UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BRIEFING ON NRC INSPECTION ACTIVITIES

PUBLIC MEETING

Commissioner's Conference Room 11555 Rockville Pike Rockville, Maryland

Friday, May 31, 1996

The Commission met in open session, pursuant to notice, at 10:04 a.m., the Honorable SHIRLEY A. JACKSON, Chairman of the Commission, presiding.

COMMISSIONERS PRESENT:

SHIRLEY A. JACKSON, Chairman of the Commission KENNETH C. ROGERS, Member of the Commission GRETA J. DICUS, Member of the Commission

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STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE:
JOHN C. HOYLE, Secretary of the Commission
KAREN D. CYR, General Counsel
JAMES TAYLOR, EDO, Executive Director for
Operations
WILLIAM RUSSELL, Director, NRR
R. WILLIAM BORCHARDT, Chief, Inspection Program
Branch, NRR
STEVEN STEIN, Senior Technical Assistant, NRR
JOSEPH SHEA, Project Manager, NRR
EILEEN MCKENNA, Senior Reactor Systems Engineer,

JAMES LIEBERMAN, Director, Office of Enforcement

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PROCEEDINGS [10:04 a.m.]

 $\label{eq:CHAIRMAN JACKSON: Good morning, ladies and gentlemen. } Good morning, ladies and gentlemen.$

The purpose of this meeting is for the NRC staff to brief the Commission on NRC operating power reactor inspection activities, including the results of the evaluation of the spent fuel pool licensing basis review, the final safety analysis report inspections, and the 10 CFR 50.59 review.

These activities were initiated in response to problems that became evident at the Millstone Station, but the activities are not limited to Millstone. The Commission is particularly interested in what safety significance the staff's findings have and its plans for future action.

The content of safety analysis reports, the knowledge of the plant's current licensing basis, and the need for consistent guidance regarding what changes licensees can make to facilities without prior NRC approval are all related issues. The staff's resolution of these issues may have far-reaching implications for NRC licensees and the NRC staff's oversight.

For example, as more programs are being placed under licensee administrative control, the agency must have confidence that subsequent changes to these programs are

adequately reviewed and appropriately documented. This will require the development of appropriate and consistent guidance and confidence that the staff and licensees have a clear understanding of what is considered to be a plant's

current licensing basis and what activities are controlled by 50.59.

This process, again, is particularly important as the nuclear industry moves to more performance-oriented regulatory approaches, and I have spoken about this within the context of the movement to the improved standard technical specifications and the control that it places in licensees' hands with respect to changes in parts of the tech specs.

Now, I understand that copies of the presentation slides are available at the entrance to the meeting. Commissioners, do you have any opening comments? If not, you may proceed.

MR. TAYLOR: Good morning. With me at the table are Jim Lieberman, Director, Office of Enforcement; Bill Russell, of course, from NRR; and, the following staff are Bill Borchardt, Joe Shea, Eileen McKenna, and Steve Stein. All will participate in the briefing this morning.

There are activities that will be talked about that will potentially result in changes in the inspection program and potentially changes in the regulations.

Bill Russell will continue.

MR. RUSSELL: If I could have slide number two, please.

[Slide.]

MR. RUSSELL: I'd like to set the stage with the approach that we're going to take for the presentation.

The first area that will be covered is I will go through some of the regulatory requirements that currently exist to put those in overview, because they will be coming up many times in the subsequent presentations.

We will then go through, in some detail, with Joe Shea presenting information on the spent fuel pool licensing basis review, what some of the findings were, and the implications, followed by Bill Borchardt, who will cover the FSAR inspection activities and findings and what we are proposing to do by way of making some modifications to our ongoing inspection efforts to look at design basis and licensing basis.

Jim Lieberman will talk about what we're doing to get consistency in our enforcement processes as it relates to design information and where the staff stands in developing enforcement guidance which would be coming to the Commission.

We're going to talk quite a bit about 50.59 review, the action plan and what's the history of the 50.59

regulation, and where we are going longer-term in that area; that will be done by Eileen McKenna.

Then, because we had so many activities going on and, as the Chairman mentioned, these are all interrelated activities, I initiated a task force, led by Steve Stein, to pull the information together from the various activities that we would be discussing, as well as the information that's coming from our lessons learned from the Millstone review, with the team inspections and the other things going on up there. So Steve will lay out how we're pulling this information together and what the schedule is in the near

Following that, before going into discussion of schedule, I will identify what are some of the broader implications and issues that need to be addressed as it relates to licensing, inspection, enforcement and reporting requirements with respect to NRC's regulatory programs.

I'll talk then broadly about the schedules and the plans that we have to interact with the Commission on those major policy issues.

If I can have slide three, please.

[Slide.]

MR. RUSSELL: By way of an overview of the regulations, I wanted to start with 50.34 first. This relates to the applications, the final safety analysis

report, and, broadly, the required information to be submitted that would be related to the design basis, limiting requirements as it relates to operations, and, most importantly, the safety analysis, including the functional requirements, the bases, and the justifications to show that the safety functions would be performed consistent with the application.

The second area is 50.2, which relates to definition of design bases, and these are functions to be

performed, required; requires you to identify the controlling parameters and the controlling parameters are derived from the analysis and they are necessary to assure that structures, systems and components are capable of performing and meeting their functional requirements.

50.36 relates to the technical specifications which are incorporated in each facility license. They are also derived from analysis and evaluations submitted as a part of the final safety analysis report and amendments to the license. It includes definitions of limiting safety system settings, limiting conditions for operations, surveillance requirements, design features, and administrative controls. These are generally the issues that are more operationally focused and it relates to the recent rule change which identifies the threshold for things which would be controlled by technical specifications, as

compared to things which would be controlled by other regulatory documents, such as the final safety analysis report.

As the Chairman mentioned, this is quite important because as we move to the new standard technical specifications, in items which in the past were controlled by tech specs and the amendment process are moved to the FSAR, they may be changed under a 50.59 process without prior Commission review.

Slide number four, please.

[Slide.]

MR. RUSSELL: There are a number of requirements which are imposed related to maintenance of the license. 50.54 establishes conditions to the license. These generally involve the quality assurance programs, requirements to submit information under oath or affirmation when requested.

And there is one nuance here that I'd like to identify, and that is within 50.54(f), the phrase "current licensing basis" is used and there is an exception, a compliance exception for requesting information under oath or affirmation; and that is, any time there is a question about whether a facility currently complies with its current licensing basis, there is not a need to justify the burden associated with requesting that information; that you can

request information related to compliance without going through a regulatory burden analysis for providing the information.

I would point out, however, that current licensing basis is not defined in Part 50. It's in Part 54.

Other matters covered under 50.54 are such things as safeguard requirements, requirements for emergency plans, insurance, how you handle a bankruptcy, national emergencies, etcetera. The ones that are governing typically are associated with quality assurance and the requirements of the quality assurance activities to maintain the facility design basis.

The next area, 50.59, that will be covered in quite a bit of detail by Eileen McKenna and I won't go through that at this point.

50.71(e), the rule as it relates to updating the final safety analysis report. This rule is quite broad. It requires that all changes that are needed to reflect information and analysis submitted to the NRC, facility or procedure changes, analyses in support of amendments, or analyses performed by or on behalf of the licensee which have been requested by the NRC, should be incorporated into an update of the final safety analysis report.

Practice has not been consistent with that broad description of the rule. This is an area where I believe

the rule is satisfactory, but there needs to be guidance as to what is sufficient set of information to be included in FSAR updates.

50.90, applications for amendments to licenses. In 50.91, which relates to public notice, significant hazard or where there is no significant hazard, are also related. License event reports; this is important because design issues, potential for operation outside the design basis are reportable, both under 50.72 as it relates to event reporting and 50.73 licensee event reports and more routine reports.

The last one is 50.9, and this is completeness and accuracy of information. It essentially requires that information submitted to the NRC be complete and accurate in

all respects. And so we have some issues with respect to missing information from FSARs or incomplete information or inaccurate information.

And, finally, I mentioned earlier license renewal. That's the point in the regulations where we have defined current licensing basis. We have not done that under Part 50 and that's something which does need to be looked at and is a potential for a rule change in the future.

We will be discussing each of those regulations as we go through the next series of presentations. What I'd like to do first is have Joe Shea cover the spent fuel

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licensing basis review. Joe?

MR. SHEA: My name is Joe Shea and I served as the lead project manager in NRR for the recent spent fuel pool licensing basis review or survey.

The survey project was developed to meet one of the commitments made in the December 28, 1995 memorandum regarding lessons learned from recent activities at Millstone Unit 1 and specifically at Millstone in the summer and fall of 1995. There was a concern that core offload practices, refueling practices were not consistent with the design of the spent fuel pool decay heat removal systems, as those systems were described in various licensing documents.

The survey was designed and implemented to gauge the extent to which offload practices at other plants were or were not consistent with the design and licensing basis of fuel pool decay heat removal systems at those plants.

We had two goals or objectives for the survey. The first one follows off what I just said, to determine if each plant was in compliance with its current licensing basis with respect to spent fuel pool decay heat removal and core offload practices. And as we referred to a moment ago, the current licensing basis is not specifically defined in Part 50.

So for the purposes of my discussion, as we were doing the survey, we looked at licensing documents --

specifically, the tech specs, final safety analysis report, and licensee submittals and staff reviews of relevant license amendments. Those license amendments typically included spent fuel pool capacity increases, reracks that is, or amendments to allow the use of increased enrichment in the fuel.

In addition, we looked at certain other docketed correspondence that may or may not have been related to a license amendment.

