UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
***
BRIEFING ON PRA IMPLEMENTATION PLAN
***
PUBLIC MEETING
***

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

Wednesday, October 15, 1997

The Commission met in open session, pursuant to notice, at 10:05 a.m., the Honorable SHIRLEY A. JACKSON, Chairman of the Commission, presiding.

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

STAFF AND PRESENTERS SEATED AT COMMISSION TABLE:
KAREN D. CYR, General Counsel
JOHN C. HOYLE, Secretary
MARGARET V. FEDERLINE, NMSS
SCOTT F. NEWBERRY, NRR
L. JOSEPH CALLAN, EDO
ASHOK C. THADANI, OEDO
THOMAS L. KING, RESEARCH
PATRICK W. BARANOWSKI, AEOD

P R O C E E D I N G S

CHAIRMAN JACKSON: Good morning. I'm pleased to welcome members of the staff to brief the Commission on the status of the PRA Implementation Plan.

The PRA Implementation Plan was first issued in August 1994. The Plan is intended to be a management tool that will help to ensure the timely and integrated agency-wide use of PRA methods and technology in the agency's regulatory activities.

The last written update on the status of

activities in the PRA Implementation Plan was received recently by the Commission. The Commission was last briefed on the Plan in May of this year.

During today's briefing, the staff will cover its recent accomplishments -- status of key activities, responses to SRM's, and future activities. These new activities include the development of standards for PRA and the evaluation of the need to revise the Commission's safety goal policy statement.

The staff's recent accomplishments -- and I'm taking Joe's thunder, probably -- include the issuance of draft risk-informed regulatory guidance for inservice inspection for comment. A public workshop to discuss public comment on these documents is being planned for later this year. I am my fellow commissioners are looking forward to

your briefing today, and I understand that copies of the viewgraphs are available at the entrances to the meeting. So, if none of my colleagues have any comments they wish to make, Mr. Callan, please proceed.

MR. CALLAN: Thank you, Chairman. Ashok Thadani, to my right, who is the deputy EDO for regulatory effectiveness, will lead the staff's discussion this morning, but before I turn the meeting over to him, let me introduce the other members at the table.

We have a diverse group of executives at the table representing all the large program offices -- to my far left, Margaret Federline, representing the Office of Nuclear Material Safety and Safeguards; Scott Newberry, representing the Office of Nuclear Reactor Regulation. I've already introduced Ashok. To his right, Tom King, representing the Office of Nuclear Regulatory Research; and then, Pat Baranowski, representing the Office of AEOD.

With that, Ashok.

MR. THADANI: Thank you, Joe. Good morning.

CHAIRMAN JACKSON: Good morning.

MR. THADANI: Well, Chairman, as you know, the most prominent activity underway in the Implementation Plan continues to be the development of regulatory guidance documents -- that is the Reg Guides and Standard Review Plans.

In August, we held a workshop. I attended that workshop -- part of the workshop. It was a three-day workshop. It was very well attended. It was very lively; there was a great deal of give-and-take. We received 30 sets of written comments on the guidance documents. Some of the comments are quite significant, some significant in terms of technical issues, as well as policy matters.

An example of a policy issue that has been raised is concerned with having so-called tight limit of using a core damage frequency of 10-4 per reactor year in terms of considering any further small increases in risk.

There were questions along the lines of clarification as amendments come in with varying impact on core damage frequency, what was meant by different level of analyses, as well as different level of management attention, as we discussed in the past.

There were also substantial questions in the area of uncertainties -- to what extent the detailed uncertainty analyses need to be conducted for very minor or very small changes in, let's say, core damage frequency.

We're analyzing these comments, and we're in fact

planning to discuss our initial thoughts on these issues with the Advisory Committee next week. We would expect -- as Tom is going to summarize some of these issues, we would expect to come back to the Commission on the policy issues

for guidance.

CHAIRMAN JACKSON: Let me ask you a question that occurs to me immediately. You mention this issue of this tight upper limit vis-a-vis the core damage frequency -- you know, 10-4. At the same time -- and I'm only looking aqt what I read in the trade press -- there's discusion about the industry having a perspective of wanting to use PRA's as they are.

The third piece is, when I've pressed the staff in meetings that have been going on since I've been here, about the PRA's -- what you can say about them, the quality of them, et cetera, et cetera, et cetera, et cetera -- there has been some kind of squishiness and indeterminacy, and there was some issue about PRA's that were graded, you know, one, two, three, or something.

And so, the real question that I have is, frankly, this -- that I think, in terms of your bringing a policy issue to the Commission that I think has to be addressed, if there's some variability in the PRA's, either in terms of the methodologies or assumptions, et cetera, or fundamental quality of them, that tracks with this issue of what kind of limits or how much flexibility there can be in limits, et cetera, et cetera, et cetera, that if you don't get at that -- okay? -- and somebody says, "Well, my core damage frequency is 10-5," and if you did the calculation another

way, maybe it would be 10-3, and if you did it another way, maybe it would be 10-6.

What are you doing about that? I have a question about that. How do you handle that kind of issue in getting at this? Because there's an assumption underlying all of this that the numbers, as presented, have meaning.

MR. THADANI: Yes.

CHAIRMAN JACKSON: And that's a question.

MR. THADANI: Yes, clearly. And, in fact, that was also one of the issues that was debated, which is the guidance that we have in a NUREG document in terms of quality for risk assessment.

CHAIRMAN JACKSON: The statement has been made that you're looking for a gold-plated PRA.

MR. THADANI: Yes. There is concern that the risk assessments don't need to be of that quality, and the comment was made that perhaps the use of PRA or the quality of the PRA should be driven by the application.

We have some thoughts on those issues in terms of if the change has a truly negligible estimate impact on core damage frequency -- we could define negligible - and, for that change, does one need to go through a detailed uncertainty analysis, for example.

It may be that that's not necessary, hut that these are the issues that the industry has raised. We're

looking at them. We haven't really come to any conclusions on that.

CHAIRMAN JACKSON: Right, but I think you have to be thinking about these things. I mean the issue is, if you have variability in the PRA's, in the quality of them or how they're done, and getting straight at this issue of

uncertainty, because I've raised the issue in the past --

MR. THADANI: Yes.

CHAIRMAN JACKSON: -- the question is how much variability and what degree of uncertainty, how much can be tolerated for which regulatory use? Because I think it tracks into some of the legal questions that arise.

MR. THADANI: Yes, it does.

CHAIRMAN JACKSON: And what's the difference between the use of PRA in a risk-informed framework as opposed to what I think some of the legal analysis has focused on, which is risk-based?

MR. THADANI: That's right.

CHAIRMAN JACKSON: We're talking a risk-informed framework, and how do these questions play into that?

MR. THADANI: Yes, indeed.

CHAIRMAN JACKSON: And I'm saying that, if you don't address those, then don't send the paper, because I think you're going to have to address these.

MR. THADANI: We would intend to address them.

Those are clearly the central issues. And I think, as you have noted, it is significant to make sure that we are talking about risk-informed and not risk-based, because risk-based -- as you have noted, and it's pretty clear -- is truly relying on numerical analyses almost as a central basis. Our guidance documents don't really do that. I think, in any case --

CHAIRMAN JACKSON: Sorry. I didn't mean to preempt anything you were going to talk about.

MR. THADANI: I think, instead of my taking any more time, it's better to just jump right into the issues.

CHAIRMAN JACKSON: Well, I think this commissioner wants to jump first.

COMMISSIONER McGAFFIGAN: I just wanted a clarification question. On the 10-4 --

MR. THADANI: Yes.

COMMISSIONER McGAFFIGAN: -- core damage frequency, the upper limit, is that an IPE or an IPEEE number or the sum of the two? Because the IPEEE numbers, some of them, were quite large.

MR. THADANI: The intention was not only it's the sume of IPE plus IPEEE, but it also should include shutdown. That is, it is the overall core damage frequency, a mean value. And that's what we had said, it would be a mean value, which, by the use of the term, "mean," we imply some

knowledge of uncertainties in that. So the core damage frequency of 10-4 include internal events, external events, and low power and shutdown.

COMMISSIONER McGAFFIGAN: My recollection from yesterday's briefing is that, on IPEEE's, we've reviewed some, but we're still waiting for in the teens of submittals, if I'm correct.

MR. THADANI: That's correct. That's correct.

COMMISSIONER McGAFFIGAN: So there's a large body of folks who aren't at square one in this.

MR. THADANI: That's correct. There's a little history to this. In June of 1990, there was an SRM which gave some guidance. At that point, the Commission did not want us to subdivide the so-called 10-4 in sub-allocating to different contributors, so to speak.

Recognizing that there are significant questions on methodology of shutdown risk, that that's not available, that external events IPE's have not all been completed, so

what we have is a piece of the information.

One would have to sub-allocate -- make certain arguments about what contribution there might be from shutdown, from external events, recognizing what we have, by and large, are IPE's that deal with internal events only.

This is again discussed in our guidance documents, because that recognition is there, but the licensees would

have to pull together some arguments as to what those contributions might be.

CHAIRMAN JACKSON: To bound them in some sense.

MR. THADANI: To some sense, yes.

CHAIRMAN JACKSON: A bounded contribution.

MR. THADANI: One needs to have nigh confidence that those don't pop up as being the most significant issues. We're going to be having, I expect, fairly significant interaction with the Advisory Committee on these issues next week. Our intention is to pull together some of these thoughts and get the information to the Commission soon after that.

CHAIRMAN JACKSON: Doesn't, to some extent, the question revolves around what is the role of a numerical analysis in a risk-informed, as opposed to a risk-based, framework?

MR. THADANI: Yes. Yes. What's the role? We made an attempt when we identified five basic principles in our guidance documents that we would follow. That was an integration of probabilistic approach, as well as engineering analyses and what we call deterministic thinking. How do we integrate that?

It seems to me that's a much better way to make risk-informed decisions. It doesn't rely entirely on numerical analysis aa the basis for decision, but that

numerical analyses do play a part in that decision.

