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NUCLEAR REGULATORY COMMISSION

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PUBLIC WORKSHOP ON CIP FRAMEWORK DOCUMENT

WEDNESDAY, AUGUST 27, 2003

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ROCKVILLE, MARYLAND

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The workshop came to order at 8:30 a.m. in the NRC Auditorium, Two White Flint North, Chip Cameron, Facilitator, presiding.

Present:

Chip Cameron	Facilitator
Jerry Blake	Region II
Cynthia Carpenter	Deputy Director, Division of Inspection Program Management
Tom Foley	Inspection Program Branch
Jim Isom	Inspection Program Branch
Carl Konzman	Program Manager, Policy Development Planning Staff
Chuck Paulk	Region IV
Stu Richards	Chief, Inspection Service
Joe Sebrosky	New Reactors Section
Robert Weisman, Esq.	Office of General Counsel

AGENDA

P-R-O-C-E-E-D-I-N-G-S

9:02 a.m.

MR. FOLEY: Good morning. I'm Tom Foley. I'm the team leader for this -- this function.

I'd like to welcome you to the -- our workshop on the draft 10 CFR Part 50 Construction Inspection Program Framework Document.

We -- we've been pulling this thing together for quite some time and I'd like to thank one individual in particular Mr. Joe Sebrosky. He's kind of like our big toe, Joe here. If it weren't for him, we wouldn't -- we'd be lost. He's doing this for about two years now and he's a -- he's been our mentor all the way -- all the way through this program.

I hope all of you got home last night. I'd like to welcome you to the Washington weather. You know, just -- this is quite common. I don't know if you were here, but we had some big thunderstorms last night and there was quite a spectacular show from the ten floor if you were here at 6:00 last night.

Before I go on much further and ramble on, I'd like to introduce my boss, Stu Richards, and he's going to take us through the -- the -- the introductions and the organization chart and a few other things and then we'll continue on.

Stu.

MR. RICHARDS: That's right. Good morning. My name is Stu Richards. I'm the Branch Chief for the Inspection Program Branch in NRR and I'd like to welcome you to the workshop for the Construction Inspection Program Framework Document Review.

Glad to see a number of people here today. We weren't sure what the turnout was going to be. We only had a few people sign up ahead of time. So, it's encouraging to see a -- a little bit of a crowd, but also, you know, I'm thinking it's good not to have too many people because the purpose of this workshop is to enter into a dialogue to talk about how to do the inspections for new construction and maybe a smaller number of people is going to break down some of those inhibitions to participate.

The way this workshop is going to be successful is if people in the audience participate in the dialogue. It's not our purpose here today just to present what the NRC intends to do or proposes to do. So, please keep that in mind.

It's my responsibility to introduce some of the NRC people that are here today. I'd like to introduce Jim Lyons who's sitting out in the audience.

Jim, if you could wave your hand there. He's the Program Director for New Test and Research Reactors. So, plays a key role in what we're doing here.

One of the Section Chiefs Laura Dudes. Laura is new to the job. So, she's getting up to speed.

You've already been introduced to Joe Sebrosky.

Doug Coe with the Inspection Program Branch.

Tom Foley, Jim Isom, and then down at the end, we have Jerry Blake and Chuck Paulk representing Regions II and IV.

I think Carl Konzman is going to join us after lunch.

Mike Scott's over here on the side and there's, I think, some other NRC people out in the audience that you'll get a chance to meet during the breaks.

I think as everyone here is aware, the purpose of the draft framework document is to outline how we intend to perform construction inspections for plants that may be constructed under 10 CFR Part 52 in the future.

When I was thinking about this workshop,

I was thinking back to when the present generation of plants was under construction and I was wondering how many people who participated in that process are still involved in the NRC. Unfortunately, I think that number of people is dwindling although there -- there is still a few us around. I know Tom Foley participated. Maybe the guys from the regions were involved. I was involved.

But, the -- the people are -- are dwindling and I think it's a good time to capture our experience and the experience of the people in the industry that were involved to try and hopefully improve the process that we're going to go forward with. So, hopefully there's a few people that have some experience that are sitting here in the audience today.

Again, the purpose of today's workshop is just that to have that dialogue with the people in the audience. We'll present what we're going to do and hopefully you guys will provide us some feedback on -- on what you think about the process we're proposing.

I think I'm upsetting Tom because there was a set of slides we're supposed to go through and I kind of skipped through all that.

See if you wanted to skip to slide five.

Kind of towards the end of my remarks here, I'm suppose to tell you that if you have comments, you can either mail them to us which I think is slide five or you can e-mail them to us. Is the e-mail up there? Yes. Or you can hand deliver them to the address which is the next slide.

Now, the -- the -- one of the key personnel in our meeting this morning is sitting over here in the front room. I didn't introduce him yet, but it's Chip Cameron. He's our facilitator for the day. I've been fortunate to work with Chip and he does a great job of trying to make sure people don't sit in their chairs and stare at us, but actually participate.

So, with that, Chip, please come up and do your part.

MR. CAMERON: All right. Thank you. Thank you very much, Stu.

I'm -- as Stu mentioned, I'm going to try to give all of you some facilitation assistance this morning and basically, what I'd like to try to do is to encourage the dialogue that -- that Stu mentioned in terms of trying to connect the discussion threads.

There may be questions, comments from all of you in the audience. Rather than just moving on to

perhaps the next question or comments, you may want to -- you may want to chime in on what the previous person was -- was saying and also to give your come organizational assistance as we move throughout the day.

There may be items that -- that come up during the earlier presentation that more properly fit under a later agenda item and I'm going to ask all of you, NRC staff and all of you to -- to help me with that. If we want to defer a discussion about a specific point, for example, on quality assurance, I'll keep track of that over here in the parking lot to make sure that we could back and capture it.

And ground rules real simple. If you -- when we get to the discussion portions of the session, if you just signal me, I'll bring you this cordless mike. Please tell us your name and your affiliation if appropriate.

We are taking a transcript and that transcript will be available to the public and is our record of meeting.

So, any comments you make today are going to be considered just as the written comments that are submitted to the NRC on this particular issue.

One other item, the staff put aside a

whole day for this meeting without knowing whether a whole day was actually going to be needed and so, we're going to find out how fast we move through some of these topics. I think that the intent is to -- to keep moving. If we get done with a particular topic early, we're going to go on to the -- to the next topic even though it might not be time for that yet on the agenda.

If that correct, Tom? All right.

MR. FOLEY: Correct.

MR. CAMERON: Okay. I think we can just get started then and we're going to go to -- to Joe for an overview of the Part 52 licensing process.

MR. SEBROSKY: Good morning. My name is Joe Sebrosky. I work in the New Reactor Section. Laura Dudes is my Section Chief and Jim Lyons is my Program Director.

Next slide please.

The purpose of this portion of the meeting is to just introduce Part 52 licensing process concepts and to discuss at a very high level how we broke up the inspection manual chapters that you find in the framework document and -- and tie them back to the process.

While we're -- while we're on this slide,

we -- we had a workshop on -- on Monday and I think a lot of you were there, but at that workshop, we discussed the process in 10 CFR Part 52. Early site permits is sub-part A, 10 CFR Part 52. Standard design certifications are sub-part B of 10 CFR Part 52. Combined licenses are sub-part C.

There's another key concept that we have an inspection manual chapter dedicated to and that's inspections, tests, analysis, and acceptance criteria or ITAAC. ITAAC are set at the COL stage, but they're verified prior to operation of the plant. So, that's where ITAAC fits into the process, combined license, early site permits, standard design certification.

Next slide please.

The 10 CFR Part 52 licensing process was meant to be a -- was instituted to be a stable and predictable licensing process. There are two -- if a utility wants to come in and construct a plant, they can construct it either under 10 CFR Part 52 with a combined -- with a construction and an operating license or under Part 52 which is a -- a different process.

Most of the utilities that we've talked to in the Nuclear Energy Institute have indicated to us that if a new plant is constructed in the United

States, it'll be in accordance with this Part 52 licensing process.

One of the things -- I don't want to read the entire slide, but I'll just point out that one of the reasons for the Part 52 licensing process was to resolve inspections, tests, analysis, and acceptance criteria prior to authorization of the construction. You'll see that come up again.

Next slide please.

With the framework document, it covers some of the 10 CFR Part 52 licensing process, but not all of them. It covers the early site permit, pre-combined license phase, the ITAAC phase, and preparation for operations. It does not cover the design certification phase.

We have done three design certifications through the entire process. The advance boiling water reactor, Westinghouse's System 80 Plus, and the AP600. We have seven others that are in various stages of review. We do do audits during that process of the -- of the vendors, but we do not -- the inspection manual chapters that are in the framework document, do not cover those audits and it does not cover the operations phase.

Next slide.

I'd like to talk now a little more just a high level overview of the -- the phases that the inspection manual chapters do cover.

Early site permit, what it is. It's an NRC decision that insures that the proposed site is suitable for construction and operation of a powerplant. It allows an applicant to bank a site, reduces licensing uncertainty, and it resolves siting issue before construction.

Next slide please.

This is a diagram of the early site permit review process. The -- these areas are just the opportunity for public participation. We have posters over to your left, my right that -- that mimic this diagram.

What I wanted to spend a little bit of time on is where the inspection activities fit in. You see that we are not for early site permit. You don't see inspection activities related with the environmental scoping. There are -- that activity is very similar to license renewal and that process is -- is laid out.

So, the inspection activities that we do don't support the environmental impact statement or the final environmental impact statement. What they

support is the safety evaluation portion of the early site permit review and specifically, they support the agency's decision on the application whether or not it's appropriate to issue an early site permit.

Next slide please.

For the combined license phase, this slide is just intended to show what a combined licensed is. It's a combined construction permit and conditional operating license. It's a fundamental licensing process in Part 52 and here is where you see ITAAC and if you go back to Monday, there was just a -- a little bit of confusion about what exactly an ITAAC looks like and what it's intended to do.

Simply put, it's -- what it's intended to do it's to demonstrate or to insure that a plan is licensed in accordance with Part 52 has been properly constructed and will operate safely.

If you go to the next slide please.

What I did on this slide based on the questions that we had from Monday's workshop on Programmatic ITAAC is just separate out one -- one portion of an ITAAC from the AP600. This is a design, a Westinghouse Passive Pressurized Water Reactor that we have certified and we do have the ITAAC related to the design codified in the regulation.

This particular ITAAC is on the normal residual heat removal system. The way you see the ITAAC, you'll see a design commitment, what the inspections test analyses are for that design commitment, and finally what the acceptance criteria is.

So, for this particular ITAAC, you see that the acceptance criteria is -- is very specific and that's what we're asked to sign off on.

If you notice on the way into the room, there was this handout also. This -- this handout is the complete ITAAC for the RNS, the normal residual heat removal system and it also includes the tier one material. So, when we get into discussions or if there's questions about what an example ITAAC looked like, we'll be referring to this handout.

Next slide please.

This diagrammatically is a -- the combined license phase. While we're on this drawing, I wanted to point out a couple of things. The end points for the inspection manual chapters are pretty clear cut. The way we've made the arrangements for the inspection manual chapters. The starting points though are fuzzy. By that I mean if you look at this decision on the COL, that is where the Inspection Manual Chapter

2502, recombined license, will end.

Where it begins is going to be somewhere actually before the application and you'll -- Jerry Blake will talk about what's in the pre-combined license inspection manual chapter, but while I had this slide up here, I just wanted to show that when we talk about 2502, it's starts somewhere before here and ends at the decision on the combined license.

When we talk about 2503 which is the inspection manual chapter related to ITAAC, it also has a specific end point. That specific point is on -- is the decision on fuel load authorization. ITAAC and the fuel load and with the Commission's decision on whether or not the ITAAC had been met. So, 2503 has a specific end point which is here.

The starting point at 2503 could also have been prior to this combined license application phase. There's things done with procurement, quality assurance type contractual arrangements that are written into procurement contracts for like the reactor pressure vessel, for example, that would play into ITAAC. That could be done before the application's submitted to us in which case that -- our inspection manual chapter would -- would begin probably sometime before this.

There's another inspection manual chapter that we talk about which is 2504. That end point although it's not shown on this diagram would be with the transition to operations complete and Inspection Manual Chapter 2515 which covers the operations phase which is what we use for -- for power plants in the country today. When that starts, this 2504 would end.

The beginning point for 2504 though is -- is also fuzzy and at this -- at this point, we're not sure how issues such as programmatic ITAAC which we discussed on -- on Monday and we'll talk about a little this afternoon, how that's going to resolve itself and the impact it's going to have on our inspection manual check.

Next slide.

As I mentioned, the -- this portion of the presentation was to just provide a high-level overview of the Part 52 licensing process and try to put in context the different inspection manual chapters and I want to mention a couple of things.

We put this brochure out on the table. This brochure explains both the Part 50 and the Part 52 licensing process. It -- it provides information on what an early site permit, what a combined license, and -- and what ITAAC are.

We also have a website. It has information on it. The website also includes the draft. Has links to the draft 10 CFR Part 52 instruction and inspection program framework document and one last thing, I'd like to -- to mention this is a pitch for our section. Part 52 is going through an update phase and we have a Federal Register notice out with a notice of proposed rule making and the comment period of that ends on September 16th.

So, that's the discussion of the high-level overview of Part 52.

MR. CAMERON: Okay. Thanks, Joe. Before we get into questions, discussion. Bob Weisman from our Office of General Counsel has -- has joined that table.

Joe gave you an overview of Part 52. He also talked about the proposed rule making and the programmatic ITAAC effort that's -- that's going on. Are there questions about how all of this fits together in this -- this larger process? Have a question on that? Any concern? Okay.

And there may be things that occur to you as we go through some of the specifics, but I guess that unless any of the panelists have anything else to say on the overview, are we ready to move into -- to

Jim's presentation?

MR. FOLEY: I'd like to say you're all -- all of you are a lot smarter than I was. When Joe first explained that to me, I didn't understand half of it. It took me about six months before I really understood it. You guys are pretty smart.

MR. CAMERON: Well, maybe -- maybe we should find out. Is it -- is it because that -- that it is to murky to even identify questions our here or is it pretty well understood?

All right. Jim.

MR. ISOM: Thank you, Chip. My name is Jim Isom and I work for Doug Coe and Stu Richards. I'm in the Inspection Program Branch.

Next couple of slides, slide 21 please, is really intended to kind of introduce you to the framework document.

We have -- Joe will have to set the scene or the background -- in the background how the 10 CFR Part 52 process works.

We'd like to discuss each of the sections in the framework document. There are four phases and slides 21 and 22 are intended to kind of go over each one of those.

For your information, this effort the

construction inspection framework document actually was begun in 1996 or earlier than that. We published our first efforts in '96 and our current version is an update of that with -- or the various lessons learned and -- and the new technologies that will be placed when we build the -- the new reactors under the Part 52 process.

Also want to say that during the ESP phase and the combined license phase, our audits and inspections during those two phases are -- are intended to support the licensing effort and for the next two phases, the construction and transition operation -- the construction phase is pretty much -- our efforts devoted to the verifying the ITAACs are completed and then the last phase is -- is to make sure all your programs on ITAACs are ready so you can operate the facility to 100 power.

Next slide please.

Now, this slide is more focused on the latitude phases, the -- the construction and operational phase and covers some of the -- the key highlights or key points that we were -- have some issues with. We got some issues during those phases and it has to do with how we will verify ITAAC which we'll go over in detail shortly. How we plan to

conduct inspection operation and programs which is still I think -- still being discussed and developed and what we -- what we might consider, what we can validate in the ITAAC in the event that might happen and lightly touch on some of the enforcement aspects of our -- of our effort.

And I think at this point, I'd turn this over to Mr. Tom Foley who will discuss the early site permit phase.

MR. FOLEY: Chuck, do you -- you know, we're really breezing through this like crazy. Do you think we need a break? Does anybody need a break or want to go get some coffee or something like that? We're going to be done at 9:30 or wait a minute 10:00.

MR. CAMERON: Well, at least you're not saying it's time for lunch. But --

MR. FOLEY: I'm a fast -- I'm going to try to slow down. I -- I normally talk way too fast. I guess next slide. My -- sure nobody wants a break? No. Boy. Okay.

MR. CAMERON: Why don't you -- let's finish yours up and then we'll -- we'll take a break.

MR. FOLEY: All right. We'll -- we'll see what we can do.

MR. CAMERON: Right.

MR. FOLEY: Let's see. This is the early permit. This is -- this manual chapter is on the street. We -- we -- we issued it and -- and I think in May of this past year as a revision. It was originally -- we had this thing put out in it's original form on -- in October of last year and let me -- oh, and let me see. I'm on the wrong slide, but -- and what was -- we got it on the street and -- and it's -- and it's just recently revised.

There are many objectives of this -- of this manual chapter. It's an inspection manual chapter by the way and it's guidance to our inspectors. All right. Although many people use it because -- for various reasons.

This is really the -- this phase is prior to the application and it -- it's simply audits prior to the application and after the application, we -- we call them inspections and I -- I wouldn't get hung up on the terms audit, inspections, and meetings because we in the NRC in the inspection group the way we transmit information to our inspectors is through inspection procedures. So, if we're going to tell them to have a -- a meeting, you know, we'll write an inspection procedure to tell them to have a meeting.

So, a lot of these -- a lot of the things

you'll see in this manual chapter refer to inspection procedures and it could be a meeting or something like that or an audit and prior to the application, we do meetings and we do audits and the -- and in addition to all these things. So, when you see that information up there.

Let me see. This -- this -- the -- the manual chapter begins with a licensing when the licensee gives us some sort of indication that they intend on submitting an early -- an application for an early site permit. All right. So, and that could be like a year before they actually do it. In fact, we -- we -- they did do that and we are expecting some in the -- towards the end of next month I believe. I think Dominion is planning on doing that and other's have given us some sort of indications.

So, about two years ago, we had to get on the stick really quick and -- and -- and put out some guidance for what we were going to do at the early phases of this.

This is a -- these -- these objectives -- one of the most important parts in my mind of these objectives is to -- to really -- to -- to notify -- to let the licensee -- oh, could we have the next slide please. All right. Next slide.

Yes, to explain the -- explain the process to the public and that's one of their functions here is to explain it and to get your feedback on this -- on this information so that we can have an improved document. We're kind of a little disappointed we're not getting more feedback from you guys. I would appreciate it if you could give us some -- improve this thing.

Another important part of this is to assure that quality is being applied in the process all through and this thing is -- this -- I'd like to talk a little bit about that. Because we -- we are sending out teams and conducting meetings in order to insure that quality is instilled in this thing right at the very, very beginning.

It's -- it's kind of like the -- I draw an analogy between building a sand castle. Although there's -- there's not -- not a lot of safety related stuff or steeples or things like that on this sand castle. Yet it's all down here, the foundation. But, as you start building up that sand castle, you got to have good foundation or that thing's going to collapse.

And we want to make sure the foundation has a good quality associated with it. So, we have to

know where -- where they're getting the materials for these things and -- and what the seismology's like and -- and we got to verify that -- that seismology is correct and that it is -- that the records are going to be maintained for that kind of stuff and -- and to follow a -- a quality process if you will.

Next slide, Mike.

This slide's a little hard to see, but you can see it in your slide package a little bit better, I think. The purpose of this slide is to let you know that -- that -- that the timeline for the ESP application phase. The -- the preapplication, the post-application. Where the -- where the inspections -- where the inspections are. Inspections post.

We start out right up here with meetings. We'll be doing that I think week I believe. September 2nd and 3rd, we'll be holding meetings with some of our applicants and we'll be doing additional post-QA inspections over here and see there's -- the other one on here. Post-QA and -- and other inspections here.

But, all of these things are in -- are in support of this ASLB hearing and a lot of the inspectors will -- the ASLB will question our inspectors and make them stand up there in front of them and they'll shiver in their boots and they'll say

yes, sir, I saw that there was quality involved in this process. Things like that.

