UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

***

PUBLIC MEETING ON 10 CFR PART 70 AND

STREAMLING LICENSING REVIEWS

ASLBP Hearing Room

Two White Flint North Building

11545 Rockville Pike

Rockville, MD

Thursday, June 8, 2000

The above-entitled meeting commenced, pursuant to notice.

P R O C E E D I N G S

SHERR: I'd like to welcome you all. I'm Ted Sherr. We reorganized this week and so now I'm Chief of the Safety and Safeguard Support Branch. There's, also, in the Licensing Branch, which includes the old licensing group, for the most part, as well as the recovery licensing. And the Special Projects Branch essentially remains the same, except that the criticality team reports to that group. I won't go into details of the organization, but just an overview.

SPEAKER: Can you put your microphone on. We can't hear you back here.

SHERR: Okay. I just need to talk louder, that's all. Sorry.

KILLAR: Ted, will you have an org chart available maybe for us?

SHERR: Yeah, we can do that.

KILLAR: I'd appreciate that.

SHERR: I'll try to get that at lunch time. Pam, can you try to get -- what we want is a copy of the org chart for the reorganization. Thanks.

Okay. Well, hopefully, the reorganization won't affect our meeting too much, other than titles. The objective of the meeting is threefold: one is to discuss a recent draft of an industry developed ISA summary guidance

document; the second is to discuss the degree -- level of detail needed in the description of management measures; and the, finally, an agenda item dealing with the streamlining of the licensing process.

In your packet, you should have an agenda for the meeting and we intend to complete our discussion of the ISA summary guidance document this morning, breaking around noon for lunch, and reconvening at 1:00, when we would discuss management measures. And then at 3:00, we would cover the streamlining of the licensing process and then reconvene tomorrow to finish up the discussion of management measures. So, this may get adjusted in the course of our own discussions, but that's the overall plan. Does that seem to be reasonable to all parties?

[No response.]

SHERR: Okay. In the blue packet that you -- that was provided to you at the door, in addition to the agenda, there is a copy of the guidance -- ISA summary guidance document that was provided on Tuesday this week and posted on the Web, as well as a copy of the examples on management measures that was provided on Monday this week; and, also, just for background information, is a copy of Chapter 11 of the SRP, dealing with management measures.

Before, again, just to give a brief background, looking around, I think most people are pretty much familiar

with what's been going on. Last July, July 8th, the Commission approved the proposed rule and that was published for public comment at the end of July. And it included a copy of the standard review plan, that was part of the rulemaking package. The comment period closed October 13th and there were numerous comments received, both on the rule and on the standard review plan.

Stakeholder meetings were held in February and April, to discuss staff's proposed resolutions to the comments that have been received on the SRP. On the basis of these meetings and subsequent NRC staff discussion with industry representatives, the conclusion was reached that there's general agreement between NRC staff and stakeholders on all of the chapters of the SRP, except Chapter 11, management measures. And although there is general agreement on the importance of the topics addressed in Chapter 11, concerns remain as to the level of detail that would need to be documented and submitted to NRC, and that's the context of our second agenda item.

The final rulemaking package has been forwarded to the Commission. It's SECY-00-0111, dated May 19th, and I think this is available to the public through ADA I'm not sure if it's on the rulemaking Website yet or not, but I assume it will be soon. If it's not already, it should be. That rulemaking package included the most recent version of

the standard review plan that was posted earlier in May. The Commission meeting and the rulemaking is scheduled for June 20th, a week from this coming Tuesday.

Before we begin, just the normal administrative announcements. When you came in today, you signed a list of attendees. If you provide an e-mail address there and you're not already on the list, you'll be added to the list for e-mail messages dealing with the Part 70 Website. And any changes -- anytime there's a change to that, you'll receive an e-mail alerting you to those changes.

I suggest we have a short break around 10:30 and close today around 4:00, and we'll begin tomorrow at 9:00, rather than 9:30. These usual restrictions I think everybody is used to by now. There's no smoking or eating or drinking in the room. And note that Jon is here to help us and the meeting is being transcribed. And please speak into the microphones and when you -- please identify yourself before you make any statements.

Before we begin, I'd like to introduce the NRC staff members that are here at the table, many of you know them already: Drew Persinko, who has been the overall project manager for the rulemaking effort; Heather Astwood, who has been primarily involved in the rule development, but, also, involved in the -- leading the rule development, but, also, involved in the SRP development; Tom Cox, who has

been coordinating and leading the overall SRP development; and Dennis Damon, who has been intimately involved and primarily responsible for the ISA chapter of the SRP and related matters.

So, at this time, Felix, any statements you would like to make or introduce your representatives?

KILLAR: Certainly. I'd like to thank the NRC for putting on this workshop and I do hope it's a productive workshop and we certainly hope we have a good exchange of information and discussion. One of the things I would like to do, though, is I would like to clarify a point. I agree 99 percent of what Ted said, as far as where we are on the rule and the SRP. The one point that I disagree with is that in the SRP chapter, certainly, we disagree on Chapter 11; but, we, also, have our qualms on Chapter 3 and that's part of the reason why we're developing the industry guidance for the submitting of the ISA summary, is to help clarify what the industry perspective of what the ISA summary should be -- contain. And so, I wouldn't say that we agree on everything but Chapter, because we do have some issues on Chapter 3, as well.

Beyond that, though, I would be glad to proceed, if you're ready to proceed.

SHERR: Okay. So, to start the agenda is for you to give an overview of the guidance document.

KILLAR: Okay. As Ted mentioned, in your package is a draft that we have provided the NRC earlier this week. This document has undergone, you know, some work in it. It is a work in progress. In fact, we met yesterday and we made some more revisions in the document and so I'll be able to point out some of those revisions, as we go through here. The intent of the document, though, as laid out in the purpose, is that this is to help to provide guidance to the industry in industry terms and relationships that the industry is used to working with that we hope -- and part of what we're doing here today and meeting with the NRC will be an acceptable document for submitting the ISA summary to the NRC and then when they submit it, it will be deemed acceptable.

Some of the things that -- some of the ideas that we've encompassed in here is that we've kind of laid out the document in sort of three levels and that the first level, the first part of the document deals with what we call the general areas, the generic type issues. We provide general descriptions, basic program descriptions, as far as the things like the team, the training of the team, and things on that -- things that are generic. And you only need to state those things once in the document and they apply generally throughout the document.

The second part of the document is really the meat

of the document, as far as doing the summation of the ISA, in that it provides the actual processes, how the items relied on for safety provide safety for those processes, as well as the management measures that apply to those items relied on for safety. So, that's kind of the meat of the document and that's where the longest or the biggest part of the document is going to be, because you're going to -- and we've given the flexibility, you can break it down as a process being a whole process for a whole building or semi-processes in that building, you know, or maybe if you've got something that's very challenging or intriguing, what have you, you may want to go down to a level where you talk about a specific subprocess in the process, what have you. But, the idea is to give the licensee the flexibility to do it, as whatever they see fit, and, also, to apply it to the level that it needs to be applied to. If you do it on a generic basis throughout the building, that's fine; but, if you have to go into more detail, that's certainly well -- as acceptable, as well. And it's sort of what the concept of grading is, so to speak, all along.

And then the last part of the document is basically dealing specifically with the items relied on for safety and there, we're looking at two tables. One table is a table that identifies all the items relied on for safety and that provides in there what that item relied on for

safety, what is the primary function of that item relied on for safety, and then the management measures that apply to it. And then the other thing -- the other aspect of that, you'll have as a separate table, if you have items relied on for safety, which are the sole item relied on for safety for that process, so we segregate those sole items out. And that's kind of the flow or the idea behind the basic document and the philosophy behind the document.

Now, as far as this document goes, what we've done here is we provide an overall role of the ISA. And some of the things -- to give you a handle on some of the things that we've looked at changing since we submitted this on Tuesday, in the bottom of page one, top of page two, we talk about the requirements of 761 and we talk about the high consequence events and intermediate consequence events. And we realized yesterday, as we talked about this, is that, you know, we basically found the same trap we accused the NRC of falling into, in that we forget about risk. We start talking about consequences and not risk. And so, we're going to ask more words here to talk about looking at the overall risk of the facility, the overall risk of the application. And so while we will still continue to talk about consequences, we're, also, going to be factoring in the probabilities of occurrences or events. And so, we'll get into the risk factors.

You have a question?

SHERR: A question: you say you fall into the same trap as the NRC; what trap is that?

KILLAR: I'm sorry, I may have spoken off -- badly. We've accused the NRC of forgetting the risk factor and only be focusing on the consequences, and we found we were kind of doing the same thing that we accused the NRC doing, whether the NRC did it or not did it.

The next thing that we've changed since we sat these two days, we identify on the regulatory requirements where these various requirements have come up. And there's, also, a suggestion that because sometimes people may look at this and they say, well, gee, I understand what they're saying and let me see what the NRC reviewers are saying, so where does this same type thing fall in the standard review plan, so we've added some references. And if you want to jot these down as we go through them -- I should have brought some copies, but on the site description, that comes out as 7065(b)(1). It shows up in the SRP 343321. Facility description is b(2) in the regulation and it's two in the SRP. The ISA methodology description is b(5) in the regulation and it's five, also, in the SRP, under the same section 3432. The ISA team, also, shows up under five -- b(5) in the regulation. It shows up in four in the SRP. The qualitative standards for acute chemical exposure is

b(7) in the regulations and it shows up as six in the SRP. Definition of like terms is b(9) in the regulations. It shows up as item number seven in the SRP section.

For compliance with design criteria and criticality monitoring alarms, we split this up into two, because criticality alarms end up in b(4) and then the design basis is 7064, if applicable. And then in the SRP section, it's -- for the criticality alarms, it's 13 and then for the design basis, it's 14, once again, if applicable.

Dealing with the process specific information, the description of process analyzed, that's b(3) in the regulations. It's, also, three in the SRP section. The identification of hazards is in b(3) in the regulation and that's in -- what we consider item nine in the SRP section. The general types of accident sequences, once again, that's in b(3) in the regulations. It's item 10 in the SRP section. The characterization of the immediate and high consequence accident sequences, b(3) in the regulations; item eight in the SRP.

The list and description of the items at the safety -- items relied on for safety is b(6) in the regulations. It's item 11 in the SRP. The management measures is b(4) in the regulations; item 11 in the SRP. And, actually, we felt our document maybe is a little

superior to the SRP, in this case, in that the -- you had to go back through into the details of the SRP in Section 11 to find the management measures -- what we call management measures up front. And then the last item, the soil items relied on for safety is b(8) in the regulations and then item 12 in the standard review plan.

So, that was some of the changes that we made there at the beginning, just to provide that cross reference, to help people find out -- you know, you want to more specifically where the regulations are, there are their regulations; if you want to look at the SRP, where they're identified in the SRP. And we did use SECY-00-0111, to make sure we had the latest and greatest SRP and rule section in doing that definitions.

PERSINKO: Just to clarify, the references that are made right up front, underneath the regulatory requirements of the NRC summary, we have those bullets. Right after that, you have the references?

KILLAR: The references, right. On the format content, we had essentially changed that, and that was basically what I lead into on my discussion on the three parts of it. The detailed content of the ISA summary, once again, we do not make substantial changes there. Similarly, process specific information, we didn't make any specific changes there.

We did note that either in the Part 1 or Part 2, we probably need to add some words, to get a little bit more clarity on the design basis. While we refer to it in the beginning of it, we didn't do a whole lot -- in fact, I don't believe we captured any words in any of these sections and stuff to talk about it, so -- now, partly that was by intent; but, then, as we recognized, it was obvious to us -- it may not be obvious to somebody, who hasn't worked with the document -- because, we feel that anytime you do a process change that would require a substantial application or you do a new process, you're going to have to have the ISA to go with it. And so, therefore, as part of submitting that, you're going to have to meet 70.64 and part of that 70.64 is showing you did it. So, we assumed that it would be as part of the program. But -- so, we didn't specifically call it out in here. But, we recognize that it probably is not the best thing to do, so we are going to see about putting some words in here to do that.

Same with the last part, Part 3, the items relied on for safety, we didn't make any changes there.

Under the -- moving into the appendix, the definition of terms, while we did provide some new terms at the last -- the previous meeting, we discussed these definitions yesterday and today and we think we still need some more work on these and we are certainly open to some

discussions, suggestions on those, because we do recognize that there's different applications and we want to make sure that the -- there's better understanding of specifically what these terms are.

In Appendix B, one of the things we were looking at in Appendix B is that while we put this together as a way of establishing what we call our performance criteria, sort of what is your acceptance set, and that you establish this and this tells you what would be acceptable, and then you go off and do you ISA and where they fall out, you plug them in there, in this table, to see how it works. Once again, because we felt that maybe just having the half of it there, doesn't help people understand. So one of the things that we're looking to do is expand Appendix B, to have an actual application. And so, you would take and walk through an application, to show how it falls on the acceptance criteria stuff.

The other thing we're looking at doing is possibly making this a little bit simpler. You know, we thought that maybe the work here is very good and we certainly support it, but it may be a little bit too involved and maybe we ought to go with something a little simpler, maybe a three-by-three type diagram at the end there -- table at the end, rather than what we currently have in the document and stuff.

And then, as you can see, and we haven't really progressed much on Appendix C, is that we're looking to put together an example of how you would actually put this document together and include it as Appendix C, so people see how this thing actually does work. But, we haven't got very far. And the example we're using is an example that we provided as part of the management measures, so we can be consistent examples, so you can have, you know, some type of relationship between those and you don't have to talk about different things and stuff.

So, that's a quick overview of the document and our thinking behind it. And, certainly, as you see, it is an evolving document, as of yesterday, and even some comments we got this morning. We're continuing to make changes and stuff in it. So, I guess what we would be interested in is, you know, where do you guys see the big holes, so to speak; what do we need to fill in that -- you know to capture what you guys need?

ASTWOOD: I was just going to say, we did look at your documents. We only got it on Tuesday, so we're going to be able to give you our general reactions, at this point, but plan to look at it in more detail and give you more specific information later, when we really have had time to look at it in detail and caucus and things like that. But, our general reactions, as far as the up-front -- the first

part, not the appendix, the first part, we think that looks good. You added a lot of detail. You did, you know, take a lot of our comments. You followed a lot of the guidance in the SRP, we thought. We felt that looked -- looks goods. It clear. It's easy to follow.

We still -- one of our general comments, which was we think it should be linked to the SRP in the ruling, so, I think that's a definite improvement. I think that's a really good idea to point people back there, because that is what the reviewer will be looking at and it does include a little bit more description in some areas than others. So, we think that's a great improvement.

The one area that we thought we should talk about today are the appendix. The definitions -- for example, unlikely and likely, we discussed, are useful. They are one example of the likely and highly unlikely. We'd like to discuss credible with you. We think that's something that we could work on a little bit. And, again, the same position that, you know, those -- those definitions are one example, but your guidance document didn't include a lot of the guidance like we had in the SRP on how somebody would develop another example, if they wanted to develop another example. But, since you've pointed it back to the SRP, I think that takes care of that general concern.

But, in general, we felt it was definitely a good

document, headed in the right direction, and we do need to discuss the details of the appendix, which I think the staff would like to do now.

KILLAR: Good. One of the things, too, and I think it was one of your comments back on the last draft, is we did put some words in there that this is only guidance and if there are other acceptable ways, you know, as long as they meet the rules, they're fine, as well.

ASTWOOD: Exactly; exactly.

COX: I'd like to ask a question. Regarding this cross reference that you have pointed out, that would -- as I understand it, you had put these locations of particular topics from the regulations and from the SRP, but it's not clear to me yet how you would really link this document with the SRP. I mean, what is your intent, regarding the use of this document? You mentioned securing some kind of an NRC approval and given that, in some form, what would you do with that? Would the industry use this document essentially as the guiding document for production of the ISA summary? Is that how you would use an NRC "approval" of this document? In other words, merely reference -- putting some reference in here to some sections and paragraphs of the SRP doesn't say go back and use the SRP. Could you clarify how you would instruct the industry on use of this particular document produced by the industry?

KILLAR: We view this as sort of the industry's reg guide and that the industry would be able to use this to put together their ISA summary for submittal to the NRC. Now, certainly, it has to be consistent with the rule and so the idea is to, you know, make sure that it's consistent with the rule. As far as being consistent with the standard review plan, the idea for putting the references to the standard review plan in here is that if the individual says, well, gee, you know, I see what you're saying here, but I'm not sure I understand exactly what the NRC wants, they might want to go back and look at the standard review plan for clarity, as far as what the acceptance criteria from the NRC perspective is.

The intent, though, this is more of a reg guide type thing and it is one way that should be acceptable to the NRC, if they put it together in this format, using this type philosophy to prepare their ISA summary for submittal to the NRC.

COX: Well, out ultimate objective would be to use whatever an applicant submits to the NRC, to determine that the acceptance criteria within the SRP are met, or at least addressed and accounted for in some way. So, we -- so that's why it's important to understand how this guidance would be used and how closely it would relate to or tell the industry members to specifically address SRP acceptance

criteria.

SHERR: Can I add to that? I think, ultimately, the purpose of the ISA summary, together with other information, is for staff to make a judgment, to have reasonable assurance that the program the agencies are implementing will, in fact, satisfy the performance requirements of the rule 70.61.

Now, the acceptance criteria dealing with the ISA are focused on that objective and, as you have mentioned, Felix, you know, it doesn't mean that there can't be alternative acceptance criteria, if that's justified. Still -- ultimate acceptance criteria was still the ultimate objective of staff being able to draw the broader conclusion. I guess -- I think Tom's -- the way I look at Tom's question is -- I mean, one of my comments would be on this document, that very up front in the document is that the licensee, in preparing the ISA summary, or the applicant, needs to bear in mind that the NRC reviewer is going to making this overall judgment and utilizing the acceptance criteria that's in the standard review plan. And if, in fact, there -- in the course of making a submittal, the intent is that this will satisfy all of the acceptance criteria, that's fine. That's a straightforward thing. If the intent is that the submittal would be very -- something from the acceptance criteria, but still would be acceptable,

then that has to be included in the description, as well.

SHERR: I don't know if you have a different view on that or not, but just a general context.

KILLAR: Well, I have a little bit of a different view on that in that whatever the licensee submits has to be consistent with the license. NUREG 1520 -- I mean, with the regulation, part 70.

As far as NUREG 1520, what NUREG 1520 is is once again, regulatory guidance. It's whatever, you know, the licensee wants to submit and the staff says if you use this, it would be acceptable to us. But, 1520 is not the regulation if the licensee wants to submit different than 1520, nothing prohibits him from doing that.

Therefore, to say that our guidance has to be consistent with the standard review plan basically says well, why bother doing the guidance? Just use the standard review plan. The intent for us putting the guidance together is first off, actually make your job easier, we think, because then, hopefully if all the industry buys it, you will get the same format, content and flavor of ISA summary rather than ten different ISA summaries based on what their intention and their visions of what the standard review plan says.

So, we think that one thing will be it will provide consistency, and by providing consistency, we think

it will also make our jobs easier because after we get those first one, two or three in there and stuff and the NRC says yes, these are acceptable, we know that we hit the market. If we say well, if the NRC says acceptable except for this, we say okay, where have we fallen off, and the industry can then go back and make a generic change in order to get that down there, versus if, like I say, go back to the ten different ones, the NRC says this is acceptable, this one's not, this one is. You know, we don't know what the basis are, why this one was acceptable and that one was not. You know, we've already had this discussion.

If you look at the ISA's that have already been submitted to the NRC, you know, BWXT, GE, Westinghouse. I know that they've all submitted some form of ISA's, and we've heard Dennis and other people say well, yeah, we kind of like BWXT's best. Westinghouse has some attractive features in it because we like the flow charts and stuff. General Electric's is okay, you know, but none of them have been identified as yes, they are acceptable, or yes, this is the preferred approach. We're all bringing rocks to the NRC. All we're trying to do is decide how big the rock needs to be, how round it should be, how smooth it should be, to try and get a consistent rock coming to the NRC.