CHAIRMAN JACKSON: There are two.

MR. THADANI: Unless there are some other general questions, I think I'll just go to Tom King.

CHAIRMAN JACKSON: Why don't you go ahead.

MR. THADANI: Tom.

MR. KING: Thank you, Ashok. In fact, let me just mention -- to follow up on your comment, Chairman Jackson -- some of the comments we did get from industry were related to the role that we've put forward with using the PRA numbers in a risk-informed fashion.

[Slide.]

Some of the comments were directed toward -- they thought we've gone too far in using them in some sort of decision criteria and that they really ought to be geared toward looking at risk ranking, looking at trending and so forth, and not hard and fast decision criteria.

CHAIRMAN JACKSON: Yeah, but then what do you do if you talk about tech spec changes based on these analyses or inservice inspection requirement changes based on these analyses or inservice testing changes? So it sounds like there's some variability in what the industry wants to do. I mean, yeah, you can do kind of generalized risk-ranking and sensitivity analyses and kind of configuration analysis. That's one use. But if you're actually talking about

changes or relaxations in tech spec requirements or inspection requirements, that's a different kind of thing.

MR. THADANI: Yes.

CHAIRMAN JACKSON: That's what I meant about what is the use to which things are going to be put.

MR. THADANI: Yes.

CHAIRMAN JACKSON: And, therefore, that relates to this question of quality, certainty, how much can be tolerated, et cetera, et cetera.

MR. THADANI: If I may just add to just that point, it is easier said than done. When I said the quality should be driven by application -- which I think most of us would --

CHAIRMAN JACKSON: Agree with.

MR. THADANI: -- agree is reasonable -- in some areas -- for instance, inservice testing, quality assurance -- that the issue propagates through the plant. It's not a narrow issue, which means you have to rely on the overall risk assessment. It is not just a small piece that we're talking about. That means one has to have credibility in the overall study, itself. And so, for that application, the demand for the quality, it seems to me, would be very significant.

On the other hand, if it has to do with an issue -- let us just say tech spec changes on accumulators and

PWR's -- then I know that's a narrow issue. I know that there are only a couple of sequences where that system plays a part. I can make sure the quality of that analysis is good. And, in fact, if the change in, say, core damage frequency is very small, then one could have pretty good confidence that the overall impact is, in fact, pretty minimal.

ISD/QA issues of that type really, I think, go to the heart of the broad issue of quality of the whole study, not part of the study.

CHAIRMAN JACKSON: Right. I know Commissioner McGaffigan has a question, but, actually, I'm going to put my commissioner on the spot, because I know he has had some fairly significant perspectives on this.

COMMISSIONER DIAZ: Oh, I do agree. I just really would like to ask whether we are actually getting closer to define whether there should be a level playing field on PRA where, no matter what the application is, there is a base quality that we can feel we can use risk information consistently inside and outside, because I think that becomes clearly an issue.

Until we can feel that we can use this across the board with a certain level of quality and the industry realizes that that will increase safety and it would also reduce burden, we will always be writing things.

I think there has to be a demand that there be a level playing field at some point, and we look for your guidance in establishing what that level is. There has to be. We can't be looking always at the minor application. You have to have a base.

CHAIRMAN JACKSON: What's the based? Commissioner McGaffigan.

COMMISSIONER McGAFFIGAN: It's really very closely related, in that my sense is that the big dollar savings are going to be in the complicated cases and where you're going to need some sort of decent quality. They have to see that that investment in having that quality PRA across the board -- or at least for that plant, the IPE/IPEEE -- that that will then result in savings.

If they don't see that, then probably they won't

go. But if they do see that, then maybe that up-front investment can even be still made in a coming deregulated environment. A good quality PRA -- could you remind me? How much does a good quality PRA cost?

[Laughter.]

MR. THADANI: If you were starting from a clean sheet -- which, in this case, we're not --

COMMISSIONER McGAFFIGAN: Right.

MR. THADANI: But if one were starting from a clean sheet -- I would let Tom correct me if I'm wrong --

but the estimates I have got have been anywhere from 2 to 6 million dollars, depending on scope and so on, and if we're not doing shutdown, that will save some pieces, as well.

COMMISSIONER McGAFFIGAN: And how much does it then cost to maintain that PRA, to keep it up to date -- in an annual O&M cost? Do you know?

MR. KING: Well, just as an example, the South Texas project people, they have a PRA group of around four to five people that maintains it and supports risk-informed applications and so forth.

COMMISSIONER McGAFFIGAN: So that would be about a half million a year, maybe.

MR. KING: To get a ballpark idea.

COMMISSIONER McGAFFIGAN: Well, given some of the applications that they want to apply this to, it strikes me that that's a pretty good investment you could sell to a board.

CHAIRMAN JACKSON: Right. It's a question of what the saving is, if you could have a configuration. You don't have to shut down some other things.

MR. THADANI: And we have heard some estimates on different applications -- including, in South Texas, technical specification changes -- as very significant annual savings.

MR. KING: Right.

MR. THADANI: Very significant annual savings. So an area where we're being told that the savings are not very significant, I believe, was on inservice testing, actually. That's what I was told by, I think, South Texas.

CHAIRMAN JACKSON: Yes.

MR. THADANI: But, in general --

CHAIRMAN JACKSON: But I do think that we have to come out with some baseline and then, for the special big applications, what additional is really required?

MR. THADANI: Yes. Yes. We have developed guidance in terms of what our expectation was. Industry doesn't agree. We have to deal with those issues next, the significance of some of them.

CHAIRMAN JACKSON: All right, I'll adjourn the meeting.

[Laughter.]

MR. KING: In conclusion, yes. Could I have slide 2, please.

[Slide.]

What we're going to concentrate on today in the briefing is what has happened over the past six months since the last briefing in May. As you'll see, there has been a lot of work on a lot of fronts.

We've made significant progress in the

risk-informed guidance documents. We've got some new initiatives and activities we're going to talk about that have been added to the quarterly update.

We've received several SRM's which we're going to respond to specifically today in the briefing. I'm going to focus on the major items, and then, at the end, we'll also come back and talk about where we're going from here in the future over the next few months. Slide 3.

[Slide.]

Since we briefed you last, you've received two quarterly updates -- one in July and the one yesterday. There has also been several papers and SRM's that have been issued over that time frame.

Back in May, we had an SRM that asked the staff to expedite activities on the use of IPE results in prioritizing inspection activities, improving regional capabilities, and providing inspector training. When we get to slide 11, we'll address that specifically.

We had issued our draft regulatory guides for comment and held a workshop in August. We'll talk more about that later.

[Slide.]

Slide 4. On June 5th, there was an SRM that requested our plans for training the NRC staff, which is a very important activity to implement risk-informed

regulation. We've got several slides. We'll talk about that activity, what has happened there and where we're going.

On June 13th, we had an SRM that requested progress reports on the voluntary industry effort to provide reliability and availability data. We'll talk about that. And, as I mentioned, we issued a couple of quarterly updates. Slide 5.

[Slide.]

COMMISSIONER DIAZ: Let me just make a comment. Let me put my professor's hat in here for a minute.

MR. KING: Yes.

COMMISSIONER DIAZ: And look at this, the training and so forth. I haven't seen all of the final objectives on it, but if I may think of how I used to deal with some of these issues.

You know, I think one basic objective is, when you finish this training, anybody in NRC that has to do with any policy, decision-making, ruling, contact with licensee, should have clear in his mind, when somebody says, "This is risk-informed," that you have a picture.

When somebody says, "The coals are hot," or "Your coffee is hot," you've got a picture. And when they say, "risk-based," they should have a picture of what it is, and when they say, "risk-informed, performance-based," it should

be clear.

MR. KING: Yes.

COMMISSIONER DIAZ: Because we keep mixing terms or mixing terminologies and things. I think it has to be, basically, that the NRC has to be, in this country, the agency in which every technical person has a clear picture of what each one of these things means and their relationship to how we regulate.

CHAIRMAN JACKSON: Right.

COMMISSIONER DIAZ: Does that make sense?

MR. KING: I agree, I agree.

CHAIRMAN JACKSON: That's the basis. We can't do

anything otherwise.

MR. KING: Part of our training is directed toward telling the staff, what do our documents say? What's expected? How do we make decisions? Then part of it is directed toward the technology of PRA's.

CHAIRMAN JACKSON: Right, but I think he's making another statement, which I think is an important one, and that is to get the definitions straight and that the baseline of training people, before you get to the technology use, is to have a common vocabulary that we all understand.

If we're doing risk-informed, performance-based regulation, PRA and the PRA Implementation Plan are tools

along that road, but they have to be put within the right context, and so you need to be thinking about that, and you're going to tell us about the training. But we have to make an assumption, and you're going to hopefully give us comfort in that assumption, that undergirding has to do with clear definition.

MR. KING: If we can go to slide 5 and briefly talk about the major accomplishments over the past six months.

[Slide.]

Most recently, we completed the draft risk-informed guide and SRP section on inservice inspection. The Federal Register notice will be printed today announcing the availability and announcing a workshop in November to discuss these documents.

We've also made progress with some pilot activities. We've received two applications so ar for pilots, and I understand there may be up to three more coming.

There have been a number of issues raised in the Federal Register notice on inservice inspection that we're soliciting comment on and will be discussed at the workshop. These deal with issues like the scope of submittal, degradation mechanisms and so forth, a number of technical issues.

We received the Commission's October 1st staff requirements memorandum, and we'll continue to work with the industry on the two methodologies that are being developed -- the qualitative and the quantitative -- and continue to work with the pilot programs.

As I mentioned, we had held our public workshop in August on the other reg guides and standard review plans, and I'll talk more about those later.

We've completed work now on the IPE insights report, what we call NUREG-1560. We had had a workshop in April where we received 25 sets of comments. A number of those required clarifications and expansion of the document, and we've done that, and we're about ready to send it to the printer's.