But, anyway, this -- this slide just tells you the -- gives you an idea of the relative portion, where these things fall into play.

Next slide, Mike.

Please note that this is the pre-application phase. Right. Right. Yes. Pre-application phase and the applicant here is simply just a member of the public, you know, applying for a, you know, a fishing license. You know, we have -- we have no authority over that -- that -- that applicant at this phase and just -- just a member of the public submitting a, you know, application for any kind of license.

But, the only authority that the NRC might have over somebody like this is that, you know, if they -- if they give us -- send in false information to us and I think -- I think there's some rules someplace that says that anybody sends in false information to the NRC is -- is libel to be subject to some sort of enforcement actions. Could be against the individual.

But, that's about the only type of enforcement that we could take regarding a -- a pre-

applicant at this phase.

Primarily, these meetings -- meetings we appear -- primarily, these things -- we -- we arrange meetings in this phase just as -- well, as an overview, these are usually explained in detail these -- these things here. We'll -- we'll talk about these things a little bit -- a little bit later.

Next slide, Mike. On your slide package. Read about these.

Inspections. We do inspections to do the -- to verify these -- that the -- that their -- we -- the voracity of these QA controls, you know. To make sure that they're there and these inspections are led by the -- the regional inspectors with support from experts in headquarters.

All right. We do have experts also in the regions, but lately we have more seismology experts and things like that and hydrology and -- and oncology. No, not oncology.

But, they're primarily located in headquarters and the -- the primary purpose of these inspections is to -- is for 2301 provides inspection through guidance, like I said, to our inspectors. So, that's -- that's -- the next slide, Mike.

It's not guidance for the members of the

public or the licensees or anything else. It's, you know, inspection guidance.

At this stage, this stage is not really -- we don't really require a -- an Appendix B program. All right. And I don't know exactly why we don't require Appendix B program. But -- but, we don't.

It's just -- we thought when we wrote -- I can't we. We thought. When I first read the rule -- the Part 52, I thought we did need an Appendix B program. Because it does say that we will review the applicant in accordance or to an Appendix B program. Something similar to that. But, our legal interpretation is that it does not require a Part -- an Appendix B.

But, this is very important to us that this -- this -- it's very important to us because this -- because right here this Part 52.39, it prohibits us from going back and looking. Once an applicant has been granted an ESP, we -- we are prohibited from going back and -- and looking or challenging that -- that anything that -- the whole application process.

So, instilling quality and insuring the thing is done absolutely correct, it's got a -- it's a one-time thing. Once -- once we're -- once that's done, it's water over the dam and -- and -- unless --

I guess there are some -- there's always some -- if some sort of information comes up that is significant, very significant, then we can -- there's always a way to go back.

Let's see. Inspections. Inspections to -- to assure that the data that is obtained is correct and reliable for future systems structure and systems, this is very important to us as I previously explained. It's like the foundation of the sand castle again.

Recently, down here this RS232, all of our inspections and our inspection manuals will be consistent with this review standard. This was just recently issued and -- and our guidance is and will be consistent in the future with that licensing standard. So, we're trying to say that our inspection forces are consistent with the licensing group and we're -- we're talking back and forth.

Next slide, Mike.

This slide primarily mimics the RS002. That's the ESP review standard guidance. We'll be going through the -- we -- we look at -- we -- we look at the methodology for collection, the -- the ology data. This is what I talked about earlier. I said the -- the hydrology, geology, and meteorology,

seismology, oncology, whatever else. Are there any other ologies? Not funny.

And all of this data again that we inspect has got to have some sort of quality associated with it and we call it a -- must be equivalent in substance to a quality assurance plan or quality assurance -- quality assurance program. How -- let me see.

And -- and finally, if we -- since -- since we don't have -- it's not required to have a -- an Appendix B program, what we're doing is any deficiencies that we find associated with a lack of quality in any of these areas we have to find that it's based on a lack of assurance with integrity or reliability of the information presented to us. So, I think that that's -- you know, that's without reliance on Appendix B.

Next slide, Mike.

See these -- these again -- these are the inspections and audits, you know, during this phase. There's -- we got a -- we got a bunch of them. The ESP quality assurance inspection, ESP quality assurance controls inspection and we're starting to do these things as we speak. We're preparing for them and we're going to be doing some of them next week.

What else do I have here? Yes, as I -- as

I mentioned before, these are -- we call them inspection procedures, but they're really meetings or audits or just the way we convey information to our inspectors. This is the vehicle. Inspections. Sorry for the terminology.

Let's see. Down here. We all know what the ASLB is. Does anybody here know what the ASLAB is?

Could you raise your hands? Are you guys just not participating in this. Who -- I mean how many people really knew what that means? There's look three, four. Three people out of the room.

How could you guys -- nobody asked me what the heck is ASLAB.

MR. CAMERON: Since you've raised that, Tom, maybe I see our -- our counsel having a little bit of a coronary over there.

MR. FOLEY: That's -- I --

MR. CAMERON: So, go ahead, Bob. Bob Weisman.

MR. WEISMAN: We --

MR. FOLEY: It's probably the wrong terminology -- acronym.

MR. WEISMAN: Yes, I think that this is a -- an outdated acronym. I believe it stands for

Atomic Safety and Licensing Appeal Board which we haven't had since the early '90s.

MR. FOLEY: It's still there. I mean I pulled this out of the regulations.

MR. WEISMAN: Commission -- Commission did away with that about 12/13 years ago.

MR. FOLEY: You know, Bob, you had a chance to review these slides. How come you didn't pick it up yesterday?

MR. WEISMAN: What can I tell you? I was -- I'm sorry.

MR. CAMERON: Maybe because the QA program is only an equivalent. I don't know, but go ahead.

MR. FOLEY: Well, it is. It's an Appeals Board, but that's like I said, you know, that's for only the old people. Let's -- it's hard to keep up with all these changes and regulations and things when you're -- you're doing this.

I -- I think that's it. Do we have another side, Mike? Mike, you awake over there?

Next slide. Yes, this is -- that's it. Do you -- now, come on. Could we have some questions about this and -- yea. Yea.

MR. CAMERON: Okay. Ben, why don't you introduce yourself to us?

MR. JORDAN: I'm Ben Jordan from Southern Nuclear.

I guess, Tom, we could take it from the top here. The QA issue in general for early site permits and, you know, with the reference to Appendix B, of course, Appendix B provides for a graded QA program based on the safety significance of the particular item that -- that you're addressing.

There's numerous types of data that are involved in early site permits. Some -- a lot of that information comes from other Government agencies, the Census Bureau and -- and others.

MR. FOLEY: Census Bureau. Right.

MR. JORDAN: And other as well who I'm sure do not have Appendix B programs --

MR. FOLEY: Right.

MR. JORDAN: -- for collecting that data.

So, you know, I -- I'm not clear on what the NCR's expectations are when they say Appendix B like stuff. So, is there a -- do you have a categorization like red guide 126 or something like that that categorizes the type of data and the type of QA controls that you're looking to? What expectations do you have regarding -- regarding this? Because this is sort of a -- a new -- a new frontier for us and I

understand with the three current applicants that are -- that are coming forward, there's a lot of confusion about what those expectations are and this is very troubling to us who -- who our plant -- company is now looking at a possibility of -- of such a venture and we, you know, we'd like to have a little bit more certainty in what we're facing here. So, could you comment on that please?

MR. FOLEY: I understand. Understand. We -- again, I've said before that our inspection group has been interfacing quite closely with a -- our licensing group and they've been interfacing really closely with our quality assurance group and there's one guy who's kind of the lead for this right now who can probably respond to your questions best.

Mike.

MR. SCOTT: I heard about four questions there. So, if I don't answer one of them, then asked me at the end. Okay?

MR. JORDAN: I probably left out about five, but go ahead.

MR. SCOTT: Okay. I'm -- I'm Mike Scott and I am in the New Reactor Section and I am responsible for the development of the early site permit review standard which Tom referred to as

document number RS002.

As Tom mentioned, it was released in draft form in December. We added a couple of other sections. One of which was quality assurance in -- in April of this year. We've gotten public comments on the document and we are now in the process of putting it back together and sending it up for management concurrence and ultimately Commission approval to be issued as a final document.

That document Section 15 of it speaks to -- well, I'm sorry. Section 17.1.1 speaks to quality assurance and to all of these issues that Tom referred to just now. For example, what do we mean by equivalent to Appendix B? In a nutshell, and the section provides a lot more information that what I'm going to give you here, but basically, we're not going to say that you have a problem because you didn't implement 15.a.2 of -- of Appendix B.

What we are saying is -- is Appendix B is a framework for the staff to us to go out and look at the quality assurance measures that the applicants are applying. If we go out and we find that the measures the applicants are applying are very similar to the type of things that are being asked for in Appendix B and in the review standards which was drawn from

Appendix B, then -- then we're okay with it.

If we find a gap or an apparent gap, then we look further into the information and as Tom mentioned, the reliability and integrity of the information to see if it holds water because of the 52.39 finality requirements that say that absent certain very limited conditions, we can't go back subsequently and revisit findings made at the SP stage.

So, we use Appendix B as a starting point, but we're not going to write an inspection finding that says that you didn't do Appendix B step number whatever and that's the end of the story. The staff has the burden of going out and identifying what the problem is caused by the fact that there is an apparently gap in the measures.

Furthermore, we're not requiring as -- as Tom mentioned an Appendix B program plan per se because Appendix B is not required and we've -- we're being very careful here with the words that we've used and we are using and OGC has been involved with us to make sure that we're not straying from -- from what the rules require here. We're emphasizing measures.

If you will, it's performance based. Is the data reliable? Can it be relied on in a licensing

proceeding? If the answer is yes, then the applicant is going down the right road. If the answer is now, then we have a concern.

So, that's -- that's -- in summary, I think answers a lot of the points you raised. I would recommend that if you haven't already done so, that you take a look at that 17.1.1 in the review standard and I think that will answer a lot of your questions.

Having said that, did I answer your questions?

MR. JORDAN: You answered it, but what I heard you say is it's going to be regulation by inspection and that's troubling. If there's some -- if there's some way that grade of QA could -- information in that -- in that particular document you're referencing is more specific, I think that would be a lot -- a lot more helpful to -- to us that are potential applicants.

MR. SCOTT: Can you give me an example of something more specific that you'd like to see?

MR. JORDAN: Well, I mentioned before, let's -- let's take the Government agency, another Government agency. What sort of QA controls do I have to impose on the Census Bureau data?

MR. SCOTT: Okay. And that is addressed

in the review standard. What it says is that information obtained from agencies such as that once the information is in-house at the applicant, then the applicant is expected to control how that material is handled. It doesn't seek to go back and apply Appendix B measures to that Census agency and I believe that is addressed in there.

MR. JORDAN: So, you're saying all I have to do is make sure I've got the right information from the -- from the Census Bureau. That's it.

MR. SCOTT: You -- you take the information that you get from -- and there are criteria for what is widely accepted information from Government agencies and once you get it in-house, then you control it appropriately.

I -- I don't have the exact words memorize, but it does address how you handle that type of information that comes from a source where normally you would not have expected that source to have quality assurance, at least Appendix B type quality assurance. It's -- it's in there.

MR. JORDAN: Okay. Thank you.

MR. CAMERON: This -- this -- obviously this document RS002 is an important critical document in terms of it's phase and the -- the IMC. Has this

document been widely available to the people for -- for comments? So that people are familiar with what Mike is talking about I take it.

MR. SCOTT: Yes, Chip, as I said, it was released for public comment. It's on our website if you go to the new reactor licensing website on the NRC's public website, you'll find a -- a page there for documents that have been subject to public commend and you'll find RS002 in there. You can find both the -- the draft document itself and the staff's responses to public comments received on that document. It's all on the website.

MR. CAMERON: Great. Thank you, Mike.

Eddie.

MR. GRANT: First a comment and then a question. As we heard on Monday, the devil is in the details and I think we're going to learn a lot more about how we're going to apply that equivalent QA over the next couple of weeks as the SP applicants have their meetings with the staff. So, that'll be interesting.

I would like to refer though to an -- one of the inspection procedures that has been issued to support Inspection Manual 2501 or Inspection Manual Chapter 2501 and that's inspection procedure 35002.

It's the ESP pre-docketing QA controls meeting and in that particular document, it indicates that there is a special reporting requirement section and it says it will emphasize the applicability of 10 CFR Part 21 reporting requirements to contracts for activities conducted prior to submission of the application.

That doesn't seem to jive with what we heard earlier or just a few minutes ago, in fact, about the ESP applicant or particularly pre-application.

Being just a member of the public which has really no controls applied to him, so, that's a little confusing. So, I'd like to hear a little bit more about the emphasis that's going to be indicated to the applicants and also, I'd like to hear some details regarding how this application or applicability was determined and I'd like to hear some words involved in that using Section 21.2 which is the scoping section of part 21.

MR. CAMERON: Tom, do you get the gist of Eddie -- Eddie Grant or the stenographer? Do you get the gist of Eddie's question?

MR. FOLEY: I -- I think so. We were talking about part 21 and I think there's an individual in the audience or two that are more

familiar with part 21 than I am in -- in writing that procedure. Either Mr. Dale Thatcher. Dale, are you back there? Who's the Chief of the Quality Assurance Branch or Section and -- and Mr. Ken Heck who has been a -- an off and on team member who has helped us with development of the -- those QA procedures.

Do either of you have any -- any -- can shed any light on this particular question?

MR. CAMERON: And Dale -- is this Dale? Go to the mike and -- and let's not forget the broader question too that Eddie asked on the front of the part 21. Specific question about the consistency of what we're doing with not putting controls on a -- on an applicant I think, but we can revisit that.

Go ahead, Dale.

MR. THATCHER: Well, I guess there's a number of questions in here. The inspection -- the -- the procedure you're referring to is the heating one. Right? Is that the -- yes, that's all I need.

MR. CAMERON: Has to get his reading glasses out. These glasses -- there's Eddie. You want your glasses. Okay. Terrific.

MR. THATCHER: You know, it's my view that part 21 -- well, part 21 is separate and --

MR. CAMERON: And, Dale, just make sure

you talk into the mike. I'm sorry. So, we get it on the record. Thank you.

MR. THATCHER: Part 21 is separate from Appendix B and -- and this -- this paragraph's referring specifically to Part -- Part 21. So, the -- the idea is although I guess this is -- if this is just a pre-application meeting, maybe there's a question of whether it -- it really can apply at that point in time. But, the -- but, the reporting requirements as far as we see if someone uncovers some -- some particular problem that may effect safety related equipment, it should be reported on the Part 21.

MR. CAMERON: Dale, are you -- you indicating that -- that maybe we don't need this reference to Part 21 in there?

MR. THATCHER: No, we actually do.

MR. CAMERON: Okay.

MR. THATCHER: Because --

MR. CAMERON: All right.

MR. THATCHER: -- it is not Appendix B. Is it a separate part of the regulation.

MR. CAMERON: Okay.

MR. THATCHER: We do have to cover that.

MR. CAMERON: Eddie, you have a clarifying

question.

MR. GRANT: Yes, follow up or clarification. Part 21 specifically refers to licensees and people who are constructing plants. An ESP applicant is neither. So, how can you apply 21 at this point?

MR. THATCHER: Well, I think the -- the application comes through Part 52 and is Jerry here? I'm not sure about the -- how it exactly gets -- gets opposed, but I think it -- it comes from the Part 52 process.

MR. SEBROSKY: Well, this is Joe Sebrosky with the New Reactor Section. Bob Weisman from OGC and myself were conferring.

For -- an early site permit is considered a -- a partial construction permit and it also allows limited work authorization. So, for purposes of the regulations and I -- I forget where it's stated, I -- yes, we don't have the regulations with us, but --

MR. GRANT: I do. I'd be glad to share it with you

MR. SEBROSKY: Yes.

MR. CAMERON: Glasses, regulations. Good thing you're here, Eddie.

MR. GRANT: No problem. One second.

MR. CAMERON: But, I -- I think that what Joe and Bob are saying is that Part 21 and the statutory authority for Part 21 are broad enough to apply it to a license applicant at the early site permit stage. Is that the bottom line, Joe?

MR. SEBROSKY: That's -- that's correct.

MR. CAMERON: All right.

MR. SEBROSKY: And if you -- the -- the -- that's something that we can certainly take a -- a look at, Chip, and --

MR. CAMERON: Okay.

MR. SEBROSKY: -- and see whether or not we need to fix that reference in the -- in the inspection manual. Inspection procedures.

MR. CAMERON: Okay. And before we -- we go to -- to George, Eddie, let's make sure that we answered all of your questions. Okay.

Do you have -- do you have anything else you want to add here or back to? You heard that we're going -- they're going to check the Part 21 authority which was one of your questions.

MR. GRANT: Yes.

MR. CAMERON: Is there other?

MR. GRANT: Well, just again a follow up or -- he referred to an LWA1 which allows no safety

related work by the way. So, therefore, Part 21 would be very difficult to apply to that and come up with any kind of significant deficiency.

Again, if you read through Part 21, it -- it applies only to licensees and, therefore, could not apply to an applicant unless we were doing some actual construction which we're not allowed to do under an ESP other than the non-safety related stuff with an LWA1.

MR. SEBROSKY: All right. I understand your point and we'll -- we'll take a look at it.

MR. CAMERON: And this may be something that we can clarify and come back with later on in a meeting or it may take more clarification I guess than that or more time.

MR. SEBROSKY: I -- I suspect that it's going to take more time and -- and research.

If you look at those inspection procedures that were developed for the early site permit, the inspection procedures were developed based on what we used for pre-construction permit in the Part 50 licensing process and we tried to take the analogous parts out of the Part 50 licensing process that we thought applied to the early site permit process and when we did that, we -- we may have done Part 21

incorrectly. We'll take a look at it.

MR. CAMERON: Okay. There's --

MR. BLAKE: If I could -- if I could comment, I'm Jerry Blake. My -- my background is in the area of construction and I've been around through the Part 50 process. I think if you will look at the information that is provided with an ESP application, you will see that some of the seismology and some of the testing that is done for safety related foundations, that most surely would fall under Part 21 and -- and as -- if -- if after the application were -- were in-house after it, the ESP was -- was granted, if the contractor who did that work found a problem, most surely we'd have to report it under Part 21. That's just my opinion as an inspector from -- pre-Part 21 and been around while it was -- went on the books.

MR. CAMERON: Okay. And we're going -- we're going to get a clarification on Part 21. So, far we've heard two major issues. One was the authority issue that just was brought up. The other issue was what Ben raised which is is there sufficient guidance in RS002 to an applicant to know what they're suppose to do on QA and others may want to follow up on that particular point.

George.

MR. ZINKE: I would like to -- to follow up a little bit on what the example that Eddie brought up. Because it is an example. As going through the ESP process and in reviewing through the new licensing efforts, the RS2 and the -- the framework document and the various NRC inspection procedures, the concern that we keep coming across is the -- the various NRC documents that seem to implement things that the staff wished were in the regulations or thought ought to have been in the regulations rather than being very disciplined in following what is in the regulations and the -- the Part 21 is an example, but it's not the only one.

As we go through, it's just -- it has seemed to us either rightly or wrongly that there seems to be a discipline lacking wherever that is in the process of making sure these documents are meticulously following the regulations and if something's needed that doesn't happen to be in the regulation, to change the regulation.

MR. CAMERON: Okay. Thanks, George, and we'll -- I think the implication is to that -- that -- that people will be providing as specific as examples as they can of that in their written comments perhaps.

Okay. Yes, and that was George Zinke. Right? All right. For the transcript.

Yes, sir.

MR. MUNDY: I'm Tom Mundy from Exelon. question on training for the inspectors.

I know during our ESP meetings the staff has stated that individuals that will be conducting these inspections at least from the staff will be trained in the new requirements in the inspection documents that have been prepared for ESPs.