COX: Of course, that's what the purpose of RSRP is also, is to get a consistent approach and submittal. As

I understand now, from listening to what you just said -- now, see if I've got this right. So, the ISA guidance, the ISA summary guidance document would produce consistent submittals throughout the industry, consistent submittals to the NRC but not necessarily addressing all of the SRP acceptance criteria. Is that right?

KILLAR: I'm not sure if I'd say won't address all the SRP acceptance criteria, but at the same time, I don't think it necessarily has to address all the SRP acceptance criteria because the SRP acceptance criteria is out there for the licensee to use as they see is appropriate.

PERSINKO: Let me see if I can maybe try to rephrase, or in another way what you said I think is. First of all, I think a really good idea to try to bring consistency to the ISA summaries that are submitted. I think that, just the format and the content. What I thought I heard you say what that essentially the two documents would be complimentary. One is not used in lieu of another. It's just that this brings the format of what's there, and it's up to the applicant or the licensee to use this and then look back at the standard review plan as they -- he or she, sees necessary to fill out the application or the amendment. The two documents are really just complimentary and that, you know, from the NRC's point of view, I mean, the SRP is a guidance document, so yeah, deviations are

permitted from it, but essentially, it's not like you're just going to ignore the SRP then. They're just used in a complimentary fashion.

KILLAR: That is correct.

SHERR: I guess some of the revisions you were talking about for the document essentially make that point. I mean, we would suggest that, you know, that the document clearly state that. People don't tend to look at it as if the SRP should be ignored kind of thing, the guidance that's there.

FERGUSON: I think it's important to say, too, that the primacy is the rule.

PERSINKO: We agree. We agree.

FERGUSON: All right.

KILLAR: Tom, did we answer your question? Are you comfortable now?

COX: You answered it. I'm not real comfortable.

KILLAR: You don't like the answer, but you got the answer, right?

COX: Well, I mean, you've said that you will not ignore it, but it will be used as a complimentary document, but I look at that at one end of the spectrum of agreement, and there's a lot of room left to not deal with many of the acceptance criteria in the SRP. The staff has put its effort into defining a way of complying with the rule

requirements, and when -- and the SRP introduction and in many places throughout the SRP says that you do not need to comply with these acceptance criteria in any particular way. However, it's expected that the acceptance criteria will be addressed. At that level, we expect that they would be addressed and met in some fashion, which we may have to scurry around and figure out how to approve, you know, a different approach, perhaps, than has been outlined in the SRP.

There is a level of presentation in the SRP that we do feel needs to be addressed in order to comply with the rule. In other words, to say you can submit anything you want is, I think, a little too broad or a little to exclusive an approach to complying with the rule.

SHERR: I think if we step back, I mean, what's in the SRP is staff's best attempt to identify the information that it believes it needs to reach the licensing conclusions they'll need to draw. When we're talking about reaching conclusions with regard to the programs meeting the performance requirements of the rule, those aren't simple conclusions to draw. They're going to require -- they're difficult, complex review. Essentially there's just three elements, the first element being, you know, okay, are all the accident sequences that are pertinent to the performance requirements, have they been identified? So, there needs to

be enough information there for staff to be able to draw that conclusion.

Are all the items relied on for safety that are needed to either prevent the accidents from occurring or to mitigate their consequences sufficiently? You know, is that sufficiently complete? Finally, are the management measures in place that will enable to reach the appropriate risk levels in accordance with the performance requirements. So, it's a lot of information and a lot of analysis and a lot of determination, and in any case, what's in the ISA summary, together with what's in the application and information that's available at the site and all this will be needed by staff to draw that conclusion.

Now, in terms of the guidance that's here, in many cases, it's a very general level, and the submittal provided in accordance with this may very well provide all the information that's needed. At the same time, a lot of information was put into the SRP to provide guidance in terms of the level of detail that's needed for staff to be able to sort out the relationship between the accident sequences, the items relied on for safety, and the management measures in drawing the overall conclusion.

So, you know, nobody is saying that this is -- we were saying that this basically fits the overall structure, but whether or not it would lead to a submittal providing

sufficient information for staff to make a determination, we don't know. That would depend on the particular submittal. I think what we're suggesting is there's a lot of information in the SRP that provides detailed guidance that we've included there with the idea to give a sense of what types of information is needed for staff to be able to draw those conclusions.

GOODWIN: Ted, you made I think a very important or key statement earlier when you said that it would include other supplementary information, and I think I doubt very seriously that if any reviewer could take a single document and draw the conclusions they needed to draw in a licensing case, and what I mean is, I think, you know, you still have the license information, as you mentioned, the on site ISA work that's done, the inspector's feedback, all of that. So, I think what we're trying to is to provide a document that does a pretty good job of giving you most everything you need, but again, I doubt it or most any single document would provide all the information that you really need to make the -- draw the conclusions that are required. So, we're just trying to, you know, provide something that does a good job of that, but supplemented by their information, obviously.

SHERR: If I recall correctly, the guidance --the language in the guidance that you provided identifies the

ISA summaries, the primary document in all this.

GOODWIN: Right.

SHERR: It's consistent with the way the staff, we would not take exception to that characterization at all. I think that's the intent in actual practice, how much the information in the ISA summary has to be supplemented by other information, but then there's the what I'll call the performance perspective of the ISA summary in terms of the information needed to enable staff to reach the overall conclusion together with other information. There's other aspects of the ISA summary in terms of that information in terms of the change process, what's needed to maintain the safety basis and keep the -- teach prior approval and what doesn't need prior approval, so I mean, there's the 70.65 requirements kind of thing, 70.72.

Okay, I mean I think one of the problems we have is in chapter three, a significant effort was made in terms of to communicate what kinds of information staff thinks they need to make a conclusion, which is a level of detail that goes beyond some of the details in this guidance document. If it's clear in this document that you don't always intend to go to that level of detail, that this is -- that, in fact, that your -- it's making clear that -- see, we don't know from this document and from your statements to what degree you're saying there are things in the SRP

document that you object to, versus things you're just not specifically identifying here but that you think is totally consistent with the points that you're pursuing. So, at this point, it's hard for us to judge how all this fits together with that.

KILLAR: I think two things. First off, one of the things is what this does is it does provide for the reviewer where to look for things. When he picks it up, he says okay, I'm supposed to look for the qualifications of the team. So, in this document, he'll be able to identify where the qualifications of his team are because it's laid out in the first section, the first general section. When he gets into looking at the hazardous stuff, he identifies that as also showing up in the first section. So, things like that that he's looking for, this is going to help him be able to find those things.

Now, as far as the acceptance criteria, yes, except his criteria will have to be abided by to the extent that the licensee feels is appropriate, and if he wants to take exception to an acceptance criteria, the licensee has the ability to do that and to raise that issue and discuss with the NRC whatever is resolved is resolved. What we're doing here, and part of the referencing is to show the parallel between what's in this document and what's in the regulations and what's in the standard review plan to show

that all the main components are there. I think it's going to be up to the licensee to how they go forward and meet the acceptance criteria that's in the SRP if they decide that that's, you know, the direction they want to take.

I think the other side of the coin is that one of the issues that, you know, we do have is that the -- we feel that Chapter 3 and the ISA summary is too prescriptive and too detailed, and that's part of the reason for trying to get this into a more reasoned format where you could see the information without having to get down to that level of descriptive detail that the SRP is implying that they're looking for. So, it is a somewhat of a trade-off document, I must admit.

PERSINKO: But doesn't the licensee or applicant who's preparing the amendment or the application, whatever, I mean, it will be up to them whether or not they want to go to that detail. I mean, you'll be referencing it in here, and then that person may go back to there and say okay, I'll do, you know, I agree with that detail. Let's do it. I just want to clarify that because it almost sounded to me like right now that you, you know, automatically discounted some parts of the SRP, and I wanted to clarify that's not what you are saying right now.

KILLAR: No, if you look, we've got everything that's in the SRP in this here, as far as --

PERSINKO: But what I thought I just heard was, you know, we don't like some of it, so we wrote the document, but that's not what I heard initially when you first introduced this.

KILLAR: What we don't have is we don't have the detail.

PERSINKO: Okay.

KILLAR: And that's where the issues are, is in the detail.

PERSINKO: And then you referenced the section of the SRP, which I think is great. Then it's up to the person filling out the, or preparing the application to go back and look at is as they feel they want to, I guess, and try to then decide whether or not they want to meet each item, or if they feel it's too detailed, they could not do it also, I guess, and submit the application.

KILLAR: Right.

PERSINKO: Is that correct?

KILLAR: That's correct. The other thing, too, that I might point out we've done in this document is basically we're trying to codify some of our understandings that we've heard from the NRC. For instance, things like the facility description or site description or what have you, that, you know, if we have no need to go into any more detail than what we've already described in chapter one and

chapter two, we don't have to provide that information in the ISA. We just have to reference it. So, we've put some words to that effect in here to identify that. So, that's also what we're trying to do, is to try and make people understand that, you know, we can use that referencing and cross referencing and not have to go into a lot of duplication and stuff. So, there are some things like that in here, and to me, that's almost a level of detail type thing, but that's some of the things we're talking about.

PERSINKO: Okay, you know, in addition to then referencing it, maybe when you worked on the document further, you may want to up front, you know, describe the relationship of it with the standard review plan, you know, that the reviewer is referred back to the standard review plan for additional information to be used as the reviewer feels appropriate or something like that.

ASTWOOD: Okay. That's our general discussion, I guess, to start with. There are a few other points. You've covered a lot of the ones that I had marked, but I know we did want to talk to you about the definitions in Appendix A, and I probably will turn this mostly over to Dennis so that he can talk to you about his impressions of these definitions and maybe start a dialogue between the two of us on, you know, where you were going and why you chose certain words.

DAMON: My name is Dennis Damon. The part of the document we're referring to is page 8. It's also, the title at the top of the page is Appendix A, definition of terms. The definition that gives us the most trouble, I would say, is the definition of credible. There is guidance in the standard review plan on acceptance criteria for a definition of credible, and the guidance there is in the general direction that the way the term is -- the reason the term is to be defined is because it is used in the performance requirement statement in 70.61. It is used in such a way that events which are not credible do not have to appear in the ISA. They do not have to be -- controls do not have to be applied to events which are not credible, and so the definition -- our concern here is that the definition of credible needs to be fairly inclusive. It needs to include anything that really the ISA would need to deal with, and that means anything to which a control might need to be applied. So, by the reverse logic -- the reason I say it needs to be -- the staff feels that the definition needs to be very inclusive is that suppose there's an event where there's a serious question as to whether or not it is sufficiently unlikely that it does not need to be addressed by controls that are established as a result of the ISA nor justified that it's sufficiently unlikely. So, where there's a question involved as to whether or not it is

credible or not.

If the analysis, the ISA analysts simply say well, we think this is not credible, and they don't include it at all, it simply will not appear anywhere in the ISA documentation or at all. Therefore, when the reviewer encounters that process and he reviews it and it occurs to him that this event could occur, he say well, here's an event I just thought of. Where is it? He looks in the ISA and it's not there. So, he says you know, it's not clear to me whether or not this is highly unlikely or not. I don't know enough about the behavior of the system that relates to this particular issue. So, he would have no choice but to issue an RAI saying please tell me about this event which you didn't include in your ISA.

So, to head that off, what you do is when you think -- my view of it is when you're doing the ISA and you think of an event and you say is this credible or not credible and you say the answer to the question is very simple. If you conclude that any reasonable person, who if they thought of this event, would immediately, without any further need for argument or explanation would immediately conclude oh, yeah, that's clearly not something we need to consider. It's a negligible risk event; in other words, like a meteor strike or you know, some outrageously unlikely thing. Without further explanation, just the fact that it

would occur to him, then you don't need to include it. So, it's obviously not something that needs to be addressed, but if it's not obvious, if it's a characteristic of the system, something about the site that makes it extremely unlikely or something like that, well then it's not really not credible prima facie. It's something that needs to be put in the ISA and say this thing is highly unlikely because, and then a little explanation.

So, that's staff's view, is that if we take this other view of what the term credible was intended to mean in the regulation, namely a non -- that anything that the ISA analysts simply think is sufficiently unlikely, then in principle any event that has that characteristic could be simply not reported in the ISA and the ISA submittal might be very sparse. The reviewer would not know why all these events were not appearing. So, that's our view, is that credible needs to be very inclusive. So, you can define it in different ways, but the idea is don't -- our feeling is, I think, that an event should not be considered not credible unless it's something that's very clear, just obvious and clear that it's not of sufficient likelihood or consequence that it needs to be considered in the ISA.

I wonder, what was this -- in the industry, what was their view and understanding of this term credible and what role that definition would play?

KILLAR: I think, in fact, our words here reflect what our thinking was, which is consistent with what you've said. Certainly if there is something that is not credible, then, you know, you don't need to take into consideration as something you'd use in the beginning of doing your hazardous analysis to determine what hazards you have to accommodate and stuff, you know, meteorites or if you've got a plant that's located on top of a hill and the 1,000 year flood only gets halfway up the hill, you don't have to worry about external flooding. You know, it's certainly an incredible event, so therefore we have to take it into consideration. That was what our thinking was.

I don't know that we have a difference in philosophy. I think the only thing that I have a little bit of a concern with is that we do get a lot of what ifs questions, and you know, a lot of times we think some of the what if questions are incredible. So, you know, we'll be glad to work with it and stuff, but you know, I don't think we have a difference of opinion between credible and incredible or what your thinking is. Charlie, do you want to expound on that?

COX: Maybe I could make -- try to couch this slightly differently. Referring to your objective of producing a guidance document that will at least assure consistency across the industry in submitting an ISA

summary, my feeling about this definition is that it's not objective enough to even accomplish that in that across the industry, you will have a wide variation or easily have a wide variation among what is considered not occurring during the life of the facility versus what could occur during the life of the facility. I think you just need more objectivity in that definition, which I think the SRP provides.

DAMON: I would agree with Tom. I think the thing that scared us about the definition is it certainly could be interpreted as meaning the same thing as what we on the staff believe, but it could also be misinterpreted, we feel, by someone who said well, if I look at this one process, I don't think this particular accident will occur in this particular process in the life of the plant. Well that's, you know, could be once in a hundred years, and there are many things that are like that, but those are not really incredible events. Incredible in that context would be something outrageously improbable which you virtually -- if someone came to you and said you know, this event actually happened over in this plant over here. You literally wouldn't believe them. You would say you must be mistaken. That can't happen, you know. That can't happen in that kind of machine, you know. You just would not believe them if they told you it happened, but if somebody told you this

happened and you would believe that yeah, that probably could have happened. Okay, that's a credible event.

KILLAR: Yeah. I don't think we have a difference with you, and I think we can work on that definition. I think in concept, we're certainly in the same concept, and we can look at maybe beefing up the words here and stuff.

Once again, this is just something for consideration that the individuals can come up with their own and look at the SRP and what have you to come up with their own stuff.

DAMON: Then there's the other two definitions in there, unlike the -- by the way, the term likely, there was a requirement in the original draft of the rule language that included the word likely as something that needed to be defined in the ISA summary. Well, that wording is no longer in the rule. We could not find where that word was used anywhere in the rule, so it was taken out.

Then the other terms unlikely and highly unlikely, I think the staff would need time to formulate a written response to these definitions, but there's less difficulty with them than with that term credible. I would just like to make one personal observation, which is that the real purpose of defining the terms highly unlikely and unlikely is really involved with the acceptance of whether one meets the performance requirements, and this is the same function

that's being played in Appendix B by the method that's used there of using a frequency of causes and effectiveness of protection and getting a score, and then using the Table 4 to determine whether the accident is acceptable or not acceptable.

So, when I think of the definition, the term highly unlikely, I'm saying it's this method and the use of the number minus 4 in the context of this method, that's really the definition of highly unlikely, as it, in fact, is stated in Table 4. So, to me, you know, the definition really is all the different combinations that would give you a minus 4 or less. So, that's the way I look at this.

It turns out the one example that is stated in Appendix A, the actual words that appear after the term highly unlikely, those are one of the many different combinations that we give you a minus 4, and therefore would be considered highly unlikely. So, that's the way I viewed the scheme.

KILLAR: We're consistent with you. We avoided any numbers because we felt that the use of numbers is inappropriate in that. We don't feel that there is a good basis for those numbers, and so therefore, we didn't put any type numbers on there, although we talked about numbers and stuff. As far as consistency and what have you and certainly from a consistency and philosophy, we're certainly

on the same lines as you are. That was the intent.

COX: But Felix, I don't quite understand that because you did not avoid using numbers in Table 4 and in this whole risk structure which you presented. You did use numbers, and in fact --

KILLAR: No, I'm talking about like ten to the minus four or ten to the minus six or something along that line. Yeah, you have to use numbers in order to multiply things out. Numbers are inevitable.

COX: Or, yeah, in this case you added numbers apparently to define highly unlikely, as this minus 4 or D minus 4. I guess we're sort of working into a discussion of appendix. Is this B or C? B perhaps, and maybe we'll get into that, but I would certainly like to be able to understand better what that risk structure is that has been proposed in here.

PERSINKO: One item up front we talked about, list and description, we were talking about IROFS, items relied on for safety. You specifically state at the systems level, I would think that that, although it's not -- and it's acceptable, but I think you'd also allow people to do it at a component level as well.

KILLAR: Certainly. No problem with that at all.

PERSINKO: Because it specifically states systems right now.

KILLAR: Well, once again, we're trying to reflect an understanding that we had with you in that on the ISA summary, we only had to do it on the systems level, and so we wanted to make it clear that that was our understanding. Now, certainly the ISA at the plant will probably most likely go down the component level and stuff, and there may be some need in the summary for a particular complex system to do it on a component level, but for the summary, the system level should be adequate.

COX: I don't recall -- perhaps somebody can correct me -- that the rule language ever limited that to systems level descriptions of IROFS.

SHERR: Okay. I think what you're -- if I understand your response to Drew, you were agreeing with Drew that IROFS don't have to be at the systems level. They can be at the component level. I guess one question with one thing you said that puzzles me a little bit, and maybe I need clarification. You said that what's defined as IROFS at the plant versus what's defined as IROFS in the ISA summary would be different. Our assumption is that that would be the same. If it's in the -- if it's at a systems level, maybe it would help to clarify exactly what you have in mind when you say that. One can be a very broad system or a very narrow system. You know, we would assume that an IROF is an IROF, that what NRC has recorders in IROF is

equivalent to what the operator on the floor recognizes as an IROF as well. Did you mean to suggest something different from that?

KILLAR: What we're talking about here is a difference in the description of the particular system. When you talk about a system, say for instance, an active electronic system, you talk about we will have a system the monitors density and, you know, and for purposes of maintaining concentration control, where at the plant what you're going to have is you're going to say, okay, we're using XYZ system which has these probes and these probes have to be calibrated to this level and things along that line, but for the ISA summary, we only needed to explain that we are using a density control and we're using an electronic method for measuring density versus the specifics of that system, which is at the plant, is in the detailed ISA that's at the plant. You don't necessarily have to go to that level of detail in the ISA summary. That's the difference to me between a system and components.

GOODWIN: I think a good example of that would be a criticality action alarm system. You know, I think you would more or less specify the system measure IROFS, but I mean, when you break it down in its components, you've got your probes or detectors. You've got your power suppliers, amplifiers, et cetera, but I think you would probably look

at it in the ISA summary strictly as a criticality action alarm system.

ASTWOOD: People are going to have to correct me if I'm wrong on this. This is not exactly my area of expertise, but my understanding of the way this would work is that we would have a description of what you are using and what you consider important to safety so that the license reviewer would know what that is and could make a determination from all of the information that we reviewed, as you said, the license application, the ISA summary, that you chose the correct -- you analyzed and addressed the correct accident sequences and that you chose and identified and described the appropriate IROFS to protect against those accident sequences.

