increased frequencies: are they proportional?

It's as much reliability engineering as PRA in the aspects that the inspector is looking at. So we think we can give the inspector that level of tools, although we are not making him a full-fledged analyst.

That is where we are going with that, and we are trying to keep pace.

The next slides really come together totally. We call it performance assessment process.

[Slide.]

MR. GILLESPIE: The short-term actions as we are looking at improving our performance assessment process. This has been a particular interest to the Commission for a time now. It has also been an interest to us. We would like to improve ourselves.

We have issued some management directives which very much try to document what we are doing today. There is a diagram on one of these management directives which has lines going all over the place. My simplified view of that is actually the last picture on this whole package, and it's listed as backup slide.

[Slide.]

MR. GILLESPIE: It becomes very important only because what we have done is we have set up our system with the plant issues matrix to mesh the plant issues matrix report. Now what we are doing is identifying where do the

facts of the situation of our process come from.

This diagram tries to show that the inspection report is where everything really starts to come together; every LER is followed up on; AITs have results, and those are followed up on. Inspection reports become not the only source but a significant source of assessment information.

 $\hbox{After that $--$ and this gets to the root of what I} \\$  was calling diagnostics before \$--\$ you are basically dealing with the same database but you are refining it into

different levels. The PPR uses the same information; the senior management meeting uses the same information. Every three PPRs you do a SALP. It uses basically the same roll-up of information.

This will introduce me to my second to last slide, which is, how could we use technology now to maybe help us in this as the agency comes out of an era of the early 1980s of technology or information management, which was really document management, into the technology of the late 1990s where we are going to try to use information management to help us do this and to get more diagnostic, more transparent, if you will, into the whole process?

So the short-term action really here in these management directives was to document what we are doing today in a way that people could understand it.

needs to be considered and how does that factor in. I think what you can see is that leads to this idea that we have to be able to digest more information more rapidly to do it efficiently and not get inundated with the weight of our own paper in our inspection reports. We need a rapid indexing to the information.

We also then have the Arthur Andersen report that

The next diagram, which is a pictorial, while it says future assessment model, this actually lays out the information sources that we currently have in the current system.

The problem with our information in the current system is that they are basically disconnected. If I want to know what were all the items in our compliance found at a Westinghouse four loop plant, I've got one computer that tells me what are all the Westinghouse four loop plants, but I've got another computer that tells me what all the items on our compliance are, and while the docket number should be able to relate this information together, the two computers don't talk to each other. So you get a manual printout from here and a manual printout from here, and immediately you are in a system that is so awkward we don't do it.

CHAIRMAN JACKSON: Is IRM in the room?

MR. MIRAGLIA: No.

MR. GILLESPIE: What this is trying to do is be a pictorial. What we are looking at in the inspection report . 71 half on the plant issues matrix that was developed and has

nair on the plant issues matrix that was developed and has evolved is as an index to the details in the reports. This will both be technology and program.

We are going to be coordinating changes to our manual chapters and process to describe how we do things with the introduction of the technology because it is going to change what an inspection report looks like from today.

For us this is a relatively high risk operation because we have never done this before. It is pulling an awful lot of information together from a lot of dislocated places right now to try to put it into the same useful form. Which gets me to the next slide, because the key is being able to access and sort information rapidly.

[Slide.]

MR. GILLESPIE: Reporting and information technology is, I think, going to be key to our success here. If I could describe this in a way that Commissioner Diaz explained it to me, he saw the diagram, and he said, I'm glad you got rid of the triangle on the backup diagram.

Once you identify where is your basic factual base

coming from, then you can get a sense that everything after that is a different sort on the same information. Now the question is, how do we want to sort the information?

If I can relate the facility's characteristics to the docket number, which gets me a relationship then to the 72

list, then I can do peer plants much the way AEOD does their performance indicators right now, and I can look for correlations; I can do a lot of diagnostics that I can't do today. Not because we don't have the information, but because we have so much information.

The ability to diagnose, sort and filter the information is extremely tedious and manpower intensive. That is one of the complaints from the residents. They are doing what they are doing today manually. They are rehashing it for the PPR: they are rehashing the same stuff for the SALP. If we can come up with a way of doing the cutting and pasting in the electronic form rather than the manual form -- in fact, Region II even graphs these on graph paper with pencil and ruler manually.

CHAIRMAN JACKSON: You've got to be kidding.

MR. GILLESPIE: I have to automate it. We have to come out of docket management into information management, and it's a 20-year leap in technology for us.