Our second objective was to collect detailed design information on the spent fuel pools and their associated support systems for all plants, and this was done to assist in resolving the staff's open task action plan on spent fuel pool storage safety. This action plan was opened in October 1994 in response to a couple of activities. The first one was a report filed under 10 CFR Part 21 regarding concerns about the adequacy of spent fuel pool system design at Susquehanna and, in addition, the action plan was looking at follow-up to service water system failure that occurred at the shut-down Dresden Unit 1 in January of 1994.

The staff determined that certain issues coming out of both of those events warranted a generic look to see if there were possible outliers or potential enhancements on a plant-specific basis or opportunities to enhance the regulations.

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The scope of the survey project, as I mentioned, was to look at all operating reactors, and there were two key elements in executing the survey. The first point was to determine what were the licensing requirements for each plant. The staff reviewed the licensing documents that I described and we were looking specifically for limitations on offload practices that were expressed or implied by licensing documents either in the discussion of the plant spent fuel pool decay heat removal system design or in discussions of refueling practices in those documents.

And once we determined what the requirements were for each plant, the second aspect of the survey was to go out to each plant and look at the procedures, the practices and analyses that the licensees had in place by which they could demonstrate that they were in compliance with those requirements, and that part of the project was done by all of the NRR project managers with assistance, as necessary, from the region and resident staff.

If I could have the next slide, please.

[Slide.]

MR. SHEA: We completed the information gathering in early April and spent some time compiling it and determining what findings we could gather out of the information we had recovered and came to a couple of conclusions.

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Overall, we concluded that for all plants, based on existing practices or as a result of actions taken during the course of the survey or commitments made by licensees during the course of the survey, refueling practices are consistent with the licensing basis or will be prior to the next outage for all plants.

Notwithstanding that, we did observe during the survey that there were some plants that made revisions to their licensing basis to make it consistent with their existing refueling practices or the practices that they intended to undertake. As a result, the staff observed that those plants may not have been in compliance with their licensing basis in the past, if they were, in fact, changing the licensing basis at this time. So we documented the plants that we could make that categorization for.

And a little bit additional on that note, some of the plants were changing the licensing basis at the time we were doing the survey through the amendment process; that is, they had license amendments pending which specifically addressed in detail spent fuel pool decay heat removal and reflected what their practice was. In looking back, we observed that their previous licensing basis may not have specifically bounded their past practices.

Other licensees revised their licensing basis pursuant to 10 CFR 50.59, and typically those plants -- it

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involved evaluating changes to spent fuel pool temperature limits and doing the accompanying regulatory analysis for that review.

I want to emphasize that we did not do a comprehensive look at the history of refueling outages for all plants. We realized that refueling practices have changed over the life of the plants, as well as the licensing basis for the plants have changed. So we only looked historically to the extent that we needed to understand what the current practice was.

I also want to discuss some findings we made with regard to 10 CFR 50.71(e), which, as we discussed earlier, requires the licensees to periodically update the final safety analysis report to include information that was submitted in support of a request for license amendment. And during our review of what the licensing basis requirements were for each plant, we did observe that for some facilities, the FSAR did not reflect information that had been included in past license amendment documentation.

It's not necessarily to say that those plants were in violation of 50.71(e). 50.71(e) has an update window. It requires licensees to update the FSAR annually or not more than six months after a refueling outage, not to exceed 24 months overall.

So for a number of the plants that we listed in

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the report, those plants fell within that window. Just as long as they update the FSAR within the required periodicity, there wouldn't be a specific concern about compliance with 50.71(e) for those facilities.

CHAIRMAN JACKSON: So you actually did delineate which ones fell within this maximal 24 month window and which ones did not.

MR. SHEA: In the process of going from the survey overview report to documenting the details of our findings for each plant, the plants that we had listed, we did, in fact, delineate those that had a potential compliance problem and those that were clearly within the window and for which there was not a problem.

So for both the plants whose practices may not have been consistent with the licensing basis and those that have the FSAR update issue, our future activities will include documenting the details of our findings for each of these plants and putting them in a plant-specific NRC inspection report and, as appropriate, statusing that as an unresolved item and allowing that to be pursued by the staff and the licensee in the normal manner, which may end up in closing the unresolved item or may lead to enforcement, depending on the specifics of the case.

CHAIRMAN JACKSON: Given, though, that you do then

have some sites that have FSARs that did not reflect the

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information from past license amendments and to tie that back into your earlier statement with respect to plant refueling outage practices and your statement that they are all consistent with their licensing basis for 1996 and the future, that's on the basis of the fact that some clearly did have their FSARs completely updated and they were in compliance and then some are in this migratory pattern, where they're either changing their practices or changing the FSARs, as appropriate, or they've made commitments to do

MR. SHEA: That's correct.

CHAIRMAN: Is that a correct statement? MR. SHEA: That's correct. And the fact that the information is in license amendment documents, but not in 50.71(e), it still is within the licensing basis. So if we found the practice consistent with the most current licensing documents, if, in this case, it was a license amendment, then we could make that finding that they were in compliance for that plant with regard to their offload practices. It still means they may need to update the FSAR to reflect the license amendments which are elements of the licensing basis.

CHAIRMAN JACKSON: Let me ask you this question. Many sites, over time, have submitted license amendments relative to their spent fuel pools. So a question that

would naturally arise is have we determined why some of these issues or problems identified during the survey were not identified or would not be identified during the normal review of the amendments?

MR. SHEA: We did. In fact, go on to the next slide.

[Slide.]

MR. SHEA: Despite the fact that the spent fuel pool and cooling systems are relatively straightforward systems, consisting of a pool and typically a couple pumps and heat exchangers, we found that the licensing basis for that system varied fairly significantly across the population of plants, and that came for a couple of different reasons.

Individual plants had different system configurations. While they may have had two pumps and two heat exchangers, at some plants, it may have been two relatively smaller pumps and heat exchangers, with a relatively low capacity, compared to what you might put in during offload at other plants with two pumps and trains. They may have had very large capacity trains, so that each train could handle what may be associated with up to a full core offload.

So, again, there were variations in the designs of plants, of spent fuel pool cooling systems in plants, all of

which we had reviewed and accepted.

In addition, the licensees and the staff, over time, varied in their level of detail that they used to describe their systems and our basis for accepting those systems in various licensing documents.

As an example, the standard review plan, in laying out guidance for reviewing spent fuel pool cooling system design describes two cases for decay heat load that you would analyze to assure the system is sized properly. In the standard review plan, they're referred to as a normal and abnormal heat load.

In some cases, licensees would go beyond that in their submittals, describing cases that more closely reflected the heat loads and the offload practices that they expected to see at the plant. In other cases, licensees provided information that was consistent with the stylized cases under a standard review plan.

In addition, when licensees submit detailed information, perhaps a range of cases that would provide an envelope of the expected operating practices, the staff didn't necessarily always speak back to that in their review. We may have, in a number of cases, simply taken those pieces of the licensee's submittal which were consistent with the standard review plan and looked at those, discussed those in our safety evaluation and made a

finding on acceptability based on that. So it left the additional information that the licensee submitted unspoken to by the staff.

So, again, it made it somewhat more difficult to determine what were the limits on the plant operation that the licensee had submitted and that the staff had reviewed and accepted.

CHAIRMAN JACKSON: I guess I'm also asking another kind of underlying question that relates to that. That has to do with if a license amendment is being processed, what is the fundamental reference document? What licensing basis document does the project manager or whoever is processing the amendment use to do these various assessments with respect to?

MR. RUSSELL: Maybe I can address that issue. The practices have changed with time. Prior to the development of the standard review plan, it was a case-by-case review and you'd build on the information from the prior review from the standpoint of scope and depth of review.

Following the issuance of the standard review plan, the practice was to use those portions in the standard review plan that were applicable to the scope of the amendment that was being requested and then to document and make findings, as required by the standard review plan, with the objective of the standard review plan to ensure

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consistency of review.

This was going on and appearing that requirements were changing when there were quite a number of initial licensing cases being done and the requirements were changing with time. We have not updated completely the standard review plan for several years. That process is ongoing now and we expect to issue the standard review plan for public comment very shortly. There are other sections in the standard review plan that are being developed, particularly the area of instrumentation and control, probablistic risk assessment.

But the tool that's used to ensure consistency of technical review is the standard review plan and it's to be used, to the extent applicable, based upon the scope of the amendment requested.

In most instances, the licensee submits information, whether it be FSAR pages, analyses, other information with their particular request, so that all of the relevant information comes in to approve that request. Then that's reviewed against the standard review plan and there are requests for additional information is missing or if the information submitted is not clear. But that's generally the process that's followed using the standard review plan, but that was evolutionary with time. And the early reviews, particularly some of the older plants, did

not have the benefit of a standard review plan to guide the review.

CHAIRMAN JACKSON: I understand that and I appreciate that, again, but let me just go back to this. Presumably, if a licensee submits a licensee amendment request, there are presumably some design basis assumptions in that request and that refers them to presumably the then existent licensing basis of that plant.

What then is that reviewer using against which to test these design basis assumptions? I mean, leaving aside what the standard review plan tells him to do, presumably there is something that documents what the licensing basis of the plant is that includes the design basis of the plant and whether the plant, in fact, looks like what is is designed to be.

The question is what is the reviewer using then to do his reviews?

MR. RUSSELL: That was, in fact, the purpose for the FSAR update rule; to have the information updated periodically in the final safety analysis report so that the reviewer would not have to dig back into the historical files to find, in fact, what is the design basis.

CHAIRMAN JACKSON: I'm not trying to overly pressure you on this, but I think it is an important issue to be clarified. Maybe these other findings address what

you're going to -- address my question.

It's really the question of if we're processing - if somebody is processing license amendments and doing things over time, then that person has to have something to which to refer and that has to do with what is the licensing basis of the plant; you know, how the design basis assumptions that undergird a license amendment request relate to that.