I haven't heard though comments about the contractors that the staff intends to bring in particularly in the environmental area and to how you -- and to how you intend to manage and insure that they are as familiar as your in-house inspectors when conducting ESP related inspection activities.

MR. FOLEY: All of our inspections will be led by the regional personnel and these regional personnel are intimately involved with the development of the process. In fact, Chuck Paulk will be doing anything Region IV. Jerry will be doing everything in Region II and they will also be -- and I -- I myself will be on all the inspections.

So, we're trying to insure some consistency and rein in any contractors or personnel

like that to be -- confine them to exactly what our inspection procedures tell us to do which are -- are revolved or developed from the RS230 standard.

MR. CAMERON: And -- well, are you done, Tom?

MR. FOLEY: And -- and all of these -- the three of us and others are -- are ancient inspectors. We're all over the hill and dinosaurs, but we've had a lot of training in inspections and have been to fundamentals of inspection courses and we're very well trained in inspection and we'll make sure that any contractors are -- are well in hand.

Does that answer your question?

MR. CAMERON: I think that Tom Kenyan may have an important clarification to add. If not, we'll go to Jerry Blake. Tom.

MR. KENYAN: Yes, my name is Tom Kenyan. I'm going to be the Environmental Project Manager on the Clinton project and as such, I -- I just wanted to make a comment that since October of last year, we've been involved in -- in making sure that our contractors who are going to be working on the environmental review are becoming well acquainted with our -- our regulatory guidance, the ESR -- the environmental SRP.

As part of our effort to work on the document RS002, our contractors were involved in the development of the -- of the environmental clarifications that we were -- were included in that document and the people that are going to be working on it have been involved in -- in -- in taking a look at the environmental regulatory guidance that is out there now.

So, I just wanted to assure that since -- since you asked about the environmental reviews, our contractors are being trained -- have been trained and are intimately involved in -- in the development of -- of the regulatory guidance.

MR. CAMERON: Okay. And -- and to follow up on that point, we're going to go to Jerry Blake to remind everybody of there's -- there's two aspects to this.

MR. BLAKE: You know, I'd -- I'd just like to have everybody to refer back to one of the slides that Joe Sebrosky used. Slide 14 and I think at the time that Joe was going over this, he pointed out the fact that there are two phases to the ESP review. One is the safety aspect and the other is the environmental.

The environmental is a licensing review.

It is going to be done by the appropriate people in NRR with their contractors as necessary as a licensing review.

The inspections that will be conducted from -- with the regional support, are inspections of things that impact safety related foundation and those type of things.

So, just keep in mind that when we're talking environmental we're not talking inspections per se. It's beyond the scope of this framework document.

MR. CAMERON: Now, is that clear to everybody that last statement? Beyond the scope of this -- this -- this framework document. All right.

Russ. Russ.

MR. BELL: Yes, my name is Russell Bell. I'm with NEI.

I'd like to circle back on the quality assurance question that Ben Jordan started us on.

I was somewhat gratified to hear both Mike and Tom express that the staff would be focusing on the reliability, integrity of the information provided by the applicant. I think that's the right place for the staff as opposed to evaluating the -- the delta between say the quality assurance -- I'm sorry. The

Appendix B criteria and the quality assurance plan that the applicant is implementing.

But, just let me ask the question then, would the staff consider a deviation from Appendix B a deficiency that an applicant would need to address?

I'm seeing Tom shake his head no.

MR. FOLEY: I don't think so.

MR. CAMERON: Okay. Tom, can you just speak up a little bit. This is Tom Foley answering this question.

MR. FOLEY: I don't think with the -- well, I guess we better let, you know, Mike speak. Sure. Go ahead, Mike.

MR. SCOTT: Russ, I guess I'd have to refer you back to what RS002 says about that sort of thing and I believe in our comment responses to the NEI comments on that section of the review standard, we discussed it as well and it was along the lines of if -- if there's something in a particular applicant situation that is a delta between Appendix B and where the applicant is, then we will look into it further for that integrity and reliability conclusion. It all comes down to that.

Appendix B is the starting. The staff needs a framework, a reference point, something to

start with as -- as guidance, and if we find differences, deltas, then we will look further.

Does that answer your question?

MR. BELL: Yes.

MR. SCOTT: QA guys back there, do you want to add anything to this? Dale.

MR. THATCHER: Dale Thatcher of the Quality and Maintenance Section. I guess Russ' question was -- was direct to are we going deal with deviations from Appendix B specifically and the -- I don't think we're going to be speaking in those -- those terms because Appendix B is not required.

But, as Mike said, the reliability of the data -- something -- some basic premise or whatever you want to call principle of Appendix B seems to be missing and it's causing issues with reliability data, then we -- we'll be talking about not having reliable data, but not citing Appendix B.

That's my --

MR. CAMERON: Okay. Thank you. Thank you, Dale.

MR. FOLEY: Keep -- keep in mind here. There's no enforcement or anything at this point and -- and when we -- we just received the application. This whole ESP phase is simply to try to facilitate

getting a quality application in and expediting the process. That's what we're trying to do here and -- and we want -- we're trying to prevent -- there is some plant out west that -- that after it was half built that it just sagged and -- and there -- the -- the structure was cracking because of poor geology and things like that. So, we're trying to prevent that kind of thing from happening.

This thing is -- in my -- in my mind is a -- it -- it's a go-go situation for us, the licensees and the public. We're trying to work together and expedite, facilitate this process and get a quality product.

MR. BELL: Our quality's very important to us as well, of course.

MR. FOLEY: I'm sure it is. It has to be.

MR. BELL: The point is Appendix B is not the only regime -- quality regime that can arrive at quality results.

MR. FOLEY: We --

MR. BELL: It has been the -- the focus of the discussion.

MR. FOLEY: -- we recognize that. There -- there are other quality standards out there that might be perfectly suitable.

MR. BELL: My other question goes to -- and the staff is made clear again this morning. Not require submittal of the quality assurance program of an ESP applicant in their ESP application, but it's sometimes confusing as to whether that staff would request submittal of the quality assurance program through the RAI process or something like that.

And I -- I guess I'd like -- I seek some clarity on -- on whether you're going to just seek the program in a -- through another mechanism.

MR. SCOTT: This is back to that kind of sensitive issue about a plan per se is not required. We have to have enough information to assess the adequacy of the applicant's QA measures that support the integrity and reliability.

So, to the extent that the applicant does not choose to provide that information in the application submittal, then I believe the review standard refers to -- or no, actually, I think it's in our -- our responses to your comments on the review standard. Refers to the fact that the staff will address getting that information through RAIs and as supported by the inspection process.

Does that answer your question, Russ?

MR. BELL: Yes, I think it -- in my mind

that there's a fine line then between a focus on integrity and reliability of the data and quality measures underlying it. I can see -- I see the focus on quality -- reliability, integrity of the data.

MR. SCOTT: And that's where the focus is. That's -- that's the bottom line. That's what we're looking for.

MR. BELL: Okay. That'll --

MR. CAMERON: Okay.

MR. COE: Actually --

MR. CAMERON: Thank you, Mike.

MR. COE: Could I ask a question here?

MR. CAMERON: Yes, go ahead, Dale.

MR. COE: We've in -- in our history built over 100 nuclear plants and the standards of seismology, geology, hydrology, and meteorology that were applied to over 100 nuclear plants in 60-some sites, I don't think will have changed dramatically to today.

So, I'm curious is -- I'm -- I'm trying to understand the -- certainly we understand that the need is for predictability in the licensing process. That's what Part 52 is designed to -- to -- to improve. So, I'm -- I'm trying to understand what -- where is the -- where is the rub here. Is it -- is it

that the standards have changed? Am I behind the times here? As far as the -- the technical standards for these kinds of licensing decisions with regard to a site permit?

Given that -- that we all are seeking predictability I think in -- in this licensing process, I'm -- I'm just trying to understand better the industry's concern that -- that -- as I hear it that they'll be subjected to an unpredictable standard. Is -- is the standard really that vague based on our history?

MR. CAMERON: Good question. Let's -- let's explore that unpredictability and we also heard perhaps inconsistency with the regulations to which I'm going to get George up here to answer that question on predict --

MR. ZINKE: I'll try to answer your question. Over the last year and a half or more, we've had a lot of discussions with the staff on the applicability of QA and -- and we have moved a lot. You know, we started out a year ago that -- that we got various opinions not necessarily official but opinions that well, of course, Appendix B applies to everything and it started out it applied to environmental, too and -- and we overtime got a whole

lot better clarification. What does it apply?

In our opinion, it's not so much the -- the -- necessarily the standards have changed, but, you know, I -- I was involved in the -- the start up and construction of a -- of two nuclear plants and -- and what we -- what QA is today and what QA was 20/30 years ago is different and today, you know, we haven't make our submittals.

So, we've been talking in what I'd call the -- the theoretical and -- and a lot of rhetoric and where we ended up is we -- we disagree with some of the words that we hear coming from the staff and I think the applicants finally decided that, okay, it's not worth anymore arguing about the words and until we actually get into it and -- and we all see what we mean by our various words, then we'll know.

So, is what the staff intends fundamentally different that what it was 20/30 years ago? We're not really certain. We know the -- we don't like some of the words we hear, but maybe they do mean the same thing and maybe they don't. So -- so, that's why we're kind of looking forward to okay, we're going to move on.

We -- we -- we will still have these kinds of discussions where we may say we don't like some of

the words that we hear because we see they might be interpreted in a -- in a different way and might lead to more requirements. Certainly some of the words over the last year would have, but some of the words we're hearing now, well, maybe they are okay. But, so I'm not sure we can absolutely answer right now with assurance of is this different than it was a few years ago? Maybe/maybe not.

MR. CAMERON: Doug, what do you thing?

MR. ZINKE: Based on new people. Based on new people. Based upon our -- our understanding of the way things really did get conducted. You know, the -- the QA programs during the construction of -- of our plants that are out there was weaker than -- it was weaker than I -- if I was building a -- a plant right now, I would have stronger QA controls under the same regulations just because we know a whole lot more, but -- but, there were certain things that -- that we may have impressions existed 30 years ago that really didn't exist.

Okay. That -- that helps. Thank you.

MR. PAULK: This is Chuck Paulk. Just a second, George. A question for you.

Are you going to provide some examples of the words next week that disagree with or --

MR. ZINKE: What Chuck's referring to is Entergy is going to have it's meeting with the staff. That's basically the next step to say, this is our ESP project and -- and this is the quality controls we did.

Our intent for next week is to -- to just get down to the practical. Lay aside any disagreements on words or whatever and go through well, this is what the project looks like. These are the quality controls and -- and so, we can move into the okay, what do you need to inspect? What -- and -- and kind of move into the next phase and -- and we're figuring that once you have inspections and once you start looking at things and you see how all of this was done, then we'll end up having more discussions and we'll see whether or not we agree or not.

So -- so, next week, no, we didn't plan on discussing any -- anymore of we disagree with this word or not. We -- we just want to get on into the practical. This is what we did.

MR. PAULK: It seems to me that we -- it would be beneficial if we, NRC, or -- knew what words causing problems out there and where the -- the interpretations may be different of that. If you all can provide some specifics on that, I -- I think that

would be -- I'd greatly appreciate it.

MR. SCOTT: If I can interject here, I think we do know the words that are the problem. Don't we?

MR. PAULK: I mean we've made our comments in writing. I think the -- what we don't know is well, now, how does that translate into what's really going to get done. Because once we start getting to real inspections, well, some of the language is going to automatically change. Because you're -- now, instead of talking about seismology, you're going to talk about well, this sample and what did you exactly do with it and we'll understand what the -- those words really mean.

MR. SCOTT: Right. I believe that NEI's comments on Section 17.1.1 of the review standard largely addressed the concerns and the differences of opinion and interpretation that have been out there. Wouldn't you agree?

MR. ZINKE: Yes, and -- and there's been like some discussion here of we're -- we're concerned about well, is the emphasis on program elements or do you really not have a deficiency until there's -- you find something wrong with the data that was related to -- to -- to some program element that was there or not

there.

MR. CAMERON: Okay. Thank you, Mike and we have one -- one other comment back here and we will move to a break shortly. Give people time to get some coffee or whatever. Okay. Do you -- go ahead, Ben, and then we'll go to the gentleman behind you.

MR. JORDAN: Since I sort of teed this up -- this QA issue up to begin with, I guess I want to go back to Doug's comments.

QA has evolved over the last 30 years quite a bit since we built. I mean we have new technology, new information management ways of -- more robust QA programs. All of -- there's also new standards and -- and new expectations that -- that come out of -- of those -- of that maturity in -- in both the NRC as well as ourselves.

There's also new standards we're having to address. Appendix S for seismic is a very onerous standard to address for -- for seismic that we're having to address as opposed to our old current, current plan. So, there's -- that's part of the technology and methodology changes that we're having to address there.

But, my -- my question originally to -- to Tom was is -- is -- is it clear and I guess I'm

hearing from Mike. It is clear in this -- in this RS002 how to characterize QA expectations for early site permit data. Now, that's what I heard Mike say. So, again, I am not -- I am not an applicant at this point, but that's my concern. Is -- when you tell me you're going to address these gaps, well, you said there shouldn't be any gaps if I know what the standards and expectations of the NRC are. That's my original point that I wanted to make. The question I had.

MR. SCOTT: I have to put in a caveat here. I believe that the guidance addresses the points that you have raised so far. I can't be sure since I don't know what your other examples are that it addresses everything that you might have concerns about.

The guidance in RS002 closely resembles new Reg 0800 guidance related to QA measures. Now, we changed the information in there to address the different regulation and the fact that the information is different. So, it's not the same, but if you know what, and I'm sure you do know what new Reg 0800 says for QA. You know similar level of detail will be found in RS002 and that's probably the best I can address that.

There -- certainly the points you raised about use of Government information, that is addressed in there. That's probably the best assurance I can give you on that.

MR. CAMERON: Okay. Let's go to Eddie Grant and then --

MR. GRANT: Eddie Grant with Exelon.

Try to address Mr. Coe's statement and Mr. Paulk's request for examples.

One thing that hasn't changed over the last 30 years is the difference between a design input and a design process and how those are treated with regard to Appendix B or Appendix B like controls and what we're seeing is that these discussions on seismology, hydrology, meteorology, demography, and all of those types of things that are addressed in our safety reports for ESPs are being treated as design process.

We do not consider them to be design process. I think that is one of the major differences. We look at these as design inputs and that the appropriate level of quality controls is that level appropriate for a quality design input rather than a design process.

It -- it will be a while yet before we

will hire designers and turn them lose with the various design inputs and say go design this plant.

So, therein is our -- our major difference.

MR. CAMERON: And, Mike, a comment on what Eddie said.

MR. SCOTT: Yes, I just would like to say again we are focused on the integrity and reliability of the information that will support reasonable assurance that system structures and components important to safety will perform as designed.

So, to the extent that site information impacts that reasonable assurance, then we need to have the integrity and reliability of the data. That's what we're focused on.

MR. CAMERON: All right. The most -- gentleman in the world. But, go ahead.

MR. MUNDY: Tom Mundy again from Exelon. Just to follow up to George Zinke's comment. Just to put a commercialization spin on the aspect of quality. I recognize that an applicant that intends to contract to have its application prepared by another party and contracts with that individual to prepare the application not under an Appendix B program, the cost difference associated with retaining somebody to do

work under an Appendix B program and not can be quite substantial.

The dilemma then becomes if you retain that party under a non-Appendix B program, are you doing it in a manner that "the staff would consider equivalent in substance" and then are applying rigor that results in unnecessary cost and burden and that's where the uncertainty lies.

Be very simple in this case to retain and prepare under a full Appendix B program. But, is that necessary? Is the cost and whatnot associated with that necessary?

Secondly, if you do contract with a party that does not have an approved Appendix B program, that opens up or at least in our case, we found that there are many very suitable contractors out there that can do work associated with the preparation of an application that don't necessarily have an Appendix B program and we wouldn't want to exclude them from our evaluation as a potential candidate to do that work just because they don't have an approved Appendix B program.

MR. CAMERON: Thank you. Any comment, Mike, on that?

MR. SCOTT: I guess I would say in

response to that, of course, they're not required for purposes of early site permit to be Appendix B. We don't require that. It's not required by the regulations. I'm going to sound like a broken record here, but we're going back to the integrity and the reliability of the data.

So, the staff will look in the inspection process, get the work done by the applicant's contractors and the applicant themselves for integrity and reliability of data.

Appendix B provides a staff long history of -- of guidance for this type of review. So, the staff will use Appendix B as interpreted in RS002 as applicable to ESPs as a starting point, but again, we're not going to write a finding based on your contractor is not Appendix B compliant.

You won't see those words. We're not going to focus on Appendix B. We're going to focus on the integrity and liability of the data.

I'm sorry to be so repetitive, but that's really where we're going with this.

MR. CAMERON: Okay. Yes, sir.

MR. QUINN: My name's Ted Quinn and at first, I just want to recognize the staff and Chip for having these meetings. I think it's very important

that you discuss generic issues within a month of embarking on this new course that you should be receiving these docketed applications and I think it's good. I hope you continue these sessions.

I'd like to reenforce the issue of training for your staff. I think it's real critical that you discuss the ology issues and I hope you have seismic and other experts on your staff that are -- that are being trained and use example from some past experiences in the application license renewal and others that are -- that are occurring.

I think -- Doug, just a comment back. You said that this has been applied in 30 years to 103 sites. Well, I just -- I -- I think one of the comments was in seismic, for example, is -- is new and all of us are learning on that issue and others.

My question really has to do with RS002. I've heard a number of issues with this issue of graded approach or QA. There's another issue that regards the PPE process and -- and that is -- and it's expectation on the staff and industry and I see a delta and I just want to make sure.

As I read RS002, it looks to me it's written specifically towards receiving a design for a DC type application of a specific design. That's --

that's not what I believe is -- is the process going forward.

The PPE process addresses generic bounds for multiple designs and -- and I hope that the RS002 process and I'd like your comments will address looking at PPEs and I'll give you an example. What Jerry mentioned about and there was a bullet up there. I think looking at base mat or looking at the construction process that applies to foundations. Am I correct?

I need to make sure that it's clear that if the PPE process doesn't address a specific design and doesn't have a base mat design that is presented to you to learn or to look at so that you can compare it with your past experience, that you -- you understand the acceptance criteria. It's clear to you what acceptance criteria you're going to apply to those PPEs. Is that clear?

MR. CAMERON: And -- and, Ted, could you just spell out that acronym for us for people who don't know? The PPE.

MR. QUINN: Plant parameter envelope --

MR. CAMERON: All right.

MR. QUINN: -- I believe is the -- is the correct term.

MR. SCOTT: That's -- that's correct. Yes, I'd be happy to address that.

When you refer to the review standard not addressing the PPE concept, I presume you're referring to the December '02 draft that was released for public comment because that's the only one that's out there.

They -- that draft says that the staff is -- is -- is discussing the PPE issue with the industry at the time that that document was published and that when the document RS002 is issued in final form, it will more fully address the PPE concept based on the results of those discussions.

On February 5th of '93, the staff released a letter to NEI which contained the staff's positions on use of the PPE and basically said the use of the PPE concept in -- in -- in an ESP application is acceptable under the following considerations and I believe the letter also said that we would subsequently include that information from that letter and additional guidance in the ESP review standard.

In March, we got comments from NEI on that same subject and comments from two of the three perspective applicants. They all discussed PPEs I believe and the staff responded to those comments.

Those -- the responses are available on

the website. If you look there, you'll see it's sort of an affirmation that we agreed in our letter of February 5th that the applicants may use PPE and we will provide guidance in the review standard to allow that. For example, there is language in the review standard that refers to the applicants specifying the number and type of reactor plants to be put on the site. Well, wherever those -- wherever that phrase appears in the review standard, in the new -- in the final review standard, it's going to say or as defined by an applicant's PPE or words to that affect.