We included in our most recent quarterly update a copy of the executive summary and the comments and responses to the comments that were received. We've expanded our training program -- and, again, we'll talk about that later on. If I can go to slide 6, which now covers the new activities that will show up for the first time in the quarterly update you received yesterday.

[Slide.]

Over the past several months, we've had a couple

of meetings with NEI on an initiative that they've come in with which involves using a full-scope PRA. By "full-scope"

I mean full power shutdown, external events, to look at their plant, get a risk profile of the various systems an components, compare it to the requirements, compare it to their operations and maintenance cost, with the intent of coming back and, in a risk-informed fashion, suggesting changes to their current licensing basis.

What we've discussed with them are some of the ground rules by which this study would be done, and they also want to do three pilot projects to try out the review and criteria which would be used to select and make decisions on these on these items. We hope to finalize out discussions and get this underway by December.

We've also had some discussions with the American Society of Mechanical Engineering regarding development of a national consensus standard for PRA that would cover scope and quality. This would build upon the work we've done with our draft NUREG-1602. We've worked with them and drafted up sort of a charter for the group. The group involves not just ASME people, but other people from industry, from universities, as well as NRC.

COMMISSIONER DIAZ: Any key issues from trying to bring the standards with 1602 together? Any great differences, similarities?

MR. KING: Well, I'm not sure we're far enough along. I could ask our person who attended the meetings

with ASME if she wants to expand on where we stand on that activity. Mary. Mary Druin is from the Office of Research, and she has been our representative working with ASME.

COMMISSIONER DIAZ: We're driving for consistency. It would be nice to know how consistent we are.

MS. DRUIN: The ASME board met last Thursday and did unanimously vote to develop a PRA standard. They understand the criticality of the issue and our need to move forward real swiftly in this area, so there is going to be meetings, hopefully, like, biweekly. Biweekly -- is that twice a month or is that twice a week? Anyway -- I always get those terms mixed up -- twice a month.

CHAIRMAN JACKSON: Twice a week, if that is biweekly. Bimonthly is twice a month.

MS. DRUIN: That's right. But hopefully it will -- I mean we don't have the standard yet, but it is trying to address the quality, the level of the detail, and get into a lot of the issues that were discussed at the very beginning of the meeting this morning.

CHAIRMAN JACKSON: Have they laid out a timeline for their actions?

MS. DRUIN: The timeline that has been laid out is to have a standard ready for NRC endorsement by December of 1998 -- in a year -- which, if we're successful, will be phenomenal, because, typically, this is a four-year process.

They understand the criticality, and they're putting in a new process to get this through in that kind of time frame.

CHAIRMAN JACKSON: And this is a better process than doing it the reverse -- developing the standard in-house and having a professional group review and endorse them; is that right?

MS. DRUIN: I can't comment on that.

CHAIRMAN JACKSON: Mr. King?

COMMISSIONER DIAZ: But 1602 has the standards.

COMMISSIONER McGAFFIGAN: Implicit standards in it.

MR. KING: Yes. And I think, from the comments we've received, people feel that that's a good input to the standards development effort, that it does have a good foundation.

COMMISSIONER DIAZ: And one question was whether there's going to be a significant difference between what they are going to be doing, or do we have significant similarities? In other words, are we on good grounds with our standards or not?

MR. KING: I'm not sure we're far enough along to say whether there's going to be a difference.

MS. DRUIN: Tom, we had a meeting last September, and at the meeting were representatives from the different owners' group, different utilities. NEI was present. One

of the things that was discussed was where do we start in the standard?

Everyone was pretty much in a consensus to start using 1602 work that has been developed by the CE Owners Group and other organizations. There was not a lot of diversity there, and no one felt that there was going to be a big need to go out and create new writing, that there was enough information out there, between all of these different documents, that it was going to be more of a -- it don't want to trivialize it -- but more of a cut-and-paste job.

CHAIRMAN JACKSON: Good. Thank you.

MR. KING: The third new activity, which is in response to Direction Setting Issue 12 on risk-informed regulation, is an effort by NMSS to develop a framework for the application of risk-informed regulation. I understand a paper will be coming to the Commission by the end of this month providing that information.

CHAIRMAN JACKSON: Would you have any additional comments?

MS. FEDERLINE: Yes. We would just let the Commission know that we think the Commission's direction was particularly timely in this regard. As you know, we had a wide diversity of regulated systems in NMSS, all the way from predictive 10,000-year analysis to the handling of gauges.

So there are a couple of issues that we're going to be bringing forward to the Commission that we've considered. One is the diversity of the licensee base and the economic motivation for turning to a risk-based standard.

Another is the methodology questions. We're very long in the development of waste disposal predictive methodologies. We're less far along in the application of human reliability in the medical applications, so there will be a lot of development that needs to be done in the methodology area. But we will be highlighting in this paper these issues for you and proposing a path forward.

CHAIRMAN JACKSON: Good. Thank you.

MR. KING: The fourth items was, about a month ago, we provided a paper to the Commission responding to Chairman Jackson's July memorandum which followed up on an ACRS letter that said we ought to consider elevating the CDF to a level of a safety goal.

We've taken a look at that. We feel it's certainly an item that might be very worthwhile in doing,

but in doing that there is a number of other issues that we ought to look at in an integrated fashion, because the safety goal policy talks about defense and depth; it talks about uncertainties; a number of things that we're dealing with now in trying to finalize these reg guides.

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So we came to the Commission with a recommendation to defer our answer on that until the end of March so that we can deal with some of these related issues in the context of finalizing the guides and then take those resolutions and then come back with an integrated recommendation.

CHAIRMAN JACKSON: And that will be in the March time frame?

MR. KING: End of March is what we proposed.

CHAIRMAN JACKSON: Right, because the current safety goal policy, in fact, does not permit plant=specific use.

MR. KING: That's correct. That's another issue.

CHAIRMAN JACKSON: And the Commission has recently endorsed the plant-specific use.

MR. THADANI: Yes.

CHAIRMAN JACKSON: And that and this issue of elevating the core damage frequency, which you're basically de facto using on a plant-specific basis. You know, all of these things have to be tied together, and I think you and I have just said the same thing.

MR. KING: Yes.

[Laughter.]

And finally, we've started work now preparing for a more intensive effort next year in looking at low power and shutdown risk. This was prompted by an ACRS letter last

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year. What we're doing this year is gathering existing information from overseas, from industry, from other work that has been done at NRC, and then, based upon that, well decide what additional analysis we need to do.

CHAIRMAN JACKSON: Right. Now, I understand that the staff, in fact, conducted fairly extensive evaluation of low power and shutdown operations for both a PWR at the Surry Plant and a BWR at Grand Gulf.

MR. KING: Correct.

CHAIRMAN JACKSON: And so, the question is, were there inadequacies that were identified in those efforts that would require us to embark on the new activity -- you know, it's really related to what kind of scope of activity are we planning for this risk study.

MR. KING: What we found out on that was two things. We had done a screening study where we looked at a number of plant states during shutdown and then tried to identify the one that seemed to be most risky for the detailed study.

In doing that, it became clear that the thing that drives the risk is what the plant configuration is during shutdown. It's not related to vendor type or containment type or anything like that. It's how do they do the refueling? The thing that we need to do --

CHAIRMAN JACKSON: In that was not a focus in the

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earlier evaluations?

MR. KING: No. For the two plants we looked at, we tried to identify that state, but it became evident that that state does not apply to all the reactors out there.

CHAIRMAN JACKSON: I see.

MR. KING: So one of the things we need to do is

go back and see, are there some generic states that could envelop the type of plants out there in the way they do refueling and shutdown activities and try and take a look at those conditions that we haven't looked at in these two studies. That's one key aspect of what we need to do.

CHAIRMAN JACKSON: The focusing on this overall plant configuration.

MR. KING: Yes.

CHAIRMAN JACKSON: Commissioner Diaz.

COMMISSIONER DIAZ: Yes. And, of course, when we do this, we're going to set a standard for the industry. We're going to do it in a very consistent, realistic, thorough basis where apples are apples and oranges are oranges, because it's not,

MR. KING: Correct.

COMMISSIONER DIAZ: Thank you.

CHAIRMAN JACKSON: And that that's the point of trying to genericize some of this.

MR. KING: That's the point of trying to

genericize, but genericize in a sense that really reflects the way things area done in plants. I don't know whether we'll end up with six types of conditions or four types, but that remains to be seen at this point.

CHAIRMAN JACKSON: Okay.

MR. THADANI: I would just make a comment, Commissioner Diaz, that yes, indeed, but, in terms of uncertainties, that becomes, I think, a much more significant issue during shutdown of low power operation because they're largely controlled by, A, human actions; B, some of the models that need some work, like improvements in trying to estimate these risks.

MR. KING: Let me go on to slide 7.

COMMISSIONER DIAZ: I am not going to respond because it will consume the rest of the meeting.

[Laughter.]

CHAIRMAN JACKSON: Well, but before you do go on, I guess I'm interested in implementing the Commission's policy statement. Has the staff envisioned any risk-informed applications that would require changes to the backfit rule? If you haven't thought about it --

MR. THADANI: The way we have gone forward has been that this is a voluntary option for the industry, and that's how the guides are structured. They're not impositions, but that if the industry wants relaxations,

this is an approach we would pursue. We have not thought through the backfit implications if we were to impose such an approach as being mandatory. Currently, we're pursuing just the voluntary option.

CHAIRMAN JACKSON: Well, maybe you need to do some background on that.

MR. THADANI: We'll give some thought to that issue.

CHAIRMAN JACKSON: Right.

MR. KING: One thing we have thought about -- at least the team working on these guides -- was the regulatory analysis guidelines.

CHAIRMAN JACKSON: Right.

MR. KING: Maybe they need to be updated once we get the framework and the principles and guidelines in place. For example, they don't really talk about defense and depth.