How then is that licensing basis -- how do changes or plant modifications made pursuant to 50.59 captured in that? Then we're talking specifically now about outages, outage practices. But that, to me, is the fundamental kind of line that we want to understand. So maybe I'll let you go on, because I think you're going to try to address some of this.

MR. RUSSELL: We will be coming back to that with respect to the broader implications, because you will hear this through some of the other presentations. It's not limited to fuel pools.

 $\label{eq:charge_constraints} \text{CHAIRMAN JACKSON: All right. I'll stop jumping ahead then.}$

COMMISSIONER ROGERS: I wonder if I could just ask a question here that occurred to me as you were going on here. That is, to what extent did you turn up issues that relate to a secondary purpose of the spent fuel cooling

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system as part of a defense-in-depth system that needs to be thought about, particularly with respect to any changes or whether it should be in the licensing basis and isn't or should be in the FSAR?

To what extent are there situations like that. It seems to I recall instances in which the spent fuel pool cooling system is related in a secondary way to defense-indepth for the plant.

CHAIRMAN JACKSON: Before you answer that, let me give you an example that I brought up, I think, earlier. We identified outage maintenance practices -- I hope this is perhaps what you're thinking about, Commissioner Rogers -- during a refueling outage that could pose a problem and you mentioned it in the paper that you sent to the Commission, such as removing a train of service water from service that is providing spent fuel pool cooling, and it's allowed by tech specs.

But at times, the tech specs can conflict with assumptions in the FSAR, which may assume that both trains are operative. So the question is how do you resolve these conflicts

MR. RUSSELL: The fact that there are conflicts is reasonably well established, both from this review and from activities that we had done in the course of reviewing shutdown risk, and I would submit that fuel pool operations

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and refueling activities are within the scope of shutdown risk activities.

Technical specifications generally focus on events initiating from power. We have only been focusing on events during changes of mode or shutdown or, lately, fuel pool issues for the last few years. This is not something we have a history of in-depth reviews. And it is true that support systems, such as service water, may be permitted under tech specs that are written to govern operating conditions at power, to be removed at various times, and yet the implication as it relates to sub-pool decay heat removal in the fuel pool may be impacted, but was not explicitly considered at the time the technical specifications were drafted.

We are looking at a performance-based rule for shutdown conditions that would require redundancy; i.e., defense-in-depth with respect to functions such as decay heat removal, criticality, barriers, actions to be taken should those functions lose their redundancy. That is an ongoing activity.

The staff did propose technical specifications with the earlier proposed rule-making that the industry felt was too prescriptive. That's the reason for going to a more performance-based approach.

But these are issues that have been working and 26

are related to the fuel pool survey issues in the action plan. We recognize that we don't have the same degree of defense-in-depth for fuel pools, depending upon how you define the acceptable outcomes. If you are primarily interested in sub-cooled decay heat removal, then precluding boiling in the fuel pool, then you want to have reliable A/C power, on-site A/C power that can provide power to cooling pumps, et cetera.

If it's acceptable to allow boiling in a pool, then you want to provide an assured source of makeup so you don't lose inventory from the pool. And the licensing history has changed from plant to plant. Some have actually had to address the potential for loss of inventory in the

pool in litigation and hearing associated with expansions of spent fuel pools, but, in general, that has not been the case

So the depth of review and the scope of review is, in fact, why we are initiating the action plan to re-look at these and collect the information on what exists at each plant. But I submit that we do have quite a variance.

This short-term focus was to ensure compliance with existing requirements. The second step is to answer the question whether we have sufficient requirements in place at all plants and should we backfit it plant specifically or backfit it generically and what vehicle

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should we use -- rule-making, generic letter, et cetera.

We are currently looking at incorporating the fuel pool issues within the scope of the shutdown rules, because there is not a lot of difference, for example, in a boiling water reactor between sub-cooled decay heat removal when it's in the vessel, when you don't have containment, or when it's in the fuel pool, a few feet away, using similar systems.

CHAIRMAN JACKSON: Or something that just -- as opposed to trying to anticipate every potential system where there may be a defense-in-depth question or an implication of one for the other that there's something that requires that the two be evaluated relative to each other.

MR. RUSSELL: That's exactly right. The approach -- rather than looking at specifying particular systems, it's specifying functions and specifying redundancy in functions and then leaving it to the licensee to demonstrate that they have that redundancy of function and capability, rather than getting down into all of the --

CHAIRMAN JACKSON: Because you can't anticipate everything.

MR. RUSSELL: So that's the reason we're focusing more on moving toward a performance-based rule in this area and that is an ongoing activity. What we're looking at is integrating the shutdown risk issues with the fuel pool

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issues so that we don't do these piecemeal, and that is currently in development within the staff.

CHAIRMAN JACKSON: Let me just ask you, though, what confidence do you have that plant staff will recognize these areas of conflict and might, on their own, demonstrate adequate configuration control?

MR. RUSSELL: With respect to issues associated to when fuel is in the reactor, we have, over the last several years, promulgated quite a bit of technical information and guidance. We've had meetings on it. The industry has also promulgated guidance through NUMARC and others that we have been observing through our inspection activities.

As it relates to the fuel pool issues, that's been the focus of recent activities. We've put out information notices, we've done the surveys, and our intent was to ensure that future activities are in compliance with the licensing basis as currently defined.

So as it relates to these activities in the future, we believe we have addressed the issues and have communicated them to the industry. We do expect that there are going to be additional requirements in these areas in the future. We just have to go through the process to promulgate the requirements.

MR. SHEA: Discussing variation in licensing bases among plants and the reasons for those and discuss that the

differences start with the design differences between plants.

CHAIRMAN JACKSON: Which slide are you referring

to?

MR. SHEA: I'm referring to slide number seven. Differences in plant design, differences in the way the licensees and staff have discussed and reviewed and accepted changes to the spent fuel pool and related system designs over time, and variation between staff review practices, and, as an example of that, licensees can propose changes to its system design and operation that are different from the standard review plan guidance and the staff can accept those and has accepted those provided there is sufficient supporting justification.

In some cases, the staff has accepted deviations from the standard review plan guidance on spent fuel pool temperature, sometimes based on an argument that the duration that the temperature might be above that standard

review plan limit is a limited duration. In other cases, the staff has reviewed -- accepted that deviation based on a detailed analysis of the impact of that increased temperature on structure and supporting systems.

So, again, in determining the licensing basis or trying to draw any conclusions about the consistency of licensing basis, that was another staff practice that

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entered into the plant uniqueness of the spent fuel pool decay heat removal system licensing basis.

The impact of that variation is one that increases the possibility that a licensee may operate outside its licensing basis because it makes the licensing basis difficult to recognize. Secondly, it increases the possibility that there will be conflict over an understanding of what the licensing basis requirements are for any one plant.

Again, as we to through the task action plan, taking into account the results of the survey as well as the detailed design information, one thing we would seek to consider is whether we need to pursue any action just to clarify or standardize the licensing basis discussion for plants to make sure that all plants are speaking to the same technical issues and speaking to them in the same manner.

CHAIRMAN JACKSON: When you say standardize the licensing basis discussion, you mean clarify what the licensing basis is.

MR. SHEA: That's right. That's right.

MR. RUSSELL: Define the licensing basis in Part 50 and ensure then that it's consistently implemented.

MR. SHEA: The next finding on that, page 7, we talk about control of design basis assumptions. In the licensing documents, licensees lay out the assumptions that

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they use in their analyses for demonstrating the adequacy of their systems, and some of those assumptions are specifically operational assumptions. We found through the course of the survey that some of those operational assumptions were not necessarily captured in procedures, thereby raising some concern about whether the licensee had controls to ensure that the licensing basis assumptions were, in fact, met.

As an example, spent fuel pool decay heat load any time is a function of the time after shutdown that you transfer fuel from the vessel to the pool. Some assumption on that delay time is typically included in most design discussions and we found that, again, some licensees didn't specifically carry that time limit, whether it was 72 hours or 100 hours or a 150 hours, over into procedures to make sure that they adhered to that.

We observed that a number of licensees did implement procedure changes during the course of the survey to specifically address that point.

The significance of that is while we didn't identify specifically any plants that had moved fuel faster than an analysis would have supported, the fact that some aspect of the design assumptions are not being controlled by procedures lead to the possibility that you could exceed your design conclusions if you were not cognizant of the

MR. RUSSELL: We need to clarify that the scope of the review that we were doing was not to look for past basis. We were looking at whether they had adequate controls in place to control future activities and whether the procedures, if there was a time limit assumed, contained that time limit. So we did not go back and look at logs and history for some of these facilities to determine whether they had.

We may have stumbled onto information in the course of review that indicates that they may have done it in the past not consistent with -- those are being captured. But it was not an intended review to go back in an enforcement context and look at past practices to determine whether past practices were or were not consistent with assumptions as a part of the licensing basis this time. It was future fit correction that we were focusing on.

MR. SHEA: I want to move on to the next finding there. We observed that a number of plants had made what I've characterized as significant enhancements to their spent fuel pool decay heat removal capability over time. We found that several plants had installed large capacity systems, systems that exceeded the capacity of existing

systems, and they did so for the purpose of enhancing their flexibility during outages with respect to changing removal . \$33\$

from the pool.

We observed that those plants had installed and were operating those modifications pursuant to 50.59. The point of raising the issue was that in the case of Millstone Unit 1, while they installed the modification under 50.59, the review and approval of the operation of that system was done under 59.90, a license amendment process.

The significance of that is just that it provides a data point to the 50.59 review effort to show that perhaps the application and interpretation of the 50.59 standards is subject to some interpretation from licensee to licensee, such that licensees that are making more or less the same kind of modification are arriving at different conclusions under the acceptability of installing and operating that modification without prior staff approval.

It was presented as a data point to feed into the staff's ongoing review of the 50.59 process.