So, we are revising the review standard in -- the -- the draft that we have now to address the PPE concept.

We had attempted in the initial draft to pretty much deal with where we found design information being inappropriately required and mostly that was a result of starting from new Reg 008 as a basis of developing the review standard and in reviewing it, there were some items that were maybe somewhat subtle and were missed.

NEI and the applicants made comments on those and the staff responded to them indicating that we would remove or as appropriate caveat that type of request for information.

You'll find some part of the review standard contain information that's appropriate for the COL combined licensed stage and we've attempted to clearly identify that as such. To sum up, I believe you will find in the final review standard that we have adequately addressed the potential for the applicants to use PPE. We've said it's -- it's acceptable to use it and here's what the staff's going to be looking for in terms of acceptance criteria and what our perspective findings would be in a given section regarding -- regarding the PPE concept.

Now, clearly, the final review standard is not on the street yet and won't be for a number of months. But, if you look at the staff's responses to NEI and applicants' comments, I think you'll find our position is fairly clear and it's consistent with what you were saying, I believe, in your comment.

Does that -- does that answer your comment?

MR. CAMERON: Let's get one follow up here from Ted. Go ahead.

MR. QUINN: Will the industry get to comment on the final before or is it just going to be issued?

MR. SCOTT: The final ESP review standard

incorporates the industry's comments to the extent that we said we would incorporate them in our responses to those comments. So, unless the document is to be revised again for significant other considerations, no, there would not be another public comment period, but again, we're on record in our responses to the comments as to where we're going with this.

MR. CAMERON: Okay. Thank you, Mike and thank you, Tom.

I have approximately 10:30. To give you enough time to get coffee and whatever and we'll go to Bob before we break. Why don't we take 20 minutes? Okay. And come back at approximately 10 minutes to 11:00 depending on how long Bob is going to go.

Bob?

MR. WEISMAN: I just want to add a -- a footnote to the QA discussion. You know, lawyers are fond of footnotes, but as Russ Bell mentioned on Monday, the whole point of this is that the NRC has to make certain findings to support issuance of -- of an early site permit.

This information that we're talking about is the basis for those findings and if they're not appropriately -- they don't have appropriate integrity

and reliability, how can the NRC then use that information as a basis for the findings.

That -- that's the whole point.

If we've got appropriate reliability and integrity to the data, then that will allow us to make the appropriate findings.

That's just my footnote.

MR. CAMERON: Probably a good time to take a break.

So, take approximately 20 minutes and we're going to come back and -- we're going to go into the next topic which Jerry Blake is going --

(Whereupon, at 10:33 a.m. off the record until 10:53 a.m.)

MR. CAMERON: Okay. Good. Russ Bell is back with us. So, I think we have pretty much everyone here.

One -- one announcement is that when we break for lunch, after everybody leaves for lunch, the elevators out here are going to be blocked off until about 10 minutes before we have to come back.

So, if you need anything during that lunch break, take it with you because you won't be able to get back in here.

Is that correct, Joe? Is that --

MR. SEBROSKY: Yes, that's -- that's correct.

MR. CAMERON: Okay. And before we go to -- to Jerry Blake to talk about IMC2502, Tom Foley wants to give us a little clarification on this.

MR. FOLEY: It's -- it's important to recognize that IMC2501, the early site permit that we just talked about, that is the only inspection guidance that is currently issued to our inspectors. The following topics 2502, 3, and 4 by Jerry, Joe, and Jimmy, those -- they're -- we're -- we're working as a team to develop that guidance and it's really in its infancy right now. So, but recognize that only one of these inspection programs have been really implemented. That was Jerry here.

MR. BLAKE: Well, good morning. I'm -- I am as they said Jerry Blake. I'm with Region II. Title now is Senior Project Manager, but my background is -- I came to work in 1975 as a Construction Inspector and went into Operations Inspections and now, I am writing programs. I'm involved in this one and I'm also involve with writing inspection procedures for another division, the MOX facility that's being constructed in -- in Region -- or there's an application in for construction of it down in

Region II.

Let's go to the next slide.

The concept for inspection procedure 2502 is generally like I say it's a concept and it's to support licensing. I -- we're going to talk about the -- some preapplication QA reviews, application review, and -- and then the Construction Inspection Program Information Management System will be discussed later. I put it on the slide just to -- as a placeholder and to put out -- point out the fact we planned to have some type of an inspection management system in place when an application comes in so that we can capture the inspection information that we gathered during the application review and carry it along with us to the final approval for a fuel load if need be.

Next slide.

We look at -- we've looked at what kind of inspection support would be necessary for supporting the approval of a -- a combined license. We looked at -- and we had to -- we had to go back to the history of how things happened in a part -- two-part license. Part of it is the application review where we may require inspection report -- support to support the reviews.

In the SERs, some of you that were

familiar with the two-part license, you saw the -- some of the SERs came out with a construction permit that -- that had statements in it to the fact that things would -- some things would be verified later by inspection. Those are the type of things that we envision will be handled by inspection during the course of the license review so that there won't be those lingering questions after the licensing.

And once again, it's -- it's -- it's all put together to support the Safety Board hearing prior to the license.

Next slide.

In support of the NRR reviews, we will have QA meetings with announced applicants similar to what we are having with -- for the ESP application and we also have the added burden of the fact that if an applicant chooses not to come in with an early site permit and go with a green field site, then we're going to have to roll some of those inspections -- this inspection procedure as -- as well as referring back to the 2501 inspections.

We envision that we will be looking at the implementation of these QA controls through review of what is being submitted, once again what is -- what is supporting submittal and we're also as we did with

2501 envision meetings with public and local officials.

Next slide.

One of the larger areas that 2502 will cover are some areas of design inspections, engineering design verifications, first-of-a-kind engineering, operational programs, design acceptance criteria, and limited work authorizations.

Go back. Engineering design verifications, during the last generation of inspections, there were some engineering design verifications that were done rather late in the construction period. One of the lessons learned from that is to do them early and make sure that -- that the design is being translated into -- into documents that can be used to basically construct and test these equipment.

First-of-a-kind information -- first-of-a-kind engineering, that's a commitment that was made in early -- mid-'90s where we committed to doing a thorough review of the engineering -- the first-of-a-kind engineering for first of a particular design.

The -- skip the next one. Go to design acceptance criteria. If you'll look at the -- some of the approved designs that we have on the books on

right now, there are some things that -- we have placeholders and it was an agreed upon placeholders called the design acceptance criteria. We refer to it as the DAC. Without knowing when these things would be -- would be -- when an application would come in, when things would be built, there was no way to write a specific ITAAC that would describe something that the control room instrumentation. So, there is a DAC put in place that said the control room instrumentation would provide certain types of -- of indications to the operators, certain types of things that they could respond to.

We would expect that when an application comes in at least the majority of that should be identified as to what instrumentation would be in place. In which case, we could take care of inspecting that as part of the licensing review and take -- and meet the design acceptance criteria as -- before the license is reviewed.

Operational programs are put in there as a concept for this procedure because as we discussed Monday, there are different types of programs. Even the industry has -- has indicated that there are some programs that they will have as a part of their application. Inspection of those would be part of the

licensing review.

Anymore discussion on that is probably going to be -- have to be held until we settle the issue of where we're going with the operational programs. That was part of the discussion and it's part of the commitment we have to go to the Commission in March of next year.

We have to cover the area of limited work authorizations of areas. That allowance in the regulation similar to what we had in -- under Part 50 license where once the environmental issues have been agreed upon and have gone through the necessary hearings which would be covered under an ESP review, then an applicant is -- would be allowed to do work that involved non-safety related structures. That is clearly land, building roads, and to the point of erecting some structures, offices, warehouses, what -- whatever that were not safety related.

The purpose of this is to make sure that we do inspections to insure ourselves that the applicant is living within the regulation and that they are not going beyond what their site -- what they had in their license as to what they could do and -- and still be reverse.

Between the time when they have the

mandatory hearing for the COL and the -- and the license is -- is issued between the Hearing Board determinations that there are no more safety questions on certain aspects of it, the license -- applicant could apply for and get permission to even start some safety related foundation work. That is excavating areas for safety related building. Things like that.

That was referred to as an LWA2 under the Part 50 license and it's still an option that's available under Part 52.

And that -- as I say, that's kind of a concept of where we plan -- the topics we plan to cover in this inspection manual chapter. Covers quite a wide gambit of things and as I -- as Tom pointed out, we're in concept here and we'll be -- going be working this -- over this the next couple of years.

Questions.

MR. CAMERON: Let's go over and then we'll go over there.

MR. BELL: Thank you. It's Russell Bell again with NEI.

More than 18 months before the staff published their framework document, NEI provided the staff -- we call it a draft white paper. That covered many of the same topics. We hope the staff found it

useful, informative reading and we've have public meetings before we submitted that and after on -- on these topics and one of the things we've discussed is the engineering design verification described in the paper and there's a few pages that are -- in some of the cases, our white paper went into more detail than the framework document.

But, on engineering design verification, I'd -- I'd like to just see if you could elaborate on the staff's thinking in a couple of areas. Our -- for instance, our white paper talked about the -- the objective of the engineering design verification with respect to verifying consistency with the -- the tier one, tier two design. That staff might use familiar methods such as vertical slice audits to perform these -- these verifications.

We propose -- it's a significant milestone and the paper proposed that there might be a -- a Federal Register notice or some other visible closure mechanism for when staff is satisfied with the engineering design process and that they're -- they're engineering design verification was complete.

We -- we suggested that the scope might include engineering processes such as that the staff might review at this time. You know, EQ program,

seismic design, fire protection design implementation, separation, configuration management and we also stressed the distinction between this aspect of the staff's inspection activities, engineering design verification, and the ITAAC process. The important distinction between those.

On -- any -- I know I just threw out like five or six areas, but on any or all of those, Jerry, is -- can you elaborate beyond what's in the framework documents and your comments today? Again with regard to objective method, closure mechanism for the milestone and --

MR. BLAKE: As I -- as I did state, the -- a lot of this is still conceptual and -- and if you'll notice, in the framework document, I believe it's on page 10 of the framework document where this is discussed, we did bring into -- into the document an example of what type of inspection we envisioned going forward and that was -- there's a manual chapter that's still on the books, still -- you can still reach it through the website.

It's Inspection Manual Chapter 25-30 which was the model that was used for integrated design inspection program.

As I said before, these were done rather

late in life on some of the plants. Where it was more of a two-part inspection or we did design and then we went to the -- to the field and -- and verified the field change process also.

What the model is intended to imply is that we tended -- we want to do that type of a thorough design where we select a sample, a vertical slice, and in some cases or -- or a horizonal slice at a particular location where you have -- may have a contractor doing a similar type design on -- on several systems. That we haven't decided. You know, that -- that will be probably part of the -- of the form -- the final design, you know, procedure.

But, the idea is to do enough inspections that we can -- we can show that the design concepts that were in the approved design are being translated into, you know, there is a traceable translation down to the working documents for the installation of the -- of the equipment and at some point, I'm -- I'm -- you know, there may be a possibility that some things are already being fabricated in -- in off-site locations. There may be -- some look at field change requirement.

But, we're looking for making sure that you're -- you're design process is holding true to the

approved design.

MR. COE: Could I ask a clarification question? I'm -- I'd just like to understand a little bit better your -- your thought about closure. Because what -- what Jerry has described is a sampling process and what was earlier described in terms of the Part 52 licensing process was -- was acceptance of -- of the -- or -- or verification that ITAAC had been completed.

My working assumption all along has been that these types of inspections disappoint me and later through the process would ultimately be closed by the staff's acceptance of the ITAAC or assertion to the Commission that the ITAAC had been met.

Do you mean anything different?

MR. BELL: Yes.

MR. BLAKE: Let me -- let me take a shot at it.

MR. BELL: Yes.

MR. BLAKE: You have to back up and look at what the purpose of 2502 is. 2502 is -- is the inspections that we feel necessary to support the granting of the license. It has to -- more to do with assuring that -- that you are ready to meet the details of your license. That we have assurance that

-- that your design -- you're maintaining the design through the design, you know, down to the details of the design.

When we get into -- once -- once we -- once you have the license, then any design inspections in that would be handled under support of ITAAC verification which would be -- is -- is handled under a separate manual chapter. But, keep in mind that what we're talking about here is inspections to support granting of the license.

MR. CAMERON: Do you want to respond to -- also to Doug's question?

MR. BELL: I think if -- if Doug's satisfied with that answer, I -- I think I would be. It reflects the distinction I -- we consider very important between engineering design verification and -- and ITAAC and that the purpose of engineering design verification is to -- for the -- the NRC to have assurance that the detail design is consistent with that which was approved in say a certified design referenced in -- in the license and that you like -- your point is you'd like to have that assurance as part of your COL -- as part of the consideration of the combined license.

MR. BLAKE: Right. And there -- and there

we have to also recognize the fact that -- that there's more to the application than -- than an early site permit and approved design. We have the site specific interfaces. What kind of design you have in the area of service water, ultimate heat sync and -- and the interfaces in that respect. Those could come under this -- this type of site design or engineering design review if it's necessary to support the -- the license review.

MR. CAMERON: Doug.

MR. COE: Yes, Jerry -- Jerry correctly refocused. I had made an unstated assumption here and the unstated assumption was that these kinds of inspections whether we call them engineering design verifications or something else would in one form or another could -- could occur throughout the entire construction inspection process.

Jerry correctly points out that what we're talking about right here is that -- that leads up to the COL decision and -- and that I think provides at least some measure of closure from your perspective, but from my perspective in terms of have the ITAAC been adequately met, I would envision that the -- the possibility anyway that certain engineering design issues may arise after COL is granted and through the

construction process at which time we would raise those issues and -- and they would be adjudicated prior to our assertion that the ITAAC had been met and that the closure then -- the final closures comes with that final assertion.

I think that's still consistent with what Jerry said.

MR. CAMERON: That seems -- Russ, you seem to -- to agree with that. I just would ask you Doug about your use of the word adjudicate.

Did you mean that as the only way that those issues would be closed?

MR. COE: Not -- not in a legal sense.

MR. CAMERON: Okay. Good.

MR. COE: Only -- only that the issues that were raised in a -- yes.

MR. CAMERON: I just wanted to make sure that people understood your use of the term.

MR. BLAKE: And -- and as far as -- as closure on -- on the -- you know, the ultimate closure as I -- as I indicated is if the COL is granted or denied, but as far as the design inspections themselves, based on current practice with our inspection program of the operating fleet, all inspection results and reports are put on the website.

They're there for public review. We -- we plan to go forward with that. There's full expectation that inspection reports will be on the website, will be open for review and -- and results clearly -- clearly written.

MR. BELL: I might just try and seek one clarification and that is while I think it would be ideal if the NRC could complete its engineering design verification prior to COL, I don't think that that is necessarily required.

I think Doug correctly mentions that some percentage of the design detail may not yet be complete even at time of COL. But, at COL, the important thing is that all the safety issues associated with the design are -- are resolved.

Now, that should be the case because of a reference to a design certification for which all the safety issues associated with the standard design were resolved years ago. COL review would focus on site specific design and -- and address those, but I think it would be ideal if the engineering design verification of the detail designs consistency with the tier one, tier two type information. That would be ideal to complete at COL, but -- but not -- not necessary require it.

MR. CAMERON: Do we have anything to add up there?

MR. BLAKE: I would -- I would like to comment just conceptually. I -- I agree with you that there could be some areas of the design rather important to us that would not be completed by the time we issued the COL, but I would expect that there would be -- in an ITAAC, there would be the design acceptance criteria that you hope to meet in a form of a -- in an ITAAC in which case we would -- we could go later at the time when you're completing that such as a control room instrumentation or something like that when we would go forward with a design inspection to verify the design process by which you're meeting that DAC.

Does that answer the question?

MR. BELL: As we understand it, I agree with you, Jerry, that design acceptance criteria, the main control room, would not have to be resolved at COL. That would be terrific, but it -- it could remain, but then that -- that ITAAC or DAC requirement would follow along with it.

MR. CAMERON: Right.

MR. COE: Just one final thought. One area that is particularly worrisome to me is the --

how -- how we're going to do the design verification or assure the design acceptance criteria were met in the technical area of digital safety instrumentation and control systems which I believe for the new plants will be a fairly integrated system. Essentially, the brains and the nervous system of this -- of the entire plant.

And because of the rapid evolution of that technology because the design acceptance criteria are written at a high level and because the design implementation can be conducted in numerous different ways with numerous types of software and hardware, this remains a real challenge, I think, for the staff and for the industry to come to grips with a final assertion at the end of the game that design acceptance criteria at the plant can be operated safely given the system that's been installed.

So, I -- I only offer that as -- as, you know, it doesn't require an answer, but it's something that we -- we do definitely need to work on and we need to be disciplined in -- in -- in how we approach that.

MR. CAMERON: Okay. Let's go to this gentleman over here.

MR. GORDAN: Hi. Scott Gordan with MSS.

As a lot of these concepts are new to me, but it's good background to have.

I was curious where -- whether it's this phase or possibly the construction phase, but where the verification for the design and quality of equipment built at vendor locations, where that is going to be and how that'll be addressed and checked for design acceptance.

MR. BLAKE: Well, in looking at the framework document, we have -- we have conceded and -- and acknowledged the fact that probably future constructions -- we've heard numbers such as like 60 percent of -- of things that were historically done from scratch on-site will be done off-site in modular fashion and shipped to the site and put together.

So, we're trying to -- and this will be discussed in the next manual chapter as how we plan to -- to look at construction of that. That doesn't keep from the fact that the design parts of that that are important to the license will either be inspected during the license review phase or they will probably be a design acceptance criteria in an ITAAC as a placeholder for a later review.

MR. CAMERON: Joe, do you want to add to that and then we'll see if that answers Scott's

question.

MR. SEBROSKY: This afternoon when we talk about ITAAC, one of the things that we bring up is modular construction and -- and we talk about a process that we kind of invented to -- to address that issue -- that -- that specific issue. So, we'll talk about that in a little more detail this afternoon.

MR. CAMERON: Okay. Is that okay, Scott?

MR. GORDAN: Yes.

MR. CAMERON: All right. Russ, you have another question meant for us?

MR. BELL: It concerns the sharing of construction schedule type information and just point of order is this be a -- an appropriate time to ask that. This is the phase of process where I think that information would be exchanged.

MR. BLAKE: I -- I think we would -- we would like to hold that question off until after we have the discussion on the -- the construction -- well, I had it on -- on one of the my slides. The acronym is CIPIMS. It's the Construction Inspection Program Information Management System. We're going to get a -- a discussion right after lunch from Carl Konzman as to what that is, how that plan -- we plan to use that and as you'll see after you hear from him,

we're -- we're planning to put -- feed instruction schedules and results into that -- in that program.

It'll be much clearer after Karl talks.

MR. CAMERON: Okay. Great. Thank you, Jerry.

Joe, do you think that we can -- we can do your part -- your presentation before we -- we break for -- for lunch and then start with Carl?

Because we just took a break about a half hour ago. If we need to break for lunch at 11:30 because of people's schedules, then let's do that. It's up to you.

MR. KONZMAN: We can -- we can probably start it and come back to --

MR. CAMERON: Stu, do you have any thoughts on this?

MR. RICHARDS: I would guess this session's going to take awhile. For lunch and --

MR. CAMERON: To start after lunch?

MR. RICHARDS: Yes.

MR. CAMERON: All right. Okay. Let's start back at 12:30 and if you need anything out there on your lunch break, Eddie, take your glasses with you. All right. 12:30.

(Whereupon, the meeting was recessed at

11:27 a.m. to reconvene at 12:30 p.m. this same day.)

MR. CAMERON: All right. Our first presentation is going to be on something called the Construction Inspection Program Information Management System. We have Carl Konzman with us.

And -- and, Carl, if you want to use this to -- you know, you want to walk around.