Now, I'm not saying that you couldn't describe it as a temperature probe. However, we would have to have enough description of that to be able to go to the site and say that's that IROF. This is it. Not well, you know, it's in here somewhere and for the operator not to be able to agree, yes, that is an item relied on for safety. So, I think the description has to be precise enough so that there is no confusion between NRC staff and your staff.

GOODWIN: Yeah, and more importantly our staff, the operator on the floor. He must know what that IROFS is.

ASTWOOD: And the next step to that. Let me just

say one other thing. The next step to that is that -- and we'll get into the management measures discussion later -- that then the appropriate management measures are applied to that IROFS to insure that it's available and reliable and that we can, you know, you meet your performance criteria. Again, if that description is very vague and your description of management measures, we are not going to be able to make the determination that that particular system will be protected by these particular management measures.

So, those are the three things that we really need to be able to determine here when we review this, and I just want to make sure that we're clear that you do have flexibility in how you describe some of these things, but that those three things can't change.

PERSINKO: And it's important that you describe it, the functional requirement of the IROFS. The rule specifically says that. The description says, it's very important, you know, you want to -- consistency between an NRC reviewer or license reviewer or inspector and a plant operator, that if they go into the plant, they both see it the same way, that when they look at something, they both agree that that's an IROF. You don't want inconsistency there.

Also, the controlled parameter is not the IROF. It's the -- you know, we said in the standard review plan

that, you know, you don't list the controlled parameter. It's the item that's doing the actual control that is the IROF.

DAMON: This is Dennis Damon again. Yeah, in the context of what Drew is discussing, which is the description of IROFS at the system level, that is what I -- what he just referred to is where I see it as the danger. That is, that there's a danger that what is submitted in the summary is a statement that we are controlling mass and we have a mass control, period, end of description. A statement like that or where controlling concentration, we will measure the concentration. A description like that usually would not be sufficient. I mean, in some cases, a very terse description like we will have a written procedure for or this is covered by a procedure, it will be clear, you know, that what it is the operator is doing and what level of reliability that thing has, but usually what's needed in the description and that's why the rule states that the IROFS list is not simply a list of IROFS. It's a descriptive list, and it's a key term. The idea is that there needs to be enough description of what it is about the IROFS that makes it reliable.

This is, for example, related to the definitions that has been given in the NEI document of, say, unlikely here. The definition of unlikely in here states one robust barrier, and it's that robustness is what I'm getting at, is

if it will be clear to the reviewer that if you state you've got a control on some parameter that yes, you do have a control. What he needs to evaluate is that -- if as part of the likelihood argument you're saying well, what we've got is one barrier and we claim this one barrier is robust, he needs to understand what is it about that particular IROFS that makes it robust.

Why is it highly reliable? As an example, I'll refer to the criticality accident. In that case, they were relying on the operators to follow written procedures to conduct that operation, but it was not a robust procedure. It was a procedure that was very vulnerable to making mistakes. Any one mistake of a number of different kinds could cause them to do the wrong thing, and in particular, the one they appear to have made is that they didn't understand that the enrichment was different for this particular batch that they were dealing with.

So, that's the issue, is when the analysts are doing the description of the IROFS, they need to try to communicate to the reviewer what is it about this IROFS that makes it sufficiently reliable. In that context, that's where in the past I've said a descriptive language, a couple sentences often is far more helpful than a title or some other data about the thing. It's an attempt to explain why is this thing sufficiently reliable.

What characteristics does it have? That will vary drastically, of course, between different IROFS. I think the only way we'll ever really communicate back and forth on this is to start generating a lot of examples of what constitutes a sufficient level of description. One doesn't need -- we've agreed the IROFS don't need to be described at a component level and in great detail. What needs to be described, though, I think is what characteristics they have. What is the real nature of them that makes them fundamentally reliable, and then within -- and any system that then could be substituted for that IROFS that had those same characteristics without notice to the NRC.

So, that's the concept, is to provide just sufficient so that it's not something that needs to be re-reviewed.

ASTWOOD: If you guys don't have any comments, this might be a good time to take a break, if you don't have an objection.

FERGUSON: I have one question. This is Craig Ferguson. Drew, you said that the item relied on for safety is not the parameter you control, the parameter itself, which I agree with. Did you read that somewhere in here?

PERSINKO: That was in our standard review plan, actually. Sorry. In the standard review plan, we talked about that one page 324, I believe it is, where we say --

FERGUSON: I meant the industry guidance document. Did you read it in there?

PERSINKO: Oh, sorry.

ASTWOOD: No, I think that was stated in the industry's management measures example, which we haven't started talking about really.

PERSINKO: Well, I thought I heard when Felix was speaking, I thought he mentioned something about that, which made me think that that might be what he was referring to, so that's why I raised that up.

FERGUSON: Okay.

KILLAR: No, what I was referring to is how you -- the item relied on for safety for the control, the control is concentration, and the way you -- the item relied on for safety to assure that you have that concentration control is this electronic device for measuring the density --

FERGUSON: Okay.

KILLAR: -- when then gives you a, you know, shuts off a valve or whatever, sets off the alarm or whatever when that density gets so large.

FERGUSON: Yeah, I was just trying to make sure we were on the same wave length.

PERSINKO: Okay, thanks.

SHERR: Now, just to pick up on that, you're still trying to get a clarification on what we mean by systems

level. One example that you provided essentially, and consistent with what you just said, Felix, I think you're saying okay, we wouldn't be describing the model number of serial number of the piece of equipment that we'd be using, but we'd be describing the function of that piece of equipment and its performance capability and relationship to meeting the --

KILLAR: Right.

SHERR: I don't think we have any problems with that. So, I suggest we take a short break and reconvene at 11:00.

[Recess.]

ASTWOOD: Okay, I think we're ready to start here if you guys are. We have come up with more questions that we'd like to ask you, unless you guys -- do you have anything you'd like to say at this point?

KILLAR: No, we're ready for your questions.

ASTWOOD: Okay.

PERSINKO: In the rule, the rules -- back on the subject of IROFS, the rule language in the ISA summary section talks about IROFS being described in sufficient detail to understand their functions in relation to the performance requirements. When you put it in your ISA summary guidance document, you said a description of how IROFS is applied and the safety significance of it, is there

a reason that you chose words other than the rule? Do you mean anything different than what's in the rule?

KILLAR: No, we definitely don't mean anything different than the rule.

PERSINKO: Okay.

KILLAR: In fact, we were concerned that when you all were talking about a list of the IROFS that that wasn't adequate, that as you may recall -- I think it was at our last meeting -- we talked about the tabulation of the IROFS where you get that description of the purpose and things on that line in order to get to a more understanding of what it meant and so certainly, you know, we're certainly consistent with this rule, and that's what our thinking is.

PERSINKO: Okay. I just didn't know why the words were different. I didn't know if you meant something different or not.

KILLAR: No.

PERSINKO: Okay. Hold on.

ASTWOOD: Is there an IROF specific question?

COX: No, I don't have an IROF specific question.

ASTWOOD: I just have one. Can I --

COX: Okay, sure.

ASTWOOD: I thought more about the analogy that you used about the criticality safety, or criticality alarm system and identifying that as an IROF on the systems level.

That has several parts, as you had talked about, different gauges or functions that it would have individually. The way we picture this is yes, you could identify the criticality safety system as an IROF, describe its safety function to us. Everybody is pretty clear about what that is, you know, we can point to it. However, that has implications, broader implications, throughout the rest of your ISA summary and your management measures and things like that, where you know, we've said you can grade the management measures according to the safety significance of the IROF, but you have identified the system as an IROFS. Therefore, how you grade that system applies to the entire system. So, you would say it has some safety factor and that you're going to use your management measures and do surveillance on it on a certain frequency based on that risk that you came up with, that safety factor. You're going to perform maintenance on a certain frequency because of that, and it would be applied to the entire system. It's not that this component would have more surveillance than this component. It would be all identical for the entire system.

GOODWIN: That's correct, and you do -- when you do your testing and calibration, you would do a system test as opposed to individual. You may do individual as well, but you would ultimately do a system test.

ASTWOOD: Okay, because you can't -- once you've

identified it on the system, you can't break it down onto the component level for other reasons.

GOODWIN: Right.

ASTWOOD: Okay. I guess that wasn't a question.

GOODWIN: You understood correctly.

KILLAR: Well, you're questioning whether your understanding is correct.

ASTWOOD: That's right. Okay, you can go ahead.

COX: I'd like to address some similar type of questions or questions leading to a better understanding of your Appendix B. You know, what we have to do is whatever the industry would submit or an applicant would submit, we've got to determine that, in fact, it meets the performance requirements of 70.61. To that end, I'd like to be able to better understand the risk matrix and structure presented in your Appendix B.

My first question is about the severity of consequences table where there are, of course, consequences are divided up into a lot more categories than our rule does. Do I understand that -- I'm on Table 3 now. There's no page number. It's called the severity of consequences table. It starts with three categories, three high categories before you get to intermediate. One's called severe, I guess, and then there's six and five. Do all three of those categories correspond to what the rule calls

high consequence levels? Would that be your intent?

FERGUSON: I think we concluded yesterday at our meeting that we're going to modify this table to align closer to the rule, so the answer to your question is yes, it's going to be changed to match the rule language. The high severity is going to be high. I think we decided to reduce this down to essentially two levels, high and intermediate consequence. Just for clarification, across the top where it says severity, those are the four -- fire, rad, chem, cred -- those aren't in and of themselves a level of severity.

COX: Oh, I understand that. I just -- I guess I'm looking at the vertical scale here, the various levels. I did have one question about understanding in a descriptive paragraph here. Let's see, it's on the severity line. This is the top line of Table 3, and it's the second box in, which deals with chemical hazards. It says that exposure does not include plant conditions that result in an occupational risk but do not affect the safety of licensed radioactive materials. My understanding from our material that we have put out, which involves our agreement with an MOU, memorandum of understanding, with another agency and that we've talked about at length in other venues here, if the chemical -- this is our NRC understanding, I believe, and I can be corrected. If the chemical hazard derives from

the processing of SNM, then it is in the purview of our regulation, whether or not the safety of SNM is affected, to use your word.

KILLAR: Right. We don't have an argument with that.

COX: But that paragraph as you've stated it there would rule that out. It says, in other words, if it does not affect the safety of licensed radioactive materials, then you wouldn't deal with it.

KILLAR: But it may not necessarily -- it may be chemicals. What he's referring to here is that these are chemicals that aren't as a result of processing SNM, and they do not affect the safety of SNM and therefore, they are not part of this. Now, I understand where you're coming from, and we can clarify that.

COX: Yeah, I think that needs to be clarified because the safety of SNM is not really the key factor here in whether or not you consider it.

KILLAR: Yeah.

COX: But it's whether or not it's involved in the processing of SNM. Okay, that's sort of a -- it may seem minor, but it's a point of understanding that I thought we had dealt with long ago.

Now, I have another question of Table 4, risk assessment table, and I'll try to keep in mind now that --

it appears you intend to modify this, so maybe there's -- I don't know to what degree we should even discuss this if you're going to modify it.

KILLAR: As I indicated, our plans are to make this a little simpler. You know, when we first put this together, we thought it was very good, but as we looked at it and said well, gee, it's good because we've been working with it and we understand it, but just somebody who's just picking it up and reading it, it's not going to be that clear, so we need to make it simpler, so that's what we're going to be doing.

COX: Well, let me just get to something here that might affect how you change it. On Table 4, called risk assessment table, you have a box scale at the top, which I think is just displaced a little bit from the lower box. I would assume that the D minus 4, if placed on that lower box risk matrix would be shifted to the left just a little bit, is that right? The numbers in those boxes would be shifted to the left and dropped down a little bit. They don't seem to line up with the columns in that lower table.

KILLAR: It may have been just the way -- we did see that some people's, when they got copies of it, the computers printed it out screwy and stuff.

COX: Well, I want to get to my question, though. Don't deviate me from that.

DAMON: Well, I'll provide the version of Table 4 that appears in the hand-out of the NEI document is printed correctly. I think when you print it under Word Perfect, it gets shifted.

KILLAR: Oh, okay. Let me see. It's an effect of the computer software program.

COX: Okay. Then essentially what I'm trying to bumble through here is the way you would have it. The first column after the scale of consequences there is S minus 4, I guess. Then the second column is minus 3 and the third one is minus 2 and so on down. That tells me that you have the second and third columns are considered unlikely, but they're up in the high consequence area of the table. So, you have high consequence accidents being unlikely.

Now, you know, in the rule, it says high consequence accidents must be highly unlikely. So, I'm looking at what I'm seeing here as a disconnect between the rule and this presentation.

KILLAR: Okay, that's one of the things we want to clarify, that what this is, and as I indicated earlier, this is what we say is your criteria to judge against. So, you would take a system and you would go through that system and come up with a ranking, and then you put that ranking on this table. When you put on this table, it will give you an indication where it is, whether it falls up in the highly

unlikely, unlikely, or not unlikely category in the risk level. If you find that it's in the white area, then we say it's fine. If you find it's in the gray area, we say well gee, we've got some risk here. We ought to see if we can mitigate those risks and bring them down, but it's okay. But if it falls in the black or dark gray area, that's unacceptable, and we have to make changes in order to get that down into at least the gray area, preferably the white area.

So, this is a criteria table for comparing your systems against. This is not the actual system itself.

It's sort of like defining your acceptance criteria and then you go out and you do your test to see where they fall in your acceptance criteria.

That's what this is; this is the acceptance criteria or un-acceptance criteria, as you may want to state, and then you go out and you compare your results to this table, and then it tells you whether it's all right or, no, you need to do more work.

COX: Well, that's my point.

KILLAR: This is not the actual system. This is the criteria for

COX: Well, it's the criteria that you either meet or don't meet, based on what the system is, right?

KILLAR: This is half the equation, is what I'm

saying.

COX: This is what?

KILLAR: This is half the equation.

COX: Okay, well, this half of the equation seems to say for Risk Zone 2, which is a light gray, that it does meet performance criteria, and for the time being, I'll assume that that performance criteria you're referring to is the rule performance criteria, 70.61.

And you have three boxes there that supposedly meet the performance criteria, but they are unlikely for high consequence events.

And what I'm saying is, I believe it's supposed to be highly unlikely for high consequence events.

So you have three risk zones there or boxes in Risk Zone 2, which, in fact, would not meet the 70.61 requirements, because they're unlikely, as opposed to highly unlikely.

ASTWOOD: I think, just to clarify, if, when you plot your accident sequence on this chart and it falls into the light gray box, the one that he's talking about, then you would say, all right, this is something -- this is an accident that we need to protect against and you would add whatever necessary IROFS to bring it over into the white box; is that correct?

VAUGHN: Yes, our words.

ASTWOOD: Or down into the white area.

VAUGHN: Right. That was just what I was going to add; that if you follow that, if you're in Risk Zone 1, then you immediately basically have to upgrade that one before you operate for any period at all. If you're in the gray, you're not acceptable, but on the other hand, you have a reasonable margin of safety to operate for some specified period of time before you get your complete upgrades in place.

Of course, if you're in the white, you're okay. That was what we intended. I agree that the words there didn't exactly say that.

COX: I think they said it pretty well, Charlie, except that Risk Zone 2 says does meet performance criteria, whereas I think that according to the rule, it actually would not at that level of likelihood which you have here as unlikely.

Do you understand what I'm saying relative to the rule.

VAUGHN: I just struck the word, does.

COX: Oh, okay. And just as a clarification, because Heather said something here that alludes to this: My interpretation of this table was that the protective measures, that is, the IROFS, are already applied at this level of measurement of the risk.

This table is not for unmitigated risk accidents; this table is for accidents for which the frequency of cause and the effectiveness of the applied protection are already included.

KILLAR: That's correct.

COX: Okay.

KILLAR: And what this says is that that level of IROF or what have you is adequate, and if it falls in the gray or the black area, it's not; you have to do more.

COX: Okay.

SHERR: Let me ask a question. Do you intend -- you mentioned that you were going to simplify this matrix. Do you intend to maintain the gray area?

KILLAR: I imagine we will, yes.

SHERR: Okay, maybe everybody understands but me. I'm trying to understand -- you know, as a general matter, if the purpose of the table is essentially to indicate what accidents need to be protected against and which ones don't, which ones you have sufficient level of protection for, what does the gray area mean?

KILLAR: It also helps you in some grading, in that if you're in the white area, obviously the system is fine, you don't have to worry about it too much.

If it's in the gray area, and as we're going to redefine the gray area, the gray area will still be

acceptable, will meet the criteria, but we're not necessarily as good as we'd like to be, and so it's an opportunity to make some improvements.

But as far as meeting the regulations, it meets the regulations, but if it's in the black area, then we certainly don't meet the regulations, and we definitely have to do something.

So the gray area's purpose is to kind of establish where you have sort of greater risk than you would with a white area.

SHERR: So the next matrix we see, every case where there's gray, there would be cases where you meet the performance requirements?

KILLAR: Right.

SHERR: So it's only a case of opportunity to improve upon.

VAUGHN: What this table really tells you is that it answers that last tough question about am I good enough to meet the performance requirements.

In other words, you start through this process, and you define accident sequences and frequencies for those, and then you lay over that, the controls that you have in place, whether they're items or systems.

But you lay those out, and the consequences out for those particular accident sequences. And that lets you

rank these controls in such a way that you know what risk, what level of risk they're protecting against.

Once you get all the way through that process, then you have to answer the question, okay, are the controls that I have defined and identified as a result of this work in the ISA, adequate to meet the performance requirements?

And this gives a disciplined way, we believe, to do that, an so it's answering that last question.

PERSINKO: I have a question on hazards. In your guidance document, which I guess is on page 5, you talk about general information. Under Site Description, you talk about meteorology.

You mention high winds and flood potential. Later in that column, you talk about typical hazards analyzed, and then later on the next page, under Process-Specific Information, you talk about process hazards that were identified through the ISA process.

I think I understand what you say when you say process hazards. I'm not so clear about what you mean when you say typical hazards analyzed.

What kind of level of detail are you suggesting in that bullet with the words typical hazards analyzed?

KILLAR: When we talk about typical hazards, there are the ones that come to mind right away: Things like high winds, hurricanes, tornados, things along that line; fires,

you know, things that a normal -- say, oh, gee, what do you need to protect against, and these are the types of things that come to mind, are supposed to be your typical hazards and stuff.

When you get into the process hazards, then you start thinking about things that maybe the conventional person wouldn't think about, things like backflow preventers to assure that material doesn't go back through a ventilation system into an unsafe geometry.

I'll try to think of some others that you may -- chemical reactions, unanticipated chemical reactions.

PERSINKO: It's a little more specific on a process level.

KILLAR: Right.

PERSINKO: So I think that's what I envisioned it to be, too. When you say, typical, though, that could be a couple of different levels. You could write a couple of sentences and say our typical hazards are fire, criticality, natural phenomena, and stop right there.

So I was wondering that there are hazards that are maybe not process-specific, but yet you have to describe them somewhere, and I'm thinking like what you mentioned up above. That's why I said high winds and floods.

You kind of identified that up above as a hazard. Where would you describe the effect of that hazard on the

facility?

KILLAR: That would fall within the process description itself, because when you're talking about the individual process, you've got to look at all the various hazards that can affect that process.

Now, if you eliminated flood from the facility altogether because it's up on the top of a mountain and stuff, then you no longer to have to cover that, so you can cover that in your general description.

But if you have it, you may have to discuss that in your process, what impact flooding would have on that process.

PERSINKO: Okay, that was what I was trying to get at, because I saw it sort of the same way. You could handle it in an overall kind of way for the facility, if, you know, whatever -- you meet the performance requirements and the flood level never even rises to the grade, in which case you might not need to do it for each process.