COMMISSIONER McGAFFIGAN: It's fascinating.
MR. KING: We have had some discussions internally on that.
MR. THADANI: I want to make sure I didn't misunderstand your question. Your question was to the heart of the backfit rule, itself.
CHAIRMAN JACKSON: Yes.
MR. THADANI: To the heart of the backfit rule.

That's what I thought. Thank you.
CHAIRMAN JACKSON: You answered the question. Thank you.
MR. KING: If I could have slide 7, please.
[Slide.]
Slide 7 talks about the guides and standard review plans that are out for comment now. That comment period closed a couple of weeks ago. We now have about 30 sets of comments, as Ashok mentioned. Generally, the comments are supportive of the concept, the approach, the structure of the documents.
Now, they did have a lot of detailed comments on specifics of the decision criteria and things that were not clear to them, and I think we probably will be making a number of changes, certainly, to clarify things like, we got a lot of questions on the use of NUREG-1602, a lot of misunderstanding, that kind of thing.
CHAIRMAN JACKSON: Let me ask you a question. In terms of going back to the issue we talked about a little bit earlier, I want to be sure I understand some of the concerns with respect to required PRA quality. Was the concern having to do with the fact that the required quality was not adequately described, or was the concern with the quality as laid out already in the documents?
MR. KING: The concern was that what we asking for

was the gold-plated PRA, that our putting forth NUREG-1602 was interpreted as requiring a gold-plated PRA. That was not our intent.
CHAIRMAN JACKSON: Right.
MR. KING: And we need to clarify that.
CHAIRMAN JACKSON: And then, this issue of the acceptance guidelines for very small or negligible risk increases, is that an issue for those plants that may be bumping up against the 10-4, as opposed to -- because it strikes me that you've dealt with it, essentially, in the guidance, as far as I understand it, but there is an issue for those plants that either today are at or maybe even slightly exceed the 10-4 core damage frequency.
MR. KING: It's an issue for all plants that want to use risk-informed regulation, but I think it's of particular importance to those that are bumping up against the 10-4.
CHAIRMAN JACKSON: And in looking at that, have you looked at issues that may have to do with -- let's call it for those there for the moment, for the purposes of a straw man -- looking at risk neutrality, in terms of where, if there were some risk increase in one place, there might be some compensation somewhere else so that that is a potential way, within some band, of handling things without losing something that you tag your analysis to?

MR. KING: Yes. In fact, that's one area we need to clarify in our documents. We agree with the concept of bundling several changes together -- some risk increases,

some risk decreases. We think that, certainly, to do that, that will bring risk down in some areas, which is one of the incentives for allowing bundling.

CHAIRMAN JACKSON: Right, but it also allows you do deal with the issue in a more generic way, but particularly for those that are bumping up against some ceiling.

MR. KING: Yes.

MR. THADANI: Commissioner.

CHAIRMAN JACKSON: Go ahead.

MR. THADANI: I just want to make sure -- and I believe that is completely consistent with the policy statement.

CHAIRMAN JACKSON: Right.

MR. THADANI: Because the policy statement said you need to focus on both -- the areas where we need to relax our requirements and the areas it may be appropriate to enhance safety.

CHAIRMAN JACKSON: Right. In fact, the lawyers would tell you that you can't go one way without going the other.

MR. THADANI: Yes, I've seen this.

COMMISSIONER McGAFFIGAN: How much does a gold-plated PRA cost?

[Laughter.]

MR. KING: That's probably Ashok's $6 million.

COMMISSIONER McGAFFIGAN: Is the $6 million one --

CHAIRMAN JACKSON: I don't know that you -- can you really make such a statement? Because it's a plant-specific issue.

MR. THADANI: I think it's very difficult for us to sit here and give you that estimate, because their IPE's have already been done, and there is variability, as I think the Chairman noted, in terms of the quality, so the cost of upgrading -- we don't know, for that matter, the quality of the IPEEE's.

COMMISSIONER McGAFFIGAN: Right.

MR. THADANI: And so the cost of upgrading could be from a small amount to possibly quite significant. I think it's very hard to give you one --

CHAIRMAN JACKSON: Well, is the definition of gold-plated that I've done my PRA --

COMMISSIONER McGAFFIGAN: And it's good enough.

CHAIRMAN JACKSON: And it's good enough, and I don't want to change it? And if you ask me to change it for some application, by definition that makes it gold-plated?

MR. THADANI: No. I think industry's roles are

gold-plated, but --

CHAIRMAN JACKSON: No, I'm not talking about your point of view. I'm playing the devil's advocate here a little bit, not with you, but in the more generic sense.

MR. KING: I don't think changing it to reflect or support an application is an issue. I think it's what's that base level of quality.

CHAIRMAN JACKSON: It's the base level issue again.

MR. KING: Yes.

COMMISSIONER DIAZ: But definitely we want it to be corrosion of the system; right?

[Laughter.]

MR. KING: True.

COMMISSIONER McGAFFIGAN: Yes.
CHAIRMAN JACKSON: Gold is good in that regard. Brass, on the other hand, does tarnish.
MR. KING: The comments we receive, we'll be discussing those with ACRS next. We'll also, when we come back with the proposed final documents, be summarizing them for the Commission, as well, and what our response is.
Let me talk a little bit about the last bullet, the policy issues. There are several items that have come out of the comment process and from internal discussions that we're going to come back to the Commission with to get

a policy decision. We've got a paper under preparation now. We hope to have it up here by the end of this month.
Two of the issues are listed here -- treatment of uncertainties, which we talked about earlier, and acceptance guidelines for very small or negligible risk increases.
That gets, really, to the question of what's the definition of risk-neutral. Can very small increases in risk essentially, from a practical standpoint, be considered risk-neutral, which would allow more flexibility for plants that are bumping up against the 10-4 CDF, for example, to come in and participate in risk-informed changes.
CHAIRMAN JACKSON: What is the complaint about the treatment of uncertainties? You haven't treated them anyway, so -- at this stage of the game.
[Laughter.]
So what's the complaint or the potential complaint?
MR. KING: The complaint is that we've asked for too extensive an uncertainty analysis in the current draft.
CHAIRMAN JACKSON: In the current draft?
MR. KING: Yes.
CHAIRMAN JACKSON: Okay.
MR. KING: What we're thinking about at this point, and which we'll talk about in this policy paper is very small changes in risk increases, very small increases,

how extensive an uncertainty analysis do we need? Can we define a small range that we can call risk-neutral where the uncertainties really don't matter, because the change is so small, and, therefore, you don't need as extensive a treatment of uncertainties.
It would also allow plants that are bumping up against the 10-4 to come in and propose changes.
CHAIRMAN JACKSON: But isn't it rooted in the fact -- and we're not going to sit here and debate it all day or anything -- but isn't it related to the confidence you have in the beginning? With the answer, I mean.
It is naive to think that you can just take a mean and say, "Okay. That's it. I don't know how well I know that mean, and it's okay." So it's small, and it may be, though, that there's a band around it where you are that's a factor of 10 higher. And so it is not an issue that you can sweep under the rug.
MR. KING: No. And part of the problem is those same concerns apply when you're talking a confidence level, because even with a full-scope PRA that includes external events and shutdown, there are things that are not analyzed, that are unanalyzable at this point -- management and organization factors, aging of components, probably some others.
So when you're talking mean or you're talking a

confidence level, you still have to somehow decide how you're going to treat those unquantifiable factors. So we're trying to come up with a scheme that deals with that and that also deals with the application that makes sense from the standpoint of maybe they're proposing a change that really is only affecting full power operation, and they don't want to do a low power and shutdown. How do you deal with that?

CHAIRMAN JACKSON: Okay. I understand.

MR. KING: It's a complicated problem.

CHAIRMAN JACKSON: Right. Go ahead.

MR. THADANI: I might note, in our paper that we sent you just a few days ago, there is an attachment that talks to this issue and some of the initial thoughts, at least, on how we might want to consider proceeding.

MR. KING: Yes.

CHAIRMAN JACKSON: When will the Commissioners receive your formal analysis of the comments and your proposed resolution -- and pulling out the policy issues?

MR. KING: What we were doing is pulling out the policy ones and sending them up the end of this month.

CHAIRMAN JACKSON: Okay.

MR. KING: That's our plan. The others, both the comment and how we've treated it, we're planning to put forward in the package that sends the final documents to the

Commission, which is December.

CHAIRMAN JACKSON: Right. All right. So this is all tracking, still, to have the finalization by the end of the year.

MR. KING: Yes.

CHAIRMAN JACKSON: Commissioner McGaffigan.

COMMISSIONER McGAFFIGAN: The second policy issue, the acceptance guidelines for very small or negligible, does this get into things like 10-6 or -- I mean have you chosen a number for what is very small or negligible that you've quantified and said, "Okay. If it's 10-6, I don't care whether they're bumping up against 10-4, because 10-6 is 1/100 of 10-4, so therefore I'll consider that negligible in the scheme of things"?

MR. KING: We need to define a number.

COMMISSIONER McGAFFIGAN: You need to define a number? You do not have a number?

MR. KING: I've chosen a number, but that doesn't mean that we have a consensus on it.

COMMISSIONER McGAFFIGAN: Is it fair to ask what that number is?

[Laughter.]

CHAIRMAN JACKSON: No, because it's his number, not their number.

MR. THADANI: Yes, right. And I want to be

careful. I think that's not the only variable. The other variable is how many times and the cumulative impacts --

CHAIRMAN JACKSON: And what's the cumulative impact?

COMMISSIONER McGAFFIGAN: Right.

MR. THADANI: And that's the real issue, I think, that we have to pay attention to.

CHAIRMAN JACKSON: Exactly.

MR. KING: And there may be -- we've listed two policy issues.

CHAIRMAN JACKSON: I mean risk neutrality is

defined within that context, anyway.

MR. KING: Yes.

MR. THADANI: Yes.

CHAIRMAN JACKSON: Yes.