MR. KONZMAN: I can go ahead and just walk around --

MR. CAMERON: All right. Here you are.

MR. KONZMAN: Hi. How is everybody doing this afternoon?

We're -- we're here to talk to you about Construction Inspection Program Information Management System.

As we decide to move forward and build new reactors, there comes into, you know, question integrated scheduling, traceability, and auditability of the inspections that -- that occur and verification of the -- the various ITAACs are associated with the different construction -- construction activities that will occur on-site.

What we've done is -- I'll just go on. I know. You see, I have like a sticky note on it. It's the -- it's the fail safe. It always works.

One of the things that we're shooting for, and you may say I'm from the planning and management analysis staff. You're saying why is there a work planning guy who's the IT sort of guru type guy up here talking to me about nuclear stuff?

Well, one of the goals at work planning was to integrate NRR headquarters and regional activities integrate the scheduling at some point in time and oh, thank you and one -- one -- so -- so, some of the challenges we went through is we realized that, you know, we're going to have an NRR project manager in charge of this thing. This is -- this is like -- a lot like what we do today in our daily scheduling work license amendments and renewals and there will be a regional project engineer on the -- on the construction site.

A lot -- a lot of that -- a lot like how we schedule our work is predicated upon scheduling early and scheduling often so we can determine the resource commitment and -- and requirements. So, a lot of the preapplication scheduling and workload forecasting has to be done up front. That's -- that's a lot of what CIPIMS is designed to sort of accommodate as we're bringing in these schedules.

One of the other issues as I was saying

before is we need to be able to collect, record, and retrieve inspection information and we have to be able to do that in a fairly dynamic environment as -- as the construction site is evolving and like I say, we want to be consistent with the planning and scheduling of NRC and headquarters activities.

So, one of -- one of the challenges that we had is we had to say how do we leverage, how do we take -- what type of schedules do the licensees work with? So, we went out as part of a work group and we -- we talked to Bechtel and Westinghouse and the other major player and said what are you using to do your scheduling? They said well, typically we use Primavera. Said, okay, we can interface with that. We need to be able to not be a critical path item to your -- to your construction inspection activity.

So, what we did is we sat there and we said given the tools that are currently in use, how do we facilitate an interface that allows us to do, you know, pre-schedule the work and forecast workload, report and retrieve inspection data and insure consistent planning of NRC headquarters regional activities.

What we -- what we inevitably came down to is we said well, it's very difficult for us to do

because we really haven't done this. We don't have any practical examples.

So, what we -- what we did is we -- we went into a merger with the Office of -- Chief Information Officer and we piloted this technology here in the office space. Said there's not a lot of difference in the schedule information that we collect today, the license amendments, et cetera that, you know, that we're going to collect in the inspection. We just -- they're simply items in a schedule, but different -- different heading.

So, we put the things in place. These are the tablet PCs that we're projecting giving to the systems inspectors when they go out there. The ITAAC inspectors and the idea is that each one of these tablets will carry the complete construction inspection schedule and they'll be able to see based on a -- a chronological order those inspection activities that are coming up that are relative to ITAAC and we're going to actually go ahead and I'm going to hook the tablet up real quick. A brief glimpse of the interface and talk about -- so, you can see how -- how this might relate.

MR. FOLEY: We haven't -- we haven't tried this before. So, you can just imagine the rest of

this presentation's going to go right down the tubes. We won't be able to get our program back. Don't -- don't try this at home.

MR. KONZMAN: This is typically what we call the little dipper and the little dipper stands for a division planning representative. A division planning representative for all extensive purposes is the equivalent of the inspector in the field. They'll be looking at things.

Our techs look at -- check the status of open TAC. This interface will essentially be a list of ITAAC -- of construction activities and related ITAACs to be inspected. The sort by column in this case is a different reviewer. This could be the inspector with the relative skill to conduct the inspection or could be, you know, the inspector who is assigned at that case.

What we try to do is say you may not -- that's a big list. You may not want to look at everything. So, we say well, how -- how do go and do -- do this so we can select a couple key and relevant items?

One of the things we do here is we have a thing called the sticky note. So, the inspector can go out during the day and they're listed

chronologically and the inspector can select on his sticky note the particular activities that he wants to do and so, he can bring them up and he really -- and he relatively quickly rings up the associated detail with an activity.

Now, this -- in -- in the case of the CIPIMS system, this will be the inspection procedure that the inspector will be following and the -- and the related ITAAC guidance. So, he'll be able to click on something and bring that up and he'll be able to indicate completion.

Now, one of the things -- like I said, we saw -- we saw great similarities in the work that we were doing in scheduling -- scheduling activities here within NRR and what potentially we may end up in the field. So, we said well, there's a possibility that we're going to miss something. There may be an overdue inspection as part of the smart scheduling. We have to, you know, have a certain percent completed within a certain amount of time. So, what we did is we built in basically a tickler list where it changes color and it says how am I doing?

And -- and so, these are overdue activities. It says, for example, I may be behind in inspecting the pouring of concrete or the laying of

rebar. The system will identify that I am behind a schedule in doing that and it'll -- it'll bump those items up on the -- on the inspection schedule and bring them to my attention that I -- that I may become a critical path item for the construction.

One of the things -- one of the other things that we started looking at the -- look at all TAC numbers. In this case, it would be all inspection activities.

You can sort them by any possible criteria if you want to find something in the system. So, if you want to sort them by, you know, facility location or sort them by ITAAC, if you want to sort them by the component that's being inspected, you can do that.

One of the -- one of the -- one of the key issues that we got in we said well, as we're moving through this, what happens when an ITAAC is completed or inspection is completed? Will I ever want to go back and reference that information? This we're talking about inspection information, reporting, and retrieval. We've got -- it's easy to put information into a system, but the system is worthless if you can't get meaning outputs from it.

So, one of the things we looked at is we said you need to be able retrieve the information so

that that's available to the inspector and to the team on site so that they have what we call like a work packet. That's all the relevant information related to a particular work item.

This is what -- this is what you see here. This particular inspection items or particular TAC items will be closed. Here again, they would click on it. It would bring up an interface.

In this case, you -- what you would see is who the inspector was. In this case, it's the reviewer. You know, when the actual completed date of the inspection was and what you may also see within the thing would be -- you might see any associated forms or documents that were associated with the impact of this particular inspection. So, you have a -- a history associated with it.

And here's the important one. We're sinking -- we've got multiple inspectors in the field. We've got a scheduler on site. This is very similar to what we do in work planning. We have the work planning center that's continually receiving feeds and updates on the status of work within NRR.

This is going to be very similar we imagine to the -- the scheduler on site. He'll be receiving, you know, the concrete guy is sick today.

He can't do something, you know. The rebar didn't show up on sit. It got moved out. Okay. We've seen this change and we need to -- we've got a new HVAC requirement or something like that.

So, licensing schedules may -- may be fluctuating quite dynamically or we may see the need to add a new inspection for some purpose.

This is -- this is a difficult coordination effort because you've got, you know, this information coming in to the -- to the central, you know, scheduling facility, but at the same time, you've got the inspector in the field and he may be noticing things or -- or moving along and he may be -- you know, may want to add an inspection or -- or may want to note something. So, he's got that.

Well, what we did is we said this coordination effort is rather difficult. We need to give the inspector the ability to rapidly identify those activities that are new that require inspection.

In this -- in this case, I don't have any out here that are new, but what basically happens is he -- he just clicks on this button and this would be a list of all the new inspection activities with all the relevant ITAAC data and we're continually improving and refining the system as we go along.

We're very big into color coding. You know, we're trying to set the metric so that -- so that it -- it becomes as much an automated companion and tool to the inspector or to -- or division planning representative as it all -- as -- as -- as possible.

The important thing out of this whole -- out of this whole exercise is that I need to be able to integrate my planning and scheduling. So, the inspectors in the field have their own individual schedules. They're out there, you know, checking out all the different activities and inspecting them for broad TAC. At the same time, he's -- he's -- the scheduler at the central office is scheduling the overall construction inspection sources. They're going to come back. They're going to sink the schedule.

It's important that the regions as well as headquarters be aware of the overall resources and so, once -- very, very much like work planning. Once we bring them into a central database and central scheduling facility, we will now have the option of basically exporting the overall schedule and resources to the regional offices or the headquarters. So, that if we

-- we can take a look -- integrated look and say if --

if we're engaged in more than one of these activities or a particularly large amount of activity occurring on the site at one point in time.

We have sufficient resources and that -- and -- and that's where -- that's where we sort of started moving now. We're -- we're in the early stages now of beginning to integrate schedules so that we can get that integrated.

Anyone have any questions?

MR. ISOM: Carl, want to mention our trip next month to Westinghouse to load their schedule on?

MR. KONZMAN: Oh, yes, Westinghouse has -- has been kind enough to provide us with a -- what I call a demonstration copy of a construction inspection schedule. That's always been a great sort of mystery to us. We -- we really needed to get our hands on a fully blown schedule. So, that we could pull it in and integrate it.

Now, because they -- they represent many, many lines of -- of activities in the past and, you know, right now we're managing, you know, basically about 4,000 packs that go in the system at anyone point in time, but there may be more inspection activities. So, we really need to get a feel for whether or not we could handle the volume. So, full

blown schedule or whether we have to -- it out.

MR. ZINKE: I just had a question on -- you know, certainly as we would be constructing new plants, you know, we're going to do it differently than in the past and I was wondering in the -- in the development of this whether you've considered yet that the -- the licensees and utilities are sometimes under business restrictions on the level of details of schedules that can be made public even though we can, you know, let the NRC know. Because of, you know, SEC rules and -- and the -- the affect on stock prices that delays in schedule and resources can affect and I was wondering if you have started considering those kinds of surrounding rules of how these -- of what level of information would eventually be public or not.

MR. SEBROSKY: As a matter of fact, we're -- we're dealing with that issue right now. The meeting -- some of the meetings that we've had with Westinghouse and -- and Bechtel were proprietary in nature. They -- they were sharing their schedule to us -- schedule with us.

So, we have that process in place to protect the business information and -- and we've used that.

So, I -- I don't -- I don't see that as a problem necessarily in -- Bob's nodding his head no. But, I -- I think you recognize the need for the NRC to know the details of the construction schedule so that we can plan our inspections accordingly and -- and Bechtel and Westinghouse recognize that and that's why they support it our discussions with them.

MR. ZINKE: Yes, and I -- I certainly agree in -- in our coordination when you're actually building a plant. I was just wondering if -- to what -- to what degree some information would be public and would not and whether you've established those kinds of criteria yet.

MR. SEBROSKY: Well, what a licensee determines to be proprietary is -- is up to the licensee and there's a process that we have in place to either we -- we agree or -- or disagree with that. There's certain aspects of that though like the inspection reports, the -- the results of the inspection reports that -- that would be -- would be made public, but the scheduling and timing of those inspections and I'll -- I'll be careful because we -- we brought this up yesterday.

There's some information that you would want the licensee to know on-site. Next week, you can

expect some inspectors that are there to look at the rebar, but what rebar they're looking at and what kind of sampling their going to do and that -- that plan would be loaded in CIPIMS. We wouldn't be sharing that information with the licensee obviously.

So, there's information that -- that we get from the licensee that could be held proprietary and there's also information that we would not share publicly.

MR. ZINKE: Thank you.

MR. CAMERON: Any other questions.

MR. COE: I'd just like to add one comment, Carl, and it actually goes to the -- to the back end. There -- there is as you've heard sensitivity regarding the -- the comment that you made, but -- but I have a -- a sensitivity in terms of the back end of the process.

The ultimate result in -- in presenting to the Commission the completed inspection program in which we verified that the ITAAC had been met requires that we have through the process a means of seeing where we've left a regulatory footprint, to what extent and degree, and how much we've covered and as things process as we find issues or as issues arise, that we expand the -- the inspection as it would be

appropriate and that we develop a track record such that at the very end of the process, there's a thread that -- that we can attach to every ITAAC that demonstrates that we were there. We were there in a necessary and sufficient capacity in our role as an independent regulator.

Now, the back end of the process is public. Access through the process as the process develops should be public and the story as it's being built toward the end goal should be visible and understandable.

What Carl has shown you is what we hope to -- to do to help the inspector perform that function. What he hasn't shown you necessarily is yet any thinking regarding how we're going to make this available for management access and for decision making along the way and ultimately for public availability.

So, I would -- I would say, you know, just bear that in mind from a -- from a -- a public understandability standpoint. We -- we are going to have to address that at some point.

MR. KONZMAN: Question.

MR. GRANT: Eddie Grant with Exelon. I'm a little curious about the interface on this. Can you

address some details about how you intend to get the information from the applicant and vice versa, provide information to the applicant and schedules for updates? Is that on an as-needed basis as the applicant says I've changed my schedule? Are you expecting once a month, once a quarter? Is that going to vary with -- during the construction because things change on how quickly they change?

MR. KONZMAN: We would actually assume that -- that the schedule would probably change and be updated on a daily basis. Typically, assuming that the products currently in use can interface with the Primavera tools, there is the capability, once the base construction schedule is provided to accommodate updates via e-mail.

So, for example, the -- the way the process may work in one scenario would be there would be a central scheduling facility at the construction site and it would, of course, have the base-load schedule provided by the licensee, the relevant ITAAC map schedule.

This would then be imported into CIPIMS. CIPIMS would then related ITAAC to ITAAC and then take the schedule and -- and extrapolate the dates for activities from that schedule. As the licensee had

updates to the schedule, those -- those updates would simply be mailed in as updates to the premiere schedule and then integrated into the overall CIPIMS system. So, we'd maintain a -- a copy of the premiere schedule there. It would be updated and simply do a re-import to -- to update the items.

The inspectors -- as you see as this last thing, date and time, the inspectors would -- would then, you know, sync their tablets let's say first thing in the morning or at the end of the work day. All their data would be uploaded to the central system. Any changes or schedule updates would then be promulgated back to the tablets. So, they always have the latest information for that -- that business day. So, it could basically be about eight hours. That's -- that's -- that's generally the case.

MR. CAMERON: Ed Burns.

MR. BURNS: A couple of questions on that. One is my understanding is your data set -- the NRC's inspector's data set would match very closely to that if not identical to that. I don't believe that's going to be the case. Your data set is going to have a different -- need a different basis and a different tracking. You'll need to track what your inspection procedures are versus the thousands and myriads that

the applicant -- the licensee holder will.

Second thing is you just went through a very brief little understanding of what will happen at this site. We also have to look at -- at vendors' sites and multiple other locations where a large portion of the activities will be ongoing.

So, we're -- and they're looking at multiple systems. It would be nice to have one tracking system assume the licensee can have that versus having multiple sub-parts.

So, it's not going to be just a simple little thing.

MR. KONZMAN: Well, yes, I mean it's not a simple little thing when you actually get into the mechanics of it. A lot of it is predicated upon if there are subcontracts for outside fabrication facilities. The licensee will have to correct their schedules.

You'll see that one of the things that we talk about is the creation of a smart coding scheme. We do identify that there will be multiple schedules out there, multiple systems. So, we need to integrate a smart -- a smart coding scheme so that when we refer to a bolt, it's referred to a bolt whether we're working with the licensee or the licensee

subcontractor to complete that schedule.

Here again, you're 100 percent correct. The CIPIMS system is not designed to, in fact, implement the licensee's construction schedule. The onus and burden is on the licensee to manage their project. We simply carry the ITAACs in the CIPIMS system and we relate this ITAACs to the relevant inspection activity -- relevant construction activities in the licensee's overall schedule.

So yes, we're not scheduling for the licensee.

MR. CAMERON: Looks like that's it.

MR. BELL: Carl, I just want to compliment you. I'm -- I'm way out of my depth, but it's clear that the staff's given a lot of thought to this and I'm somewhat reassured by your -- your presentation of what you've been up to.

Obviously, there's some issues that have yet to be worked out in terms of the interface between the licensee and the NRC databases in a daily basis in terms of which information NRC would agree is proprietary and would agree to protect. Which information and when would become publicly available, along the lines of Doug's comments and when you click on completed reviews and you spit out the -- the long

list related to ITAAC -- ITAAC -- somehow ITAAC related items, how that list is interpreted and I think we might get into that on the next agenda item.

Some of the -- many of the things the NRC it will -- will directly relate to ITAAC acceptance criteria. Some don't or deeply underlie a final ITAAC acceptance criteria.

I guess I -- I -- and this was a brief -- a brief overview that you provided and we appreciate that.

I guess I'm suggesting there's an area we ought to jointly flag for follow-up discussion.

MR. KONZMAN: We're at a very early stage in roughing out the mechanics. We had to overcome the multiple mobile interfaces and so, we think we've done that. But absolutely, it's a developmental process.

MR. BELL: But, we'll tune into what occurs between you and -- and Westinghouse as you maybe try and demonstrate a piece of this. I think that sounds like a healthy exercise and at an appropriate time. Let -- you know, we'll schedule some quality time to talk.

MR. KONZMAN: Russ, I just want to make sure I captured your point. What is it that you believe we need follow-up discussion on please?

MR. BELL: The interface between the licensee and the NRC. Daily's been suggested and then I through the magic of electronics, I don't think that probably an overly burdensome thing.

MR. KONZMAN: Okay.

MR. BELL: Separate versus integrated databases and if there are separate databases by the licensee and the NRC, the compatibility.

What else did I say? Or, proprietary information. The licensee can request certain information be considered proprietary. NRC must agree. We should have some understanding about what we could eventually agree on as proprietary.

That goes to the question of which information is made publicly available and when and lastly, the -- how the staff interprets that spitting out of -- of nine or ninety or nine hundred inspections that are somehow related or underpinning in ITAAC.

Some may be directly related to a conclusion that ITAAC's been met. Others may be, you know.

MR. KONZMAN: It's a much more complicated process. This is, like I said, in a gross sense, basic mechanics for collecting information.

MR. BURNS: Ed Burns again. Let me add one more last thing. What Russ was saying as you work further and better understand how the quality control measures or quality measures are applied to maintain the NRC's tracking system, the CIPIMS, parallel to that of the license holder.

Because as you get into -- you mentioned you still haven't thought or you have to work through how you're going to roll up these items and how they're going to have that traceability, that thread so that you can support the finding for an ITAAC. So, you're going to have to have certain lock down or quality measures to insure that you've got the proper foundation.

MR. KONZMAN: Absolutely. So, in fact, one of -- one of the things -- not related at this point is to have the quality control system itself and we're -- what we're looking at now is integrating it with the --

MR. BURNS: One of the reasons I bring that up and I've followed this for years is when you look at quality measures, quality controls it will argue that you want to go slower rather than faster. So, we -- if we're talking about oh, the electronics or the tools, the capabilities, there are daily

updates, overnight changes to our, you know, our ability to go out there and inspect, that's wonderful. But, you may want to take a step back and say it may be better if we have a little more control over this process and not necessarily jump to the capability of daily, but to -- we have to manage our resources to maybe weekly, monthly or whatever.

MR. KONZMAN: Oh, absolutely.

MR. BELL: A little better control over the process.

MR. KONZMAN: That interval or planning horizon spread. Absolutely.

MR. CAMERON: Thank you, Carl. Before we go to the next subject I -- I think we should clarify one thing with -- with Russ Bell.

Russ, your points about proprietary information and availability to the public, that's a broader issue than just connected to the -- the little dipper here. Is that correct? Are you?

Let me get you -- I wasn't sure whether it was a more general point or whether you're just talking about Carl's system.

MR. BELL: You know, I'll look to the task force for help, but I -- I -- I think it pertains -- the context here is the construction schedule

information which can be extremely detailed on part -- on the part of the licensee and -- and may be appropriate to protect some of that information.

Ed, do you want to help me?

MR. GRANT: Sure. Maybe a quick example. Eddie Grant with Exelon.