In other cases, I've seen cases done where there may be part of the facility that's significantly lower than others. So then that hazard is described at a process level. Well, this process is at a low elevation, and it is susceptible to flooding, however the consequences of that flooding are whatever, X, Y, whatever.

So I guess I was just trying to understand where

you would describe those kinds of hazards, because I didn't really see it as a process-specific hazard, although it could be, you know.

So is your answer then that -- are you saying that you would handle it mostly in the process-specific area, rather than overall, or wherever it applies?

KILLAR: Where it applies.

PERSINKO: Okay, so if it's an overall -- if you can address the hazard in a global sense for the facility, would it expect to see it under Part I, General Information, rather than process-specific information?

KILLAR: What you're going to do is, you'll probably -- and it's going to be dependent on how the individual does it.

But when they go through and do their integrated safety assessment, they're going to identify a whole list of hazards and stuff that they're going to be analyzing against, and they're going to find that, you know, 90 percent of the process and the items relied on for safety are subject to these types of hazards or preventing these types of hazards.

So in the beginning, you'll list, these are the hazards that we analyze against and stuff. And then you have these others that are somewhat unique to the process, and so you don't necessarily have to talk about those in the

beginning, but you will provide that information in that specific process.

In addition to all the others, we evaluated this one here for this reason.

PERSINKO: Okay. But what I guess I'm a little concerned with is if you say typical hazards analyzed, and all you provide is a couple of sentences that say here are our hazards, fire, flooding, and then I don't hear any more about it, so I guess I'm trying to understand where you would describe then how that hazard is factored in.

Would it be up front? Would it be under the process-specific?

KILLAR: It kind of goes back a little bit to what Dennis was talking about as far as credible. By putting the list up front, it provides the reviewer the list of hazards that they have taken into consideration, and these are the lists of the hazards that the reviewer typically should think about when they're looking at it.

But then in the individual process, they're going to have to identify how they addressed each of those hazards.

PERSINKO: Okay, that's good. I was just trying to see, because I could see if you listed the hazards up front, like I said, fire, crit, flood, I would expect fire and crit to be described under process-specific. But I

didn't see, necessarily, that flood would be under process-specific, and I just wanted to clarify that.

KILLAR: It may or may not.

PERSINKO: But it has to be addressed more than just in the overall list up front as a flood, and the never again to be heard from?

KILLAR: If we list a hazard, we're going to have to explain who we're protecting against that hazard.

PERSINKO: Okay.

KILLAR: Similarly, we may be up front with a list of hazards, and say, hey, this a hazard that you may typically think about, but is not a hazard for this facility, and, therefore, eliminating it, you don't have to see it anywhere but that first section where it has been eliminated and why it's been eliminated.

PERSINKO: Okay.

KILLAR: Maybe we ought to take the word, typical, away.

PERSINKO: Well, typical was throwing me a bit there. I see that as two sentences.

KILLAR: You know we can't do anything in two sentences. You guys never let us do anything in two sentences.

COX: It might help if you would put out a table of contents of this document. I think I understand from

here that we've got something like three parts, but now I'm wondering if there are chapters within the parts.

There is a reference here to Chapter 1, but there are not references to any other chapters. I'm not sure whether -- just what the structure of this document is, and that might help our understanding of where things are going also, if you have an understanding of the overall table of contents, maybe you could share that at some point.

VAUGHN: I think that reference to Chapter 1 is Chapter 1 of the SRP. I mean, we don't say that there; it's just Chapter 1, but that's where that points.

KILLAR: Right, that was the intent. That's part of the cross reference that we talked about earlier.

COX: Okay, well, Chapter 1 of the SRP is talking about material that would be in the license application under Chapter 1 of the license application.

And that is -- the intent there of the NRC is that that would be a summary of more detailed information that is developed elsewhere, perhaps -- well, probably in your ISA work. But it's --

We're not looking for all of the analysis and detailed discussion that would develop, say, to plant response to tornados or earthquakes, or whatever. We're not looking for that in Chapter 1 of the application, but rather a summary of that.

KILLAR: I think we're confusing things here, Tom. What we're referring to in Chapter 1, Chapter 1 gives you a description of your site and facility.

And what we're saying is that if there is nothing that you need to define in the ISA, beyond what you've already discussed in Chapter 1, you don't have to repeat that information in the ISA; that's what we're saying in referring to Chapter 1.

COX: Okay. Only if there is something else unique as a result of the process?

KILLAR: Yes, right, if there is some unique feature that has not been described in Chapter 1, then we've included it in here to let you make sure you're aware of it.

COX: Okay.

DAMON: This is Dennis Damon. I'd like to get back to the method of Appendix B for evaluating whether the performance requirements are met that uses Tables 1, 2 and 4.

And Tables 1 and 2 are on page 10, and Table 4 is three or four pages later.

Given the clarification of how Table 4 is eventually going to appear, it would appear that this method, the comment that I wanted to make about the method was that this method would appear to work for a considerable

number of cases, but that what I think you will find as you try to apply this in a plant is that there are a couple of different kinds of situations where it won't fit.

And so all I'm saying is that my reaction is that -- and it may also apply to the method that was outlined in Appendix A of the Standard Review Plan -- is that these methods need to be adapted as you attempt to apply them in the kinds of situations where they don't seem to fit; that you need to add and supplement the table with new things, and techniques.

And as one example of that, the BWXT method, which is somewhat similar to what's in Appendix A of the Standard Review Plan, has -- one of the concepts in there is that there is an index number, not just for the initiating event and the protective system, but there's also an index that deals specifically with the duration that -- it deals with situations where we would have redundant systems where you have two IROFS, and where the quality you're trying to quantify or deal with is the duration that the IROFS might be unavailable performance functions.

And then that outage duration is limited by surveillance and recovery actions that are in place, so that you have a method for sensing when something is out. And that's addressed in Table 2 by referring to functional testing on a regular basis.

Well, what I was trying to point out is that when you use the method that's in Appendix A of the Standard Review Plan, it's really the outage duration of the first failure that is relevant to the likelihood of the sequence, not the outage duration of the second failure, which is kind of implied by the way these tables are structured.

In other words, it's the initiating events outage time that determines the likelihood of the sequence, because it's that time duration during which the second failure occurs, namely, the thing that's described in Table 2 as the level of protection, the thing that the second failure is that.

So it's the outage duration of the first failure that determines the probability that the second one will occur. And that indexing method of Appendix A and the one BWXT uses, they use this technique, this outage duration or whatever they call it, so that you have, instead of just two things where you're adding numbers, you get three things, and you have three indexes.

So I'm just saying that in some cases, that's very important. In others, you know, as long as you recognize that virtually every IROF in the plant is going to be audited once a year, then that one annual audit would probably cover that.

But in certain cases, the real thing you're

relying on is shortening that interval. Like, it comes up in the context of systems that have higher reasonable failure rates. They are expected to fail every few years.

A system like that had better have some surveillance on it so that when it does fail, it doesn't sit around for a year or so undetected. Those kinds of things have to be -- you're really relying on the quickness with which the Staff detects the failure.

In that method that BWXT has, it captures that for those cases. I'll give you an example here. If you want to get minus four as an acceptable combination, one of the combinations is a minus two initiating event, which is unlikely to -- something that is unlikely to occur in the life cycle of the system, and then a two on the second description of protection, protection by a single hardware system.

So supposing we had a case where the first thing was the one that says you're given a minus two to unlikely to occur in the life cycle of the system, would be a highly reliable IROF. There are some IROFS that goes into a failed condition.

With a minus two and a minus two, I would look at that and say, well, I think that kind of combination of two things would probably work, if I could be sure that that first failure would not be -- would not be in existence for

more than about one month. About a tenth of a year is what my judgment is on something like that.

And so what I'm saying is, is that the fact of whether it is or is not going to be out for more than a month is not really addressed by this system.

So, what I'm trying to say is that the system is a little bit simpler than the one that BWXT uses, and if you're going to use it, I would say it would impose -- it would tend to impose a requirement on you that you say, well, I'm going to have surveillance on all my controls, such that I know within a matter of hours if any of them is in a failed condition.

Well, I think what you'll find is that you can't quite meet that for some things. And so when you encounter that, then you have to use this more complex method that uses more than one index.

I'll point out another one that I think may not be adequately addressed by this, and that is administrative -- many of the things in the plant, the initiating failure is an administrative control that's not done right, like what happened at Tokimura. They measured the wrong stuff, and put it in.

I mean, those are -- something like that is very difficult to assign a frequency of occurrence to. It's more -- I think you're better off trying to capture that through

a qualitative characteristics.

When you come to one like that where the initiating event is the operator does something wrong, I would rather see some kind of scheme that identifies what characteristics the administrative control has that makes it a robust control, makes it qualify as whatever you want, a minus two or whatever.

That is kind of a key thing there that you can't -- on some kinds of things, I think you can sort of rely on the judgment of people to assign an frequency of cause to because they are things that do occur.

But I think that on management -- on administrative controls, that might be -- my perception is that that's a little more difficult. It's almost -- you're almost getting into the thing you're accusing us of making you do, which is assign numbers to these things.

And I think it's really the qualities of the controls that make them adequate, and that's what I'd like to see people try to do, is develop lists of combinations of qualities that make something a robust control.

SHERR: I think we have covered the questions that we have as of this time. Are there indicated -- we had a relatively brief time to look at this, and so this is kind of the results of our preliminary review.

I guess we intend to provide written comments to

you. You have indicated that you're in the process of revising the document, and I trust that some of our questions and some of the discussions we've had will probably be reflected in that revision as well.

Perhaps -- I don't think either one of us know our timeline at this point, so I think if we receive a revised document before we get our written comments, we'll conform those comments and modify them accordingly to the revised document.

On the other hand, if we complete our comments before then, we'll submit them to you at that time.

Okay, unless we have anything else we want to cover before lunch, we can break 15 minutes early.

KILLAR: I do have one other issue on the integrated safety assessment. We have been looking through the rule briefly.

SHERR: Analysis.

KILLAR: Integrated safety analysis. We notice in the rule that now it's subject to approval, NRC approval, and we don't understand that.

What is approval going to consummate, or how is it going to be consummated? You know, how is this process going to work, and what does that mean compared to submitting the document for your information to help you make your assessment?

SHERR: I think that, in general, the idea is that as we talked about earlier, Staff needs to make a judgment of whether or not the programs that are described satisfy the performance requirements of the rule.

So, together with the information that's in the application and the license at the site, and any other information that's available to the Staff, then primarily based on the information that's in the ISA summary, Staff will be reaching the conclusion in terms of, okay, is that the information sufficient for Staff to make that determination?

When Staff determines that, as well as that the information in the ISA summary conforms to the requirements of 70.65, then we would be approving the ISA summary.

At that point then the change process would go into effect that's in 70.72. I don't know if there are any clarifications, but --

KILLAR: What confuses me is that certainly, you know, as far as the overall process and the program, that would be appropriate, you know, for the NRC to say, yes, you have an appropriate process and you are implementing it appropriately.

But then when you say that it meets 70.65 criteria, I think that, once again, as far as a program proces, yes a program-in-process, if it's carried out the

way you carry it out, will meet 70.65.

But I can also read this as that you're going to look at everything that we've done to assure that every item relied on for safety and every process meets 70.65, which means you'll be looking at a thousand different processes to assure that we meet 70.65, before you can approve the ISA.

SHERR: The information that's in the ISA summary is going to essentially be sufficient for the Staff, one, to conclude that all the relevant accident sequences have been identified; second, that the pertinent IROFS have been identified to either prevent the accident from happening, or mitigating its consequences; and, third, that the demonstration that the performance requirements are satisfied, based on the management measures that are applied, are sufficient to meet the performance requirements of the rule.

So I think all that information is required to make that broad judgment. And like we said, it is primarily based on the information in the ISA summary, but not necessarily limited to that.

And we anticipate and probably will be getting into this discussion a little more this afternoon, that the management measures information will be primarily in the application, and what's in the ISA summary would be a cross reference to that information in terms of how that applies

to the items relied for safety that are identified in the ISA.

We recognize that you might cut that some different ways, but that's our assumption on that. What surprised us a little bit is the formality of the words in the rule, the fact that it specifically said "approval" whereas in the past workshops we talked about for your review and submittal on the docket and not part of the license, et cetera.

Obviously indirectly you are approving it or you are offering your concurrence with it, and if you are not satisfied we are going to have to provide you with more information, more detail, but I think again it was just the formality of the words, the way they were written.

SHERR: Actually, one of the comments that was received, and I am not sure whose comment it was -- I think it was part of the NEI comments -- expressed, I don't know the exact words, that the statement of considerations was incorrect when it referred to approval of the ISA summary, and in fact that was exactly what was intended and we revised the rule accordingly to reflect that.

I don't know -- I mean the status of ISA summary with regard to being on the docket rather than the applicant is still there. That is unchanged. That doesn't affect that at all. The fact of the matter is at some point Staff

is going to conclude that the information provided to NRC is sufficient to support a determination they need to make to approve the application of the license, and that is when you are approving the ISA summary.

At that point that becomes, between what is in the application and what is in the ISA summary, is the commitments in terms of the safety program.

KILLAR: I just -- maybe have the attorneys look at it because I think the way it is worded, at least from my perspective, says that we have to demonstrate that every system meets 70.65 and for you to approve the ISA summary and the ISA you have to review every item that we have challenged 70.65 with to approve that ISA.

PERSINKO: You know, we do reviews here, not -- sometimes we do sampling reviews. We don't review everything, based on the amount of Staff we have and whatever, so reviews can be conducted in different fashions. It is not to say that every little item has to be reviewed but we do take samples. We look at overall things and we can review things that way too.

KILLAR: There I agree with you as far as reviewing programs. You review when they say that the program for criticality safety will be effectively put in or the program for radiation protection, chemical safety or fire safety will be effectively put in.

The program, if you are approving the program for the ISA, and the way the ISA is conducted, is fine, but that is not the way it read the ISA results, meeting 70.65.

PERSINKO: But Staff also in other cases reviews things beyond just a program. I mean there are cases where the Staff will look at samples of -- cases where you even look at sample calculations, so just to say the Staff only reviews programs, I don't think that is accurate.x

KILLAR: I agree you look at examples to make sure that we are implementing these programs specifically, correctly. In fact, that is what we thought the ISA was to do was to demonstrate that we are implementing the ISA program effectively, but now you are approving the ISA or the ISA summary, which is different than approving the ISA program. That's the subtlety that I am trying to point out.

I think it's going to give a problem as far as a regulatory licensing issue.

COX: The objective of the Staff's review is not just to approve the ISA program. We are supposed to find out that all credible accident sequences meet the performance requirements of 70.61.

KILLAR: In that case you have to look at every process to assure that we have done that in order to approve the license.

PERSINKO: That is what I was saying. It doesn't

have to be every one. The Staff can do things on a sampling basis as well and reach conclusions. It has done that in the past.

KILLAR: Well, we just have an issue with that.

COX: I think in a former, one of these meetings some time ago I even mentioned or suggested that the Staff would -- that this was one possibility.

We had been thinking about how to review this and we thought we would probably review most if not all of the high risk accident sequences involved, but certainly as we got down to other lesser consequence accident sequences it would probably almost certainly be on a sampling basis that we reviewed.

The depth of review will depend on what the Staff turns up in its review. If it turns out to be satisfactory, in most cases the review would probably be foreshortened but there is nothing in the rule that says how the Staff goes about making its determinations, only that it must come up with one.

SHERR: I wonder if I can ask for a clarification. What is the model that you envision? In other words, the ISA summary is submitted and then what action is taken by NRC on that basis?

KILLAR: Maybe the analogy that comes to mind, and I will probably get beat over the head by some of my -- I

will move away from Charlie and Wilbur before I say that -- is that the ISA summary is to me what used to be a Part 2 of the license, a demonstration of how you carried out the programs, and Part 2 was not something that was approved. It was accepted as supporting documentation and we, in my vision of ISA summaries --

ASTWOOD: It was approved when approved the rest of the license --

SHERR: Let me ask if that is the notion you have, how does the 70.72 requirements fit into that context?

KILLAR: Well, what concerns us is that you have now upped the ante to where you have now made Part 1 and Part 2 all license requirements to where if we made any changes in Part 2 we have to get NRC approval.

I know you keep shaking your heads.

ASTWOOD: It is not in the license.

COX: That is basically -- you know, there is an element of truth to that. There is no longer a Part 1 and Part 2 under the new scheme. There won't be Part 1 and Part 2 of the license. There would be the safety program description and the ISA summary and the ISA summary will be approved and then later changed by the licensees in accordance with 70.72 which says that in some instances changes can be made without NRC approval. In other instances NRC approval will be required.

KILLAR: I don't think we need to take the discussion any further. I just wanted to make that point that we were surprised that it ended up being a requirement to be approved as part of the regulation.

SHERR: Okay. You are surprised?

KILLAR: That's all I have.

SHERR: We will reconvene at one o'clock and start with Management Measures.

[Whereupon, at 12:00 p.m., the meeting was recessed, to reconvene at 1:00 p.m., this same day.]

A F T E R N O O N S E S S I O N

[1:09 p.m.]

SHERR: We are ready to convene.

We will begin our discussion now on Management Measures, which is focused on the degree of detail that is needed in that regard.

I thought it might be useful just to set an overall framework to just quickly review where Management Measures is covered in the regulations.

First, of course it is defined in the regulations and where the definition is to ensure that items relied on for safety are available and reliable to perform the functions when needed and in 70.62 three elements of the safety program in relationship to the performance requirements in 70.61 are identified, where the third element of that program are the Management Measures.

Also in 70.62 it goes on to indicate that these Management Measures need to be established to ensure that the items relied on for safety are design, implemented and maintained as necessary to ensure that they are available and reliable to perform the function when needed to comply with the performance requirements of 70.61.

Then in 70.65 it indicates that the application must include a description of the applicant's safety program established under 70.62, which as we noted, one of the

elements of the safety program are the Management Measures.

Also in 70.65, Section (b) deals with the integrated safety analysis summary and Item 4 on that summary indicates that information that demonstrates the licensee's compliance with the performance requirements of 70.61 including a description of Management Measures.

I think this is the context in terms of what related requirements there are and the purposes to be served by the descriptions of the Management Measures themselves.

As I mentioned this morning, one of the areas of concern is the level of detail that is needed to be documented with regard to the Management Measures. The industry representatives have kindly agreed to prepare examples that indicate the level of detail that they think would be sufficient to meet NRC's needs.

Examples were provided early in the week and are included in the packet and the industry representatives once they provide us a briefing on these examples, we will follow that with NRC comments and questions and discussion as we did this morning.

At this time, Felix, would you?

KILLAR: As Ted has indicated, we have put together three examples of Management Measures and what we would think would be adequate for defining what the Management Measures programs would be for three areas, the

three areas being maintenance, training and quality assurance.

From our perspective, we will commit to a Management Measures program in each of these. The programs will be integrated with the Integrated Safety Assessment and therefore for the purposes of grading and ensuring that they are applied appropriately, and thirdly that they will be documented in a procedure which would be there for NRC inspection to verify that the program is being carried out correctly.

That is kind of the philosophy we used behind putting the three together as provided here.

SHERR: Can you just say that more slowly? I am not sure I absorbed what you said.

KILLAR: Okay. The three elements that we see as important for the Management Measures is, first, a commitment to do a Management Measure, and so we commit to do a Management Measure such as maintenance or training or quality assurance.

The second thing that is important is that that Management Measure is incorporated appropriately with the Integrated Safety Assessment so that you assure that it is graded and applied to the items relied on for safety appropriate. That is the second aspect of it.

The third aspect of it is that it is in some form

of documented procedure, so that the NRC could come in and look at that procedure at the facility as they look at any other procedures, to assure that we are properly carrying out the intent of that Management Measure.

That was the basis for putting together the examples that we provided here in the handout that you received.