MR. KING: This would define risk neutrality, whatever that number is.

CHAIRMAN JACKSON: Exactly. That's right.

MR. KING: And there may be other policy issues in the paper, as well. We're talking about, for example, do we need separate guidelines for the shutdown condition? Do we need guidelines to cover temporary increases in risk? So the paper in October will deal with all of those.

[Slide.]

Let me go on to slide 8 and just quickly talk

about where we stand on IPE and IPEEE. The IPE reviews are done except for Browns Ferry Unit 3, which will be done in December, I believe.

We are putting together what we call the IPE follow-up program, which is talking a look at a number of the results from the standpoint of the plants that had a relatively high core damage frequency or containment failure probability.

Perhaps we would want to follow up with those and see why haven't they done something to reduce that using the guidelines in the regulatory analysis guidelines document as sort of a benchmark to look at what improvements could be made.

There are some generic issues that perhaps we want to work on. You know, probably the most prominent one is the pump seal LOCA for PWR's. A number of plants, that was a dominant sequence. Do we want to do something further there.

We had asked plants to specifically answer some what we called containment performance improvement questions, questions that came out of generic studies that were done several years ago.

A number of plants answered those; a number of plants didn't. We want to follow up on the ones that didn't, and we want to follow up and see have licensees

really done the things that they committed to do when they submitted their IPE, make the improvements they said they were going to make.

So those are the kinds of things that we plant to include in our follow-up program, and we owe you a separate paper, giving more detail on that. I think it's in November.

The IPEEE is underway. We're going to give you an interim insights report in November. We've just tried to put a short executive summary in the paper that you received yesterday, and ultimately, when we're done, we'll have a follow-up program similar to the one we're embarking on on the internal events.

CHAIRMAN JACKSON: Let me ask this quick question. Are the IPE results becoming obsolete, and do we know how many licensees have been updating their IPE's? Because kind of undergirding this is the issue of, if we are going to make regulatory decisions based on PRA results -- which is what most of these IPE's have turned out to be -- there's an issue there in terms of -- and you've mentioned cumulative impact, for instance, of changes. Are we thinking about how that's going to be tracked and what that implies about how updated the IPE's need to be?

You know, I've been to nuclear plants this year. This is 1997. Now, admittedly, what may be in our

residents' offices may be different than what's on the shelf in the licensees' engineering organization or PRA organization, but I've seen dates like 1991. Presumably, there have been changes made to the plant, including ones that could have lowered the estimated core damage frequency, as well as ones where there has been no analysis one way or the other to know what the cumulative impact is. What are we doing about that?

MR. KING: The IPE's, basically, are a snapshot or information that's maybe five years old, something of that nature.

CHAIRMAN JACKSON: Well, I guess I'm really asking something else, which has to do with, if we're purporting to make regulatory use of the PRA's -- and I want to stay on that plane, but I'll ask it within the context of the IPE's -- is there not a linked question having to do with living PRA's, how they're maintained and how up-to-date they need to be relative to -- otherwise, how do you make the judgment?

MR. KING: Our guidance documents --

COMMISSIONER DIAZ: Going back to what is not even a dead horse anymore -- it's a skeleton by now.

[Laughter.]

But it goes back to establishing a base --

CHAIRMAN JACKSON: Baseline, yes.

COMMISSIONER DIAZ: Okay. And they need to know what the baseline is, and we need to inform them of what it is so we can say this is what we will find a baseline acceptable to make these changes.

CHAIRMAN JACKSON: Right. And included in that is the issue of how do you update?

COMMISSIONER DIAZ: Yes.

CHAIRMAN JACKSON: I mean we're dealing now -- I mean that's our big lesson learned in the last year and a half with updating and maintaining certain fundamental information vis-a-vis the licensing basis and design basis information. The question is, what are we doing?

MR. KING: There is no requirement for them.

CHAIRMAN JACKSON: No, no, no. I'm not talking about the requirement.

MR. KING: I mean there was no requirement for them to do a specific type of PRA in response to an issue generically in the first place.

CHAIRMAN JACKSON: Well, no. That is not the issue. One is an informational question. One, are the IPE's becoming obsolete? The second part of the informational question, do we even know how many licensees are updating their IPE's -- second informational question.

Because, three, it has bearing on the third question, which is, if you're going to lay out standards

having to do with what the IPE's have to be for what regulatory use you're going to make of them -- because that's what we're talking about -- you have to include in there how they're updating.

I'm not saying you're laying it as a requirement, but you have to have something. You can't take 10-year-old information and make a regulatory judgment on it. That's all I'm saying.

MR. THADANI: I think we can answer one out of three questions.

[Laughter.]

CHAIRMAN JACKSON: Well, that's good.

MR. THADANI: I'm pretty comfortable with the second question you have raised, which is, first of all, are there some licensees whose IPE's or obsolete or are there licensees who are keeping up? I think the answer probably is yes to both, but how many I don't think we could say. Clearly, the pilot plants that we've been working with have been keeping up and have been paying attention to the issue of quality and so on.

My sense would be that if we keep moving in this direction where there is, in fact, consensus within the industry, more and more of the licensees' IPE's would be along the track.

The only other comment I wanted to make was, in

the guides that we have, we have clearly stated that when licensees are coming in for changes that the analysis, itself -- that is the risk assessment -- should reflect the plant as is and not as it might have been.

CHAIRMAN JACKSON: So, in a sense, you have that covered in there.

MR. KING: It's in there now, yes. Yes.

CHAIRMAN JACKSON: That's the baseline issue. Mr. Callan, you were going to make a comment.

MR. CALLAN: I was just going to say -- and I'm sure Ashok would agree -- that we can't take comfort from the fact that pilot sites are maintaining their IPE's, because they were selected precisely because they maintained their IPE's current.

CHAIRMAN JACKSON: Yes.

MR. CALLAN: That they are, in effect, leaders in the industry in that regard. So I don't think that's a good indicator of the rest of the industry.

CHAIRMAN JACKSON: You said something very important, though. You've already said, in the guidance documents that you've developed, that you already clearly have stated that when one comes in with a PRA it has to reflect the latest and the greatest.

MR. CALLAN: As built, as operated plant is what it says.

CHAIRMAN JACKSON: Right. In order to be able to use it. Commissioner McGaffigan.

COMMISSIONER McGAFFIGAN: My only point is that the standard process -- the ASME standards process that we talked about earlier that's going to start with 1602 -- if you have imbedded in 1602 that a good PRA is a living PRA, then that presumably is the standard we're going to be propagating into standard space.

I think that's good, but I suspect some of the stuff we're reading in Inside NRC about gold-plated PRA's may well be -- a living PRA is -- I'm trying to still get a definition of gold-plated.

[Laughter.]

Maybe part of it is that it's living and it has to have been updated since the last time you thought about this. Many of them see that large improvement as too hard, as opposed to the South Texases who you've been working with who, for them it's a small increment, and they are ready to go. But I think it's real important, the notion of a living PRA.

MR. THADANI: Yes. And, in fact, what Tom said earlier is significant. South Texas, I think having a group of five or six people, it is that the idea is not just to update the PRA; the idea is to apply it.

COMMISSIONER McGAFFIGAN: Right.

CHAIRMAN JACKSON: Right.

MR. THADANI: And so if a licensee were to apply, there is obviously the incentive to make sure it's kept up, it's in fact a living PRA.

CHAIRMAN JACKSON: Right.

MR. THADANI: The issue is going to be --

CHAIRMAN JACKSON: Okay. You know, I've asked on several occasions, but I'm now going to get you to commit to this. Are we keeping record of what regulatory use we are have been making of IPE results? I've asked this question for -- two years. So now I'm going to get you to commit to a date. Or we'll give you a date.

MR. KING: No. We are committed. You will find it in the table in the quarterly update.

CHAIRMAN JACKSON: Ah, okay. Very good. We've been talking about South Texas, and I notice it's on the next viewgraphs.

MR. KING: Yes. I'm going to turn it over to Scott Newberry, who will talk about the pilots.

MR. NEWBERRY: Yes. Good morning.

CHAIRMAN JACKSON: Good morning.

MR. NEWBERRY: I'm going to go through the status of the four pilots on the next couple of viewgraphs and then a little bit about insights in the inspection program.

Of course, each of the pilots would use a

risk-informed approach to all their NRC requirements and the associated program at the plant in response to those requirements, using a process along the lines of the Reg Guides which are out for public comment, and I know there are issues, and are being finalized, which creates a challenge in the pilot process. But progress has been made.

The first pilot, on tech specs, just to remind you that that pilot would extend the outage time for certain equipment, ECCS equipment that would be used to respond to unlikely events, large LOCA's or the safety injection accumulators and low pressure injection systems.

The Commission -- I guess early last summer -- approved the Arkansas risk-informed tech spec SER. But there was an issue in the SER that we're working with licensees on that has to do with one of the five principles in a risk-informed approach, and that's the configuration risk management program that would be committed to by the licensee.

I think the snapshot of our experience to date is that that's really a plant-specific issue. In working with specific licensees on that, it looks like -- San Onofrio, I think, may become the lead plant there -- that we should be able to finalize a position on that issue and get our first safety evaluation out by the end of the year that would approve a plant-specific configuration risk management

program that would serve as a model -- perhaps a simple example here, but a model nonetheless -- that shows that we can make a risk-informed decision with tech specs.

Graded quality assurance pilot, we just sent a paper up to the Commission -- 97-222 -- which forwards the

draft safety evaluation report for South Texas. This SER would accept Houston Power and Light's risk-informed revision to their operations quality assurance program.

This was an interesting pilot. I think it challenged the staff to use the guidance, to learn from the guidance. Many of these issues that came up here were talked about extensively as we moved that safety evaluation report up to the Commission.

I think the conclusion in the safety evaluation report is important to point out to you, from the standpoint of including, that we think this program presented an overall safety improvement at the plant.