MR. RÜSSELL: I think we've already covered, in the context of questions from the Chairman, the outage maintenance practices. I think we should probably go on to

CHAIRMAN JACKSON: I do have one other question. Have you linked these findings in terms of the level of safety significance or are there safety significance rankings within them?

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MR. RUSSELL: The answer to both is that we have not completed that process fully. The next step is to issue the information to the licensees formally through inspection reports, to get any information they have that may be in mitigation of what is the current staff view. But as a broad reply, I would characterize that those facilities that conducted activities not consistent with the licensing basis are more of concern than the failure to update a bookkeeping problem with respect to updating the FSAR.

That's not to minimize the importance of updating the FSAR, because if it gets significantly out of date and changes are made using that as a resource, you have the potential for making changes at a facility that do not adequately reflect the design and licensing basis.

But on a relative basis, conducting activities not consistent with the licensing basis or the assumed analysis is more significant than a failure to update and submit information to the NRC.

We're still looking at whether there are violations associated with 50.71(e) and violations associated with failure to conduct activities consistent with the design and licensing basis, and that would be through the enforcement process.

Our schedule is to complete issuing all the information to the licensees and start that process by the

end of June, to get the plant-specific out in inspection reports; if necessary, hold the appropriate enforcement conferences.

And we're waiting to complete -- Jim will be talking about the schedule. We want to get the enforcement guidance to the Commission and get feedback from the Commission so that we do these in a consistent manner as it relates to these issues.

CHAIRMAN JACKSON: Let me ask you one last question before you go on. Of course, you know, many times, whenever the Commission asks about FSARs, as well, you know, the older ones, and, of course, they have less robust or certainly less large FSARs. So that's the case and it relates to everything we're talking about. As I said in my remarks, everything is related to everything.

And how do we know, for these older plants, that the FSAR is a sufficient basis for an adequate safety evaluation?

MR. RUSSELL: I think there are two aspects. One is the level of design description in the older FSARs is typically a lot less than what is obtained today. But the FSAR also describes the safety analysis that was performed; that is, evaluations of how the facility may respond to various transients, accidents analysis.

So the safety performance, the functions to be . 36 performed are described and have been analyzed. It does mean that that information is in the design basis, but may

not be in the FSAR.

This has been an issue with industry in the past. If the level of design description in the FSAR is less, does that relieve you of the obligation to update that information as changes are made to maintain a consistent level of description? 50.71(e) would not permit that, but that is where some of the practice deviates.

As it relates to safety analysis, we generally find that as Chapter 15 analyses are redone, those are generally updated and resubmitted, because that also relates to core reloads and refueling practices and other things which they have to submit information under amendments.

But it is not consistent, and this is an implication in an area where we need to provide guidance as to what is required. And at this point, I don't see a need for a change to 50.71(e). It is sufficiently broad. But I do see differences in practice and we've got to reconcile old FSARs to new FSARs with respect to staff guidance to make sure it's clear as to what the expectations are to meet the rule.

CHAIRMAN JACKSON: Okay.

MR. RUSSELL: Bill?

MR. BORCHARDT: Slide eight, please.

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[Slide.]

MR. BORCHARDT: On January 25th, inspection guidance was issued that supplemented the existing level of FSAR review performed as part of the normal inspection program. These instructions did not mandate any new inspections, but rather directed that specific attention be given to the verification of FSAR commitments as they relate to specific planned inspection activities.

And although this was not a comprehensive FSAR review, inspectors were instructed to review the applicable portions of the FSAR and verify that those FSAR commitments have been properly implemented into plant procedures, practices and plant configurations.

And as we've already discussed, there is considerable variation in FSAR thoroughness between older plants and newer plants especially and because of these variations, the inspectors did not attempt to judge the overall completeness of the FSAR, but rather to focus solely on identifying differences between the existing FSAR and the as-built plant.

All routine inspection reports, beginning in February, now contain a section that describes this FSAR review effort and the inspectors' findings.

Although originally planned for a three-month limited duration, this specific review instruction has been . 38

extended indefinitely.

There were approximately 220 discrepancies identified in that three-month period and they range in safety significance from issues that are administrative in nature to potential escalated enforcement issues. Several discrepancies have been identified as violations or potential violations under the existing enforcement policy.

Corrective actions for these discrepancies can normally be grouped into three categories; a physical change to the plant, a change in the way the plant is operated or its operating procedures, and an administrative FSAR change. It's also reasonable to expect that some of these discrepancies out of the 220 are the result of an unclear language or different interpretation between the licensee and the NRC staffs.

There are a number of reviews to be conducted on this data and inspection results that have been gathered to date. In fact, as we have begun our analysis of these inspection results, there's a number of questions which we have decided we need to get supplemental answers to. These include when was the discrepancy first identified or known to the NRC; if the NRC was aware of the issue earlier than this current inspection report, how was it known; and, when did the licensee become first aware of the discrepancy or issue.

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The answers and these questions are a first step in enabling us to determine whether the issues identified are indications of deeper programmatic problems of specific licensees or with the NRC's licensing and inspection

The results of our review will be fed into the lessons learned task force, which you will hear about later,

and will be used to improve the inspection program, particularly in the form of revised inspection procedures and guidance to field inspectors.

COMMISSIONER ROGERS: Just before you leave that. To what extent have the resident inspectors been involved in these inspections?

 $\dot{\text{MR}}.$ BORCHARDT: They are the primary source of this information.

COMMISSIONER ROGERS: They're fully familiar with what you're finding and how you're finding it.

MR. BORCHARDT: Well, they were sent the instructions to conduct these inspections and how to document it. We're just now in the process of sending the matrix that we forwarded to the Commission out to the regions so that they can see on a nationwide basis what kind of discrepancies are being identified.

We really just expect them to use that as background at this point. It's our responsibility to put it . 40

into the programs and provide a more pointed direction to them

CHAIRMAN JACKSON: How much coordination or communication is there among resident inspectors, regional staff, project managers and technical reviewers regarding the implementation of licensee commitments or amendments to their licenses? How do we ensure that any licensee actions to be implemented are propagated appropriately in the significant areas into the inspection program?

MR. BORCHARDT: Well, that specific question is one of the things we're taking a very hard look at. I don't think it's been as thorough in the past as it needs to be.

The process at this point relies upon the frequent interaction between the NRR staff, project manager primarily, and the regional staff, to identify areas that are worthy of follow-up.

CHAIRMAN JACKSON: But it's something you're specifically going to be looking to.

MR. RUSSELL: The best way to describe is as it relates to generic issues -- that is, where we have requested a licensee or number of licensees reply to a generic letter, those items are tracked through a multiplant action and we issue a TI, temporary instruction, to the field that identifies specifically what is the inspection activity to be followed up based upon the safety

significance and the other considerations.

So we have a formal process of giving instruction on generic issues. We have an ad hoc informal process on case-specific. That's an area that we need to fix to make sure that amendments to licenses, where they are requested by the licensee, are appropriately followed up through an inspection activity, where there is a process where the licensing organization tells the inspecting organization explicitly whether to inspect, what to inspect, what the issues to follow up.

We have not been doing that. That is a significant implication on this process.

CHAIRMAN JACKSON: Given that you found 200 discrepancies and, you say, 37 of them resulted in a violation, are you able to say at this point or do you have any sense of why licensees haven't been keeping up in this area? And how might this then apply to other administrative controls that licensees are responsible for?

If you can't answer it, you can tell me that it's part of your action plan.

MR. RUSSELL: I will come back and wrap up with some implications at the end. That is an issue that is being addressed within the scope of the action plan.

CHAIRMAN JACKSON: Okay.

MR. BORCHARDT: There are several modifications

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being made to the inspection activities now to strengthen our design basis inspection activities. This is clearly an area that needs more attention.

In the short term, safety system functional inspections, which are inspection procedures that already exist, but have fallen out of use over the last several years, are being evaluated for conduct at several sites. And future headquarters-led integrated performance assessment process inspections will include a vertical slice design basis review.

These design basis review activities will compare the as-built plant to the design basis. They will verify

selected design parameters. They will compare the design basis to the FSAR documentation and also verify selected licensee commitments.

The long-term actions are closely related to the ones we've already discussed, which include revised and improved inspection procedures and any program changes to the inspection program.

CHAIRMAN JACKSON: I know that in the past there were these service water inspections done in these -- what do they call them -- EDSFIs?

MR. BORCHARDT: Right.

CHAIRMAN JACKSON: How are the licensing basis issues resolved that arose out of those inspections in the . 43 past?

MR. RUSSELL: I will broadly cover this. In the late 1980s and on, we conducted inspections that were vertical slice inspections. The two you mentioned were done generically across the board based upon the mission from NRR and directions that we issued through a temporary instruction to conduct a particular safety system functional inspection at all facilities to verify issues which had come out of operating experience in other areas.

We also did safety system functional inspections based upon regional concerns, where they would go in and take a vertical slice inspection. In the late 1980s and early 1990s, following the regulatory impact survey, there was a concern on the part of industry of the impacts of the team inspections that were being conducted and we reduced the number of team inspections and cut them back significantly.

We have been, since the '87 timeframe, focusing more on operational safety activities -- operations, maintenance, material, condition of plants -- and that's been quite effective, I think, in improving safety of facilities. But we had not given the same focus to design issues and ensuring that the design assumptions, which are often difficult to extract -- that is, they are buried in analyses as to how they're going to operate.

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So when you review procedures, you look at the procedure; is the procedure being complied with, are the operators following the procedures - that's one question. The more difficult question is is the procedure itself consistent with the assumptions in the safety analysis in the design basis.

We've relied on process, plant operation reviews by review committees, et cetera, but we have not focused on ensuring that those details are, in fact, captured in the procedures captured in design change packages. This has implications for the core engineering inspection program and other areas, which I will discuss in wrap-up. But it is a broader issue.