We did go on and did what we call a hypothetical example of how these Management Measures would be applied and it is very hypothetical because as we noted yesterday, as we talked about it a little more in our preparation, is it's not something that we would do, this thing is not something the way we would normally license it, because you would license this because you would license a disolver on a safe geometry, a concentration, it would probably be a safe geometry enrichment rather than concentration, but we wanted to get in the aspect of an administrative control versus a passive control, and so that is why we used the two different controls that we have identified for this, but we did lay out sort of the Management Measure.

Then we went a step further and talked about the difference between a Management Measure that is on something that is at the intermediate level of risk versus a high risk type things, and that was kind of the idea, the philosophy we used for putting this together.

Questions?

ASTWOOD: Okay. Thank you. I have a couple of -- again short turn-around time, so we are going to give you some general comments and then we will get into the more specific comments as the people would like to step in and do that.

One of the questions I had is it wasn't clear to me from this submittal and your statements what of this information was going to be in the license application and which was going to be in the ISA summary. I think you had mentioned that this example was going to be an attachment to the ISA summary --

KILLAR: No --

ASTWOOD: -- guidance? Okay.

KILLAR: The first page, and I am trying to get my copy of it -- maybe I'll pull yours out -- what is identified as (b) example, Management Measures, this is what we would envision as being in the license application itself. Like I say, this would carry the three elements that we talked about -- the commitment to, for instance -- take the maintenance program. The commitment to have a maintenance program. That maintenance program will be the first item. The second item is that program will be integrated with the Integrated Safety Assessment and graded according to the ISA and the third thing is it will be a

documented procedure.

ASTWOOD: Okay. Now in the first page in the (a) Introduction, you had stated, the bottom paragraph, current levels of commitment to such Management Measures should continue to be acceptable and the additional voluminous detailed information required, it seems unnecessary, and so does that indicate that the information that you currently have in the license application in addition to this would be what you would submit, or are you saying this is all that would be in the license application?

KILLAR: We looked at a number of the different license applications or actually a number of the existing license, and we found that it is certainly a variable, that there's some that have fairly descriptive programs and some that have no program whatsoever --

ASTWOOD: Right.

KILLAR: -- and so what we tried to do is kind of come up with, like I say, a balanced submittal between the extremes. This is the balance there that we felt -- most of the people felt we certainly didn't have to go into a voluminous description and discussion of it, but at the same time we sort of had to commit to these Management Measures and include the --

ASTWOOD: Right. I understand. Okay. I just wanted to clarify where this information was going to be.

Our general assessment of this is that this would not provide us the sufficient information. We need, as I had stated before, we need to be able to determine that you pick the appropriate accidents, appropriate IROFS, and that those IROFS would be protected, so we would need a description of the Management Measures in such a way that we would have that confidence and this level of detail we do not feel is sufficient.

KILLAR: Okay. Now I guess that is where we have to start getting into the discussion as to what are you looking for.

When we define in the ISA we have an item relied on for safety and in defining that we have indicated that there are certain Management Measures that have to be applied to that to assure it is available or reliable when called upon, and then you list them out, whatever they may be and stuff, how do you see going from one to the other rather than one thing -- we'll have a program for these Management Measures versus maybe go through our ISA and we find out we don't need any training, although training is probably not a good one because you have Part 19 -- but you may not need one aspect of it, for instance.

ASTWOOD: The way we generally pictured this is that in the license application you would have a description of the Management Measures programs, and let's just pick

maintenance because we have kind of worked with that before.

You would tell us what your maintenance program included, how you set it up, who was involved in it, the methods that you used to determine surveillance frequencies, this kind of thing, not the surveillance frequencies themselves but a description of the program and how you got to that point so that we have confidence that the program was set up correctly and includes all the relevant parts you may want to describe -- describe the program.

Then in the ISA summary, where you have identified these items relied upon for safety you would then link those specific items relied upon for safety with certain Management Measures, sort of in the fashion that you have done here, the same type of detail where you have actually gone through, and if one doesn't require any then you wouldn't link it to anything, so that there's really two separate types of descriptions, a general, broad overview type description and then something more detailed if necessary in the ISA summary that is specific to certain IROFS.

KILLAR: That is where we have the fundamental disconnect in that certainly we have to have Management Measures, but to describe the Management Measures in intimate detail to us is basically now you are establishing specific requirements for maintenance programs, specific

programs for a training program, specific requirements for a quality assurance program, and now you are establishing programs rather than, quote/unquote, "a Management Measure program" and so that is not what certainly we think the rule needs or our interpretation of the rule.

Now granted that is your interpretation of the rule, but we certainly think it is inappropriate.

PERSINKO: One thing is we did look at what is in existing applications, existing licenses as well, and as you said there's quite a bit of variability, but one thing to be noted is that some of the -- in some cases the Management Measure we have listed here, in some cases in the existing licenses there's a lot more information than what you have specified in this example here.

I mean in fact there's some cases where it is quite a bit of information that is really good information that would be useful to the Staff in determining whether the IROFS are available and reliable.

If you look at what you have provided here versus some of the better examples that are in some of the license, there's a lot of difference. There is a large difference, so you said you struck the middle ground and I don't know, it sure looks like maybe you struck the lower end in some cases.

KILLAR: Well, the lower end is nothing and as I

indicated there are some licenses that have nothing. There are some licensees that have no commitments to maintenance programs, they have no commitments to quality assurance, you know --

PERSINKO: But there are other licenses that have descriptives about how they are going to group it --

KILLAR: True. I am not going to argue whether who or what --

PERSINKO: -- but I am just saying that --

KILLAR: -- and stuff. What I am trying to determine is the level of detail that you need these programs to be in. From our perspective, we are willing to commit to a maintenance program, training program, some level of quality assurance program and we need to define quality assurance with a small "q" and "a" but the thing is what we are concerned is that as this gets deeper and deeper and stuff that we just get tied up in paperwork and procedures that have very little benefit to safety and actually ends up being a regulatory burden.

If you look, for instance, on reactor side, the reactors do not have to have a maintenance program. They have a maintenance monitoring program.

Now here is a reactor with a hell of a lot more sophisticated equipment than we have, a lot more risks than we have, and they don't have a maintenance program anything

close to the depth that you guys are asking for here.

PERSINKO: They attack it in a different way. We went through this in an earlier meeting, about specifying performance requirements for individual components and monitoring and tracking the availability of those components, and constantly checking the feedback against whether or not their initial assumptions are met and we talked about this in an earlier meeting and I thought I heard -- I think there was silence in the room when we talked about it, so I interpreted that to mean that you really didn't want to go down that path.

KILLAR: Well, I am not sure if your description of what your maintenance program is correct.

SHERR: Felix, can I ask a question? First talking about the submittals, what is submitted, the way you described it was that for each item relied on for safety you will be in fact identifying the Management Measures that are in place to support that IROF.

KILLAR: Right.

SHERR: Okay. It is that information -- we need some sense of -- one of the requirements of the ISA summary is to demonstrate the fact that the performance requirements are satisfied. That demonstration requires some type of correlation between the Management Measures and the items relied upon for safety.

Now what do you have in mind when you are talking -- kind of skipping to this morning's discussion -- what do you have in mind including in the ISA summary itself to cover that aspect of the rule?

KILLAR: Probably an example would be a training example. If you have got an item relied upon for safety that the operator has to carry out specific activities in order for it's being sort of an administrative control. One of the Management Measures would be the operator would be trained in the specific measure that he has to carry out to assure the operability of the system or the administrative control, so you would have a measure for training.

SHERR: Okay. Now whether or not that -- you know, I think that would be clear as a general matter any time you have an administrative control you can have training as a Management Measure that applies to it. How much you are going to rely on that administrative control may very well depend on how often the training is, what the frequency is and all those things.

Would you intend to define that for every IROF separately?

I think our context is there would be in the Management Measures discussion, there would be different levels of training that's identified and in the ISA summary one would be referring to Level 1, Level 2, Level 3 as it

might apply to a particular IROFS.

KILLAR: We looked at that and we broke it down into basically two categories in that the items that were the high risk, high consequence type events that certainly we would have more stringent requirements than we would, and more stringent Management Measures than we would for something that is an intermediate or a low risk or consequence, and so, yes, we did look at grading some things along those lines as far as the training requirements or maintenance requirements or what have you, but that was only maybe three categories at the most.

SHERR: Well, where would those categories be defined?

KILLAR: In the procedures.

COX: In what procedures?

KILLAR: It would be in the maintenance procedure, it would be in the training procedure, it would be in the other elements of quality assurance procedures.

COX: So there would be no definition of the levels in either the ISA summary or the application, Chapter 11?

KILLAR: I couldn't say that they wouldn't necessarily be in the ISA summary. They may be in an ISA summary because you will be differentiating between the higher risk versus lower risk and stuff but as far as the

Chapter 11 and maintenance are -- I mean Chapter 11 we certainly do not envision at this time those along that line.

PERSINKO: But this sort of relates back to this morning's discussion in a way, because there was an item in this morning's discussion on the ISA summary where one of the bullets said a description of the Management Measures applied to each item relied upon for safety and a description of how the measures were graded, so what would that description of grading consist of then in the ISA summary?

KILLAR: As far as whether it would be a high level or intermediate or low level of application.

COX: So the NRC would be knowing only that this one had a high level or a low level without knowing what high or low level really meant?

KILLAR: You'll have the ability to come look at the procedures as the facility and make a determination.

SHERR: Is there some middle ground between the level of detail that would be in the procedures that would define in specific terms, what's meant by high, low, and intermediate or whatever the categories are, versus just saying that there are those levels?

VAUGHN: Yes, I think where we probably are on this is, in the license itself, we ought to have a certain

level of definition and commitment to follow a particular approach to these things, so it kind of gives the commitments that we have to follow, but it is not so prescriptive in terms of exactly how you'll meet those commitments.

But if you look at a maintenance program and there is a logic or a methodology that you've committed to apply to maintenance, there's a logic and methodology to training, with the right kind of supporting commitments or affirmations in there to make it work.

And I think that's where we're going. I guess we're not doing a real good job of communicating, but --

SHERR: Charlie, do you want to move over here. I think that expresses what --

KILLAR: But if you look at what we submitted, we've kind of said that, that maybe we're too subtle in our words when we said that, but we did say that.

And if you look at, for instance, under maintenance, we say the IFOs are identified, and ranked relative to the risk that they are protecting against as identified in the ISA, and then we say that the maintenance procedures will include a procedure for designing schedules and scope of maintenance testing and calibrations, and the procedures will be integrated with the ISA.

So if you're grading the items relied on for

safety in the ISA, you're grading that in accordance with the maintenance procedures accordingly.

Similarly, under training, we say that the training will be established according to the requirements and the verification would be mostly important to the safety of the item, and the activity relied on for safety and its complexity.

So there we're saying we're grading these things according to the risk.

PERSINKO: What I heard I say Charlie say was more than what's written down over here.

VAUGHN: It is, and I wanted to make a comment, because when we made up this management measures example, we were reacting to a situation that we believed was suggesting far more rigor and far more prescriptive type of detail than we envisioned being required to do the job.

And because there was so much uncertainty in some of the words, or at least that's the way they came across to us, we felt like the best thing to do to get started on this was to get some kind of a clear focus on a high level statement that says this is what we're trying to do, recognizing that we had to fill in some details. But there wasn't much sense in noodling through details till we decided what the high level definition was.

And so these are admittedly pretty high level

definitions to try to understand if we're all on the same wavelength. Once we get on the same wavelength, then there is additional detail that has to be looked at.

COX: Well, I can make an initial cut at what things I think have to be incorporated as a minimum, and that is the four or five components of an acceptable maintenance program, which would include surveillance, preventive maintenance, corrective maintenance, functional testing. Have I left one out?

As a minimum, we want to know what you're doing in each of those areas regarding maintenance. That's what's described in the SRP.

Now, perhaps I think what you're saying -- I'm not sure whether you're saying that addressing those four or five components is too much, or whether you're saying that the words that we have following each of those four or five components is too much.

But I can say that I think we need to know about the various components of maintenance, and what an applicant would do with their function. I didn't call it a program. I was surprised to see it called program here.

SHERR: Can I just ask a question? We've talked about two extremes of what I would consider broad commitments which I think are the examples that you have provided, versus the detailed procedures in the plant.

Is your concern that what the SRP calls for is the level of detail that would be associated with the plant procedures?

GOODWIN: I think I can answer that. I think our concern is, Ted, that all of us have some description of the various management measures, all except maybe possibly one of them, in our licenses currently.

In fact, I was just looking at ours. Under the maintenance section, we have about a page and a half in there that covers that, and it covers basic elements.

But the real concern we have is that if you look at the Chapter 11 as it's currently written, we feel like that it's going to mean we're going to have to commit in the license to do a lot more things or either provide a lot more detail than we currently do.

And here we are, you know, operating plants that have been operating for the most part for 30 years, and with some level of detail that is currently acceptable, and they remain acceptable as confirmed by OPRs, et cetera.

So, we don't want to end up having to commit to more, formally commit, I should say, in the license. The thing about it is, in addition to what we've committed to as a minimum in the license, most of us do a lot a more, okay?

So we don't want to see the ratchet turned another time, and end up having to put more in there, because we're

always going to go beyond, you know, what the minimum that's in our license, for the most part.

So, that's really, I think, from my viewpoint, that's where I'm coming from.

PERSINKO: The only reason I brought up the existing license also was because I thought and we all thought there was some -- you know, as you went through them, there was some cases that were a long way down the line to what we thought should be in there.

That's the only reason I brought it up. And to address Wilbur's concern about ratcheting down, that sort of distinction between the license and the ISA summary, if you put the linkage to the IROFS in the ISA summary, you then have the ability to change that without NRC prior approval. That's where I think you get your flexibility.

KILLAR: I don't have a problem with that. What I have a problem with is that the commitments in the license as far as the maintenance program and the elements of the maintenance program, cannot be changed without your approval.

And that's where we're concerned, and go back to Tom's point as far as what the elements are, we did say under maintenance that the maintenance program will create a procedure for designing schedules and scope of maintenance, which is basically your preventive maintenance program, and

testing and calibration, which is your monitoring and testing programs.

So, we have probably three or four. The one we didn't leave in there is corrective maintenance which basically everybody does corrective maintenance. If something breaks, you've got to fix it.

So, you know --

ASTWOOD: I want to make a statement. We did the same thing; we took all the licenses and pulled all of the maintenance, management measures, descriptions out, and looked at them and reviewed them against each other and against the SRP.

And I, for the record, want to say that it's not a voluminous amount of information that it would take to bring some of these licenses up to what we asked for in the SRP.

Some of the rough calculations that I made just skimming through and making check marks according to what descriptions were asked for in the SRP, I'm coming up with 50, 60, 75 percent in some cases.

And when, as you describe, some of these descriptions are two pages, you're adding another page. That's not a voluminous amount of information.

FERGUSON: I think then -- I don't know why your checking didn't come up closer to 100 percent, rather than 50 percent.

ASTWOOD: Because you didn't develop these maintenance programs based on an ISA. There are some parts of the SRP maintenance program that specifically is tied to IROFS which you wouldn't have identified in your license.

FERGUSON: Right, our commitments are across the board for our facilities. They're not just for IROFS. They go across the board.

But I looked at one on, for example, procedures, your maintenance measure on procedures which was, I felt, a significant difference between license commitment and then what this Standard Review Plan says about procedures.

I don't want to get off the maintenance one; we're going to be talking about that, but --

ASTWOOD: I agree, there are some areas. I think that of everything I looked at, I think procedures was one of the ones that had the lower values.

But, again, if I can look at this and come up with 30 percent, and it's half a page long, I don't see that bringing that up to 100 percent is voluminous.

FERGUSON: I agree with the half of a page, that's great. I just five years from now when we're all submitting licenses, I hope the person sitting across says, well, you need another half a page and that would be great. That's the concern.

DAMON: I've been looking over Chapter 11, and it

seems like sort of an example. The thing you did, which was to submit sort of an example license submittal is a good way of communicating here, rather than sitting here talking about, well, high, medium, and low level of detail. Let's just put something on paper and communicate that way.

I mean, I've been comparing with what you said, and, you know, for example, training and maintenance, you've got about four to six lines of text, and there's about 30 lines of text in the SRP or a couple of pages on what the content should be in a program description.

What I'm finding is, I'm thinking about what you would have to add to the text you already had to meet what's in the SRP. And despite the fact that the description in the text in the SRP is very long, the number of lines you have to add, I think, is not that -- it's not as many as there actually are lines of guidance in the SRP.

They're just asking for commitments that you have certain programs in place, you know, and once that's there -- but to explain what the thing is, actually seems to take more verbiage.

So, my impression from both maintenance and training, at least in those two areas, that it doesn't take a lot of text to commit to a sufficient detail about the program to meet what the SRP is reaching for.

But there may be other areas where -- there were a

couple and there was one thing in training about performance-based training that I didn't understand how much detail they wanted there, you know, in terms of commitment or what the content of the program was.

But in general, most of the things were motherhood things like would have qualification training and things like that, and record of qualifications. It's real basic stuff.

In fact, it wasn't as detailed. What they're asking for doesn't seem as detailed as actually what I think is in some of the licenses in terms of commitments to fairly specific things.

So, I don't think it's as bad as --

SHERR: Can I suggest that one of the things that we try to do to -- we went through the maintenance section of the SRP and a portion of it, and tried to identify what information we'd be looking for and what this means.

I think I'll be interested in what Charlie's response is. I think what we say there is similar to Charlie's notion in terms of the kind of information that one would expect to be documented, looking at more how you set up the programs, rather than the details of the program itself.

ASTWOOD: So what we did is, we just went into Section 11.4.3.2 maintenance and picked out surveillance and

monitoring, and the top paragraph is the actual paragraph from the SRP. That's the only thing it says for surveillance and monitoring, is that paragraph.

We then took that paragraph and took each sentence and tried to explain what we were thinking with each sentence. I'll walk you through the first one, but I think most people can read this.

For example, the first one, for IROFS identified in the ISA summary, the applicant describes the surveillance function and its commitment to the organization and conduct of surveillance at specified frequencies.

And what we're saying is, in the license application we'd like to see, as it says, a description of the surveillance function, how it was designed, how it was organized, how it was conducted. And those are things that probably are higher level things that wouldn't change that much, how you organize and it and designed it aren't going to change on a day-to-day basis, necessarily.

I guess they could, but we didn't picture it. Those are upper level things.

And example of how you're going to do this, how to give us a sense of how you're going to meet the performance requirements, how would the surveillance be done on different types of IROFS, not necessarily saying the details of which IROFS fall into which categories, what surveillance

frequencies those are for those IROFS.

It's a general description of how you're going to do the program. And then the other details could be in the ISA summary.

PERSINKO: I may be wrong, but the way Charlie was talking, I thought that's more in line with this.

[Pause.]

ASTWOOD: One other statement, while you're reading, is that we realize there's a little bit of overlap in some of these descriptions, but we were trying to identify each sentence on its own, so there are some areas that we're asking for basically the same type of information.

There is also one mistake, which just because this SRP -- these were the actual words from the SRP that was in the Commission paper, and I didn't want to change it, because I wanted it to be exactly what was in the Commission paper, and there is an error in here which says review of the failure log required by, and that has been removed from the rule language and should be removed from the SRP and we will do that. It won't be failure log; it will just be failure information or failure records or something like that.

So I just --

VAUGHN: Just as I come to one example of where I

think there's a little deviation between what I said and what's here, I mean, we haven't talked about it as a group, so I may be a flyer. But in that third paragraph under 1, where it says for IROFS, the sentence does real good for me until I get down to the statement, at a specified frequency.

And I don't know exactly how to interpret specified frequency. If it means that I only have to affirm that this process that I have in place to deal with these things does yield a specified frequency that's recorded in part of the record, then it's consistent with what I said.

If it says that in the license, a specified frequency has to be included, then we're miles apart.