But the issues of -- I think the term, "bundling," was used here -- clearly, that activity was meant to focus on the most important equipment at the plant so there's intense activity, but to relax the program on the less important equipment at the plant.

But then there's an increased feedback mechanism. -- that's principle number 5 in NUREG-1060 -- which we think will really provide us a safety benefit.

I think those conclusions really come from the judgment of the staff. I think there's a lot of qualitative evaluation involved in this SER. So we were happy to get that SER to you finally in that recent paper. Next viewgraph please.

[Slide.]

IST and ISI pilot. Both pilots, of course, would be intended to improve test programs, inspection programs at plants using risk insights. We're still shooting for a December date on the first IST pump and valve pilot at Comanche Peak.

In terms of recent activities, we had a team on site at Comanche Peak dealing with the issue of PRA quality. Looking at the PRA for this particular application, there were some minor issues identified that are being worked through that have to do with elements of the PRA such as treatment of human performance, success criteria, issues like that.

I think I would mention that the dates have delayed a little bit on this pilot and others. Utilities were focusing resources on providing comments to us on the Reg Guides and SRP's so that there has been an impact there. But, as I said, we're still shooting for December on that pilot for Comanche Peak. Palo Verde is going to slip into 1998.

Inservice inspection of piping. I want to modify, I think, the context of that first bullet there, in terms of "nothing received for review yet." At the time of the viewgraph, nothing had been received for the identified pilots to date. Those would be Surry, ANO-2, and Fitzpatrick.

However, just within the last couple of days, ANO-2 did come in with a full proposal, and we understand, in talking to Surry, that they would be in next week. And then, a recent letter from the industry adding two more pilots, ANO-1 and Vermont Yankee, so there would be five plants pursuing ISI initiatives.

Now that we have ANO-2 and with Surry coming in, we'll be able to look at schedules and priorities and provide you an update in the next plan. Next viewgraph, please.

[Slide.]

We've got one viewgraph here on some of our actions in response to your May SRM regarding use of PRA in the inspection program. I think it's fair to say, too -- and, Chairman Jackson, you mentioned that -- we're really talking about a philosophy here in terms of implementing the policy statement.

So there are other broader actions in our pursuit of opportunities every day, not just in the inspection

program, but, of course, here at headquarters, to try to use risk-informed decision making in our programs, but you hear it particularly in response to your SRM.

You asked about prioritizing inspection activities using IPE information, improving the region's ability to use risk insights, and then, of course, staff training. Pat Baranowski will talk in some detail about training after I finish up here in a minute.

But in terms of particular staff actions to date, a lot of the information that has been talked about here in terms of the IPE's, the information that we have has been made available now through documents. There will be more documents going out to the regions, but there have been training lectures at all the regions conducted by people familiar with the IPE results.

Then there's a continuing effort with the senior reactor analysts program, keeping that program staffed.

CHAIRMAN JACKSON: No, do all the regions, at this point, have senior reactor analysts?

MR. NEWBERRY: Yes. The exact status on that is, of course, there's 10 SRA positions in the agency -- two at headquarters and, so, two at each region.

CHAIRMAN JACKSON: So there's at least a body at each region.

MR. NEWBERRY: Yes. Region 3 has two SRA's, but

they're not certified yet. They're in the training program.

CHAIRMAN JACKSON: I see.

MR. NEWBERRY: That's an 18-month program.

CHAIRMAN JACKSON: And to whom are the training lectures targeted?

MR. NEWBERRY: As I recall, it's a broad target. We look for opportunities to bring people in from the field, residents as well as regional staff. So the effort here -- and you'll see that, I think, in the training.

There's training directed toward the review staff and NRR in terms of what these guidance documents say. There's training on PRA technology. There's training for inspectors. There's training for managers. There's a broad spectrum of training, and Pat's going to talk about that. The intent here, and I think you'll see it in Pat's viewgraphs, is to touch on, basically every NRC employee making regulatory decisions here.

CHAIRMAN JACKSON: Okay.

MR. NEWBERRY: Guidance on the use of PRA in the Inspection Manual. Just last month, an appendix to Manual Chapter 2515 was completed. Just looking at it recently, I think folks will find that very interesting. We will probably get some feedback on it and maybe have to do something else.

But there's everything from general advice to

advice to a glossary of terms in that Manual chapter. There are examples of things that have been found and could be

found at plants with respect to support system relationships, to front line systems, and also guidance on ranking issues in planning using PRA information. And, as I said, Pat will be talking about training here in a minute.

Upcoming actions -- the training effort is a pretty significant investment of resources, both in the training center facilities and also getting employees into those classes and the seminars. It's an important activity.

We're just starting to do more in revising core inspection procedures. In particular, the graded QA inspection procedure is being worked on, and that's explicitly an item in the plan, and that's due to be completed this spring.

CHAIRMAN JACKSON: Good. Let me ask you a quick question. You talked about the ANO risk-informed tech spec changes.

MR. NEWBERRY: Right.

CHAIRMAN JACKSON: How long did that take?

MR. NEWBERRY: I don't know. Is there somebody here?

CHAIRMAN JACKSON: And are we --

MR. NEWBERRY: We can get you an answer on that.

CHAIRMAN JACKSON: And even though the guidance

documents that you're working on are still being finalized, the question is are you gathering kind of what you've learned so that you kind of begin to develop a better oiled process for doing them to shorten the time?

MR. NEWBERRY: Yes. In fact, some of the comments received have been from staff working on those reviews.

CHAIRMAN JACKSON: Okay. And also input from licensees to try to draw it all together into a process.

MR. NEWBERRY: Yes,. Some of the comments received were derived directly from the pilots -- the tech spec pilot, for example.

CHAIRMAN JACKSON: So if I talked to ANO and so on, what would they say? Were they pleased as Punch or -- you know, "This is the cat's pajamas"?

MR. NEWBERRY: No. I will take a chance here and guess at what they would say. I would say they would be concerned about the risk configuration management program, that we should limit ourselves to, perhaps, the extension.

More precisely, I think, for example, the safety injection accumulators now have a one-hour AEOT; we would extend it to 24 hours. They would like to limit that safety assessment or that configuration issue to the latter part of that extension. So they would have an issue. They would have an issue.

CHAIRMAN JACKSON: Okay. Training. Pat.

[Slide.]

MR. BARANOWSKI: The October 14th update to the PRA Implementation Plan briefing provided an attachment that talked about training, and I have a few highlights here.

That attachment responds to the June 5th SRM in which we were requested to discuss plans for training the staff and, in particular, with regard to training for regulatory approaches that would be relevant to the risk-informed regulatory guides and the standard review plans that are in development, as well as overall training for basics in PRA, and, moreover, to focus somewhat on regional inspection training activities.

The PRA Implementation Plan does include several tasks related to training. These are modified as we go

along to reflect the regulatory program that's in development as it evolves.

We have made some changes over the last several months and are continuing to define and implement some new training requirements, and I have a couple of them that I'll mention here, in particular, with regard to the NRR technical staff.

First, let me mention that there is a seminar that has been put together that covers the responsibilities associated with risk-informed regulatory activities, and it's designed to familiarize the NRR staff in general, and

hopefully it will cover the kinds of things that we talked about a little bit earlier -- terms and things that we can all talk in a common language.

It's a mandatory seminar. It's meant to motivate and familiarize the staff with the uses of risk-informed regulatory initiatives, and it's primarily taught by an NRR senior manager. I think Gary Holohan has done the most recent one.

MR. NEWBERRY: Let me just make a comment quickly there, Pat, in response to Commissioner Diaz. Your issue on this mental image of risk-informed comes out very quickly in the dialogue that's created in that seminar. That seminar is built around regulatory policy, the PRA policy statement, and the intent of where we're trying to go.

We've got a ways to go, based on the dialogue in those seminars, but I think that's where it's beginning to take place.

CHAIRMAN JACKSON: Well, the question becomes, in terms of a metric, on the outcomes, the people who attend the seminars walk away, you feel, with more clarity in that regard? That's a metric.

MR. NEWBERRY: More clarity, yes, but my own view is it's going to take continuing attention for a period of time here with on-the-job attention.

CHAIRMAN JACKSON: Application and guidance.

MR. NEWBERRY: Yes, very definitely. It's only a two-hour seminar.

CHAIRMAN JACKSON: Yes, I understand the point.

MR. NEWBERRY: Yes.

CHAIRMAN JACKSON: But you're at least opening the minds in this regard.

MR. NEWBERRY: Yes. They're lively time periods.

CHAIRMAN JACKSON: Yes. Okay.

MR. BARANOWSKI: In addition to the seminar I just mentioned, the PRA Basics for Regulatory Applications course -- that's course number P-105 -- has been modified to include some additional information on the regulatory approaches for the Reg Guides and the SRP's.

That's also a mandatory course for NRR technical staff, and over the next two fiscal years, we would expect that the full staff should be trained, would have attended that particular course. Next viewgraph, please.

[Slide.]

The resident inspectors' needs are intended to be addressed by the PRA Technology for Regulatory Perspectives course, P-111, which is mandatory for all full-time NRR inspectors and regional reactor program inspectors.

Now, the course curriculum includes extensive practical workshops and case studies applicable to the needs of the inspectors as they would perform risk-informed

inspections.

The first presentation of the course was originally scheduled for October of this year. It was delayed until January of next year as a result of what we call a pilot talk-through, where we sort of try the course out on some more experienced people to see if the concepts that were intended to be in there are coming through clearly.

So a few modifications are being made, and then we would expect to have several of these courses in Fiscal Year 1998 and finish up in 1999. Resident inspectors will be given the highest priority for attendance in this course.

CHAIRMAN JACKSON: Will there be different training for NMSS staff? Has anyone thought about that?

MS. FEDERLINE: Yes, we have. You'll see we highlight it in the paper as one of our issues. We're trying to decide right now what systems approach is appropriate for each of our individual regulated systems, and that would somewhat dictate the types of training. We have had training, dedicated courses for performance assessment in the waste disposal area.