You mentioned daily updates by e-mail. Would each and everyone of those e-mails need one of these 2.790 requests or are we going to have a -- you know, a general request at the beginning of the construction project that says we're going to share by e-mail all of these schedules and they'll all be exempt down to a certain level of detail and then, of course, one of the things we definitely need to work out is what is that level of detail. How much of this is -- do you agree is -- is proprietary and how much is not. So.

MR. CAMERON: So, the -- the system that Carl was talking about exacerbates the -- it causes special 2.790 issues. Okay. I just wanted to make sure that that's -- that's what you were saying.

MR. WEISMAN: And I -- I'd just -- I'd just like to comment. I'm glad you're raising those kinds of questions so that we can get together with the administration division in OGC and maybe work

through some of the process-type questions.

As to the type of information, I mean I know that the people in that division generally do that on a case-by-case basis, but maybe we can engage them a little bit on -- on that also.

MR. CAMERON: Okay. Great. Well, I know that this is a subject that you've all be waiting for and Joe Sebrosky is going to talk about IMC-2503.

MR. SEBROSKY: Next -- next slide please.

For this portion of the presentation, IMC-2503 is our inspection test analysis and acceptance criteria, inspection manual chapter.

I'd just like to go over an overview. Some of the issues that we've identified like the sampling techniques, sign-as-you-go, NRC ITAAC interim conclusions, and other items, treatment of new and significant information, operational program inspections, and modular construction.

Next slide please.

As Carl discussed earlier, we've had -- the teams had conversations with four different vendors, Westinghouse, General Electric, Atomic Energy Canada Limited on -- for the ARC700, and Bechtel to ask how they intend to construct new plants.

All of them have basically told us it will

be this module. It'll be this model which relies on modular construction and you see -- you see here -- here's the plan order and sometime later, you see site construction activity taking place, but almost immediately, you see factory production of modules taking place that are trucked to the site and then it's assembled on -- assembled into larger pieces and finally that leads to -- to plant operation.

The reason all four vendors told us they have to go to this model is the construction schedule, to reduce the construction schedule and to control quality. They'd like to move as much of the fabrication off-site as -- as possible and Jerry Blake earlier this morning indicated that some of the applicant -- or some of the vendors that we talked to estimated that 60 percent of the work that was traditionally done on-site in a stick build type process is going to moved off-site.

So, we took this into account when we were developing the framework document for ITAAC.

Next slide.

If you look at the ITAAC for the ABWR System 80 plus and the AP600, the team made an assumption that the ITAAC for the rest of the designs that we're looking at are going to look somewhat

similar. That may or may not be the case. The vendors may choose to -- to bend their ITAAC different ways.

But, if you look at the ITAAC and I think I told you this morning that we had the normal RHR system ITAAC for the AP600 and you just look through it and do a qualitative assessment. You'll notice that the majority of those ITAAC are completed late in the process.

The problem with that from our perspective is one estimate that we made early on as many as -- as much as 80 percent of the ITAAC are completed in the last 20 percent of construction. So, obviously, we're not going to wait to do our inspections until that late in the process. We're going to be doing inspections all along.

That led us to the development of these two things, the SAYGO ITAAC for large components and the SAYGO process for processes which affect multiple ITAACs. You do not find SAYGO -- the mention of sign-as-you-go in our regulations in 10 CFR Part 52. You do see mention of sign-as-you-go in the predecessor to the draft framework document, the document that Jim Isom talked about earlier, the 1996 document.

And basically, the need -- what we think

the need for SAYGO is from an organizational perspective in assuming these modules are built all over the world at different facilities and we send inspectors all over the world to these different facilities, at the end of that process, you have an ITAAC that says that that particular component was put together properly. Some of it was done on site. Some of it was done in different shipyards and we do not want to wait until the end to try to figure that all out.

So, what we developed was this concept of SAYGO ITAAC for large components and SAYGO process for processes.

SAYGO ITAAC for large components if you look at the reactor pressure vessel as an example and I think we put that in the framework document, you can imagine that we would do inspections of where that's being fabricated and make observations about that and document that in inspection reports.

We may also issue a report at that time saying that we either find it satisfactory or unsatisfactory. That would later be referenced at -- at the final ITAAC as a basis for our conclusion on whether or not the reactor pressure vessels acceptable.

This last process, the NRC ITAAC interim conclusions, this is alluded to in the regulations, 10 CFR 52.99 requires Federal Register notices. We got a recent clarification from the Commission on the interpretation of 52.99 we've incorporated into the framework document and basically what this says is during the construction stage, as the licensee says that ITAAC are complete and as the staff makes a determination that it believes the ITAAC are complete, it'll issue Federal Register notices to that affect.

Next slide.

Regarding sampling techniques, this -- this first bullet, the staff will not perform direct inspections of all ITAAC, we simply don't have the resources to do that. We've estimated 50 to 65 FTE for inspection related resources for the entire construction period. That's based on what we've done in the past for the last generation of nuclear power plants that were built in this country.

If you look at the last generation of plants that were built in this country, we did not do direct inspections of all construction related activity. So, we can't afford to do that in the future.

The ITAAC development was heavily risk

informed on the front end. If you look at the ITAAC for the AP600, there is non-safety systems such as the emergency diesel generators. The AP600 is a passive plants. Several of the plants that we're reviewing rely on passive safety systems. The emergency diesel generators as an example are not considered safety related, but they have ITAAC associated with them because of the risk significance.

This -- that was looked at during the -- during the certification of the AP600, ABWR, and System 80 Plus and was factored into the ITAAC. In general, you see more ITAAC on risk significant systems than you do on others.

The sampling techniques, this is one of the issues that we've identified that the ITAAC sample selection will use statistical methods, insights from the PRA, and inspection of licensee's quality assurance program.

You heard quality assurance in Inspection Manual Chapter 2501 discussion this morning and 2502. Also we believe a cornerstone of Inspection Manual Chapter 2503.

This last bullet NEI in their white paper that Russ Bell had alluded to earlier indicated that they intend to send us ITAAC determination letters.

The licensees then send the NRC ITAAC determination letters when they believe an ITAAC is done.

We will 100 percent review of those determination letters although we may not have done an inspection of the activity associated with them.

Next slide please.

This is blown up in your material. You can read it easier there, but essentially, when I talked he agrees that all the ITAAC has been complete and then finally, here is the 52.103(g) finding that is our regulations that must be made by the Commission.

If you go to the next slide.

I expect that based on questions from the audience, we may have to come back to that slide.

But, the next -- next slide under other items, treatment of new and significant information. This was an issue that NEI had identified in their white paper. How would new and significant information or what -- what is the threshold for new and significant information that would invalidate a -- a previous NRC ITAAC interim conclusion? We gave five examples in Appendix D of the document. Took a shot at that to identify what we think an appropriate threshold is.

And operational programs with ITAAC inspections are part of IMC 2503. If you go back to what we had said earlier, quality assurance is -- is part of ITAAC, implicit in -- in some of the ITAACs up to the extent that we do inspections that we tie to an ITAAC related to -- to quality assurance. That would be in 2503.

Next slide.

And finally, with this -- with this slide, the Commission determination in accordance 52.103(g) that the licensee -- license conditions have been met to -- to load fuel. We in the -- in the framework document lay out how we think that process would work.

The staff's recommendation is based on the status of the ITAAC. You could go back to the flow chart. You'll see that there's a regional administrator recommendation that's made to the Director of NRR. Director of NRR would -- would then forward that recommendation to -- to the Commission and the Commission would make it's decision.

So, that process is how we envision the 52.103(g) process being completed as discussed in the framework document.

Mention this real quick. Staff recommendations to the Commission, we -- we also in

2504 which the Inspection Manual Chapter that Jim Isom will talk about after I'm done mentions this operational readiness assessment team inspection. We do -- because of programmatic ITAAC that we discussed on Monday in the Commission's staff requirements memorandum, we do expect that we -- we are going to be doing inspections on programs that fall outside of ITAAC, that the regional administrator would use as a basis to -- to make his recommendation.

If you look at 52.103(g) though, 52.103(g) is limited to whether or not the acceptance criteria is met. So, the 52.103(g) is limited to ITAAC, but as that letter goes up, we would also forward to the Commission the results of this operational readiness assessment inspection.

Modular construction as I -- this is just kind of a concluding bullet. As I discussed earlier, this modular construction and the way the current ITAAC are structured for the -- the reviews that we've completed has driven us to inventing the SAYGO ITAAC and the SAYGO process.

So, that's -- that ends my presentation.

MR. CAMERON: Good. Thanks, Joe. Where do we want to start on -- on this. Ben?

MR. JORDAN: I guess, Joe and Chip, I'd

like to start on -- on -- I guess back on page 25 and beyond. Really relative to the terms interim ITAAC conclusions and SAYGO conclusions, ITAAC conclusions. We're sort of -- sort of using those interchangeably in your presentation, Joe. But, I think in -- in the guidance document, the -- the framework document it's referred to as interim ITAAC conclusions.

My -- I guess my concern is that 52.99 requires the staff to determine that we've met the acceptance criteria. I think that's the way the Commission directed through the SRM and to me that -- that requires the staff to draw a conclusion not an interim conclusion.

As I understood some of the problems we had previously in some of this language, we wanted to stay away from the word findings because that was totally under the -- under the auspices of the Commission to make a finding that all ITAAC had been met.

But, I thought the staffs really should be at least drawing a conclusion not an interim conclusion that we've met it. The tentative nature of that sort of -- is sort of like the, you know, QA reliability on the data. It's sort of is it -- is it right or is it -- is it totally right or is it a

little right or what.

So, I guess I'm -- I'm troubled by the use of the word interim in the staff's I guess document relative to drawing ITAAC conclusions.

MR. SEBROSKY: The -- and look to Mr. Weisman if I say anything incorrect.

That NRC ITAAC interim conclusion the reason that we use that term is to differentiate it between the -- the -- the one conclusion that we believe is made at the end and that is that all the ITAAC are met in the -- the Commission finding.

So, when we say ITAAC interim conclusion, there's a concept that for a particular system I guess in our -- in our mind that an ITAAC could met very early on and if you look at the time frame you could say maybe two or three years just as an example. ITAAC met very early on in the process and the Commission finding the rest of the construction isn't completed until two or three years later and we were just trying to differentiate between that conclusion that -- that the staff drew and the Commission finding that would come at the end of the process when all construction is completed.

MR. JORDAN: I guess going back to my previous I guess thought process was that's why we

wanted to stay away from -- away from the word finding that was -- I think was in the original '96 version of -- of the report and that what we were looking for in the industry was a more you might definitive conclusion by the staff relative to an ITAAC determination that we had sent into the staff and I thought that's what the 52.99 SRM direction was giving the staff.

MR. BELL: Maybe I can --

MR. CAMERON: Let's -- just -- would you say -- you -- you would not want the word -- the term interim. You would want conclusion basically.

MR. JORDAN: Well, I think it's -- at the point, what we're looking for is -- is some sense of the staff is satisfied --

MR. CAMERON: Okay.

MR. JORDAN: -- with the fact that we have completed the ITAAC.

Now, the Commission finding's another thing because that involves a public hearing.

MR. CAMERON: Okay. Well, I think that Jerry and maybe Chuck wants to say something.

Russ, why don't we listen to what Jerry has to say and then we'll --

MR. WILSON: I think it's important to

remember in this discussion that the NRC is not performing 100 percent inspection and that leads to how much of a conclusion we can make at any particular point in time. We all recognize that the NRC staff has to make a recommendation to the Commission at the end of the process and they'll do that and -- and we've talked about how that's going to be formulated and the Commission's going to make a finding, but at those points in time based on less than 100 percent inspection, there's only so much of a conclusion that you can expect the staff to make.

Now, does that mean uncertainty for the applicant? Well, no, I don't think it does. Because the person building -- the company building the plant is doing 100 percent inspection and in addition to that, prior to initiation of construction, there's been an agreement in the application on what they have to do to meet the regulations.

So, if the company building the plant does what they say they're going to do and they're doing 100 percent inspection of that, they know whether they've met it or not. They're proceeding and they don't have uncertainty.

The staff has to deal with what they can do and -- and that's why we use terms like interim

conclusion.

MR. CAMERON: Is the -- I guess the -- perhaps the concern is -- is does the use of the term interim have any implication that not just to distinguish it from a Commission finding, but does it have the implication that it's really a tentative conclusion subject to change? I think maybe that's half of your concern.

MR. JORDAN: Well, that's our -- that's our concern. There doesn't seem to be a -- a commitment on the part of the staff that they have agreed fully with our conclusion. I'm talking about the Commission finding. I'm talking about this, the 52.99.

MR. CAMERON: Let's -- okay. Let's -- let's hear what the staff has to say. Tom.

MR. FOLEY: Our -- our use of the term interim ITAAC conclusion, it's been my understanding that and correct me if I'm wrong, team, but we -- that's our -- that's a final conclusion that we buy off that the acceptability of the work that's been done to date on that particular portion of a system or portion of an ITAAC is -- is satisfactory and we plan on noticing it as such in the -- in the 50.99 or proceeding I guess it is.

Is that right, Joe?

MR. JORDAN: I understand, Tom. I'm just saying why -- why take -- why do you need the word interim there? Why can't you just say ITAAC?

MR. FOLEY: I think this is semantics we're talking about here.

MR. JORDAN: No, I don't think so.

MR. CAMERON: They may be. Let's go to --

MR. JORDAN: Not -- not to the industry. Let me tell you that.

MR. CAMERON: Let's got to Chuck and then we'll --

MR. PAULK: It's -- it's interim in that if you look further in the framework document, we talk about those issues that come up of significant importance that would invalidate a previous conclusion.

If you finish early in the process and somewhere later on down the road through your corrective action program or our inspection program, we find something that would invalidate a prior conclusion, it's no longer a conclusion. It's only interim -- it's interim only until the Commission says they've been met.

MR. JORDAN: I can only address that

point. I can address that point, too.

The fact -- we're required once we have an ITAAC completed to maintain configuration control such that that ITAAC remains valid. We've signed -- sent off to you an ITAAC determination letter under -- signed under oath and affirmation and if there -- if there comes something up -- brings something up, we're required under 50.9 to notify you that that -- that conclusion is not longer valid that we sent you and we would expect you to take some action.

We -- we're -- we're going to be depending again on inputs, relative deficiencies, more QA program. That can be -- that can be from any -- deficiencies can be entered from any -- any source, the contractors, the licensee, the NRC allegations, the public for that matter.

So, I don't understand why you can't use the word conclusion recognizing the configuration control in 50.9 play in effect all the way to the fuel.

MR. PAULK: Staff doesn't have the final word.

MR. JORDAN: You have the final word on whether you believe we met the ITAAC or not.

MR. SEBROSKY: Yes, I -- I guess -- I --

I think I -- I understand the -- the concern from -- from industry about the -- the term interim and -- and -- and we'll take a look at that.

The -- if you look at and go back to the -- how this framework document came about and you go back to NEI's white paper, it was clear to us that there was concern about how an ITAAC -- a staff ITAAC we call it interim conclusion. I understand you object to that, but how a staff ITAAC interim conclusion would be -- what -- what would constitute re-looking at that and we tried to address that in the -- in the document through the use of those examples.

And what we understood the issue to be from industry was the finality of that ITAAC conclusion.

MR. JORDAN: I understand your examples.

MR. SEBROSKY: And -- and we -- we tried to -- we listed -- we listed the examples and we also absent a detailed organization chart which we haven't developed yet because we don't know if we're talking about one plant being built or eight. We also say in there the management controls that we would have in place for re-looking at -- at ITAAC. It's not done on a whim.

So, we thought that we had addressed

industry concerns and I -- I'm hearing that you don't think that we did.

MR. JORDAN: No, I understand the examples, Joe. I'm not talking about the examples. I'm talking about the -- you know, one of the examples pointed out is if the NRC discovered a -- the point of the matter is the licensee has an obligation to notify the NRC if there's an issue that invalids something the NRC will make a safety determination on. Specifically, an ITAAC -- ITAAC conclusion.

MR. SEBROSKY: Well --

MR. JORDAN: I would hope that -- that if the resident inspector or anybody had a -- had a concern, they would enter it into the QA program as a deficiency and we would process it accordingly, verify whether it was relevant and material for the conclusion of the ITAAC and we would take appropriate corrective action thereof up to and including sending a letter to the NRC saying we made a mistake --

MR. SEBROSKY: Well --

MR. JORDAN: -- on the 50.9.

MR. SEBROSKY: I think the way I was bending that, Ben, and -- and maybe I've done it incorrectly, was that gets to finality of ITAAC and the status of the ITAAC of what the staff's belief is

on the -- on the status of the ITAAC. Right.

MR. BLAKE: I'd like to make a comment.

MR. CAMERON: We'll got to Jerry Blake if Joe's done.

MR. BLAKE: This -- I think I -- I understand pretty well where -- what you're talking about and there is a perception in your mind that by using the modifier that we chose that there is lack of permanence.

We chose that after careful deliberation. We could have just as easily chosen the word of 50.99 conclusion. Which after this discussion, we may go back and do. Rather than use the word interim, we'll say it's -- because as Joe pointed out, this is the conclusion that will be noticed in accordance with -- with -- with the requirement 52.99.

So, if we -- we decide to call it that way, if you're -- if you're not comfortable with the word interim, we can -- I think we can understand your --

MR. JORDAN: Okay.

MR. BLAKE: -- comfort level with it. We'll find --

MR. CAMERON: We'll -- we'll go back and look at something else.

MR. JORDAN: Okay.

MR. CAMERON: We'll find something equivalent in substance.

MR. BLAKE: Modify it, but it's not quite as solid. Put it that way.

MR. JORDAN: We'd appreciate you considering.

MR. CAMERON: Okay.

MR. JORDAN: Thank you.

MR. CAMERON: Good. That's one issue the staff is going to look at.

Do we have a second major issue in terms of 2503? I think, Russ, are you going to bring something to our attention here?

MR. BELL: We'll provide you a written comment to endorse the notion 52.99 ITAAC conclusion would be a better term. But, that's probably enough said on that.

I had a question about SAYGO ITAAC conclusion. Again from a terminology perspective.

I'm having trouble differentiating that term from an -- an ITAAC -- a 52.99 ITAAC conclusion. I recognize that it's -- you're using it in the -- in the case of a large component parts or all of which may be fabricated at some remote location and you're

applying the term SAYGO ITAAC conclusion, but to me it seems equivalent to an ITAAC conclusion and I don't know what the SAYGO in that respect means.

Even if it's an ITAAC or a system that's completely and wholly fabricated on site, okay, you're going to weld it together at one point and you can complete the welding portion of that system ITAAC, but you won't be able to run the functional tests until much later. There's a separate ITAAC later in time, but you -- we're -- we're calling those simply 52.99 ITAAC conclusions and not -- not SAYGO. So, why the term SAYGO ITAAC?

MR. SEBROSKY: The -- the reason that we used SAYGO ITAAC, and again, I'll look to the panel to -- to add anything, is we were looking at large components and a specific example that we were considering is the reactor pressure vessel and if you look at the ITAAC that exists for the ABWR and the AP600 and the reactor pressure vessel, we don't think that the licensee is going to sign off on those ITAAC until that reactor pressure vessel is placed on site and at that point, some of the reports that are discussed may -- they may be able to say well, for this particular aspect of the reactor pressure vessel or this particular ITAAC we think is complete.

Because it was fabricated in accordance with the requirements and it's installed on -- on site.

We looked at that and we said well, we're probably two years prior to that going to be doing inspections where that reactor pressure vessel is being fabricated and we're going to want to do inspections of that activity and we're going to want to alert out future inspectors that we found that acceptable or we found it unacceptable.

We do -- if you go back to the way the AP600 and ABWR ITAAC are constructed, they didn't have to be constructed that way. There could have been an ITAAC that said, for example, it was fabricated properly before it was shipped and then a separate ITAAC for handling shipping and installation of the -- of the large component, but it -- it wasn't. It's -- it's in-processed kind of ITAAC.