ASTWOOD: Right.

VAUGHN: So I don't know how the others see it, but it makes me react two different ways, okay?

COX: We can clear that up real quickly. It's not expected to be in the license. I'm going to call it license application. I think that's a more accurate way to put it.

The specific actual frequency, we would not expect to see in the license. It's the way you originally thought of it. It's just a commitment to do and to establish such frequencies for particular IROFS.

However, in the ISA summary, we might see some of those actual frequencies for a particular IROFS where you describe the management of the maintenance function to be

applied to that IROFS, you would probably specify the frequency, which is what I think your example actually alluded to.

If we ever get to C on your document here, under Maintenance Plan, you said for these management measures, you said maintenance plan for IROFS (frequency of testing, calibration, maintenance). That, to me, implies actual frequency laid out for that particular IROFS.

So, in the ISA summary was where you actually established what would be the frequency for a particular IROFS, and that's where you might see that.

PERSINKO: Just to clarify also, your Example C and D, would that be in the application, or would that be in the ISA summary?

KILLAR: It certainly would not be in the application. Whether it would end up in the ISA summary or not, I'm not sure. It was just put together as a means of giving you something to look at as a specific examples of how the things would be applied.

COX: Okay, maybe I made an assumption, but I assumed that you wouldn't be talking about details about a uranium dissolver in the application material, or whether that would be in the ISA summary.

PERSINKO: I just wanted to clarify that.

GOODWIN: It's just intended to illustrate how the

management measure would be ranked according to the risk that it's protecting against, is basically what it amounts to.

VAUGHN: What it kind of refers to, if you look at it, it's kind of one method of implementing -- it's more written from the implementation side. And it has been this particular approach that is kind of designed from a matrix approach where there aren't a heck of a lot of routine decisions that have to be made.

In other words, given the risk, given the importance, given that kind of information up front, and where you have to hit on the acceptable performance table, then there's almost a cookbook that the facility has put together as this is the way you do most of that.

And that simplifies the implementation and ups the probability that you get done what you expect to get done in the implementing phase.

So that's kind of -- now, you know, there's a whole other school of thought that says you treat everyone independently and you make an independent judgment every time. But what I would kind of envision -- and, again, this is a personal thing -- that some of these rules of engagement would be part of a license.

And so it would always be understood that under these conditions, this is what you apply. But we're not

quite to that step yet.

COX: I would think that that might be somewhat limiting to you as an operator, in that a particular IROFS, whether it be a valve or an inline monitor or something else, might have different management measures applied to that same thing, if it were used in different ways in two different places.

So I don't think there would be one frequency you would establish for all inline monitors, for instance, or it would depend on how it's used in an accident sequence for protection.

VAUGHN: It's going to be associated with the risk associated with that particular item.

COX: Exactly.

VAUGHN: And what level of assurance we have to meet that the thing is available and operates. So you can have two valves just exactly alike and they are treated completely differently. One of the might not even be treated.

SHERR: Now, Charlie, your concern about specifying the frequency in the license application, the last dark bullet on page 1 specifically addresses that issue, and, in fact, the -- once you get to the last sentence of that bullet, it says no specific frequencies would need to be included in the license application.

VAUGHN: You're telling me that if I read farther, I'll answer my own question, right?

SHERR: Just winging it.

[Pause.]

Going back to what we were talking about before, I mean, there are the two extremes in terms of general commitments to doing the various management measures, versus the detailed procedure of the plant. I mean, the thrust of what we're trying to communicate here is that it's more describing the basis for the management measures that are already in place.

And ultimately, with enough differentiation of information that you're able to correlate the level that you're going to be applying when you're looking at the ISA summary, look at the IROFS, how are you going to distinguish between the lowest level of management measure versus the highest level, and where you're going to -- one is the higher level versus the lower level.

So, its a matter of communicating that.

ASTWOOD: We can give you guys more time to read that, or we can go on to some specific questions about the attachments. Your choice.

[Pause.]

COX: I might point out that this two-page piece here to help explain what would be an adequate response to

the SRP words, in no way is intended to replace the SRP words with new words. It's just that this is by way of explaining what is meant, just in case the SRP words are so abstruse as to be unable to be worked out.

This helps explain, or we think it helps explain.

FERGUSON: A guide to your guide.

COX: A guide to the guide.

ASTWOOD: Which is not easy to do.

SHERR: I guess one question is that if, in fact, the level of description that we're talking about here is something that seems reasonable, then maybe part of the answer is, what type of statement should be in the front of Chapter 11 that communicates that; that this is the kind of level of information that we're talking about?

But I think the first question is, is, in fact, the level of description that we're talking about here, is, from your point of view, is that reasonable?

KILLAR: I guess from what I have heard over here it looks reasonable. I guess the concern, the only concern we have is what kind of slope we are getting on here as far as reasonableness and that it is reasonable today but then when we actually submit it, you'll say, well, you got most of it captured here but if you add this and this here then it will be all right, and so, you know, we are concerned about how far are we going.

PERSINKO: But I don't know how we are going to get over that unless we see one, you know? It's like we have this written and we have been working on it real hard but you are always going to have that question.

No matter if we try to fine tune this, you will probably have the same question.

KILLAR: Well, we had submitted this and you say it's inadequate. If it is inadequate, would it take one or two sentence to capture this, to add on there, to make it adequate?

COX: I don't know how you could capture this in two sentences.

SHERR: I don't think the question is the number of sentences. I think it is the question of the type of information to be included.

This communicates a level of description that doesn't get down to the detailed procedures, doesn't get down to specifying all the frequencies and all this kind of thing, so the question I mean is at the same time Staff feels that this level of description will in fact provide a basis for knowing what the capability of that Management Measure is.

COX: I think Ted hit on it pretty well right there. I would be willing to at some point, maybe this is not the right venue for that, but I would be interested in

taking any particular sentence in one of these paragraphs in the SRP and considering just what the content of it is, and you tell me why the NRC should not be interested in knowing from a safety standpoint about that particular matter -- you know, what we should just be silent on that -- because we think the points that we ask for some information on are those points that we are properly needing to know about to determine whether or not the Management Measure as applied to an IROFS would be appropriately safe, would provide the kind of availability and reliability that we think is necessary by your stated likelihood of failure of that IROFS.

When you assert that the thing will have something like a minus 4 index, what we are asking for here is the kind of information that would help us agree with that sort of thing.

[Pause.]

SHERR: Would this be a good time to take a break and reconvene in 15 minutes?

GOODWIN: Probably.

SHERR: All right.

[Recess.]

KILLAR: There's a series of opinions and certainly no consensus. Overall we think the perspective or the program or whatever you want to call it, elements, are

reasonable and as indicated, most people have the various elements in there.

The concern gets into the level of description and level of commitment of the detail to the specific elements be on there.

While your little two pages provide a little more clarify, it still does not provide a definitive where that level of detail cuts off, because when you say "describe" -- how detailed does that description have to be? How many commitments in that description do you have to make in order to make it an acceptable description? So it gives us a lot of pause to say that, yes, this is fine.

Conceptually most people say yeah, we've got -- yeah, I've got this part in, I don't have that part in, and things on that line, so yeah, we agree, a lot of these things are already in our licenses and stuff. The question is how does it all come together and have the level of detail that can define that.

Maybe it would have been helpful if you would have taken maybe what we had provided and maybe added maybe the next level of detail you felt was needed in order to get the programs in there and we could have been a little bit more comfortable talking about it from what we provided versus what your expectations were.

We are almost at the same place you are in that we

are just seeing this for the first time, and trying to rationalize through it and try to come up with an answer for you, but right now we can't.

SHERR: The sense I get is that the general approach of this in terms of the nature of the descriptions is along the lines of what you think is reasonable. It is still a question of how detailed that description has to be, but the nature of the description that we are identifying here is along the lines that you think would be reasonable description to be included in the application?

KILLAR: Well, that may be a little bit too generous in that there are some of the group who feel that some of the things that are even in here are not, should not be reflected in the license. When you get to some of the documentation requirements for instance, you know, we are not sure whether we need to have that level of documentation, so I think the overall concept of providing more information and that information providing more detail how our maintenance program is carried out certainly we are willing to go that far, but just making sure that we have all the so-called elements of that. We are not sure what all the elements are that we feel are reasonable as far as -- we are not sure we have a one to one basis of what you have provided here.

SHERR: When you say "all the elements" are you

referring to anything specific or are you just using the word generally?

VAUGHAN: One little place that came up in our discussion was on the second page where it talks about, in the section about records showing the current surveillance.

The second bullet there says a description of recordkeeping procedures or a pointer to the recordkeeping section of the license application, and because of the use of a description of recordkeeping procedures a number of people read that as a very detailed documentation and what we are really wondering is what is the fundamental principle there or principles that you are looking for us to commit to and is that something that is manageable, but when you use the term "description" like that it sounds like a pretty verbose thing as opposed to if we knew what the objectives were that we needed to meet in terms of recordkeeping it might be a very simple matter to confirm or define those points that apply.

COX: I can commit to finding out -- I can come up with that information that you are asking for. I can't give it to you right this minute.

I could make a stab at telling you why we want those things, rather than what, in terms of what specific elements of maintenance documentation we would want.

What we are looking for is some knowledge and

commitment on the part of the applicant that they will keep records of preventive maintenance, corrective maintenance, surveillance, records of their work that would help point to how to correct deficiencies or failures in equipment using the data, historical data, that has been kept. That is the objective.

EDGAR: That seems to be covered by the first bullet, the first bullet saying a statement of records will be kept. I mean that is a commitment that we can all make, but then when it gets to the description of the recordkeeping procedures that seems to add another layer that --

COX: Well, it does add another layer, Jim. What we are after there is not just records will be kept but records concerning what elements of maintenance --

VAUGHAN: Yes, we can describe what records we will keep and then we can tell you that we will keep records of maintenance and we will keep records of whatever incident investigations and whatever but we are worried about procedures for recordkeeping.

I suppose there is some procedure in our company someplace that talks about recordkeeping but the fact that we need to commit to keeping records seems to me to be good enough and describe the records we are keeping.

COX: Well, that could be what we mean by

procedures, a statement that you will keep these kinds of records as they emanate from periodic inspections or whatever they come from -- tell us what they come from and the fact that you will keep them, and that is a procedure.

VAUGHAN: Yes, but I liked your answer or, you know, even though you can't define it perfectly, but I liked the approach that you used in the first answer that says you will have records that does this, this and that kind of criteria --

ASTWOOD: And that you will maintain them for a period of time, whatever.

VAUGHAN: Right, and then that lets me define the procedure and manage my operation so that I meet those objectives.

PERSINKO: I would think you would have procedures like that already that just tell you how you are keeping the records and this is sort of a description of that.

SHERR: Right. I think what Charlie's suggestion, and it seems to be a good one to me, is that if what we describe under the corresponding information is in terms of what the purpose of maintaining that information is that, what the capability that will result from that.

We don't intend I'm sure to ask you to describe all your recordkeeping procedures.

ASTWOOD: No.

EDGAR: In the description above that one, on incident investigations and so on, where you are talking about corresponding information in the application, you give two bullets, the first one being describe how the results of incidents are used and then you give an example, and the second one is describe how the system is set up, and then you give an example, and both of those examples to me seem to be pretty straightforward.

If those are examples of statements per se that would suffice in the application, I think those are good ones, if that is all we had to say on those two subjects was what you have as an example statement, I think those are pretty good.

COX: And you would suggest doing the same thing for the next two bullets -- surveillance schedule --

EDGAR: The examples are a good thing and it gives us some comfort that we are not getting into some big, blossoming program here.

GOODWIN: I think it certainly provides some boundaries for us as far as how big is the envelope, where do you stop, and that is, I think that is a concern throughout the Chapter 11, not just the maintenance but how much is good enough or how much is not enough.

FERGUSON: And I think they would be good for you too.

COX: Yes.

GOODWIN: I think the other thing, depending on the experience of the license reviewer, it certainly would provide more consistency amongst the entire licensing reviewer staff, and that is another concern too, I think, is that if you get, as I have said before an inexperienced person who takes these words literally I don't know where it stops.

SHERR: If we added examples, that is one way of kind of showing where the threshold is in terms of level of detail. Is that the sense of the comment, that in this particular case where we showed examples, then it gives the sense of what level of detail we are looking for.

EDGAR: That is the way I look at it, yes.

VAUGHAN: Yes, but the first thing we would like to do is get away from this description, et cetera, and get down to a list of, you know, what are the fundamental requirements, what are the objectives that this has to meet, or performance criteria, however you want to say that, and then, yes, the examples will be helpful.

ASTWOOD: I agree with you. That gets to be prescriptive, however, on exactly what you have to describe.

COX: If I understand what you mean by description, you mean the words in the SRP, right? You say you want to get away from this description. What do you

mean by that, Charlie?

VAUGHAN: This example, the first one that we brought up, was a description of recordkeeping procedures.

COX: Oh, okay. You say you want to get away from using the word "description"?

VAUGHAN: Right. We want to talk about what the performance requirement is, you know, whatever it is that is important there.

KILLAR: What we are trying to do, and I may be misquoting Charlie and I'm sure he will correct me if I am wrong, but what we are looking, at least what I think we are looking for is what is the specific commitment we have to make in a license application and how definitively do we have to define that commitment in the license application in order to be acceptable for the NRC.

SHERR: Let me give it a shot. When Tom responded to the question on that he said I'm not going to address what but I can tell you why we want it, and I think it was on his statement that you picked up and said, yeah, that's the kind of thing that should be there is why, what the purpose of the information serves.

What I am gathering from the comments is the fact that for something like this we kind of give a sense of why you need the information and an example of what the information is or what purpose the information serves. Is

that --

VAUGHAN: Well, I thought Tom did a little -- I mean he ultimately did what he said he was going to do but in starting into that discussion he kind of made the statement that the purpose of this thing was such-and-such and he named off some requirements that, you know, were objectives of the program that were stated so much in prescriptive terms but in slightly more general terms, and that is what was helpful and, yes, it does -- and then he went on to describe "and this is why we need it" or this is how it is used, which is helpful information in terms of getting a better understanding of what has been specified, but it is important to get those fundamental pieces there that have to be in the program or the process of whatever you want to call these things, I think.

SHERR: We'll have to look at this thing further to see -- I mean I think your suggestions are good. Some things may be possible for some -- since we are parsing particular sentences, sometimes things may fit and sometimes they may not in that context. We will take a look at that.

More of my thoughts is perhaps we'll investigate looking at this -- as I mentioned before -- trying to include some statements in an introductory part of Chapter 11 that addresses the issue of the level of detail. Perhaps some version of this would be an example that would be

appended to it that would give the sense of what the level of detail is type of thing. It is just an idea. It is something that I think would at least help us to address the concerns in that area.

EDGAR: One of the other things, on the first page, under actually the first set of bullets there, where they talk about IROFS identified in the ISA summary and then down below that the corresponding information in the application would be a description of how the surveillance function is designed, organized and conducted, and that has the connotation to me that you are expecting us to have a surveillance organization or a surveillance function and it's really part of the maintenance function.

ASTWOOD: Well, then that would be -- the description is how you have come up, what is it that you are calling your surveillance function and how does it function.

EDGAR: It looks at things.

ASTWOOD: I mean exactly how does that work.

COX: I think you all agree that you have a surveillance function. If it part of preventive maintenance or some other component, you can describe it that way.

SHERR: I guess my question is that do you think it would be useful if we did what I was suggesting in terms of expanding the introduction to try to address the issue of the level of detail?

GOODWIN: Looking at -- we are picking on the word "description" in a couple of cases here, on the bottom of page 2 there where it talks about a description of the types of compensatory measures that would be considered, I think that is another one that could become a trap for you if you listed and you wanted to consider some compensatory measure that was not listed there, for example.

Are you limited to only those that have been mentioned in the license application or would it be better to say a description or examples of the types, you know, for example, would possible be a better word, but it kind of ties it down a little bit neater and it doesn't maybe leave it is open-ended as it would be going with that particular word there.

COX: I think what you are asking, Wilbur, is to make it more open-ended, which in this case I think it is probably all right. In other words, you would not say a description of the types but you would say you would rather give examples of the types, leaving it open to apply some other one than mentioned in the application.

GOODWIN: It would give us more flexibility, I think.

COX: Right -- I don't think we have a problem --

VAUGHAN: I would call that one a description of the process for determining these items.

COX: Or for selecting those items but I would expect to see at least a couple examples of the types of compensatory measures you would use for different kinds of IROFS.

For instance, you would apply different compensatory measures to an administrative control that was missing than you would for a valve or some other piece of equipment that was out of service, and you might divide it up that way or some other way that you wanted to address it differently and simply mention a couple of the kinds of things like putting a fire watch on on one, and maybe substituting another piece of equipment would be another, so that the Staff knows that the licensee or the applicant has thought about these things and is prepared to deal with it.

EDGAR: Ted, back to your question. It was kind of silent when you asked the question, and I am not sure how you would go about addressing these kinds of concerns in an introduction to this part of the chapter.

What would you have in mind?

SHERR: Well, we haven't invented those words yet, but I think, first of all, we want to distinguish that what is looked for is not the kind of details that one would envision in the plant procedures, so to make it clear that that is not what is looked for and that it would be something along the line of descriptions of the basis of how

in fact the Management Measures would be defined, the basis for determining those I think along the lines of what we talk about in some of these areas here where, you know, what is the basis for establishing the frequencies, not defining the frequencies themselves, that type of thing.

I think there is another aspect that has to do with the fact that ultimately there needs to be a way to relate the Management Measures and the items relied upon for safety in the ISA summary, so there has to be some forethought in that, but as we've indicated before, there's probably some flexibility in terms of how much information is in the application versus how much information would end up in the ISA summary.

EDGAR: In an example that was sent to you where we had the two different levels of risk, I guess, we had the geometry and the concentration of the stuff in the vessel, where we described that the geometry once it is established is probably an intermediate risk of failing and the concentration control, which is more of an administrative control, is a higher risk of failing, and so we had commensurately more Management Measures applied to the higher risk one than we did to the lower risk one -- does that kind of fill the bill?

SHERR: Well, it is certain the nature of the -- I mean the fact that if inherently the item relied upon for

safety by itself is not very -- you can't rely on it, it's going to require a lot of Management Measures applied for it in fact to be reliable versus something that it's almost, a pipe is just going to be there and there's very little you need to do in addition to that other than knowing that it's got the right specifications, but I guess what I was referring to was looking at the big picture of the thing is ultimately Staff -- the licensee is going to be demonstrating how the performance requirements are satisfied and so it includes identification of the items relied upon for safety and indicates how the Management Measures that will be applied to those items relied upon for safety will in fact satisfy the performance requirements.

I am just saying at some point or other it's a matter of correlating an item relied upon for safety to a Management Measure or group of Management Measures.

But I asking -- I wasn't throwing out text.

EDGAR: No, I understand that.

SHERR: I was just saying the notion that there would be kind of a broad statement trying to address the level of detail, and of course the proof is in the pudding. I mean in other words your reaction could be yeah, in concept it is a good idea but we would have to see what the text is before we think it does the trick or not.

EDGAR: That's true. I think something like that

along with added examples would certainly help us a bit.

ASTWOOD: I was just going to say that before the 3:00 where we're going to have the other presentation, I know there were a couple specific things about C and D that we wanted to make sure you knew our feelings on.

If people feel it's appropriate to move on to that -- but we do want you to hear a couple of these things.

KILLAR: That's fine. We also want to talk a little bit more about the quality assurance aspect as well.

SHERR: Before we get on to C, let me -- I think, Felix, earlier on you had mentioned that the example in C ultimately will find its way into the ISA summary guidance document; did I understand that correctly?

FERGUSON: We were looking to use the same example, yes.

SHERR: To some degree, the comments on this may relate to how you develop that example.