We have essentially completed the vertical slice inspections of service water. There may be a few plants that have some follow-up activities, but service water inspections, the electrical system design inspections were completed. We also did a horizontal inspection activity for motor-operated valves, independent of which systems they were in

We believe that we will be back in doing fairly routinely vertical slice inspections as a part of the long-term program and we are starting some pilots now as it relates to the IPAP inspections, particularly those being led by headquarters, starting in July, where we will do a

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vertical slice as a part of that team inspection.

CHAIRMAN JACKSON: Because this is relevant to if

we identify issues or problems during the proposed vertical slice inspections and what will be the agency response. Now, I'm told that when these SFSIs were done in the past, that the agency had an interest in licensees doing their own such inspections related to design basis reconstitution.

Some utilities actually did that, and what did we do with the results?

MR. RUSSELL: We were identifying a number of issues and were taking escalated enforcement in the late 1980s associated with failures to maintain the design basis. In some instances, changes which were made to the facilities, that it undid some safety function that was relied upon in the safety analysis report. We were conducting independent design verification inspections.

The issue was fairly broad and the industry came

in with an initiative -- not an initiative. I wish at this point that it had been an initiative, but they could not get an 80 percent vote to commit to do this at all facilities. But they came in with guidance to assess the scope of the problem and basically lay out a process for a licensee that wished to to determine the extent of vulnerability that that particular licensee may have with their design basis.

Newer plants may have better design basis

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information. Older plants may need to do more work. The staff reviewed that guidance. It was developed then by NUMARC. We took positions on the guidance. We forwarded that to the Commission, advised the Commission that we would be endorsing this as an appropriate process for voluntary implementation by licensees, and identified the priority for developing missing information from the design basis, with the priority being to focus on technical specifications first and then secondly, to redevelop information before the main changes under 50.59.

The Commission also issued a policy statement at that time which summarized existing requirements under the regulation and the Commission's expectation that licensees would have appropriate design basis information and that that information would be consistent with the licensing basis.

And the approach on the part of the staff was through its ongoing inspection activities, should we find cases where they were outside of that, to take enforcement action and require that the design basis licensing basis be updated and maintained.

We also modified the enforcement guidance at the time to encourage the voluntary identification of issues. So to the extent a licensee identified design issues, discovered them through a program that was voluntarily

initiated to discover such events and problems, that we would grant enforcement discretion, and Jim will be talking

about that in a few minutes.

But there is a history from 1990 on of concerns with these issues and as we've shifted the balance to focus on operational safety and less on these very resource-intensive team inspections, some licensees stopped these activities. I think that's a major lesson learned coming out of Millstone, because activities which were underway were terminated as a result of fiscal considerations and other things and it was done without our knowledge in some instances.

COMMISSIONER ROGERS: You just mentioned the industry effort. Was that the NSAC-125?

MR. RUSSELL: No. NSAC-125 is the guidance for conducting 50.59 reviews. This is a NUMARC document on design basis programs.

COMMISSIONER ROGERS: NUMARC was involved. MR. RUSSELL: They were involved.

MR. TAYLOR: We always recognize that even with vertical slice, with our limited resources, there was no way we could carry this rather large task out. It was up to the individual utilities to examine their designs. Some of them, particularly the old ones, had to go buy design information.

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So there was sort of a big move by industry, I think you recall some of this, Commissioner, and doing it system-by-system is a big job and as the plants -- newer plants had a pretty good handle. Some of the older plants had to go back to AE files, NSSS files. So there was all of this motion within the industry itself to assure that they had their design basis with sufficient depth that they could reflect it into the facility.

Do you agree, Bill?

MR. RUSSELL: Yes, I do.

MR. TAYLOR: And this was an effort that was going on over a period of several years at least.

MR. RUSSELL: In fact, some licensees have developed it to the point where they have it on an electronic file, where they have the information readily available. Many have spent millions of dollars upgrading this, but the staff issued direction to the field inspectors to not conduct inspections or make programmatic requirements of voluntary efforts. We did that there enforcement, other inspections

So the concept was if we identified concerns through inspection activities, we would take enforcement and

require corrective action; but if the licensee did it voluntarily, identified the issues, they would get relief under the enforcement policy at the time. But it was left

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on a voluntary basis and then we also, for other reasons, reduced the vertical slice inspections and we now need to go back and re-look at some of those issues to make sure that the design basis and licensing basis is adequately being maintained.

COMMISSIONER ROGERS: I think it's a very important point here, because this is something that I think certainly I wasn't really aware that it had kind of trickled away to nothing, that it was going along and --

MR. TAYLOR: Well, we weren't either. That's part of the problem, and Bill reflects on Millstone itself, because it was in their hands, so to speak.

COMMISSIONER ROGERS: I don't want to dwell on this too much, but I think there is a lesson to be learned here of when we're trying to do something and we think it's going along, something else comes in and then we lose track of it and it's started to evaporate, because it is a very important effort and there were many millions of dollars spent.

MR. TAYLOR: I had a recent visit from Fort Calhoun and during our discussions with them, they had noted -- I guess they're in the final stages, and this has been going on a number of years, as a public utility, and dependent upon the AE and others, but they've been putting it together over a period of years and the last visit, they

actually talked about this.

COMMISSIONER ROGERS: Well, it's not so much the specifics of it that I'm interested in, but I think the general approach that we took there is one that, in a sense, we felt would be an approach for the future, and now I'm not so sure that it worked.

MR. TAYLOR: I didn't work in all cases, that is for sure

COMMISSIONER ROGERS: We need to document that. MR. RUSSELL: I think there is another policy implication, and that's the policy implication of reliance on voluntary programs where voluntary programs can be changed, particularly without our prior knowledge.

COMMISSIONER ROGERS: Yes.

MR. RUSSELL: So the regulatory approach of reliance on industry voluntary activities, et cetera, is one that we need to have appropriate programs in place to follow up to ensure that those voluntary programs are, in fact, being implemented and carried out.

CHAIRMAN JACKSON: If the voluntary programs particularly are put into place or structured to be in lieu of regulatory requirements.

MR. RUSSELL: Absolutely.

CHAIRMAN JACKSON: Specific regulatory

requirements.

MR. TAYLOR: Or supplements to their action.

CHAIRMAN JACKSON: Right, exactly.

MR. TAYLOR: Jim Lieberman is next.

MR. LIEBERMAN: Good morning, Chairman Jackson and Commissioners. Can I have slide ten, please?

[Slide.]

MR. LIEBERMAN: I intend to provide a brief overview today as to where we are in developing enforcement guidance and treatment of departures from the FSAR.

The first issue in considering enforcement action is what is the appropriate requirement that should be cited. There are a variety of requirements that may be violated by a departure from the FSAR. To the extent the FSAR describes how a licensee intends to meet a regulation and license condition, the failure to meet the description in the FSAR for that particular requirement may cause the licensee to be in violation of that requirement.

A departure from the FSAR may also be in violation of 10 CFR 50.59. 50.59 requires that the licensee perform an evaluation, one, of changes to the facility and procedures described in the FSAR and, two, of tests or experiments that are to be performed which are not described in the FSAR in order to determine if there's an unreviewed safety question or conflict with the tech spec.

Failure to perform the evaluations required by

failure to document the evaluation, failure to report the changes to the NRC are violations. 10 CFR 50.59 is a prospective requirement; that is, we expect that at the time of licensing, the licensing meets the FSAR.

In fact, many licenses have a license condition that the licensed facility is described in the FSAR as amended and supplemented. Thus, the concept of Section 50.59 is that an evaluation will be performed before a change is made on the basis that we made the licensing decision on.

We recognize that in some cases, the licensee never met the FSAR and that, therefore, there is not a change to the FSAR. This is considered a de facto change and in violation of Section 50.59 if an evaluation had not been made under the 50.59 approach.

Failure to update the FSAR may also be a violation of 50.71(e), which, as we've said already today, requires periodic updating of the FSAR. If licensing is not met in the FSAR, it may also provide inaccurate information to the Commission and may be subject to 50.9, which as Bill said earlier, requires notice to the Commission to be complete and accurate in all material respects.

In each case, in the enforcement process, we need to decide, based on the facts of the particular case, which

requirements or set of requirements should be the basis for performing the enforcement action.

Given a violation, the next step in the enforcement process is to evaluate the regulatory and safety significance of the violation by assigning a severity level to the violation. The existing enforcement policy provides guidance to assist us in characterizing violations associated with FSARs and maintaining consistency. However, we think additional guidance is needed to characterize violations associated with 50.59 and 50.71(e).

In respect of 50.59, the enforcement policy provides guidance to address individual violations. A severity level three violation, which is the threshold for escalated enforcement action, is described as a significant violation of 50.59, including a failure where a required amendment was not sought. This would be where you have an unreviewed safety question or a conflict with a tech spec is involved.

A severity level four violation is defined as a violation of 50.59 which is less significant and there is no specific guidance as to how we should treat violations of 50.71(e). We need to address both programmatic and isolated violations of 50.59 and 50.71(e). We need to consider when these violations should be categorized at a level higher than a three, such as a two. We also need to consider when

the violations should be considered a minor violation, which, under the enforcement policy, would not subject the licensee to formal enforcement action.

We are in the process of developing additional guidance by examples at different severity levels to better characterize the safety and regulatory significance of these violations and also improve the consistency of such violations.

In developing the guidance, we're considering the importance of both performing appropriate evaluations to consider if there are unreviewed safety questions and the importance of maintaining and controlling the licensing basis as reflected in the FSAR.

We're going to provide this guidance to the Commission for your review and we hope to do that within a month.