CHAIRMAN JACKSON: And you are going to do it in two years?

MR. GILLESPIE: We are hoping to do it within two years. That is what our commitment is. We are hoping to prototype this in a full region within 12 months. I'm going to give it one heck of a try.

CHAIRMAN JACKSON: Twelve months. I'm writing

this down.

MR. GILLESPIE: We have two what I will call small prototypes that we have actually tried in our own LAN environment already with regional participants. With time I am gaining more confidence that it's fairly doable.

We found some glitches in the whole system, things you would think smart people -- we're all engineers -- should know. In the last two years we have created a number of databases and we were smart enough to use the same kind of off-the-shelf commercial software, but we weren't smart enough to label everything the same. So docket numbers in one system are zero five zero dash something; in another system it's five zero dash something; and they don't even talk to each other.

CHAIRMAN JACKSON: This is where the CIO organization should be helping you out, because your jobs are one thing. The best way to handle information is another thing.

 $$\operatorname{MR}.$$  GILLESPIE: If I could jump into the conclusion on 14.

[Slide.]

MR. MIRAGLIA: I think, Frank, we ought to say we have been coordinating with IRM.

MR. GILLESPIE: We have joint project managers with IRM and my organization and people working full time in . \$74\$ both organizations to try to make this work. Actually we

have no conflicts. The conflicts are technological ones.

CHAIRMAN JACKSON: All right.

MR. GILLESPIE: The conclusions. We have an evolving program, particularly as it applies to inspection. One of the conclusions and one of the strengths, I would

say, of the inspection program which we have been talking about is the discipline of having an inspection manual in some detail and generally having a baseline to change. That includes detail in training, detail in how we do things. If we have an unusable procedure, at least we can point to it and know what we have to change. That is a strength, the discipline we have approached it with.

Both self-assessments and external reviews have led to program improvements. I would not want to claim either one is stronger than the other. They tend to fit together and actually be self-supporting.

Future direction will be closely coordinated and integrated. This is this tying of the diagnostic and the inspection and a recognition of how it's the same group of people doing it. So we have to give them the tools to do it as best we can.

The balance between operations and design is going to be with us long term as we make decisions: Is it staff?

Is it contractor? And out of the whole how much is it?

What is the safety significance? How does it queue up?

Performance assessment I've touched upon.

Our real challenge is how do we use technology to try to get us this giant leap forward in the technology area.

With that, I thank you.

CHAIRMAN JACKSON: Thank you.

Commissioner Rogers.

COMMISSIONER ROGERS: I think this is very interesting. A lot of questions I had when I walked in here got answered, but let me touch on a couple of points.

On your performance assessment backup slide, one of the problems that I have with this is that it looks like it's a totally event driven process.

[Slide.]

COMMISSIONER ROGERS: It starts with an occurrence observation or allegation. It looks like there is something external to what we do that starts a process. In other words, it looks like it's event driven and not initiated in a certain sense by us.

MR. GILLESPIE: That's my drawing problem. The observation piece is our routine program. We have got 434 people out there who are for the most part working the observation aspect of it.

What I was trying to do is get a recognition of

even when we have an event and have an AIT, even the AIT report is basically an inspection report while we call it something else because it doesn't generally come through to compliance. But any unresolved issues or any compliance items or problems that come out of that event-driven end up right back in our system of observations, because it's the inspector where the rubber meets road who has to follow up on it.

This was only intended to show that really we do have a way. If all the information comes together in enough of a bottleneck, we may actually be able to deal with this if we can deal with how we articulate our findings. We added in the PIM about a year and a half ago, and if I wrote an inspection report so that the list item was in the executive summary and every list item has detail in the background of the report and it's a relationship, and I index that item to SALP functional area, cause code -- in

fact in the second part of the Arthur Andersen report there is one page on it which had, here's what we did to come up with what we have; we think you should consider these other things. But we didn't do it.

If you look at those other things, they look very much like the LER cause codes; it's procedural compliance personnel over design.

So observation should probably be in much bigger letters than occurrence and allegation follow-up.

Observation is what we do day to day.

CHAIRMAN JACKSON: You should capitalize it.

MR. GILLESPIE: Yes.

COMMISSIONER ROGERS: We don't want to be controlled simply by events.

MR. GILLESPIE: No. Absolutely not.

COMMISSIONER ROGERS: Otherwise we will be chasing those all the time and not taking another kind of look.

CHAIRMAN JACKSON: I just think it's presentation.