CHAIRMAN JACKSON: Okay

MR. BARANOWSKI: Just to make one final point, we would like to have at least one resident inspector through this training by December of 1998 at each site, and so

that's the way that priorities will be worked out. Next viewgraph.

[Slide.]

At the recommendation of the PRA training focus group, a PRA Technical Managers course was developed and is now being implemented. The course is required for NRR, AEOD, NMSS, and regional technical managers. It's course P-107. The course has been recently updated to include information on the RG's and SRP's, or at least the approaches that we're talking about taking in them, since they're still in draft.

We would expect to conduct a number of course in 1998, which would get about two-thirds of the agency's technical managers trained and then the balance in Fiscal Year 1999.

At the same time, all offices are looking at their technical training needs with regard to risk-informed Reg Guides and SRP's that might result in some additional training or revisions to the courses that I just mentioned. We would expect to enact additional courses in the future as warranted, which I mentioned earlier.

I would like to mention that there was a question raised in the SRM regarding a regional representative on the PRA training focus group. There wasn't one on the PRA training focus group. The NRR representative normally

provided representation of inspection personnel in terms of PRA training.

We have recently added a regional person on there, but I would like to point out that when the PRA training focus group meets, it's not just four people that meet. There are four specific members, but folks from the inspection staff have, in fact, participated in meetings in the past where we've talked about resident and headquarters inspection personnel training in PRA.

CHAIRMAN JACKSON: Right. Well, it's very important, which is why the Commission asked for that,

because of the fact that you, for instance, talk about having a resident at each site.

I mean you need to have a member who has equal weight at the table that can represent the interests, because those are our folks who are out there on a day-to-day basis, interfacing with the licensees, looking at how they handle configuration management, overseeing outage activities, overseeing on-line maintenance, any number of things.

Their interests and what they do -- and it is unique to what they do -- need to be represented fully in what you do, not just as visitors to the meetings. So it's a very important issue. Yes.

COMMISSIONER DICUS: Do you believe that our

training is keeping pace with our other activities in PRA, or is training lagging a little bit behind it?

MR. BARANOWSKI: That's a good question.

COMMISSIONER DICUS: Or do you feel that it perhaps is, and that's a concern?

MR. BARANOWSKI: I guess my personal feeling is that you need to have an understanding of what your regulatory program is before you can train people to execute that program. I wouldn't want to use training as an approach for developing the regulatory program. I've seen some of that tried in some of our meetings, and I don't think it works very well.

So it may be we're lagging a little bit, but I think we're addressing things pretty rapidly.

CHAIRMAN JACKSON: Once you get the pieces in place.

MR. BARANOWSKI: There's a very big push to get this training going.

CHAIRMAN JACKSON: Commissioner McGaffigan.

COMMISSIONER McGAFFIGAN: How long do these courses last? I mean I'm just trying to get a sense of how much one might possibly take away from it.

MR. BARANOWSKI: A typical course is running four or five days. Now, there are some plans to have some two-week courses and things like that. I don't remember the

exact length of them.

COMMISSIONER McGAFFIGAN: The ones that you have here -- the 107 and 111, et cetera -- they're all four- or five-day?

MR. BARANOWSKI: I believe they're four or five days.

MR. THADANI: I see three and four days.

MR. CALLAN: Three and four days. In classroom hours, something on the order of 18 to 24.

MR. BARANOWSKI: We're looking for about 25, I think it was.

MR. CALLAN: Twenty-five?

COMMISSIONER McGAFFIGAN: I suspect we're going to have to have refresher course.

MR. CALLAN: Right. Our concern right now, just to put that in perspective, I think NRR has asked for 400 slots of a four-day course, and we're trying to find the money.

CHAIRMAN JACKSON: Right. Plus you want to try to get a certain baseline.

MR. CALLAN: We're trying to get a baseline, so -- I think I know where you're going with the question. It's a

survey course -- we understand that -- but it's to accomplish some of the objectives that Commissioner Diaz mentioned and others, to get a baseline. But we are

concerned about the resource expenditure it's going to take to do this training, and we haven't solved that problem yet.

CHAIRMAN JACKSON: You wanted to make a comment? Could you identify yourself?

MR. COE: Yes. I'm Doug Coe with NRI. I just wanted to correct one thing. P-11, the course that's specifically designed for inspectors, will run the better part of two weeks.

CHAIRMAN JACKSON: Thank you.

MR. BARANOWSKI: And these courses are also in addition to our other more exacting curriculum, which a lesser number of people are taking.

CHAIRMAN JACKSON: Right. Let me just ask a question that is somewhat disconnected. How are we creeping up on -- or are we -- performance-based regulation? What are we doing in that regard?

MR. THADANI: There are two parts to that effort. Part one is, as we have indicated before, we're trying to utilize some of the thinking that went behind the maintenance rule. Where areas are amenable to risk analysis, we're folding in the performance-based aspects as feedback for any follow-on actions. So that's embedded in what we're doing in terms of areas which are amenable to risk analysis.

As far as the other areas, the Commission directed

the staff in an SRM to also look at how performance-based approaches could be used in areas which are not amenable to risk analysis.

We have a paper due to the Commission, I believe in two weeks, in which we're going to address what is it that we're doing to respond to that Commission direction. Basically, we're going to tie it to integrate with the SI-13, which is the role of industry, and we are planning to have some workshops. But those are actions that are going to come.

CHAIRMAN JACKSON: So the more formalized one has to do with this response to the SRM --

MR. THADANI: Yes.

CHAIRMAN JACKSON: -- and working with industry, and the other is on the more ad hoc basis of utilizing approaches a la the maintenance rule when it seems appropriate.

MR. THADANI: That's right. That's right.

CHAIRMAN JACKSON: Yes, Commissioner.

COMMISSIONER DIAZ: As a parallel, how are we doing with the maintenance rule assessments? I guess we've got now -- what? -- 36?

MR. THADANI: Thirty-six, I believe we've completed.

COMMISSIONER DIAZ: Thirty-six? Can you tell us,

you're happy with the way they're looking at -- the responses?

MR. THADANI: Let me ask Scott to give you, up to date, the status.

MR. NEWBERRY: I thought we might get that question, so I even conducted a poll of happiness. I think it depends on the expectation. If you were to ask some, they believe there's still a significant way to go. But I

think, in the larger picture, we've come a long way in terms of where we were before the maintenance rule, before the use of -- you know, very little use of risk information.

Now, you see all plants the use of risk information in terms of qualitative or even very good models and work stations and the like. So I think overall, in the broad context, we've been reasonably pleased with the progress, but, of course, there have been some issues identified.

COMMISSIONER DIAZ: And so those 36 plants that we have now -- you know, have assessments completed already -- when you say performance-based, they know what it is.

MR. NEWBERRY: I can't agree with you. I don't know. I don't know how they would answer that particular question.

COMMISSIONER DIAZ: I think Mr. Callan was wanting to speak.

MR. CALLAN: The 36 plants, Commissioner, are the plant that have received the baseline programmatic inspection.

COMMISSIONER DIAZ: Right.

MR. CALLAN: Which, in my view, is not a real good measure or gauge of the maintenance rule, per se. The maintenance rule is not intended to be a programmatic type of rule. And so, as we gain experience with implementing the performance-based aspect of it, then we'll be in a position to, I think, answer your question. We really don't have that much experience to date in the performance-based aspect of the maintenance rule.

CHAIRMAN JACKSON: So what you're saying is the baseline inspections have been looking at what licensees have put into place --

MR. CALLAN: Right. Yes.

CHAIRMAN JACKSON: -- to begin to fully implement the rule. It's not until you have the chance to begin to inspect against their program that you can really address the question.

MR. CALLAN: That's right.

CHAIRMAN JACKSON: Is that a fair statement?

MR. CALLAN: That's right.

MR. THADANI: I think we can say one other thing, and that is, when one gets finished with maintenance

inspections, you do end up with some understanding of what are those so-called performance measures the industry is going to use, so that that level of confidence is attained. But the actual experience, as Joe correctly noted, we really haven't had.

COMMISSIONER DIAZ: But going back to the dead horse or the skeleton, we are needing to define, and the industry understands and we communicate on a one-to-one basis of what it is. I mean it's the expectation that we need to be clear on, even if we're delaying the actual looking at the performance.

MR. THADANI: And that was one of the goals behind these programmatic inspections.

COMMISSIONER DIAZ: Right.

MR. THADANI: It was to make sure that expectation was going to be realized.

COMMISSIONER DIAZ: And that's why I asked the question. You know, from these inspections, are we getting a sense that people are moving in the direction of really

getting performance measures that can be then "regulated according to the maintenance rule," which is risk-informed performance?

MR. THADANI: Yes.

COMMISSIONER DIAZ: Okay.

MR. BARANOWSKI: Okay. Number 15.

[Slide.]

Let me briefly mention a few additional things on the risk-based analysis of operating experience. Of course you're aware that we have an agreement now and an SRM of June 13th giving the staff the go-ahead to work on the voluntary approach for obtaining reliability and availability data with the nuclear industry.

We recently signed a memorandum of understanding -- or a modification to the memorandum of understanding -- which addresses our obtaining that data that we expect to get from industry through INPO, and we should begin receiving that information sometime in Fiscal Year 1998.

CHAIRMAN JACKSON: You may recall that, in fact, the staff agreed to characterize for the Commission the scope of the voluntary data arrangement --

MR. BARANOWSKI: Yes.

CHAIRMAN JACKSON: -- as opposed to the scope of the maintenance rule.

MR. BARANOWSKI: Right.

CHAIRMAN JACKSON: Now, when will we get that comparative?

MR. BARANOWSKI: I would hope you have a memorandum already in your in box.

COMMISSIONER McGAFFIGAN: It arrived in our boxes as we were walking downstairs.

CHAIRMAN JACKSON: Oh, you did it so you would get us.

[Laughter.]