I want to note that the existing enforcement policy in Section VII.B.3 provides an incentive for licensees to initiate voluntary efforts to identify and correct violations that are not likely to be identified by routine efforts, such as normal surveillance and quality assurance activities. This provision addresses past problems, such as engineering design and installation, where we've placed a premium on licensees identifying and correcting violations before a degraded safety system is

called upon to work.

This was the section that Bill was referring to a few moments ago that we adopted to encourage the licensees to voluntarily adopt design reconstitution programs.

Over the years, it's been used by the agency to encourage licensees to voluntarily identify and correct old

issues that are not normally identified through routine efforts. Under Section VII.B.3 of the policy, we can refrain from proposing a civil penalty for violations up to a level two and if the violation does not reflect current performance, we can refrain from issuing a violation.

In light of our desire to encourage licensees to review compliance with the FSAR and the potential for the identification of violations during these reviews, we are considering the need for guidance for the application of Section VII.B.3 to FSAR issues.

Using this discretion we think would be consistent with the revisions to the enforcement policy of last year that places greater emphasis on the importance for licensees identifying and correcting their violations.

CHAIRMAN JACKSON: Would that not offer the opportunity then for licensees to get ahead of the curve in this area?

MR. RUSSELL: Absolutely.

CHAIRMAN JACKSON: Particularly given that in the

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inspection space, one is going to have this indefinite extension of reviews of the FSARs. I'm just saying that for emphasis, but I'm asking.

MR. LIEBERMAN: Well, that is its very purpose, to give the incentive for them to establish formal programs with defined scopes and schedules so that they will get this problem under control.

MR. RUSSELL: We have a number of issues we've already identified that are going to go into this process. The corrective action for those that we've identified may be a formal program. How we institutionalize the continuance of that formal program to completion to ensure that it is, in fact, done is also a significant issue.

So just relying on voluntary activities may not be sufficient if we have identified already violations or failures to adequately maintain the design basis or licensing basis, which are both significant by way of impacting safety systems or the operability of safety systems, or they are so broad in scope that they raise questions about whether you are operating the facility consistent with the license.

So we may need to use tools from Part 2 to ensure that such programs are, in fact, carried out, overseen and monitored with a more formal process for ensuring that they are carried out.

CHAIRMAN JACKSON: Right. But nonetheless, there is the mechanism that potentially exists as opposed to lying in the grass and waiting to see if the rake will rake you

MR. RUSSELL: Yes.

CHAIRMAN JACKSON: Because when the rake rakes you

up, then there is a different treatment.

MR. RUSSELL: Absolutely. We may have already captured some in the rake.

MR. TAYLOR: Eileen.

MS. McKENNA: Thank you. My presentation will briefly describe some of the provisions in 10 CFR 50.59. I'll give you a little history on the regulation and how it evolved, describe the recent review that the staff performed, and will conclude with a description of our plans for future actions

Could I have the next slide, please?

MS. McKENNA: First, as Jim alluded to, 10 CFR 50.59 defines the conditions under which power reactor licensees may make changes to their facility without prior NRC approval. The licensee is the one who decides whether the change they are contemplating meets the provisions of 50.59 and can be made.

Specifically, the rule provides that the licensee

may make changes in the facility as described in its safety analysis report, if they chose the procedures as described in the safety analysis report. And I didn't include it on the slide, but also to conduct tests or experiments that are not described in the safety analysis report without the prior approval, unless it involves a change to the technical specifications or an unreviewed safety question.

The regulation goes on to define what an unreviewed safety question is and it has three provisions, which, again, I'll summarize. First, that if the probability or consequences of an accident or a malfunction of equipment important to safety previously evaluated in the SAR may be increased; secondly, if a possibility for an accident or a malfunction of a different type that are evaluated previously in the safety analysis report may be created; and, thirdly, if the margin of safety as defined in the basis for a technical specification is reduced.

Other parts of 50.59 address such things as recordkeeping and reporting. These are the major points that I want to focus on.

The rule itself would allow licensees to make changes to its facilities provided those changes maintain the licensing envelope documented in the safety analysis report and technical specifications upon which the staff made its decision to license the facility. Thus, it is a

licensing test of when NRC approval is needed on something rather than a test of acceptability of the activity that's involved

A change may involve an unreviewed safety question, but have little safety significance, and may, in fact, overall be a safety improvement, but does meet the test of requiring NRC approval. The need for having this kind of 50.59 process arose early on in the AEC's history, largely because of some other requirements at the time that the hazard summary report, which now would be the safety analysis report, was totally incorporated into the technical specifications, and, therefore, changes to that resulted in a license amendment and there were mandatory hearing requirements associated with those.

So there was a need to have some degree of flexibility to make changes without that process. In 1962, the Commission issued rule-making that redefined the scope of technical specifications to be less comprehensive and put the remainder of the information under control of a process in 50.59 that's similar to that language, but was somewhat simpler than first issued in 1962.

I think the most significant change to 50.59 since that time was in the 1968 rule-making, which did three things; first, it revised 50.34 with respect to the safety analysis report to describe more fully the information which

should be in their design basis, the safety analysis, analysis of functional requirements of systems; secondly, to define in 50.36 the scope of information that should be included in technical specifications in the NRC today in the manner you see today in terms of limiting safety system settings, limiting conditions for operations and surveillance requirements; and, thirdly, it revised the definition of unreviewed safety question in 50.59 to add the provisions with respect to malfunction of equipment which had not been there previously and the reduction in margin of safety.

The next bullet I had on the slide was reflecting the issuance of the 50.71(e) rule on updated FSARs that occurred in 1980. In the period after that, the staff initiated efforts on technical specification improvement to design to make sure the tech specs were focused on the more - information on more operational significance on a day-to-day basis and that other information could be controlled in other documents.

This initiative also triggered efforts to provide better guidance on 50.59 since more information could be subject to the controls of 50.59. As a result, a joint NUMARC and NSAC working group developed a document known as NSAC-125 to provide guidelines on performing safety evaluations for 50.59. The NRC staff reviewed and commented

on the various drafts of this document before the document was issued in 1989.

The staff has concluded that the licensee evaluations have improved as a result of using the process outlined in the NSAC document. However, the staff was unable to formally endorse it because of some concerns about language in specific areas, where it conflicted with the language in the regulations.

In the fall of 1995, Chairman Jackson, you asked a number of questions about the 50.59 process and the staff responded in a memo of December 15, agreeing to the reevaluation of the process, the adequacy of guidance, and develop a plan with the goal of identifying actions that could be taken to improve the implementation and oversight of the process.

The staff responded to this in a letter of April

15, 1996, which had three parts. First, there was a white paper that described the review staff had conducted and the guidance and other information that's available; second was a plan of steps that we would take in the future to try to improve the process; and, thirdly, some interim guidance to our inspectors that focused on current staff practices with respect to 50.59.

[Slide.]

MS. McKENNA: This slide lists the information

that was considered in preparing this analysis. First, a look at the record for rule-making in 50.59, the comments and the papers back and forth that supported this. We looked closely at NSAC-125 and various internal documents that had been prepared by the staff during their efforts to see if they could endorse the document, examined in a lot of detail inspection reports that spanned the period from, say, 1994 till early 1996, where they referenced 50.59, to get some idea of what kinds of inspection activities resulted in looking at 50.59s and also what kinds of issues arose in implementation.

I should note that those inspections predated the ones we've heard about this morning on the FSAR discrepancies and the spent fuel pool ones which are not yet out for the timeframe in which the reviews were done.

We also looked back at enforcement actions over the last several years where 50.59 was a factor in the action taken. Further, we looked at the NRC inspection manual and other guidance, a few generic letters that speak to this question of 50.59.

Finally, we talked to people on the staff and in the regions about what areas did they find problems with, what are the hard spots in day-to-day interactions, where we might benefit from clarification.

I mentioned the inspection activities. We found

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that they were addressed in a number of different ways. First, I think there were the inspections going out to look specifically at the licensee's 50.59 evaluation process, look at their procedures and training and how it's carried out, but also arises in many other kinds of activities, follow-up on operational problems, inspection of plant modifications, temporary alterations that may be in place, day-to-day activities of plant review committees where they address these kinds of issues. So it was a wide range of activities.

As I mentioned, for our action plan, we do plan to look further at the appropriate mix of inspection activities and review activities to see what would be most effective in terms of looking specifically at the evaluations versus as part of other inspection activities and specifically we've requested the roles of NRR and the regions with respect to these activities.

We are planning a workshop in the near future to explore some of these, an internal workshop, to explore some of these issues and we will take into account a number of the other inspection program changes that are being planned or underway, such as the IPAP and vertical slice, in our decisions.

With respect to the issues for further evaluation under the action plan, we found that in looking at the

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inspection information and the available guidance, that many times the terms in the rule, such as changed procedure or as described in the safety analysis report or margin of safety as defined in the basis for technical specification, could be variably interpreted among the staff, between the staff and licensees.

And as a result, in some cases, 50.59s were not performed or activities where the staff might have felt that it was something that was affecting something in the FSAR. The licensee did not interpret it that way because that particular change that was being discussed did not explicitly show up in the language of the FSAR, but was related to it.

In other cases, 50.59s may have been performed, but the conclusion as to whether an unreviewed safety question was involved, again, may have reached a different conclusion between the staff and the inspector because of differences in view of what the meaning of some of these words is

Therefore, that is our focus for the next several months, with our action plans designed to develop

clarification and definitions for some of these terms that would help remove some of these different views, and we'd like to then look at those definitions we develop with respect to the specific language in the rule to make sure 65

they're consistent, and then define where we go from there as to whether we can put forward such definitions in the form of guidance or whether we would need to do some other kind of action to make improvements in that area.

As I indicated, for the action plan, we have established a work group and we've had some meetings, we've been discussing these issues, looking at the existing definitions that may exist in some guidance or the NSAC document to see whether we can come to an agreement on what's a reasonable understanding of these terms, and then we will move that forward in the process.