COMMISSIONER ROGERS: The other point on performance assessment is that I was just curious as to what your view of performance assessment is compared to the one that the materials people have, particularly in looking at waste sites. They have a rather large performance assessment, or had a large performance assessment effort there. I wonder if the terminology here is really basically the same or different, and whether you had looked at their

MR. GILLESPIE: I have only got a sketchy background on high level waste. Performance assessment in a . 78

waste sense is the assessment of the repository?

approach to performance assessment.

 $\label{eq:commissioner rogers: No. It's not just the high level.}$  Level.

MR. THOMPSON: It's a modeling process, which ends up with a release rate into the environment. The words are the same, but they really are focusing on something different.

COMMISSIONER ROGERS: It's the process that I am talking about. I'm not saying they should be the same. I am just asking whether you have looked at and understand any comparison between the two.

MR. GILLESPIE: We are not trying right now to create a mathematical model. So in that sense it's different. In principle, my view would be that the PIM should actually be part of a report, because the licensee then gets to see it. If the licensee agrees with the fact that the inspector saw, now maybe I have a fact, and now I can index and classify the fact.

MR. MIRAGLIA: I think the key is we are assessing a different type of performance. I am not that familiar with the performance assessment models used.

COMMISSIONER ROGERS: I don't want to get into it too deeply here, because it might take us a little bit far afield. I just want to raise the point that we are using terminology that has kind of a superficial look about it

that is trying to achieve something close to the same thing in one area versus another. I am just asking you to make sure that you understand anything that might be beneficial that comes from that.

MR. THOMPSON: The more we go to performance-based regulations in the reactor side the better overlay there will be, that is, where you can actually do some information input into a model and you do calculations that come out to drive some aspect of your evaluation to something that matches your regulatory criteria. In those cases they will actually come closer as we get that way.

COMMISSIONER ROGERS: As you use this approach to performance assessment that you sketched out, Mr. Gillespie, it does seem to me that there may be a little problem here in that we are moving back into the use of judgment.

I'm not averse to that, but I think we ought to recognize that in looking at the total ability of a system to perform. You cited some examples which I think were very good, the tank problem. That came about because somebody exercised some engineering judgment in looking at it. That was a darn good thing.

So it's not a bad thing to use engineering judgment in this performance assessment, but I think we ought to recognize that that is probably going to have to be a part of it. At any rate, I would ask you to think about . 80 that and address it as you proceed.

The other point is that I am a little concerned about the resident inspectors. I wonder if you are not perhaps overloading them. They have got a heavy burden here, and I think particular care should be taken to see that as you add into their activities these new responsibilities that they get the kind of personal support that they need to be able to get through this initial period.

MR. MIRAGLIA: I think the job task analysis will certainly give us a basis to evaluate that in a very conscientious kind of way.

MR. GILLESPIE: Let me give you an example of the feedback from the job task analysis. There is real aggravation with the residents about preparing PPR packages, SALP packages, senior management meeting packages, and cutting and pasting. In fact, what we are trying to do with the technology is, if we could standardize that, I can relieve them of that burden of right now literally manual cutting and pasting and then Xeroxing it to make it look like an original piece of paper.

One of the objectives is to actually reduce that burden through some sense of standardization and who does what function. In fact, to try to reduce the cutting and pasting or administrative burden of the whole thing all . 8 across the board.

CHAIRMAN JACKSON: Frankly, I think one of the greatest achievements in addition to actually saving in terms of people spending their time on administrative things is that in fact it can help to ensure actual consistency of approach as you move up the line from PIMs to PPRs to SALPs to whatever.

MR. MIRAGLIA: I was going to say something very similar. In terms of not only efficiency and technology, it will have us look at the functions: What functions are we performing? Are they clearly the expectations out there and are they understood? I think that is another thing that is going to be an outcome of that. It is going to be an iterative type process. We are going to learn as we go

CHAIRMAN JACKSON: Commissioner McGaffigan.

COMMISSIONER McGAFFIGAN: I don't want to get into things that we are going to do next week, but this last backup slide I think is one of the best things I've seen since I've been here in trying to get a lot of information down on one piece of paper.

The plant issues matrix, when you get through this computerization that you are going to do, is it going to be the central document? It seems to be on this slide. If you have a good plant issues matrix, then everything else flows

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from it. So that's the heart of it?

MR. GILLESPIE: Yes.