MR. BARANOWSKI: It's that kind of trick we pull on you once in a while.

COMMISSIONER McGAFFIGAN: It was brought to me as I was walking downstairs.

CHAIRMAN JACKSON: Oh, okay.

MR. BARANOWSKI: Sorry. We wanted to get it to you a few days early, but we couldn't quite do it.

CHAIRMAN JACKSON: Touche.

MR. BARANOWSKI: But just in a quick nutshell, the scope of the maintenance rule's systems and components -- not structures -- overlaps quite well with the scope of the equipment in the voluntary approach. They're essentially the same. I can't say they're exactly the same.

Now, the level of information that's provided on each component or system varies depending on it's perceived risk significance. We tried to put together a more thorough discussion in the paper, and we would be glad to meet either individually or under other circumstances to go over that if necessary.

[Laughter.]

CHAIRMAN JACKSON: That's very good. Thank you.

MR. BARANOWSKI: Let me also mention a few more

things. The Accident Sequence Precursor program, we have a paper due to the Commission in November, and so I won't cover too much of that since we're running a little bit late.

I will just mention that we've finished the '95

work and published that. The '96 precursors have all been identified, and they're going through final QA. Most of them have been finalized and released through the PDR to the public, and we're even into doing some 1997 analyses.

In general, what we're finding is about 10 to 15 precursors identified per year, and the conditional core damage probabilities run up to a maximum about 10-3, and the 10-3 we see about once every other year. But we're going to cover this a little bit in our paper, and so I think we'll do a more thorough job in November, if that's okay.

CHAIRMAN JACKSON: Sure. And also, there's a question of where are you with respect to developing risk-based performance indicators? Are you going to speak to that in November?

MR. BARANOWSKI: I might just mention that the next couple of things that I have listed here, some of the studies that we've done -- reactor core isolation cooling, a special study on fire events, BWR core spray system, and a number of others that we have on progress on auxiliary feedwater systems, reactor protection, initiating events,

and loss of off-site power -- are all part of what I would call the ground work for preparing more risk-based performance indicators.

I think, after we get a few more of these studies done, we would be wanting to come back to the Commission with some sort of a conceptual idea and see if we're all on the same page on this.

CHAIRMAN JACKSON: Okay. Very good.

MR. BARANOWSKI: The last thing I'll say is that we're now about to issue our CCF database. It's in a CD-ROM format. It will be issued to the nuclear industry. It does contain proprietary information, and we have worked with INPO to make sure that that can be released to U.S. nuclear power plant operators.

Now, I'll turn it back to Tom.

MR. KING: All right. Let me try and summarize with the last viewgraph.

[Slide.]

We've got a lot of things underway or that have been completed over the past six months, but we still have a long way to go. What we've tried to list on 16 were the major things coming up over the next three months or so.

As we mentioned, we've got the framework paper from NMSS, which is due in a few weeks. We've got an intense activity to complete the Reg Guides and SRP's.

That is going to involve a policy paper to the Commission later this month. It's going to involve some meetings with ACRS -- one next and nne in mid-November -- to go through the comments, the policy issues, and the positions as to how we want to deal with the public comments and finalize the guides.

MR. THADANI: Tom, on that, this is a very important point. Tom indicated that a number of significant issues have been raised, and we're going to be meeting with the advisory committee.

I think, in view of the significance of some of these issues, we do need to take a week or two to really think through these issues carefully, and so I'm really putting a hedge on whether we can get the paper to the Commission by the end of October. That's a big question mark in my mind.

CHAIRMAN JACKSON: Well, you work toward that.
MR. THADANI: We are going to work towards this.
CHAIRMAN JACKSON: Right? Because, you know --
MR. THADANI: Yes.
CHAIRMAN JACKSON: -- if you let it slip, things tend to slip forever.
MR. THADANI: We're going to work towards it, but I just want to acknowledge that there are some tough issues that we better take a little time to think through.

MR. KING: In addition, we've got the pilot activities that we're trying to complete by December, at least in the tech specs and inservice testing area. We've got the ISI package, which is out for comment now, a workshop in November in pilot activities that are just getting underway there.
We have the initiative from NEI, where they're going to take a full-scope PRA and compare it against regulatory requirements and operations and maintenance costs, which we hope to finalized and kick off in December. So there's a number of things in the mill. Some of the schedules, as Ashok said, are ambitious, but that's what we're working toward. With that, I conclude.
CHAIRMAN JACKSON: Commissioner McGaffigan.
COMMISSIONER McGAFFIGAN: I have one question. I apologize. It really goes back to Mr. Newberry's presentation. You said that San Onofrio was out front in terms of the configuration risk management program and that you hoped to have something done by December.
Now, do they have a living PRA? And do they calculate, when they take something out, what the conditional core damage frequency is? And do they then adjust for it, take it into account and say, well, that this is too high a risk? And did you even get to the point of discussing what the threshold is for when that might be too

high? How did all that work in that discussion?
MR. NEWBERRY: In general, they have a very advanced, or a significant program at that plant, such that they would be able to essentially do what you've just suggested there. That's right.
And I only wanted to mention that Arkansas was the lead and, in fact, you got the SER, but as that issue unfolded, right now it appears that SONGS is ready to move out on that amendment. That was really the only thing that I wanted to mention.
COMMISSIONER McGAFFIGAN: I'm just trying -- is the commitment that they're going to be making something that's going to be captured in a license condition or something?
MR. NEWBERRY: A technical specification.
COMMISSIONER McGAFFIGAN: In a technical specification.
MR. NEWBERRY: In the administrative section, I believe.
COMMISSIONER McGAFFIGAN: And can you tell me what number -- is there a number, like, if the conditional core damage frequency approaches some number, then we will think twice about whether we allow the configuration?
MR. NEWBERRY: At this point, I don't think there would be a number.

COMMISSIONER McGAFFIGAN: So it's a qualitative judgment we're leaving to the licensee.

MR. NEWBERRY: Yes, with -- I think there's five or six elements -- just like principles -- that would go into the tech spec considerations.

MR. THADANI: I might add to what Scott is saying -- and we're going to be addressing this as one of the issues -- while we have talked about core damage frequency of 10-4, it's an average estimate over a period of one year.

COMMISSIONER McGAFFIGAN: Right.

MR. THADANI: And the next issue is what kind of instantaneous risk or dynamic aspect of it would one want to consider. That issue we're going to address amongst the -- I think that's a policy matter, as well. It needs to be --

COMMISSIONER McGAFFIGAN: The reason I'm asking the question -- and I apologize; it's late -- is we're considering the should-to-shall issue in A-3 of the maintenance rule at the moment.

CHAIRMAN JACKSON: Right.

COMMISSIONER McGAFFIGAN: And to some extent, what you're going through in this negotiation with SONGS or in the other combustion engineering plants is a precursor to what happens when "should" gets changed to "shall" and what do we mean by that?

CHAIRMAN JACKSON: Right.

COMMISSIONER McGAFFIGAN: So I may just ask the question --

CHAIRMAN JACKSON: Well, once "should" is changed to "shall," then they'll be forced to address what, in fact, that means on the ground.

COMMISSIONER McGAFFIGAN: Right. But I may just ask separately -- or maybe our TA's may get briefed in more detail about --

CHAIRMAN JACKSON: I think that would be good to do a TA briefing on that.

MR. NEWBERRY: I'll take the action item to look at that.

CHAIRMAN JACKSON: Right.

MR. NEWBERRY: And we'll put something together.

CHAIRMAN JACKSON: I'm just going to go ahead in the reverse order. Do you have any other comments or questions, Commissioner? And then I'm going to go to Commissioner Dicus.

COMMISSIONER DIAZ: Okay. I think I wrote something in here that I think is -- it's going back to philosophy. But having looked at these things for some time and looking at gold-plated or hot-dipped galvanized, we need to remember that, you know, in this case, we've been for some time striving to get to a level of achievement.

And in that case I am of the opinion that the

better is the enemy of the good and that the best is the enemy of the better, that we need to define what is it that we can do and do it, rather than keep trying to make it gold-plated or otherwise, and I think it is an important step.

I would like to ask the staff the next time that we come back -- and these are questions that are not as simple as they sound -- but the first question is, are we convinced -- we, the NRC -- that we are going to be a risk-informed agency? And if that is so, have we permeated the structure so everybody knows that that is a fact?

Second is, have we convinced licensees, stakeholder, or anybody that we are going to be a

risk-informed agency? Because if we are and we haven't done that, then we have a job to do. Even it it's information, whatever, we need to be doing.

And if the answers to these two things are yes -- and I do hope they are -- then we go back to the dead horse. It's a matter of defining how good is good and where the process needs to lie. I think we need to move to make something happen rather than keep waiting for further definition. But in that sense, what we make happen has to be enforceable in regulatory space.

CHAIRMAN JACKSON: Absolutely.

COMMISSIONER DIAZ: Thank you.

CHAIRMAN JACKSON: Absolutely. Commissioner Dicus.

[No response.]

I would like to thank the staff for a very informative and, I'll actually say, enjoyable briefing on the agency's PRA activities. Thank you.

We commend you for the progress that you've made to date in what is a sometimes difficult area, but at the same time, we encourage you to continue to improve the process -- and we've heard various comments to that effect -- and to provide appropriate -- for yourselves -- review mechanisms and feedback mechanisms to ensure that the PRA is appropriately understood in a risk-informed framework and appropriately used to make your own efforts performance-based in that sense, to have that feedback so that you focus on outcomes.

But I think you've made some long steps forward from where we were two years ago, even though the policy statement was there and there was a PRA Implementation Plan, there's a lot more flesh on the bones, and I think you can be proud of that.

Clearly, PRA has become an important tool in support of the regulatory process, a risk-informed process. And so we have to strive to enhance the process where necessary, but always to ensure its consistent use where

appropriate.

Unless there are any further comments, we're adjourned.

[Whereupon, at 11:45 a.m., the briefing was concluded.]