I think I'll leave the question of schedules until after the next presentation, which is a broader look at lessons learned.

That concludes my presentation. Thank you. CHAIRMAN JACKSON: One question. You mentioned interim guidance.

MS. McKENNA: Yes.

CHAIRMAN JACKSON: Can you give us a highlight or two of --

MS. McKENNA: Yes. The interim guidance addresses a couple of specific aspects that have come up, again, in some of the day-to-day issues. One is with respect to the question of compensating actions. This relates to the kind of situation where in considering something as a change, the 66

licensee may also be contemplating some administrative controls to result in a no net change as a result of that activity

The interim guidance provides that the staff accepts that kind of approach provided that the changes that you're talking about a negligible and that the compensating effect, if you will, clearly outweighs the change that you're considering with respect to impact on increasing probability or consequences of an accident. So that's one area that's addressed in interim guidance.

It also, I think, otherwise summarizes some of the positions that have been established; for instance, Jim mentioned the question of de facto changes or I think it --I sometimes refer to it as non-conforming conditions, where a licensee discovers that something is not the way the FSAR says it is and needs to respond to that, and the guidance refers to our Generic Letter 91-18 that provides the existing process for how a licensee dispositions those kinds of issues.

We do have one question that we're considering further with respect to 50.59 in particular in that area that relates to the kind of -- when you should be doing a 50.59 with respect to those kinds of conditions.

The guidance also talks about some other ongoing things; for instance, the equipment management process that 67

has been developed to handle equipment other than those that are governed by processes such as 50.59 or license amendments and how that relates.

So we've tried to lay out some of these kind of current issues and current practice in one document for the inspectors to have for reference.

CHAIRMAN JACKSON: These are issues that had not been dealt with before and you just felt the need for strengthened guidance at this stage.

MS. McKENNA: Well, some of them have been dealt with in various places. I think these -- given the issues that have been raised by 50.59, it was appropriate to put forward a document that expressed sort of the current view of these issues for their reference and that we would take action to look further at them in the future. Some of these positions may change, but this was to try to provide them a basis to conduct their activities.

CHAIRMAN JACKSON: Yes. I noted that nonconforming conditions was under your list.

MS. McKENNA: Yes.

CHAIRMAN JACKSON: For the action plans. So, in fact, this guidance may migrate or change as an outcome of

MS. McKENNA: Yes. Right now, the guidance with respect to 50.59 really says that a licensee, then they

discover such a condition, may decide to change its licensing basis to accept the condition. So that, again, you would resolve a discrepancy by changing your licensing basis.

What was left there, although there is some language in there, was at what point should you be doing a 50.59 because you have not resolved the condition and essentially you have made a de facto change.

CHAIRMAN JACKSON: So this is retrospective versus the prospective use of 50.59.

MS. McKENNA: Right.

MR. RUSSELL: I'd like to broadly summarize what we did. The intent was not to create new guidance. The intent was to summarize existing guidance to head them through the review and improvement process.

CHAIRMAN JACKSON: Okay.

MR. RUSSELL: And, broadly, in personally meeting with inspectors at counterpart meetings and discussing this issue, the problems we're seeing are failures to perform 50.59 reviews and all that is is they make a change and they have not done a review. Those are fairly black-and-white and are able to be handled through the regional inspection

We've indicated that the question comes up regarding the quality of the 50.59 that has been performed.

But rather than debating that at a local level, that it should be forwarded to headquarters under a TIA, during the period of time that we're trying to develop guidance, particularly as it relates to increase in probability or consequence of an event or a reduction in margin.

If we get into debates where those terms are relevant, we've said, in the interim, forward it to headquarters to get assistance in the review rather than using the field review process to de facto define those terms.

CHAIRMAN JACKSON: Do you anticipate that looking at this issue of degraded or non-conforming conditions and the use of 50.59 in a retrospective sense will require any kind of a rule?

MR. RUSSELL: It may very well. We believe that we may need rule-making as it relates to defining current licensing basis in Part 50.

CHAIRMAN JACKSON: Is this going to be part of your summary comments?

MR. RUSSELL: Yes, it will be. CHAIRMAN JACKSON: All right.

MR. STEIN: I'm heading up the task with Bill Russell to draw together all the lessons learned coming out of the activities related to the situation at the Millstone site and to respond to the Chairman's request for a report

that explores our existing oversight processes.

We broadened the scope of the task beyond just the 50.59 issues, the FSAR and license amendment issues coming from Millstone. We considered having a regional member on the task group, but the immediacy and the length of the effort prohibited us from getting a member from the region. However, the regional administrators are all aware of the effort and have seen copies of our plan and will be informed

CHAIRMAN JACKSON: Would it not be appropriate to structure meetings or interaction or do you plan to do that?

MR. RUSSELL: I'll be covering the next steps, which include management-regional.

CHAIRMAN JACKSON: Okay.

MR. STEIN: Our charter to do a broad-based evaluation of the lessons learned from the existing reviews at Millstone and other related activities, for their implications to our oversight processes. We're to determine the implications of those lessons learned on the broad programs and policies that provide direction for our programs.

The group is addressing four general areas, and those are licensing, inspections, enforcement and licensee reporting.

[Slide.]

MR. STEIN: The next slide lists our three basic objectives for the group, and that's to identify deficiencies or holes in our regulatory programs that are associated with the problems, again, highlighted by the situation at Millstone and to determine the causes for those deficiencies. We're doing this by integrating all the findings from the various activities to see if their -- the broadness of the issues, the depth of the issues.

From that, we will make recommendations for changing existing processes, developing new processes, or identifying areas that might require further review. The recommendations we anticipate making will be program office or agency level recommendations. Program enhancements for specific existing processes we see coming out of the individual review activities.

And the third major objective, the last objective, is to consider all this information that we gather for its broad implications for the agency's policies and directions in its regulatory programs.

CHAIRMAN JACKSON: Will it also address the implications in terms of how those programs are structured and how they are managed?

MR. STEIN: Yes. Yes.

[Slide.]

MR. STEIN: Slide 18 lists how we're going to meet

those objectives. We are collecting, reviewing and analyzing the findings of ongoing and past activities that bear on the issues. We are supplementing that information with our own reviews and information gathering efforts, hopefully without duplicating work that has already been done.

The ongoing activities that we're drawing information on are those that we've just discussed this morning -- spent fuel pool review, the FSAR inspection effort, and the 50.59 process review. Other ongoing activities are Millstone-specific, and those include the onsite team, Office of the IG investigations, even Millstone's self-assessment of the event, and, if timely, the responses from Northeast Utilities to the 50.54(f) letters.

Some of the past activities that we are drawing information from and reviewing are the policies and process that we went through to define current licensing basis in Part 54, the commitment management audits that were conducted after that to respond to questions and issues that came out of that rule-making, and the regulatory review report as it relates to consistency of regulation.

Some of the independent reviews that we're doing include historical analysis. We're doing a historical analysis of the inspection program to identify major changes in the program, major focus specifically on design basis

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type inspections and how that may have affected licensee focus. We're also doing an historical analysis of enforcement; again, specifically design related issues.

We have also done an analysis of design related events that were reported to us under licensee event reports, comparing design based events to total events and to see if there is some correlation between that and perhaps the focus in our inspection program or enforcement history.

We're also reevaluating the basis for licensing information and licensing documents, such as the FSAR. [Slide.]

MR. STEIN: The next slide, 19, lists some of the issues that we're exploring and we will address in our final report. The group is examining these issues that relate to our programs and processes that may have contributed to not identifying problems earlier, and there include licensing and design basis of plants to determine if or how well they're defined, how well they're understood, and how well they're maintained.

We're looking at how significant licensing actions, specifically plant-specific ones, are verified. As Mr. Russell indicated earlier, we have a set process for generic issues, but there is no formal process for plant-specific issues.

We're looking at, again, how major changes in the

inspection program affected ours and perhaps licensees' focus and how licensing or design basis information is and should be used in the NRC's inspection program. We're looking at consistency of our regulations, specifically those dealing with reporting issues to us, such as on the 50.59, 50.71(e), and 50.73. Finally, we're looking at the adequacy of the enforcement policy to handle licensing basis

If there are no questions, I'd like to pass this back to Mr. Russell for the schedule and next action.

MR. RUSSELL: I'm going to do this in two parts. I will talk about the short-term schedules first, then I'll talk about what some of the implications are broadly. So I'll go through the schedule pieces.

As we indicated earlier, we're going to complete issuing the information in inspection reports from the fuel pool surveys and put that into our normal enforcement process and we will complete our review of potential enhancements to that process by June 28.

The FSAR inspection analysis of the approximately 200 issues that were forwarded to the Commission, we expect to complete our analysis of those, as was described by Mr. Borchardt, and have that information factored into the analysis that Steve Stein just discussed by the end of July.

We are expecting to have completed our guidance

and actually commence some pilot inspections in the IPAP process in July. We'll have that out and the licensees will have been informed of it.

The 50.59 action plan, the broad objective is to complete the program review and the other matters that Eileen talked about by October of '96, such that we would be in a position to obtain public comments and go through that process. We anticipate that there will be a number of interactions with the Commission through this. This is not to indicate that we don't expect to come back before February of '97, but that's kind of the timeframe that we expect to have to final recommendations to you based upon a public interaction process. Then, broadly, pulling this stuff together as its known at the time is intended to have a report to me by the end of July.

If I could have the next slide, please.

[Slide.]

MR. RUSSELL: Once we have that information to me, we need to go through a management review, involve the regional administrators and the other line managers, and get the raw information from the task force report to the Commission. We then expect to complete a management review, prioritize the activities, identify the resources that would be involved in doing that, and develop a detailed action plan and then forward that action plan to the Commission to 76

get the Commission's agreement on the priorities, schedule and approach to be taken.