COMMISSIONER McGAFFIGAN: We talked in my office the other day and you just mentioned some day the goal is to be able to -- at the moment, as I understand it, licensees every six months get an update to their inspection plant, and it is sort of like reading tea leaves or the Kremlin wall: Where is the NRC today? They are worried about X, Y and Z; there is a change there, therefore I better do something. But we don't convey any more information than that. If we could convey the plant issues matrix, would we be conveying a lot more information?

MR. GILLESPIE: Yes. This is something that has kind of come up. It is a public document. If someone submitted an FOIA request, we would release it; we wouldn't fight it. So then the question came up among the staff, well, what is the best place to promulgate it since it's a critical element in going into the PPR relative to the summary document?

What we have toyed with within my group is going to be a recommendation to the regional administrators that we just attach it to the letter that already goes out with the inspection schedule.

We just instituted this process last year. Each region approached it differently, and there are differences in consistency. I think our goal is we don't want to have one PIM in Region I looking very different from Region II. So we are evolving. We are going to get there. At a point in time I think we can share this information. That is our goal and objective.

 $\hbox{ CHAIRMAN JACKSON:} \quad \hbox{We may do something to hurry} \\ \hbox{you along in the process as a motivator for driving toward} \\ \hbox{the consistency faster.}$ 

MR. MIRAGLIA: That's the goal. The PIM was a tool that we tried to use and we are learning. There are differences; they are getting closer together; and as we get to that point, as Frank says, I think their recommendation will probably be accepted. It's just to make sure that everybody is doing it in a consistent kind of manner.

COMMISSIONER McGAFFIGAN: I would agree entirely on the consistency. From my perspective, this all leads into the senior management meeting and the watch list and all that sort of stuff. It would be nice to be conveying to all 108 operating plants where we think they stand every six months.

I think somebody said the PPR drives resources

around here, and since it drives so many resources, the outcome shouldn't perhaps just be the X number of plants that are on the watch list; it should be information conveyed to everyone.

MR. MIRAGLIA: It's a tool to the whole process, and we have to make decisions on how to apply the resources to all 110 plants. This is the mechanism for doing that.

Another issue with respect to the PIM besides consistency is we need to have a common understanding among all of the regions and ourselves as to what is the threshold for putting something on there.

 $\label{eq:commissioner mcGaffigan: Right. When is it an issue?}$ 

MR. MIRAGLIA: Yes, and that is another thing where there are differences and we are trying to sort out.

I think we are striving to that same goal and objective, and the question is how soon can we get there.

MR. GILLESPIE: Because we are in a public environment, we have a programmatic requirement that each PIM item actually have its reference. Nothing is really allowed to be on the plant issues matrix that doesn't have a reference. The reference will be either an inspection report or an inspection report which then gets you to like a licensee report, because what we are interested in is, is the licensee system working? Is he finding and correcting.

things also?

So it's important to note that we give credit on that. The basic question is, if you find something wrong at a facility, that thing not showing up again is some evidence that the root cause has been fixed. If that thing shows up again even though it was fixed once, then you have to question whether it has been fixed. So there is a trending nature to why you would want put even things that we give them credit for in one report on it if they are safety significant.

We are thinking out how to use the PIM. These are the thoughts that we had in place when we put it in place. It becomes an index then to what is in the reports, because it does have that link to a public document. The details are in there.

COMMISSIONER McGAFFIGAN: Thank you.

CHAIRMAN JACKSON: Your backup slide is a big hit, because what I want to tell you is that Commissioner Diaz asked me to, and I will just read it, commend the staff for transforming the pyramid into a functional line process that is conducive to implementation of pass/no pass filters and actual weighted feedback to decrease or prioritize information for decision-making. N. Diaz.

interested in this and obviously is closely monitoring it.

I think you have begun to address it as a guide to a thought process. Your backup slide suggests this.

As you continue to implement the improvements you talked about and others, what we are particularly interested in is how our NRC staff activities provide the inputs into the assessments that we make and the regulatory actions that follow from those assessments, and then how they lead ultimately to our attaining and providing to the public and the licensees a clear and coherent picture of their performance, the performance at operating reactors in this

particular case.

 $\label{eq:wear} \mbox{We are looking forward to the additional} $$\operatorname{Commission meetings.}$ \mbox{Again, thank you very much.}$ 

 $\ensuremath{\text{I}}$  would like to remind the Commissioners that we do have an affirmation session.

 $\label{eq:continuous} \mbox{[Whereupon, at 3:55 p.m., the briefing was adjourned.]}$