FERGUSON: Just so I'm clear, you then intend to change or modify Chapter 11, and you're going to put examples in that intro paragraph; is that what I heard?

SHERR: Well, I was trying to get some feedback. You will -- what I say is, we'll make an attempt to draft an introductory paragraph and will include in the introduction to Chapter 11, that would try to provide some guidance in terms of the level of detail of information that's needed.

And I think what we're saying is that it would probably be useful, if, in fact, we put in an annex to the document or something like that, that just provides some concrete example along the lines of what we have here further developed along the lines of what we talked about.

So, you know, I was trying to get a feeling if people felt -- you know, recognizing that we don't have any words that people can look at, we're not asking people to review any specific words, but if, in concept, people thought that was a good idea, we would pursue that.

COX: Picking up on what Ted said, you could put something like these two pages in another appendix to the SRP that would be referenced in an introductory paragraph to Chapter 11, saying, you know, Appendix -- whatever it is -- gives some examples on how to interpret the sentences in a particular part of Chapter 11.

But it would look essentially like this. Obviously, we cannot write something like this for every paragraph where we now have a paragraph in the SRP.

SMITH: But we can.

COX: You can.

[Laughter.]

KILLAR: The thought that has come to mind though is, back when Part 20, the new Part 20 was developed, basically a whole series of questions and answers were

developed as supporting to the understanding and interpretation of Part 20.

And it was not -- it was a separate, stand-alone document that helped clarify. Maybe something along those lines could be done.

I'm a little concerned if we start writing paragraphs, rather than clearing up the water, we may muddy up the water more, and it may be better to have a separate frequently-asked-questions-type section instead to help clarify these issues and stuff.

That way, it doesn't change anything in Chapter 11, but it clarifies the intent of it.

COX: I have a copy of that document. It is, in fact, just a long series of frequently-asked questions and answers. It is about one and a half times the thickness of the current SRP, and it's written for a different purpose.

They collected those frequently-asked questions over two or three years. So, I'm not quite sure how we would make that -- do something like that.

PERSINKO: Are you suggesting that that would be also an appendix to Chapter 11?

KILLAR: No, this would be a separate document.

COX: It's a big document.

SHERR: I would say that I think what you're saying is that as we get experience in applying the SRP, we

have to deal with different issues, and we kind of document how we dealt with those things.

KILLAR: Right. And in the intent in Part 20, and, I think, the intent here is that this is new. This is a different way of doing things.

We have not had management measures in the license before. And we now have a new system, and it's new for the NRC to determine, you know -- you have your expectations now, but once you start seeing license applications and have these things in there, you say, well, gee, we thought this, but now we see this, and we think this would be better to go this way.

And so it's going to be somewhat evolving and stuff. It's the same with the ISA, is that the ISA, you've not had an ISA before. While people have been submitting ISAs, you know, they've got very little feedback or response on those ISAs.

And so we're all still kind of feeling the way in the dark here as far as what the ISAs are. So we need something that helps give some clearance and guidance to these things, but I wouldn't recommend going back and starting fuddling around and changing these things until we're more comfortable that, yes, this is the right way to go.

And so that's a way to kind of address these

issues without changing those things, but at least giving everybody the same playing field, and also avoids asking the same question two or three times.

SHERR: This deals broadly with the whole gamut, not just management measures, I take it?

KILLAR: Well, what I'm saying is that it goes to the ISA as well as the management measures, because those are the two new things, or two things that we have had previously in the rule and previously in the Standard Review Plan, is ISA requirements or management measures.

Just about everything else, we've had in the rule in some form or another that we have in here.

ASTWOOD: I really think we should let Tom give his couple of points here on C and D.

COX: Okay, I have some points on C: I think we already talked about my first point, that is that a parameter like geometry is not really the IROFS, it's something at a lower level of detail than that.

But I think, Felix, that you agreed with that earlier in the meeting anyway. And the second point I want to make was that you refer here to these IROFS as falling in high-risk categories or being of intermediate risk significance, and I think there is a slight misunderstanding here.

Our view is that IROFS alone do not have the

attribute of risk, but rather the likelihood of failure or frequency of failure. The accident sequences in which an IROFS performs have risk as their ultimate outcome of consequence and frequency, but the IROFS themselves shouldn't be characterized as high risk, but rather a high likelihood of failure or intermediate likelihood of failure.

GOODWIN: It's more the risk that they're protecting against.

COX: They certainly are associated with risk in an accident sequence.

GOODWIN: Right.

COX: So I was a little concerned that between that point and the first point, that this example was not hitting the mark real well, or at least it was indicating some quite different understanding of things than we have.

But then getting on to the list of management measures associated with those things, this is a little closer to what I would expect to see in the ISA summary for each IROFS that's identified.

And there could be, you know, two or three in a single accident sequence. But I do think that the approach to describing what management measures would be applied to a give IROFS is reasonable here.

Now, whether or not a simple statement like configuration control is adequate, we have to think about

some more, because it's here that I would have expected to have seen, for instance, under Configuration Control, identifying the level of rigor of configuration control, like if you have perhaps two levels or three levels, you would say configuration control Level 1.

And then back in Chapter 11, you would have described what Level 1 means, configuration control versus some lower level.

And I notice that under the bullet called Maintenance Plan, you have a parenthesis there that says frequency of testing, calibration, and maintenance, and that's what we talked about earlier also. If you're in the ISA summary, that's where you would identify that kind of thing associated with a particular IROFS.

That's all I wanted to say about that. I somebody has any comment or --

ASTWOOD: Okay, that seems to have covered all of the points that we wanted to ge across. I guess there aren't comments on D. I was mistaken.

COX: Hearing nothing more on C, let me just pop over to D for a minute.

[Laughter.]

ASTWOOD: Please go ahead.

COX: Oh, okay. You were just going to tell them what the points in D were?

ASTWOOD: I had just said there weren't any points in D.

COX: Oh, did you, really? Well, I'm sorry. I have a short one.

It's really a carryover from C, where you have at the heads of these columns -- I'll look at Column I, or the Table in I, you have intermediate risk significance and high risk significance.

Again, I would just point out that that -- I think that would be intermediate failure rate significance or intermediate likelihood significance.

And this is really coming from the point we discussed before regarding IROFS as opposed to accident sequences. I'm done.

SHERR: Just as a general matter, in terms of this risk significance of IROFS, it seems to me that a particular IROFS has two aspects: One is what level of consequence it's working against; and the other is to what extent it's being depended on as compared to other -- in conjunction with other IROFS.

Maybe the third thing is the inherent failure rates of the IROFS itself. Somehow or other, I don't know how you capture all that, but those seem to be the parameters that would affect what kind of -- what management measures need to be applied to that.

Are there any more comments? I think, Felix, you had mentioned you wanted to talk about quality assurance.

KILLAR: Yes, I want to talk a little bit about quality assurance, in that one of the things that we're not clear on in quality assurance is that you talk about other quality assurance elements, and you list 19 different things and stuff.

And we see a lot of this as repetition of other parts of either management measures or other parts of the SRP, and we're trying to figure out if you are looking for repetition here, are you looking for a different aspect of it? We're trying to understand that.

Just to walk down the 19 things, Item 1 is what I guess you'd call management, talking about structures and things along that line, which we feel would be covered pretty well in Chapter 2 of the Standard Review and the application.

You know, what are you looking for in management here that's different than what's in Chapter 2?

Now, a quality assurance plan, Item No. 2, yes, right now, I don't know if we have anyone who has a quality assurance plan for these types of items and stuff. Certainly we have quality assurance programs for product and stuff, but not for the items as you related here.

Items 3 and 4, design control, design basis, to

us, that falls under 11.3.1 which is Configuration Management. You have to have your design basis, you have to have your design control as part of your configuration management.

What are you looking for here beyond what's already under your configuration management?

Item 5 is procedures. We already have a requirement, 11.3.4 dealing with procedures. Are you looking for additional procedures, or what are you looking for in procedures?

Similarly, in document control -- purchasing, yes, there is nothing that we have right now. We don't have anything else in the SRP dealing with purchasing.

Identification control of items relied on for safety, you know, to us, that's the whole Chapter 3 in the ISA. What are you looking for here under QA for identification control that is not already captured in Chapter 3 in the ISA?

Item 9, Special Processes, that's kind of a mixed bag. We see that as we have special processes for maintenance, for radiation protection, as part of our configuration management as far as welding and repair and stuff.

So we're not exactly sure how to put that in there. Item 10, Inspections, once again, that falls under

Item 11.3.4, dealing with audits and inspections. Are you looking for something different?

It's the same with test and calibration; that gets into the maintenance program and stuff.

Control and storage of equipment, granted, we don't have anything identified right now for that.

Control for inspection testing, once again, that goes back into the maintenance area.

Installation of equipment, well, we don't have it specifically called out, but that certainly would be a combination of your configuration management and your integrated safety assessment program to make sure that the proper things are installed.

Corrective action program, Item Number 16, certainly falls under what we consider 3.6. Records management is 3.7; specific call, Section 3.7; audits and assessment of specifically 3.5s is already called out.

And Item No. 19, continuous QA, we're not sure what that is. That's even beyond NQA-1, so we're not sure what that item is.

So what we're trying to do is get the relationship between what this is, compared to what you're asking for in these other sections. Is there something above and beyond that?

And if it's above and beyond it, what is it above

and beyond?

PERSINKO: First of all, I'll take a try at something here. We had our QA engineer here earlier today. I wish that this question had come up earlier. He was in the audience, but I don't see him right now. He probably could answer some detailed questions if you had them.

But let me talk from a bigger picture, because I worked with him putting this together. The idea here isn't to duplicate something that's done earlier.

We recognize that some of these QA elements -- first of all, these are, I think, accepted, recognized QA elements.

And we recognize that they can be linked to other sections, and that's why we had the references under each element, see sections whatever. We were trying to show how they linked to different -- to other management measures.

But they were fairly specific. And if you go to the section on -- oh, I don't know, test or whatever -- you will not see that exact statement under there.

Now, the thought was that we had two options here: We could have taken that statement out of here and made that somewhat specific statement back in the section that we referenced, or we could keep these elements together, rather than separating them out and dispersing them throughout the document.

We elected to keep them together, since I think people recognize them to be QA elements.

And so the idea is, if you see something here that is in audits and assessments, if your audits and assessments program at the site already encompasses it, you're meeting it. It's not like it's -- it's not to be -- it's not mean to be -- how should I say this?

We could have include it in there, but we opted to keep these together. We didn't care if you do here, or there, but it was something that's recognized as a QA element that I think QA engineers would agree on.

Now, some of these don't map, and if you'll see that, you'll see that in some cases, the map doesn't exist.

We couldn't find what we felt to be a good map, and so then it is stand-alone. I don't know if that answers your question, but maybe we can get you a better answer tomorrow, if we're going to meet tomorrow.

KILLAR: I guess the question is, like, for instance, audit and assessments, why couldn't you just bring audits and assessments section into this, rather than have this and the audits and assessments section?

To have the two sections implies that you're looking for two different things. And it's not clear to us --

PERSINKO: We could have taken this more specific

statement and put it into our audit and assessments, yes.

For example, the audits and assessment section, we could have taken this specific provision of the QA element out, and moved into the audits and assessment section of the management measures.

But we elected to keep these altogether, because these are recognized QA elements, and they're often portrayed together. So, we kept them here instead.

I mean, if you wanted to take that element out and move it somewhere else, I don't think we'd have a problem with that. It's not meant to be that way; it's just a way of sorting it.

KILLAR: Well, see, our aspect is actually the opposite. We agree we're used to seeing the 18 criteria from our product QA list, and we're used this to 18 criteria for transportation QA and thing along that line.

But why did you take and have to have a separate section over here dealing with procedures? Why did you have to have a separate section over here that's dealing with audits and assessment? Why couldn't you just include them in here?

PERSINKO: Do you mean take the section from -- take like the management measures description of procedures, and lump it underneath one of these QA elements?

KILLAR: Right.

COX: Let me ask it a different way. Where we have those numbers of these 19 that have references back to other sections, they're generally only a few sentences at most. Could those be taken back and put into, say, the CM section or the maintenance section or the training section?

And then the only thing that would be left under other QA elements here ar those items which do not map back into the other sections, and which do, in fact, stand alone.

And they would be left here as truly other QA elements that don't -- aren't included somewhere else?

PERSINKO: That's what I was trying to say; we could have piecemeal'd it out an moved it to the appropriate section, but -- because these are rather specific, whereas this section is a little more general in its description.

But we just thought it was more beneficial to keep it together, because this is often seen together.

COX: I think it could work either way.

KILLAR: We just want to make sure that you have an alternative mode here; that we aren't looking for two different things in different places, and that we're addressing the same thing differently here, versus there.

And we're trying to get some understanding of the rationale of --

PERSINKO: If your audits and assessment program at the site encompassed whatever the right other quality

assurance element is, I would think that would be fine. It's not that we're trying to do something other than that here. It's just a matter of how we sorted it out.

VAUGHN: I think there is a piece of this -- we looked at the management measures, okay? And we looked at the rule, and the rule requires us to take action necessary to assure that these items relied on for safety function when they're called on.

And we went down through, okay, what does management do? What process does management use to make sure that that happens?

Well, if you go down this quality list, you basically touch on -- I mean, the management issues, the management process that's used is really nothing but a quality assurance program, in effect. They're assuring the quality of the operation, which has to meet those objectives.

And so there is an extreme amount of parallel. So the question is, why do we have to address upper level QA approaches? Why is it that we don't include the things that you need for assurance, because that's what we're really talking about here, into the management process that makes sure that this facility meets the performance requirements?

I mean, it pretty well already does that. There

are a few things that need to be fixed, but the management system that we're talking about here for doing this has right now, almost all of the elements.

COX: I think that's what we were just saying. You were saying you considered it and just thought, well, let's take it over here.

PERSINKO: No, let's keep it together, I thought.

SMITH: By keeping it together, you have the maximum flexibility for individual applicants to come in and modify their submittal, their application. And having it in one place gives them the guidance, as well as our reviewers, to go through and look at an individual case and individual situation, if they have been adequately applied.

VAUGHN: The problem is that we don't have to look at a quality assurance description if the management system is designed to do what the regulation requires it to do.

COX: Why don't we take another look at this, and think about it. I think we have the issues drawn here, at least two ways to go about it. We could consider that, and get back to you informally on that, I suppose, if necessary.

SHERR: Is there anything else? I guess this is a question of whether or not we think it would be useful to continue our discussion of management measures tomorrow, or do you think we've pretty much discussed what we can at this time, and we will pursue looking at ways?

GOODWIN: Why don't we caucus for about five minutes as soon as the next presentation is over, and get back with you on that?

SHERR: Okay, that's fine. Eric?

[Discussion off the record.]

SHERR: You need a microphone.

LEEDS: That's too bad.

[Pause.]

If we're ready to get started, good afternoon. My name is Eric Leeds and I'm on temporary assignment to the Fuel Cycle Division, working with Ted and the Staff.

I'm from the Spent Fuel Project Office, and I will be returning there in a few weeks. I need you all to kind of detach yourselves from what you were just working on. We're going to shift gears on you here this late afternoon and talk a little bit about the streamlined licensing process.

Now, this was a process that was developed and implemented in the Spent Fuel Project Office. We found that it's a process that works; in fact, it works very well.

In a recent Commission meeting, the Nuclear Energy Institute, along with a number of licensees and applicants, WholeTech, Nuclear Assurance Corporation, NAC, and Transnuclear, all had a lot of very, very good things to say about the process to the Commission and to the Staff. They

were very, very satisfied with it.

They found that the process does a number of things for them: First off, it provides some certainty to the regulatory process with regards to schedules.

Secondly, it provided a quicker turnaround on technical issues, specific technical issues got NRC management attention quicker.

And the third and maybe the most important was that it resulted in licenses and amendments being processed much quicker than they had previously been processed.

Now, the overall strategy of the process: To begin with, we prioritized the workload based on industry needs. That's very important. It's important for the Staff and it's important for us that you let us know what your needs are.

What we ask you to do is provide in the cover letter to an amendment or a license application, whatever you need processed by the Staff. In that cover letter, let us know what the time schedule is for the amendment, for the action.

And please give us a justification. What we do is, we'll take a look at your time schedule, we'll take a look at all the other competing priorities within the Office from all the different licensees and applicants, and we'll our best to work out a schedule that meets your needs.

But that requires you all to let us know what your needs are, and give us a justification for why you need what you need what you need and when you need it. It's very important; the justification is very important.

This strategy includes establishing rules of engagement with the applicants and licensees, and that's what these next slides are going to tell you, what the rules of engagement are, how we're going about setting up this process.

The third, we establish strict schedules for time-sensitive applications, for applications that affect site operations. For applications that affect your business, we're going to set up a strict schedule with milestones, not just a schedule for an end date, but milestones for when we're going to issue a request for additional information; milestones for when we expect you to respond to the request for additional information;

Milestones of when we expect the safety evaluation report to be completed; and milestones for when we expect the amendment to be issued.

We're going to use disciplined Staff reviews. Staff reviews will be in accordance with the Standard Review Plan.

The purpose of that is to try to get as much consistency as possible between all reviewers.

And we're putting a lot of management attention on that, as you are well aware. And finally, use dedicated teams for reviews.

The idea here is that once we assign a team to an amendment review, it costs us a lot in terms of efficiency and effectiveness to change those folks out and put in new folks. So once we've dedicated a team, we'll do everything that we can to keep that team together.

Now, the approach to the licensing reviews: To begin with, we found that the process works best if there's an awful lot of communication.

We need communication between you and us as much as possible. In fact, before you even send in an application, we'd like you to come in and talk to us, talk to the Staff about what your plans are, what the intentions are. Give us as much information as you can.

We, in turn, will give you feedback on your proposal, let you know where we think the hard spots are; let you know what's coming into the Staff. It's very worthwhile, and you can save yourself a lot of time by just coming in and talking with the Staff.

Secondly, partial or incomplete applications will be returned. We found the process doesn't work when applications are trickled in. We can't dedicate a team, get the team working on an integrated review and get a product

out timely when we don't know when different pieces of the application are going to come in. We've got to have a complete application.

This is also where if you meet with the Staff and talk about what your intentions are, we can come to an agreement on what constitutes a complete application. Some are very straightforward; others are not. Other processes are step-wise and they take a number of steps to complete it.

It might be a two to three year process, but if we can bit those off in increments, we can make this process work.

The drafting of the safety evaluation report will begin with the initial review. That's for us.

We found that we get more efficiency, more effectiveness out of our technical folks if we have them all working writing a safety evaluation report as soon as they begin the review. It focuses them on what types of requests for additional information they need to get to an end point.

We need to focus them on the safety evaluation report, focus them on the Standard Review Plan. The goal here is to get an amendment license processed and issued.

When you respond to a request for additional information, we can't start our review until we get sufficient response. Ideally, what we'd like is a complete

response, to get everything in -- everything, all requests for all the information in at once.

That way, we can have an integrated Staff review; that way, we get the most efficiency and effectiveness out of our reviewers, where they don't have to start and stop a review. They can just go right through the review.

This last bullet, applicant's failure to provide quality response, causing rescheduling of entire review, that shouldn't necessarily be viewed as a negative. The schedule that we set up is to meet your end date.

If your end date changes or you find that you need more time for whatever reason, that's fine. Let us know. If you need more time to respond to a request for additional information, that's fine; please let us know. We will, however, reschedule the review. Remember, we're working your schedule.

Staff guidance with applicants: Of course, our goal is no requests for additional information. I'm sure that's your goal also.

It would make things a lot easier if we could just get an application in, process it, and be done with it, however, realistically, we understand that perhaps we'll need a request for additional information.

Perhaps we'll even need two requests for additional information. We'll find that acceptable, but

we're asking for some things from you.

We expect a quality response from you, and we'd like it on the schedule. When we get that response, we will conduct a four-week review and determine how the review should continue. Now, I'm going to go into that bullet in much more detail in a couple of slides.