That's not the way we do inspections and the thing that we were concerned about is to make it publicly known as early as possible what we felt the status of that component was and to tie it to that particular ITAAC so everyone's clear that they know why we did the inspection in the first place, what the results of the inspections are, and the ramification for the ITAAC down the road and we invented the term

SAYGO ITAAC to cover that.

MR. CAMERON: I'd just like to amplify a little bit what Joe said that as SAYGO ITAAC conclusion would go to an individual element in an ITAAC. ITAAC may have several elements that we have to find.

So, we do an inspection on one. Inspection report is going to have SAYGO ITAAC conclusion on that one element.

When we've got them all done, the whole ball of wax, that's going to give the -- for want of a better term, a staff conclusion on the ITAAC that we're going to publish under 52.99. So, that's really the difference the way I see it.

MR. BELL: It's my recollection that we previously agreed that those ITAAC sub-elements, I'm holding the reactor pressure vessel one, there's seven sub-elements to the RPV ITAAC and that -- those could be signed off one by one.

You could get an ITAAC -- you could get seven ITAAC determination letters.

MR. SEBROSKY: That's -- that's correct. We -- that was our understanding from the discussions we've had with you. But, when you look at those -- I don't know which particular reactor pressure vessel

ITAAC you're looking at, but when you -- when you look at those and when we looked at them, we don't think the majority of those are -- we believe the majority of those are end of process type ITAAC and we know we're going to be doing inspections that directly impact whether or not we find that ITAAC acceptable early on in the process.

So, what -- what do we do with the results? And there may be a series of inspections.

If you take a look at the flow diagram, the flow diagram that's the reason it's set up the way it is. If you can imagine the reactor pressure vessel being fabricated overseas someplace and us sending a team or more than one team over there several times at different points in the fabrication process. At the end of that, all those team inspections the -- the responsible manager may say we have enough information to say that that fabrication was done either correctly or incorrectly at that site and we'll issue a SAYGO ITAAC saying we don't have issues with the fabrication at the site -- at the off-site site or we do.

MR. CAMERON: Now, is that different -- Russ brought up the point of the sub-elements and if there could be a -- a conclusion on each of those sub-elements. Are you -- now, are you saying, Joe, that

the SAYGO ITAAC is broader than just the finding on a sub-element?

MR. SEBROSKY: Yes, I'm -- I'm saying that it's independent of whether or not -- how you -- how you cut up the ITAAC. That if you look -- if you look at the ITAAC as a whole or if you cut it up into sub-elements and just go across one line, that the majority of those one-line ITAAC when the team looked at it it looked like their end of process and we know we're not going to wait -- we're not going to do all our inspections end of process. We're going to be involved during the process.

MR. CAMERON: More like a keep on. If you look at the -- the fabrication of this particular component and everything looks -- looks fine, but the way they're doing it at that the inspection, that's more like a keep on going rather than a SAYGO.

MR. SEBROSKY: Process.

MR. CAMERON: Yes. Is that helpful what you heard from --

MR. ISOM: Joe, as I recall, we had this discussion when we wrote the framework document. Really from all practical standpoint there's no difference. As I recall, we -- we had a discussion with Joe. We just gave a -- a large component like

reactor vessel special treatment because when the construction begins we just call it SAYGO ITAAC process. I don't know if that helps or not.

But, really, you end up in the same place which is you're going -- you're going to eventually get, you know, NRC interim ITAAC conclusion statement made once we get your letter.

MR. BLAKE: I -- I'd like to -- this is Jerry Blake again.

I'd like to add one -- one comment. We -- we looked at this as a way of -- of providing some assurance to the licensee that we have, in fact, looked at things that we both deemed to be important and we are satisfied if we make the positive decision and that when they do send us the -- their letter of finality, then we're not going to suddenly say hey, it's nice in Paris this time of year. Why don't we schedule an inspection? Because we've already had -- done the inspection. We have schedule the inspection. We've done the inspection and we've got something in -- in the CIPIMS that says that inspection is done. We're happy. Now, we just look at shipping damage.

Okay. It's -- it's to provide some predictability to you as to what -- the ongoing inspections left to be done on that particular

component.

MR. CAMERON: Do we -- do we have a -- a third issue to start on, Russ, or are we finished with this one or do you --

MR. BELL: We can move off this one. I think I -- I need to let it sink in. I'm -- I'm hatching a slightly difference concern based on your answers since that -- there's seven elements of the -- this is ABWR RPB ITAAC.

I have no doubt there are many, many other elements and inspections associated with fabrication of a reactor pressure vessel and that the staff would be involved in -- in looking at those, but there's only seven of them called ITAAC. So, I'm hearing that some of these additional things you may -- you may go to France and -- and observe -- observe those things being done there because by the time it gets shipped back here, that work will already be done.

I liken that to the normal expected inspection activities that the NRC would be doing on any item large or small, off-site or on. But, there's only certain of these and in this case, seven of them that are given the status of ITAAC.

The term SAYGO ITAAC conclusion would seem to, if I'm understanding your answer to me right, is

seeming to encompass a -- a whole other set of -- of things.

MR. BLAKE: We -- we also had to consider the factor that there's nothing in the regulation or we foresee nothing in -- in the license that's going to dictate on a case like that where you have seven steps whether you send us one letter or seven. That's your choice.

MR. BELL: Right.

MR. BLAKE: So, if you elect to send us one letter, then we'd like to have some track on -- in our inspection program that we've got a footprint or something on the ones that we feel are necessary to -- to verify.

If you elect to send us seven letters, then we won't need to SAYGO ITAAC in that particular case because we'll be doing it step-by-step as you request.

MR. CAMERON: Is that -- can we get a clarification on that? Because I think you're sending -- it seems to me you're sending opposite signals here that the SAYGO ITAAC is meant to be broader than just the -- a finding or a conclusion on all of the sub-elements.

If --if it is just the sub-element

conclusion, then Russ' concern about -- that he just mentioned goes away.

Joe, I don't -- and maybe this is something the staff needs to -- to think about.

MR. SEBROSKY: We'll -- I guess we'll take a look at it, but I -- I think I understand what Russ' concern is.

We -- we -- we developed SAYGO ITAAC as a means of informing our stakeholders of what we felt about the -- the process and if you look at large components, we did treat that differently than -- than other -- than other ITAAC and -- and the -- the thing I guess I would like to do is if people could go to Appendix E of the framework. There's an ABWR construction example in there. It's a real world example of a problem that occurred in Taiwan.

The staff looked at that problem that occurred with welding of the reactor pressure vessel pedestal and said if that happened in the United States, what ITAAC would be affected and how -- how would we deal with it and to go to -- to Russ' point, there's -- there's ITAAC -- you -- you find in -- in some of the ITAAC for these large components terms like you'll see on page E-2 under 14 that a structural analysis report exists concludes that the as-built

internal structures are able to withstand the design basis loads as defined in Section 2.14.1.

That's the ITAAC. That's what we have to find acceptable at the end.

Fundamental to -- to our inspection scheduling assumption is that when we do inspections at the facility that's fabricating the reactor pressure vessel pedestal for example, that we would say well, the reason that we're here is to inspect the fabrication of the pedestal. Here is the ITAAC that are associated with it.

If you don't have ITAAC on the reactor pressure vessel pedestal, why are you doing any inspection?

So, getting back to -- to -- to your point with the reactor pressure vessel and the example that you were alluding to, I don't have the ABWR ITAAC in front of me, but I bet you that there's an ITAAC in there that has something along the lines that a design report exists and concludes that the as-built reactor pressure vessel was completed properly.

That is a small ITAAC. I agree. But, the information that goes into that and the inspections that we would use to verify to say that that ITAAC has been met is not small.

So, getting -- getting back to what Chip was -- was saying earlier as far as clarification and maybe -- maybe we weren't giving a -- a constant story here and we'll -- we'll go back and take a look at it, but my interpretation is what I just told you that when -- when we say SAYGO ITAAC and you look at this reactor pressure vessel pedestal example, if we had done inspections associated with it or we get an allegation that says we don't think it was fabricated properly, we would issue a report saying, you know, what? It wasn't fabricated properly. Here's the ITAAC that impacts and this is why we think it wasn't done properly. You guys need to fix that.

So, it -- we don't wait until the reactor pressure vessel pedestal is installed, concrete's poured around it, and five year later determine that we have a problem with it. It gets back to I guess what Jim Lyons had kind of whispered to me as we thought we were -- we thought SAYGO ITAAC and SAYGO process conclusions were a good thing. That we would let all our stakeholders know what we believe the status is and not -- try to avoid as much as possible surprises at the end.

MR. CAMERON: And is that -- is it sort of a status report basically on our particular

inspections?

MR. SEBROSKY: Yes, at management's discretion. Basically, do you have enough information to -- to make a high-level determination that you think it's acceptable. Have we done enough inspections? We don't define what that is. We -- what enough inspections are. We -- we leave that to future to -- to try to figure out.

MR. CAMERON: Okay. This -- I guess the staff is saying that they are going re-look at this. You heard -- I think Joe expressed it very well what the concern is of the staff of having what's now termed a SAYGO ITAAC and Jerry also spoke to that.

Do we have a third issue or do you want to say some more on this particular point?

MR. BELL: No, I -- Joe's answer was helpful. Jerry's also. We're -- if there's seven letters, they'd be seven SAYGO process -- SAYGO ITAAC conclusions.

MR. SEBROSKY: There -- there could be. That's something that we'll talk with the team about.

If you guys sent us seven ITAAC letters at the end, I don't think there's any disagreement on the panel that -- that we could issue -- we could issue seven separate 52.99 Federal Register notifications or

the NRC staff may -- may decide to bid all those and say hey, we got all seven of them. Here's the one 52.99 Federal Register notice that says all these ITAAC are complete.

But, the -- the SAYGO process, I see a fundamental difference and the fundamental difference is the -- the SAYGO process and SAYGO ITAAC conclusions are us. That's -- that's us making a determination independent of information that we get from you.

The ITAAC we call them interim conclusions that are 52.99 conclusions are driven by your ITAAC determination letters to us.

MR. CAMERON: Okay. Let's -- let's go to this gentleman here for a quick point on -- on this and then see if there's a -- a third major issue that -- that Russ or anybody else wants to bring up.

MR. SING: A. K. Sing from Sargent and Lundy.

The concern was in -- in doing the SAYGO -- it's not the inspections -- the SAYGO inspections because they're obviously necessary and -- and they would be part of your inspection process.

The issue really is would you term them as ITAAC. Because the way the industry sees this the

ITAACs are listed in the design certification document and would this process which you have on the right-hand side create more line items with terms as ITAAC compared to what is in -- in the design certification document?

So, in terms of calling them SAYGO conclusions -- SAYGO conclusions, I don't think that's -- that's an issue. The issue is not whether you should or you should not inspect. Everybody agrees you would have to inspect to make sure that the process is working. The product which has been delivered is quality product. The issue which -- the concern was are you creating ITAACs which are not really listed out in the design certification document.

MR. SEBROSKY: I -- I guess I have a question back to you if you could stay there for a second.

When -- when we looked at this and we said that we believe -- we -- we looked at it from the end first and that is that we get an ITAAC determination letter that the reactor pressure vessel was completed properly and the -- the person that's going to have to sign off in the staff has to make a determination that he agrees with that.

We want to be able to press a button in that Construction Inspection Program Information Management System and pull up every inspection that relates to that ITAAC, everyone of them. To -- to say, well, yes, here's the -- here's the history. I know that I had -- I -- I had an NRC inspector that went out and looked at the reactor pressure vessel three years ago. Here's the inspection report and here's the results of that inspection report.

So, we -- we looked at the -- the planning and which we want to do with CIPIMS and basically, getting back to I think Doug had said it earlier what's the necessary and sufficient information to make the -- the determination that we think ITAAC are done. That we would lay out that okay, we're going to go to shipyard X at this time to look at this particular component and in CIPIMS, we're going to tie it -- the reason that we're there is we're looking at it because it -- it impacts these ITAAC down the road.

Now, what -- what -- how would you have us do that? I mean if you know we're going to do inspections of those -- of those components and you know the reason that we're doing those inspections is because they directly impact an ITAAC, what --

MR. SING: By the way --

MR. SEBROSKY: You want us to call them something different or -- that's my question back I guess.

MR. SING: The answer would yes, because there are many activities during construction which you would be either inspecting or auditing to make sure that the applicant -- instructor is following the QA program and -- and all the different procedures which -- which we're committed to.

Not all of them become ITAAC. So, in terms of the underlying verification of the quality of the construction, that's an activity which we take it as separate from ITAAC verification. ITAAC is such a higher level than the rest of the activity and I think that's where -- our concern is more related to that issue than to the issue whether the NRC should or should not be inspecting all the activities.

MR. PAULK: I have --

MR. CAMERON: Go -- go ahead, Chuck.

MR. PAULK: I think a -- a short answer to your question is this going to create additional ITAAC, no. What the SAYGO ITAAC and the SAYGO process are -- what -- what we created them for -- a -- one of the functions is a management tool for us to keep track of what is inspected and what that inspection

relates to. It has no impact on you meeting your requirements for your ITAAC.

It's as Jerry said and Joe. It's also a tool to notify the stakeholders where we're at, what we're finding, what we believe is unacceptable.

I think -- I think we're -- what I'm hearing is a little concern over terminology. Terminology is ours. We created it for us to use.

We're not changing the regulation. We're not adding to the regulation.

MR. CAMERON: Then I guess if you just called it a SAYGO related to ITAAC whatever, you may not have a problem --

MR. SING: Right.

MR. CAMERON: -- with that, but if you use the term SAYGO ITAAC, it looks like you're creating a new ITAAC. So, even though it's terminology and NRC knows what it means, is that sometimes things get bounced in another arena and it's like wow, we have this ITAAC -- this SAYGO ITAAC here. It must be another ITAAC.

Is that what the concern?

MR. SING: And for an example, given proper ITAAC that was -- was the pedestal constructed to the design requirements. Whereas a SAYGO ITAAC

could be the welding was done properly. So, you're really creating --

MR. PAULK: That would be a SAYGO process.

MR. SING: But, you're creating a new -- I'm saying in terms of the -- so, the -- you're saying on the interim ITAAC, it would relate to the fact that the pedestal was constructed to the drawings and the designs just as the ITAAC reads in the design certification docket.

MR. CAMERON: And can we -- I think we're pretty close to beating this to death, but -- and I hear a willingness of the staff to re-look, but we -- do you want to make a couple final comments on it and then go on to another issue? Do you want to -- want to say one more thing on this issue, Mr. Burns?

MR. BURNS: This is Ed Burns again.

We've talking about the interim conclusions discussion. I want to talk about SAYGO. Before the NRC makes a conclusion, the applicant/license holder will be making that conclusion. They will conclude that they have completed their work to that point in time to their satisfaction to their requirements and then they will be at risk if they proceed further in their construction fabrication program and have to revisit

something that they -- a goof came in. It wasn't done properly.

The NRC -- we have this called SAYGO here. This is for the NRC terminology, but what exactly does that means in terms of sign. The word sign. The importance of that signature as you go.

So, I think there's more of the aspect that we need to look at as you're -- as you're mumbling over the -- the terminology. It's not just the interim conclusions. It's also the use of SAYGO and that type of a meaning to somebody who is in the outside, in the public when they come back and challenge you. Give some thought to that.

MR. BLAKE: I'd like to take a shot at that. The sign-as-you-go as we envision it is a management tool that means to us that a responsible level of NRC management has determined that we have enough inspection in that particular area to satisfy our particular needs.

We have a limited staff. We -- we understand that we will not be able to inspect everything 100 percent the way licensees will be inspecting.

We like -- we established these two SAYGO items because we envision a couple of different things

could happen. One could be that we would like to track the inspections that related to a single ITAAC. So that when that particular ITAAC like the reactor pressure vessel became complete, then we could tie that to -- we could pull up all the management decisions where we said that's enough inspection in that particular area and make the final determination.

We came up with a SAYGO process because we understood that we can't be everywhere looking at things like concrete, welding, various processes. So, the best maybe we could hope for is to do some sampling of the process being conducted by a particular contractor under a particular contract of may -- that may involve many ITAACs and reach a conclusion that yes, that process is being well controlled. The contractor has it under control. The licensee is aware of what's going on and, therefore, based on our inspections that actually leave a footprint on two or three ITAAC, we can make some kind of a conclusion about the welding on the remainder of the ITAACs that that particular contractor is working on. That would be the other ITAAC that we're talking about.

MR. CAMERON: A SAYGO -- the SAYGO process is not called --

MR. BLAKE: Another SAYGO -- another SAYGO process.

MR. CAMERON: -- it's not called a process ITAAC. Is it?

MR. BLAKE: It would be a SAYGO -- no, it would be a SAYGO process that said and then -- and we had hoped that at the time that we loaded inspection reports into CIPIMS, we could also include in that inspection database the other ITAAC that we didn't necessarily look at but are being handled by that same contractor. So, that when you -- we got your determination letter, we can pulled down all our data and say okay, this particular ITAAC we have a letter on. We didn't leave an inspection footprint on any part of it, but during the same time frame it was being fabricated, we looked at that fabricator's welding process. We looked at that fabricator's NDE process. We looked at that fabricator's inspection process and their documentation process and we can make a reasonable assessment that that ITAAC received the same -- same considerations that the ones we did look it.

It's a matter of -- it's a management tool in order to management our limited resources.

MR. CAMERON: Good. Thanks, Jerry and

Russ, are you going -- I think that that was probably a third issue the SAYGO process that we just heard about there. Are you going to -- Russ, are you going to take us to a -- a new issue in terms of 2503?

MR. BELL: Yes.

MR. CAMERON: All right.

MR. BELL: We support the SAYGO processes. Jerry just -- just describe it. Both Jerry and Joe touched on the notion that when they get a ITAAC determination letter from a licensee that they would go to their CIPIMS, press a few keys and get a dump or a printout of all the activities, all the inspections related to that ITAAC determination and what I want to ask is -- and at that point, you would -- let's -- let's assume you find all that to be in order and indeed agree with the licensee that the acceptance criteria are met. We'd go to the 52.99 notice.

My question is what will that documentation look like? What will that notice look like with respect to identifying your conclusion and the bases for it? Given that some thought?

MR. SEBROSKY: The -- the short answer is no. We -- we have not worked out an example of what the Federal Register notice would -- would look like for that.

MR. COE: I would offer though that you can state as a given that the basis for that should be publicly available.

MR. BELL: What I want to ask is you press the keys on the CIPIMS and you've got your 90 or 900 inspection activities that are somehow related to that ITAAC. Certainly one option would be to make that list of inspections available. Perhaps reference it in the 52.99 notice as basis for the ITAAC inclusion. Okay.

My -- my question is to -- to what extent -- that -- that documentation is going to be a mixture of inspection conclusions directly material to an ITAAC acceptance criteria and other inspection reports and findings and so forth that pertain to normal construction inspection activities that are underlying, okay, that were performed under the licensee's quality assurance program, inspected by NRC, do not correspond to in the case of RPV one of the seven line items of the ITAAC.

If this mixture is characterized as the NRC's basis for concluding the ITAAC is met and it may be a question for Bob, what is a -- what will a member of the public conclude is open to question or challenge in the 52.103 hearing?

MR. WEISMAN: Well, I think you're raising a -- a good point that we'll have to consider when we -- when we make our determination of what should be in the notice. I mean it's -- as Joe said, it's not something that we thought about before.

MR. SIMARD: This is -- this is probably one of the most important things we ought to be talking about here. This is Ron Simard from NEI.

Where do you draw the line? You know in Russ' example, he said well, you press a button and you get nine or 90 or 900 inspection reports. I think the key issue before us is what -- what -- what constitutes information that is material -- materially relevant? The impression I'm getting from the discussion is that everything you do is tied to an ITAAC.