This is a process similar to that which was followed for the regulatory review group; that is, gather the raw data, the information, identify areas first, take that through a management review process, with Commission involvement, to establish priority schedules.

I indicated that I would try, based upon what we have learned to date, to identify, in each of the four areas that we're looking at, what are some of the broader implications at this point for the programs, and I will focus on licensing, the inspection, enforcement and reporting.

I see three areas in the licensing context. First is the final safety analysis report accuracy and completeness and its ability to be used as a tool in licensing activities, as it was intended with the update rule previously. That is, it's important to understand what the licensing basis is so that you can use it both in licensing review for making changes to the facility and in inspection activities.

Related to that is the important question to be answered of the role between the project manager, regional inspectors and residents as it relates to the FSAR accuracy, completeness and how we test that. So that is being

addressed in parallel.

The second area associated with licensing we had mentioned in the briefing, and that is case-specific requests for amendments to license or other approvals and providing feedback to the inspection program as to what types of inspection activities should be done to confirm that those requirements are being appropriately implemented

This includes reliefs from the code, case-specific amendment requests, et cetera. Our process is presently to do that with issuance of a temporary instruction; that is, instructions to the field is done only for generic issues. It is not done on a case-specific basis.

The third area relates to commitment, tracking and closure, particularly as it relates to commitments made in

the licensing process, but this issue applies equally well in the inspection process. In some instances, commitments are made related to taking corrective action for past violations and we need to make sure that those commitments are carried through to completion.

One of the things we are learning from the Millstone review and what we've seen from some licensing issues is that commitments are often closed and the systems we have for keeping book on them are closed before they're fully implemented. We do have procedures for following

unresolved items, open items in inspection activity or following them in licensing activity, but in some instances they've been inappropriately closed before the action was totally completed.

In the inspection area, I think there are five broad implications. One relates back to the items discussed earlier, and that's the FSAR completeness and accuracy. This is both the descriptions of the facility and the information contained in the FSAR and how that's used in the inspection process. We intend to continue using the FSAR as a prime source of information in conducting inspection activities

The second area relates to design basis and licensing basis and the need to conduct vertical slice inspections similar to safety system functional inspections. The reason for that is it's not simply enough to read the FSAR. If there is a commitment made to meet single failure criteria, that is only able to be tested once one looks into the actual design and how the design has been implemented. So while the commitment may be described, how the commitment is implemented requires a much more in-depth inspection activity.

The third area of broad programmatic concern relates to the engineering and core inspection activities. By core inspection, we mean the inspection that would be the

minimum that would be done at all facilities where they had SALP Category 1 in each of the areas.

In the past, we focused on operational safety and engineering support to operations and maintenance, those types of activities. We need to make sure that there is an appropriate focus on the responsibility of the engineering organization to maintain the design basis consistent with the licensing basis of the facility over time.

An important note here, and this relates to risk-informed or other activities where you may use a probablistic risk insight, and that is it's an assumption of a PRA that the design will work and that you address random failures. So to the extent there are problems associated with maintaining the design basis or the licensing basis, those issues in general cannot be handled with PRA insights. Rather, it's a fundamental assumption that the design basis has been maintained and the systems will operate consistent with that design. If the design will not work, you have a common cause failure or you are outside probablistic assessment techniques.

The fourth area of implication for inspection relates to our quality assurance activities and quality assurance inspection efforts. In the past, we've looked at component quality, how do you assure component quality, those type of activities, operational activities. We need

to ensure that the focus is back on design control, as well, and the requirements of Appendix B to maintain the design.

The final area is related to handling of degraded and non-conforming conditions. We expect that those will occur. We have issued guidance associated with Generic Letter 91-18 on how to handle various types of degraded non-conforming conditions, how that interfaces with operability evaluations required under the technical specifications, et cetera.

We need to make sure that that process is consistent with respect to the 50.59 evaluations, the timing of those, when does it constitute a temporary change to the facility or is it something which is being handled as a corrective action under Appendix B. This is an area that has had a lot of questioning from regional inspectors and others at counterpart meetings and we need to refocus those issues.

Enforcement is probably the nearest term item to deal with from the standpoint of -- we're working on the guidance now as to how to handle these under the existing

regulatory requirements and we hope to have that to the Commission in the month of June, and then we'd be using that to ensure that it is done consistently in the field.

In the area of reporting, I think the issue here is not necessarily a concern with the regulations, but . 81 potentially the threshold with respect to when design or licensing basis type information is reported. We'll be looking at the history of those reports to see whether the

looking at the history of those reports to see whether the changes we made in staff guidance resulted in fewer reports being provided, et cetera. So there may be a need to address guidance as it relates to deficiencies in maintaining the design basis or potential operation outside of the design or licensing basis.

Those are the types of areas we expect to address. We believe that there will be a number of recommendations and we will try and prioritize them into priority groupings and identify whether they are near-term or long-term, to give some idea for schedule and estimate for resources. We expect to complete those activities and be prepared to address the Commission on the results of the first part of the review -- that is, the staff effort and what the recommendations are -- by about the mid to late August timeframe.

MR. TAYLOR: That concludes the staff presentation.

CHAIRMAN JACKSON: Commissioners, any questions?
COMMISSIONER ROGERS: No. I think this has been very complete and I don't have any additional questions.
COMMISSIONER DICUS: Nothing.

COMMISSIONER DICUS: Nothing.
CHAIRMAN JACKSON: Okay. It's been a long
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meeting. I would like to thank the members of the staff for your briefing to the Commission. Today you have presented a lot of information that indicates how much work you've already done to scope out the generic implications of the issues that have been raised in connection with Millstone and, more broadly, with FSARs and 50.59.

I've listened to your findings from the spent fuel pool licensing basis review, the FSAR inspections, and the review of the 10 CFR 50.59 process and it's my view that there are two primary issues or a couple of issues, I should say, around which everything else seems to revolve. One has to do with the interpretation and use of the current licensing basis of a facility. That seems to be at the root of a lot of what we're talking about. And then the process used to change a facility without NRC approval.

And a third then is the cross-connect with other processes and other regulatory documents and requirements as we move to a performance-based regulatory environment, and we talked specifically about some of the defense-in-depth issues, the interface with tech specs.

Now, with respect to the licensing basis issue, you indicated, in the short-term, that you plan to perform design basis inspection activities and the safety system functional inspections or vertical slice reviews that are planned as part of the integrated performance assessment

program beginning in July, and that's what my understanding is

You will also review the NRC's regulatory program for power reactors and determine the implications of the lessons learned from the ongoing activities related to the FSAR inspections and licensee implementation of 10 CFR 50.59.

Once we understand, and that's presumably what you have just outlined, the extent and safety significant of vulnerabilities in this area, then you are going to be developing workable options that you will be coming to the Commission for guidance on for addressing them.

It is important that the improvements that you have outlined in the 10 CFR 50.59 action plan are pursued, particularly as relates not only to guidance to our own people, but guidance to licensees in preparing adequate safety evaluations in support of those determinations. What we are looking for is a consistent degree of consistency in licensee implementation and in consistency in NRC oversight of the process.

In the context of these efforts, and you've already referenced this, Mr. Russell, the staff should consider whether the regulations should be amended to define better the scope of applicability for 10 CFR 50.59, definition of the current licensing basis, and any attendant

FSAR update requirements in 10 CFR 50.71. But I think you feel that those requirements are well laid out. So it strikes me that the first two appear to be, based on your presentation, where the focus has to be.

So all of that is to say, and you've said it to us already, that significant work remains to be done and so timely, and I put the emphasis on timely, resolution of these issues should properly focus on the most effective means for monitoring the safety of operating reactors, because that's, in the end, what we want to keep in front of us.

So I would encourage you to work closely with the Commission as you move forward in considering changes and in implementing improvements to our oversight processes. I'm also going to ask the staff to brief the Commission again before any final decisions are made.

And let me discuss a couple of other things before I close. I would like to emphasize that it is the licensee's responsibility to know, to maintain, and to assure operation of their facilities within their licensing bases and I would encourage licensees that have weaknesses in their licensing basis documentation to proactively address those weaknesses. And we have indicated that there are mechanisms that provide an opportunity to get ahead of the curve in this regard.

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There's a lot of discussion and as you're working through your action plan, there's a tendency to kind of discuss separability with respect to different aspects of our regulatory program, where that separability, if it existed in the past, is, to some extent, being merged as we go to these performance-based approaches. Of course, my favorite example involves the improved standard tech spec program, where certain things are going to be moved to either FSARs or other licensee controlled documents, which gives greater urgency to these issues of what constitutes the current licensing basis, how it's being maintained, et cetera.

I think also it would helpful, when you come back to the Commission, that there is clarification and real specificity with respect to what you believe requires a regulatory change or a change in regulations versus what can be handled through guidance changes, so that we understand, as a Commission, what is going to be rooted in our regulations and what are we leaving up to implementation through quidance.

Now, the Commission is going to be looking forward to receiving this lessons learned report that you talked about, together with a comprehensive report being done by the IG relative to lessons learned coming out of this. And I would say the following -- that if the lessons learned

activities do not address only the issues listed, but also the implications for how our programs are actually structured and managed, specifically with respect to the interaction among headquarters, the regions and the residents, then we will not have gotten to the roots and the hearts of these issues.

So we need then -- or I would urge you to be sure that you develop an effective mechanism for getting regional input, particularly from our resident inspection program, because that is where the rubber meets the road with respect to our interface with licensees, and the Commission would like to see that well fleshed out in your action plan in terms of how you're going forward.

And so with that, unless there are any further comments or questions, the meeting is adjourned. Thank you.

[Whereupon, at 12:09 p.m., the meeting was concluded.]