Or course, as I had mentioned before, we'll slip the overall schedule if responses are not received on schedule, and we'll issue you a new schedule.

So what happens when get to two requests for additional information and the Staff hasn't received the information it needs to make a positive finding of safety? Well, the Staff will identify its positions and its concerns, and we will stop the review.

We'll stop the review. We'll ask you to come in and hold an open meeting with you, a face-to-face meeting, and talk about what our concerns are. We'll talk about what the issues are.

We'll talk about what's left open, and seeing how you've paid for this review, the Staff has done an awful lot of work after two rounds of questions, we intend to write a safety evaluation report and issue the safety evaluation report.

If it has holes, it will be issued with open issues. However, the amendment would be denied.

If the process occurs that way -- and in the Spent Fuel Project Office, we did have one of those cases where part of an application was denied -- the licensee can go back, address those open issues at any time, and come in, and the review starts on those open issues.

The items that have been completed satisfactorily stay completed; you don't have to go back and reopen the entire review.

I talked a little bit about the four-week review of a response to a request for additional information. The purpose of the four-week review:

The first thing, has the applicant answered the mail? Have they responded to all our questions? Has the Staff gotten everything that they need to proceed?

The second question we ask the Staff is, is the application internally consistent? Does that mean do the P&IDs match up with the calculations? Match up with the verbiage in the safety analysis report? Is everything consistent?

And the third question we ask ourselves is, notwithstanding the above, whatever outstanding issues there are, can conditions of the license be written to address the deficiencies so that we can issue an SER and an amendment?

Now, personally, I detest license conditions. I think the license conditions are cumbersome, and, ideally,

we should be able to go without license conditions, but realistically, we haven't found that's the case. But in any case, we want to minimize license conditions as much as possible.

But we found that with this process, we get to an end point; we get to an amendment; we get to a license.

Now, say we get to that end point and the Staff has made a determination that they can write a safety evaluation report and issue an amendment or a license, inevitably, we always have some minor open issues.

In order to resolve those quickly, what we'll do is have open meetings, face-to-face meetings, discuss the open issues, discuss what it takes to close them.

Whatever commitments the licensee or applicant makes, we're going to ask you to document those back in a letter to us within two days of the working meeting, what you're going to do to close those issues.

And then provide a final, cleanup amendment to the entire application, and the safety evaluation report will be issued.

This is an interesting part of the process. The Staff likes to call this the death march. We have found that we can get a lot of business done quickly when everyone knows that the finish line is approaching and that we're on a success path.

As I stated when I began this presentation, the Spent Fuel Project Office found that this process works. We were able to take reviews that were taking three to four years and cut them down to a year.

Fuel Cycle would like to start using this process in their dealings with you all. About a month ago, I presented this to the folks down at NFS.

Unfortunately, none of them are here, but we had quite a lively back-and-forth. They asked a lot of questions, a lot of good questions, and they were very optimistic about the process.

That's it for my presentation. If I can field any questions from you all, I'd be happy to.

KILLAR: A question more for Ted. Why do you think you need a process like this over in the licensing side? In the Spent Fuel Project Office, we felt things were broken there, that we needed something to get that straightened out. We think this process has gone a long way to help that, but we don't see the same issues over in the licensing side. If it ain't broke, don't fix it.

LEEDS: Can I answer that, Ted?

SHERR: Sure.

LEEDS: I've been here for four months. We just issued an amendment on the cask system to NFS. That review took over three years. I don't know if they were on the

sixth or seventh request for additional information.

The folks down there were just thrilled with the idea that we could do this with one request for additional information or maybe two. The process was broke. I think the process could have been fixed for that. I think the process could be better.

KILLAR: What's happened with that cask system was a moving target is what regulations they'd be following for implementing that.

LEEDS: That isn't what I heard from the folks out at NFS. Can you give me some examples of processes that have worked well, other than this? The folks over in NRR, the reactor licensing folks, they also adopted this process. They're going to do the same thing on the reactor side.

KILLAR: I've heard also some -- well, this process certainly is better than the process they had. There are still some issues with this process as well.

One of the issues is that if the licensee and the NRC can't seem to agree on the issues, the thing basically gets done without that issue being resolved, which basically is not solving the problem.

LEEDS: There is some legitimacy there, that's for sure. I know that in the case of one cask fabricator, we couldn't come to an agreement. It involved burnup credit.

The Staff and the applicant couldn't give us the

information that we needed; the Staff couldn't make a safety determination, and they lost one of three different basket designs for that cask.

Now, since that time, the Staff has completed its review on that technical issue, and the applicant has come back in with that cask basket and it's under review. But that's true, if we can't come to a technical agreement on something, it's going to be shelved; it's going to go back.

But that's a safety determination. That's should be the same in any process.

I'll tell you what the process did do; it focused us on that issue, and we were able to put a lot of management attention on it, and now we have burnup credit.

SHERR: Felix, can I ask a question? I guess, first of all, on a less formal basis, the Licensing Section has been implementing this process, for example, limiting the number of RAIs.

I think what Eric is addressing is just maybe more formalizing what has been evolving within the Licensing Group as it is.

I guess my question to you is, what problems do you see with the approach being discussed here? In some ways, I think it's a win/win situation.

Now, there might be some aspects of it that are troublesome, but it's the notion of, okay, for the set of

customers that the Licensing Group needs to support, the idea is to try to be responsive to the needs of that group, and not let where work on one -- for one licensee is dragging along for reasons just because there are impasse-type issues, and is precluding the ability to work on work for other licensees that may have urgent things to be done.

It puts priorities on the Staff, and it puts some priorities on the licensee. I recognize there are always wrinkles, but I think that's the philosophy that's behind this, that's the principle.

I would expect that you would look at it positively, rather than negatively. I'm also saying that I don't think this is a significant departure from what has been evolving over the last two years in licensing activities, either.

KILLAR: I guess that from my perspective, from talking to various people and interacting with them, they certainly see it as an improvement of what has been done in the past, particularly in like the Spent Fuel Projects Office.

But at the same time, they don't think that it has addressed all the problems that have come up, issues such as hard technical issues, being able to sit down and work out a good technical fix.

As soon as you get into one of these technical issues that certainly indicates that things are going to take maybe some longer time, it basically gets thrown out, and you're back at the beginning of the queue, so to speak, rather than able to work through it.

Sometimes in the Spent Fuel Project Office, if there is a technical issue, they say, okay, what we'll do is, we'll issue the license without that aspect, like, say, without this basket in here, and then you can come in for amendment for that basket in order to do this.

Well, that solves maybe -- gets that cask on the road, but it still leaves the issue of that basket out. And now because that cask is on the road, and now you're only looking at a basket issue, it doesn't have necessarily the same umpf or emphasis that it has as a total package.

And so I'm not saying that it's bad, it's a rotten process, you know, go some other way; I'm just saying that this certainly doesn't solve all the problems, and I think people have the tendency to get all spun up on this, oh, it's so a great, wonderful process, and this proces is an improvement, but it still has issues and it still doesn't solve everything that needs to be addressed.

VAUGHN: Let me just make a few comments: Number one, with your group in terms of the facility licensing activity, I have been extremely pleased with the way your

process is working.

Now, I know you've kind of rearranged your behavior a little bit over the last four or five years, but I have been extremely happy. One example of that is our license renewal, which basically took about a year, which is a very significant improvement over what any or our prior experiences had been.

And there, I don't -- I guess there were a couple of RAIs, but there was very little formal interface that had to take place between the two parties to be able to complete that work.

We recently just went through a corporate structure change, and that required some license modifications and principally with decommissioning funding assurance and the methods for doing that. And it's a pretty complicated process, but that went right through on a very quick schedule without a hitch, and made it on time.

So, we're having a lot of good experiences. I will agree that one of our complaints about the Spent Fuel Project Office in the past has been that nothing ever came out.

I mean, you know, there were just lots of issues in there that seemed to have gone into a black hole and didn't come out. And in the recent while, with their current management over there, you do get responses out

quick, almost sometimes quicker than you might want them.

I think we -- well, the reason is that I think we still have some problems that we perceive with the -- I'm going to use the term, quality of work, which is -- the problem is that there are too many things over there that seem to be written down as practice or Staff guidance or something like that, that is not public.

If you're dealing in an area, and you turn in something and you don't have any chance to know how you're going to be judged, or what the inhouse poop is or why it is, I mean, it just automatically comes up tilt.

And if you go crossways with one of those, you can lose your whole application, and that's absolutely no fault of your own.

LEEDS: Well, Charlie, that's very significant. I'm going back to the Spent Fuel Projects Office in a new position, as the Licensing Section Chief, and I want to know what those issues are, because that's wrong.

I'll take care of that. Let's talk about it offline.

VAUGHN: Okay.

LEEDS: I'd really like to find out what those issues are.

VAUGHN: Okay. The other thing is that there is a tendency over there to write different standard for things.

For example, the one that just is very confusing is the standard that you all put out on criticality safety for packages.

And we all have facilities, we all handle fissile material, and we all have to demonstrate criticality safety for the operation which includes the receipt and storage of material, much of which deals with packages.

And we have in place, programs that have been approved by the NRC, and yet we have a little different standard that is required for applying with packaging. And so --

LEEDS: Did you get to comment on that standard?

VAUGHN: Probably. Now, actually, the standard was already written before it was out for comment.

LEEDS: Well, normally, we write a standard, and then ask for comment.

VAUGHN: Right.

LEEDS: Right, work with you on the comment. I can't speak for what's gone on in the past year and a half. I wasn't running the Licensing Section. I did it before then, and I'm going back to it, so I'd like to have those conversations with you.

VAUGHN: That would be fine.

LEEDS: Good, thank you.

FERGUSON: To apply this, you talk about a

Standard Review Plan. What are we using today, or what did you anticipate to use for this?

LEEDS: Well, as I understand it, we have a Standard Review Plan now, and we're working on this ISA guidance, so there are a number of guidance documents out.

You're not aware of the Standard Review Plan?

FERGUSON: We have a draft Standard Review Plan. You're not applying that to us at this point, to be sure. Are you?

[Laughter.]

Let me look at my slides again.

COX: Craig, I might interject here that some aspects of what you now see in the Standard Review Plan have been part of our review process for several years, starting with a Federal Register Notice of several years ago concerning quality assurance, fire protection, and a couple of other things.

EDGAR: What will be the basis of determination of an incomplete application? I mean, if you read it one way, you say I've asked you for everything I want. That's a complete application from my point of view. If I'm asking you for half of it now and half of it later, that, I can understand would be a problem.

But if we're saying that the format isn't right or something like that, does that become an incomplete

application and get bounced?

LEEDS: Oh, you'd have to look at the technical. There are a lot of aspects of it. You have to take a look at the technical merits of the application.

Does it hold together? Does it justify what you're requesting?

If it has multiple technical disciplines, does it include fire protection, criticality, HP considerations, radiation safety? Does it include all of those aspects.

Format is just one aspect of it. Is it complete? Can it stand on its merits? Can the Staff -- does it provide the Staff enough information to make a regulatory determination of safety?

EDGAR: But from our standpoint it may, and from their standpoint, it may not, and it's not always obvious. We had one not too long ago that we didn't even think required a license amendment because it involved vessels that we'd already done criticality safety analysis on, and it involved a process that was almost identical to another license process.

And just for information purposes, we said we're going to start up this new process, assuming that it didn't require a license amendment. And the determination was made that it did require a license amendment, which threw us a little bit, but we're in the process. But it's not obvious

to us, when we get credit for something we're already doing, for a new process that's almost identical to that.

LEEDS: I have a two-part answer for you:

The first part of the answer is that I understood that the new Part 70 was going to change some of that.

EDGAR: I think it is, the new Part 70, but that is a ways down the road.

LEEDS: Is going to take care of that?

The second part of it is, and using the process, when you come in to talk with the Staff, the Staff ought to be able to give you feedback as to what they would want to see in the application for whatever kind of amendment that you are requesting.

EDGAR: Okay. I mean I understand that, for a complex one I can understand that, but for a very simple application applying across the country with a couple of people and taking up time --

LEEDS: All right. It may not be necessary. It may be a conversation that you have on the phone with your project manager, this is what we intend to submit, here's the aspects of it and here's what we see.

If you have got an SRP, you have got a new Part 70, it should make things clearer.

EDGAR: When that is in place it will be a lot clearer but it is not in place yet.

LEEDS: Other questions, comments?

[No response.]

LEEDS: Thank you. I appreciate your time.

I will let you get back to Part 70 issues.

SHERR: Would it be useful to take a short break?

KILLAR: Yes, give us about a ten-minute break or so and be back at 4:00.

[Recess.]

SHERR: I guess what we were talking about, we were trying to understand the issue that you were raising on QA.

What exactly was the issue that you wanted us to address on that? It would be helpful to us to maybe have some clarification of it.

KILLAR: Well, I think there's two things, and I think Charlie pretty well pointed it out, is that we QA as nothing more than a series of Management Measures and you look at the SRP a lot of those Management Measures are already laid out as individual sections, yet you have a quality assurance section which is duplicative of a number of the sections, and we just wanted to make sure that you aren't looking for two different things, one in the quality assurance section and a separate one under the individual section, whether it be on configuration management or procedures or what have you.

SHERR: And I think what our response is is if it is covered in one place it doesn't have to be covered in the other place.

Does that address the concern?

KILLAR: I would think so.

SHERR: Cross reference it to kind of remind the reviewer that in fact that could very well be covered in the other area.

VAUGHAN: Yes. I mean where the elements are consistent like that, in other words the things that you do for quality assurance are in the management program I don't see why the reviewer has to do anything.

I mean, you know, you review the management program.

It is either acceptable or it is not. We don't have to write it. We don't have to reference it. The reviewer doesn't have to do anything different.

If we call it out as some different review or some different element then it just begs the question, so what is supposed to be done here?

PERSINKO: The element that is duplicative is audits and assessments then. Okay, so you address audits and assessments, but the QA elements may have one particular item in the list, the other QA element list, that has to do with audits and assessments. Are you suggesting then that

that would be covered in whatever you describe in the audits/assessments and you wouldn't address it separately here, but would you address that particular item that is listed in the other QA elements, say on audits and assessments, because it is more specific actually.

The individual element that is in QA is written more specifically. Do you see what I mean?

If it is in the other section and you are addressing it over here, it's fine also.

VAUGHAN: Let me go back to the premise. We didn't start down this trip to just generate a capital quality assurance program. We started on this journey to have a safety system in place with Management Measures or quality measures, assurance measures to ensure that this system operated when called on to perform, okay?

What we are saying is those tasks, most of them are already called out in the Management Measures system because in fact the assurance is basically what management provides. It is a system to give you assurance, and most of those are called out so why do we need to call out a formal quality assurance dimension to this thing when what we really are supposed to have is a management system that has this assurance built in?

Now there's two or three little things in there that, you know, we might have to talk about how to handle

them, but the majority of them fit the management system and they ought to be called out in the level of detail that they need to be called out to meet the performance requirements of the rule. It's not a question of whether it meets some quality outline or not, but what we are interested in is are they called out in enough detail to meet the performance requirements of the rule.

SHERR: One way of dealing with your concern would be where in fact in the other quality assurance elements discussion it essentially is covered by another Management Measure. We would just not have it there -- no. Okay -- go ahead.

PERSINKO: Let me ask you, what are you suggesting be done to the chapter then? Are you suggesting rearranging it in any way or just with the understanding that if it is in one section it doesn't have to be repeated in the other section in your response in the application?

Are you suggesting a rewrite of the chapter in any way?

VAUGHAN: Do you mean the chapter on --

PERSINKO: 11.

VAUGHAN: -- on quality?

PERSINKO: Right.

VAUGHAN: No, 11's management.

PERSINKO: Yes, but one of those is QA.

COX: 11.4.3.8. Are we talking about eliminating things from that listing of 19?

VAUGHAN: Yes. That section in my opinion would go away and be integrated into the management system.

COX: But you agreed there were a couple of things, a few things in that section that were not found in the other management measures descriptions.

VAUGHAN: And if we get to the point that there has to be a little section that covers those two or three things, fine.

COX: And that would be called Other Quality Assurance Elements.

VAUGHAN: It could be called Other Quality Assurance Elements.

KILLAR: Maybe a way to look at it is you actually title it Other Quality Assurance Elements but you have all 18 plus one listed in there. Well, how could it be "other" if you have all 18 listed? Just list the ones that are not duplicative of other sections.

COX: Yes, you would knock out of 11.4.3.8 those that are covered in other sections and you would leave in 11.4.3.8 -- the two or three that are not covered in other sections.

VAUGHAN: That are not or it is not practical to integrate them into one or the other sections?

COX: That is another category. If it is not practical then leave it over here in this list of what is now four or five instead of the 19. I didn't know there weren't any that were not practical to include in some Management Measures description.

SHERR: We think what you are suggesting is achievable and we will add that to our list of things to do here.

With that, are there other matters either on Management Measures or QA we want to talk about?

[No response.]

SHERR: Okay. Just to kind of summarize what I think we have decided to talk about, on the ISA summary guidance document we appreciate very much your effort in developing that document. We note many of the revisions that you are already working on that that is reflected in our comments, were consistent with things we also saw that needed to be worked on and we look forward to receiving the next draft.

At the same time we will work on developing our comments on the current draft, and, as we talked about earlier, we will see which product gets done first and if our comments are completed before we receive the next draft we will provide this to you. On the other hand, if you provide us the draft before we complete those comments,

we'll conform those comments in the new draft rather than giving you obsolete comments.

In the Management Measures area, I think there's two things that we will do to follow up on our discussions.

One is to expand the introduction of the Management Measures to address the level of detail that needs to be provided in the descriptions of Management Measures. With that we will include as an appendix something along the lines of the handout we provided at the meeting modified to reflect a number of suggestions that were made here to include examples, try to give a sense of the purpose of the information that is being sought.

The other aspect, the one we just talked about, we will look at Chapter 11 in terms of other QA elements, in terms of where we would reduce those to just those that really truly are other QA elements in light of our discussion just now.

Just to address what our future activities are, as you are all well aware, the Commission meeting will be coming up soon, a week from Tuesday, and I am sure we will all see each other at that time.

As I said, we will be working on developing comments on the ISA summary guidance document. We continue to work on the SRP to address comments that were received, in particular on Chapter 3, that we still have not been able

to complete that review as well as the modifications that we discussed just a few minutes ago based on our discussions today.

Also, we will be developing for rule implementation guidance documents relating to backfit, change process, and reporting, and we anticipate stakeholder interactions in that process.

Finally, Jon has been so nice to do a good job recording all the jewels of wisdom that we have expressed today and that transcript will be posted on the website as soon as it is available.

I guess before we adjourn, are there any other comments we need to make or --

KILLAR: The one thing that we'd be interested in having support from the NRC is putting together some guidance for the submittal of the implementation plan for the ISA. As we look at the rule, there is, I believe a six-month after the rule is effective and we want to make sure we capture what you are looking for there and don't give you a lot of things you don't need and at the same time what we give you is complete so we are going to be looking at that and we would like to get your input to make sure that when we put these things together we end up doing what you guys wanted done.

SHERR: Are you talking about the same type of

approaches with the ISA summary guidance document that --

KILLAR: Hopefully more successful.

SHERR: -- parts of an outline --

KILLAR: Right.

SHERR: Okay. With that I thank you again for your participation and all the effort you put in preparing for the meeting.

Before closing, I would like to thank Pam Shea, who helped very much in terms of making arrangements for the meeting, making sure we had all the handouts and all that, and also, as ever, Barry Mendelsohn, who does a very good job in getting our documents put on the website and hopefully you all are notified of those things.

Again, I would like to thank Jon for keeping us honest and making sure we used the microphone and all that, and thank you very much.

[Whereupon, at 4:21 p.m, the meeting was recessed, to reconvene on Friday, June 9, 2000.]