Let me ask -- let me ask a question. Earlier, Joe referred to this handout, the -- the construction -- the framework document and page E-2 and there is a -- there is an ITAAC in there on the containment internal structures. Let's say we had forgotten to write an ITAAC on this. Absent an ITAAC here, does -- what level of inspection activity would you be performing to assure that the as-built design can withstand the structural design loads? Would you

not be performing an -- an equivalent or a roughly comparable level of -- of inspection and -- and -- that you might have done previously if the plant were licensed under Part 50?

Does my question make -- my question is why -- why is the -- the care or the attention or -- or roughly the level of detail you put into this, why does it need to be tied to an ITAAC and where do you distinguish what is materially relevant to an ITAAC and what is just, you know, the -- the baseline of -- of quality activities?

MR. CAMERON: Joe.

MR. SEBROSKY: Yes, I -- I guess this was the kind of question that I wasn't expecting. The reason I wasn't expecting it and I was -- I was expecting the opposite. I mean if we have inspectors show up on a site and say we're looking at X, Y, and Z today, the question that I was expecting from -- from the industry was well, why are you looking at X, Y, and Z today?

And what we thought CIPIMS would do would -- would -- the Construction Inspection Program Information Management System would give us a basis for why we're doing those inspections? In other words, related them to an ITAAC.

And that's some of the things that we've asked the contractor to look at is to take the ITAAC that we have and look at all our inspection procedures and tie -- that we use to inspect the last generation of plants that were constructed and try to tie the two together and we're hoping that there's pretty good correspondence because concrete's still concrete and rebar's still rebar and that -- the inspections that we did in the past when we do those inspections, we -- we should be able to tell not only the licensee but any interested stakeholder why we're there.

And forget about programmatic ITAAC for a second and suspend disbelief. When we looked at the construction stage, we -- we basically thought that any inspection activity that we did forget -- forget about programmatic ITAAC, we -- we would have to tie to an ITAAC and if -- if we didn't --

MR. SIMARD: Even though all the way back to receipt inspection, warehousing. That far back, Joe? I mean where do you draw the line? How far back would you go?

MR. SEBROSKY: If you look at those -- if -- if you look at those inspections that we've done in the past and I think I now understand the concern, but if you look at the ITAAC, there's ITAAC that says

that, for example, these components are seismic category one.

Well, if you screwed up the receipt inspection or we don't have any faith in how you handled that material from the time that it was shipped from the vendor to the time it was shipped on-site and the as-installed equipment doesn't have the appropriate pedigree, there's an ITAAC that says this component is seismic category one and if we have an inspection report that says wow, their -- their receipt inspection doesn't work right. They got all these issues associated with being able to tell us that the component X that got shipped from the -- from the vendor is actually the component X that's installed in the -- in the -- in the -- in the plant.

So, although it's not an expedite ITAAC, we think a lot of those inspections are implicit to our making a reasonable assurance determination that the ITAAC had been met.

MR. COE: But, let -- let me add to that, too. Because I'll assure you that one of the things that I've tried to encourage the -- the construction inspection to do is ultimately to devise a -- a program in which we've decided up front before you start construction what's necessary and sufficient for

us to develop in terms of inspection findings to make -- to allow the Commission to make its finding at the end of the process.

To answer you question directly, everything that we do should be tied to an ITAAC. Everything that we do in support of that Commission finding at the end of the process needs to be tied to an ITAAC. So, yes, it's -- it's material everything we do.

Secondly, how far do we go down and Joe's giving you some examples, but that is to be decided and determined and will be promulgated through our inspection procedures, but the examples that Joe raises can be, I believe legitimate -- legitimately connected to the inference that -- that a system that demonstrates its performance on a given day and a given test is assumed to demonstrate that performance throughout the operating lifetime of the plant given its initial design and the programs designed to -- to take care of it over its lifetime.

So, the point is you're making a good -- you're offering a good question here and -- and the answer is is that we have to decide what's necessary and sufficient and then we have to define that in our inspection program.

MR. BELL: Boy.

MR. JORDAN: I'm a little bit taken back by your comments and I'll tell you why. You said everything's material to an ITAAC. Now, I'm not a lawyer and I don't practice law without a license. But, I know there's one sitting next to you and I think -- I think the issue is relevant and material regarding an issue of whether it's -- it's -- you might say it -- it invalidates an ITAAC or not.

We -- we talked earlier this morning about a QA program and about the quality of the data and the QA program is important to assure that the quality of that data is right so the NRC has confidence so they can make their finding on that.

I see no difference here with the quality assurance. If there's deficiency that Joe identified, it goes into that QA program. I'm sure the quality of that result is there.

Once you're at the 103(g) finding given all -- we've agreed all the quality is there, the corrective action -- for the robust corrective action program, to me the -- the question comes -- would be -- comes then did they meet the test results or not?

Not -- not is everything material that was done from day one, material to that ITAAC finding.

I guess we have a real disconnect if that's the perspective.

MR. COE: Let me make sure -- let me make sure -- let me make sure my comment was understood.

What I said was is that everything we do to inspect should be material to an ITAAC. I didn't say that everything that you do on-site under a quality assurance is material -- necessarily material to an ITAAC. What I'm saying is it's our obligation to support the Commission's ultimate by representing the Commission or offering the Commission a set of findings that each of which can be related to a -- a particular ITAAC.

MR. JORDAN: Okay.

MR. COE: Under the Part 52 licensing process, that's our obligation and so what I'm suggesting is is that we define an inspection program that is -- in which all of our inspection activities can be linked to an ITAAC and so, I -- I guess I'm agreeing with you on that point and then the second part of the question was how -- how deeply do we delve into the -- to the details may be related to that ITAAC and those ITAAC elements and that is the question that hasn't -- has yet to answered and may only be answerable when a specific design is presented

to the staff to inspect.

MR. JORDAN: I think we were talking about some fundamental -- maybe Bob understands where I'm coming from.

MR. WEISMAN: Yes, I -- I think that -- I mean what Joe said at the beginning was we're going to set operational programs aside here.

MR. JORDAN: Right.

MR. WEISMAN: Right. We're holding that in suspense and I think we had discussions early on in this process, you know, months or even years ago about how for instance quality assurance might play into an ITAAC and I think we have reached an understanding on how that would work, but the fundamental goal here is what's set out on Part 52 and the Energy Policy Act of '92 that we're moving a lot of findings that used to be made after the plant was built -- on -- findings on design, on the adequacy of design, we're moving those to the COL and when verify that the ITAAC are satisfied, that completes the set of findings that we need to make under the Atomic Energy Act.

Okay. The Atomic Energy Act findings are the same whether you're making those findings under Part 50 or whether you're making them under Part 52.

So, in a sense, I think Dr. Simard made a

comment about you're going to be inspecting all the same things. In a sense, that's true. You're just cutting them up differently.

Is that right, Joe? Is that -- is that an accurate way to say it?

MR. SEBROSKY: That's my understanding.

MR. WEISMAN: Yes, so, I believe that what Doug was saying is we're not going to go out and spend a lot of time looking at stuff that's not relevant to ITAAC. We got to make sure that the ITAAC are met because that's what we have to do to make the finding to authorized operation. If we don't have that information, we can't make that finding. So, that's -- that's what the goal of all these inspections are.

Now, I might -- I might say that the staff had a little flexibility to look into certain programs which we said we were going to set aside to make sure they're working the way they're suppose to work, but those may or may not play into an ITAAC according to the previous discussions that -- that we've had.

MR. WILSON: And if I could just add on, Bob. This is Jerry Wilson.

MR. WEISMAN: Yes, go on. Go ahead.

MR. WILSON: That previous discussion Bob's referring to is in SEKI 0092. There was an

extensive discussion on material relevant to ITAAC and I would invite folks who are interested in this to go back and look at that document.

MR. WEISMAN: Thanks for the reference, Jerry.

MR. JORDAN: Well, that's the document we were referring to.

MR. RICHARDS: Before -- you need the microphone. I'm not sure we're answering your question. You said you were taken aback by something Doug said. Can you give us an example of --

MR. JORDAN: Here's what -- here's what I'm -- I'm coming after and -- and because I thought we were expanding the -- the ITAAC inclusion beyond the -- the acceptance criteria solely thereon. Whatever those wordings -- whatever that wording is in the 52.99 requirement.

Is -- is the test results themselves are subject to you might say contention or whatever at the 103(g) finding, I'm focusing on the results because the quality assurance program has taken into effect all the deficiencies and -- and you -- the staff has agreed that we've met the ITAAC.

So, then the question is are the results valid or not? And I'm -- what I'm -- what I'm trying

to understand here is when you say everything's materials to an ITAAC, I think I understand where you're coming from on that, but what I'm asking is at the 103(g) finding, what are we really talking about relative to ITAAC verification? Are we talking about the results of the ITAAC is what -- is what the finding's going to be about? Do we verify that we did the test passed -- the test passed as opposed to worrying all the -- all the stuff that came up to produce that result?

You know, what we're saying is the -- the QA program assured the quality of that result. Therefore, at the 103(g) finding, we're focusing on the test results. Correct? I mean that's the -- that's our -- that's where our perception is and maybe there's a disconnect there.

MR. ISOM: Well, could I ask a question? Are you just saying -- are we -- when we verified ITAAC was complete, are we verifying just a number? Was it math like 100 GPM for example?

MR. JORDAN: Yes.

MR. ISOM: It's just a number.

MR. JORDAN: That's correct.

MR. ISOM: I don't -- I don't think so. I think we will look at the -- the -- how you got that

number if that's a valid inspection requirement. We may look at the test process or may look at your -- how you did the test. What instruments they used.

MR. JORDAN: Fully expect you to do that as part of your ITAAC verification process, but once you verify that the ITAAC is correct and complete and we confirm that to you in writing, then the -- then the test has been satisfied. Then it moves to the 103(g) space.

The results are what's -- what's up for you might discussion. I'm not a lawyer and I can't say it quite right. But, what I'm saying is you've already agreed that the ITAAC was met. Therefore, at the 103(g) we're just talking about the results being at issue.

MR. SEBROSKY: Is the concern -- if -- if you go back to programmatic ITAAC, the -- the -- the issue really boils down to litigation risk. Is the concern that -- that if we reference several different inspection reports that that may be brought into the 52.103 hearing?

I'm -- I'm still trying to understand what the -- what -- why you're so concerned about our basis for saying that an ITAAC is complete and specifically I'm trying to understand what the concern is that if

we reference several inspection reports which as soon as they're written -- I shouldn't say as soon as they're written, but they're -- they're publicly available, they're on the record and our intention talking to the team was when we issue those inspection reports we'll say this is what we came to inspect, this is what the results were, and just so you know, everybody, stakeholders and internally to the NRC, this is what -- this is the ITAAC that are impacted by either this -- this positive inspection report or this negative inspection report.

Are -- are you concerned that -- that that could be used in a 52.103 hearing? Are you trying to limit that?

MR. BELL: Yes.

MR. SEBROSKY: I mean that's the issue?

MR. BELL: Yes.

MR. SEBROSKY: Okay.

MR. BELL: Yes. Let's take Jim's example of the pump and the 100 GPM and let's say it's that functional GPM test criterion that needs to be met under the ITAAC and we would demonstrate to you that we had a calibrated instrument and the -- the configuration was appropriate and that would be all as Ben said fair game for you to verify as part of the

ITAAC.

The receipt inspection report on that pump, the installation procedures for that pump, okay, that -- the inspections of those things might also spit out of your CIPIMS data dump. Okay. Those things are not related to the -- no, they're not material to the ITAAC conclusion that 100 GPM inspect and so, would -- should not be subject to the 52.103 hearing.

Now, that is not to say that there is no avenue to raise a question about a licensees receipt inspection of warehousing activities or -- or their competence in -- in installing complex equipment, but there's a separate avenue for raising non-ITAAC matters on any licensee and that's the 2.206 process.

So, if you were to spit out a long list of -- of matters that were considered a long the way to an ITAAC process end point, only a small subset of those we would think would be directly material to the ITAAC acceptance criterion as written. Others would be -- would be performed as -- or have been performed as part of the quality assurance program and if there are questions on those, they'd be raised under another mechanism.

MR. SEBROSKY: Yes, I -- I guess as Jerry

Wilson indicated maybe the -- the solution to this is you can provide those in written comments. Because there is -- I think there is a disconnect.

We -- in the SEKI that Jerry talked about 0092, we laid out, for example quality assurance and we think that's implicit in the ITAAC and we got a Commission staff requirements memorandum that agreed with -- with that and --

MR. BELL: What that SEKI said was that if there was a deficiency in a quality assurance -- a quality assurance deficiency, that it could affect an ITAAC conclusion and the example was an out of calibration flow meter. Okay.

But, I don't -- I don't think any of us interpreted the quality assurance program itself or anything accomplished under that program would be part of the ITAAC conclusion or -- or basis.

MR. SEBROSKY: This gets back to devil in the details. That was one example that was spelled out in the SEKI and I -- I think I understand that we're using that example to extrapolate out and we're going in a direction that --

MR. COE: If you would argue -- if you're arguing that the QA program doesn't have, and I know you're not, doesn't have an influence on the

acceptability of the ITAAC, then we wouldn't have to look at the QA program at all.

But, we since we -- we have agreed on this link --

MR. BELL: Well, as you say, I'm not arguing the --

MR. COE: -- then -- then we will look at the quality assurance and deficiency correction programs and we will -- we'll look at them with respect to whether or not they're treating a particular system and -- you know, appropriately and -- and, therefore, that may play into our database that supports our ultimate conclusion.

MR. BELL: The quality assurance program assures a great many very, very important things, but they're not ITAAC. Included might be seismic two over one, electromagnetic compatibility, radio frequency interference, electrical separation, cable and conduit trades, cables, missile generation, set point methodology, concrete criteria, rebar patterns and spacing. I mean, would you agree these are important things that would be accomplished under a quality assurance program inspected by the NRC and in 1992 --

MR. COE: And -- and --

MR. BELL: -- proposed to be tier one

ITAAC items all of them. Okay. And there were extensive discussions that those types of verifications would be -- would be of a tier two nature. Not -- they were not -- we don't ITAAC on -- on all or most of those things. I may be off on one or two. But, they were to be verified by the quality assurance program. Inspected by the NRC normal inspection process. Certainly, they all have some relevance. They all relate to the ITAAC. These are very important topics. They were not elevated or promoted tier one ITAAC.

So, there's a -- there's an avenue for performing these -- this kind of work for NRC to inspect it and for the public to raise questions about it for things like -- that are ITAAC per se, meaning the ITAAC -- the -- the flow -- adequate flow test.

Clearly the avenue to raise questions on that is the 52.103 process. We think that's an important distinction. That was carefully, painstakingly established on the design certification and that this process needs to uphold.

MR. RICHARDS: May sure I understand what you're saying. What Doug had said before is everything we inspect is a relevant ITAAC decision. You're saying no, that's not the case. There's these

kind of a high level items that do apply, but a lot of these other items that are relegated below having an influence on whether the ITAAC was better.

MR. BELL: We've called them supporting -- we've tried to find another term for those important things that are related to the pump that pushes 100 gallons per minute, but we had to find a different name for those because Part 52 demands them be treated differently because the Part 52 gives special significance to the ITAAC.

MR. RICHARDS: Joe, do you want to comment anymore on that or do we make that a take away.

MR. SEBROSKY: Yes, I -- I think we're at the point that we -- we have that in the transcripts and I'm sure NEI will probably provide that as a written comment and we'll -- we'll -- we'll address that.

MR. BELL: Just back to the point -- the reason why we didn't ask you the question you expected us to ask you which is why -- why would you even look at all this stuff when we given you an ITAAC determination letter? Because we've asked you that before and we found that we were barking up the wrong tree and, in fact, staff is going to look at whatever the staff wants to look at because that's your -- your

prerogative, but where the rubber meets the road for us, the reason that was important to us is because the distinction between certain types of information from the ITAAC and what's available and open to the 52.103(g) hearing -- 52.103 hearing versus the public's ability to raise questions over the -- by the 2.206 process.

So, we didn't ask you the question you expected because we've asked it before. Today, I think we're getting to the nub and yes, we'll follow up this -- in addition to the transcript, you'll get our -- our comment on it.

MR. RICHARDS: I think we've got the question and provide that in your written comments and we'll give that some thought.

George Zinke. Are -- are you done, Russ? George has been back there for awhile.

MR. ZINKE: What I was going to say, Russ has said.

MR. RICHARDS: Russ, did you have other comment?

MR. BELL: Yes, unfortunately. Want to do an easy one?

MR. GRANT: Yes, this -- this is hopefully an easy one. Eddie Grant with Exelon.

The question for you on that last block there that's on the slide that indicates that the Commission is going to make a decision. At that point, certainly the -- the rule requires a finding.

I'm rather simple I guess, but -- and look for the simplest way for things to be done.

I envisioned basically that block to be punching the buttons here in -- in CIPIMS and identify that yes, indeed we saw that there were 4,783 ITAACs identified and we punched the button and we verified that 4,783 ITAACs are complete and the Commission decision, therefore, is -- or Commission finding is they've all been met.

Is it not that simple or is there more envisioned in that last block?

MR. SEBROSKY: If you go back to that -- that last -- those last couple of blocks, it's -- it's based on the Part 50 licensing process and -- and the determinations and findings that were made for an operating license and I -- the process that we used in the past and I believe it's Inspection Procedure 94300 lays that out. Then you get a -- the regional administrator makes a recommendation to the Director of NRR. The Director of NRR then forwards that onto the Commission and then the Commission votes and the

Commission -- the staff doesn't control the Commission. The finding is 52 -- is the Commission finding and not a staff finding.

As Jerry Wilson's standing.

MR. WILSON: And to add onto that, there may be a hearing and the Commission is going to be hearing from the results of the -- the findings from the Hearing Board also. So, that's going to be taken into consideration on what the Commission decides and there may be last minute allegations filed. I mean it's hard to predict that it's simply adding up I forget the number Eddie used, but all of them and -- and the staff made a recommendation at various points in time and said that they all were met and so, yes, that's it. There are other things that -- that could come up that the Commission could make your decision on.

MR. BURNS: I understand that there are other things that fall into play or come into play there. My question -- I'm sorry I didn't state it well I guess. But, the question was really relevant to ITAACs since that's the primary discussion here today.

Is there some other evaluation that the Commission is going to do or is this merely a -- like

an accounting process at this point for the ITAAC?

MR. FOLEY: Well --

MR. GRANT: You mean the Commission or do you mean the staff?

MR. FOLEY: Commission finding is based on meeting the acceptance criteria. So, that's the ITAAC.

As I said, I think that we will be doing sort of evaluation as we go. I mean as you know, you might be 4,000 ITAAC. We're certainly not going to look at all 4,000 ITAAC. You might provide us with 400 letters saying that -- each one saying that ten ITAAC are done. Well, we will look at a certain percentage of those. If we have problems with some of ITAAC and say hey, you know, you guys, you didn't fulfill this, this didn't make that on this ITAAC. This is not necessarily correct and that's not necessarily correct.

We don't have a lot of confidence in the other ten or -- that you provide or the other nine for example and if this type of process continues through the whole program, then what kind of confidence do we have in those ITAAC that we did not look at.

I think that there is an evaluation. It is not simply just pressing the button, you know. If

you say if we take those let's say 3,000 or -- or 2,000 ITAAC that we did not look at but we just had the confirmation in the letter from you saying they were done and yet we put them into CIPIMS and say they were done but with no real hardcore inspection of those -- those ITAAC and yet the other thousand that we did look at we had trouble verifying the veracity of the data or the quality, the reliability of the data or just some sort of problems with them. I think that -- that we have to do some sort of assessment then.

It's not simply pressing the button. We want to assure to the public that the ITAAC are met and complete and are valid with reliability -- reliability and some sort of veracity. Wouldn't you agree? I mean that's our responsibility.

MR. GRANT: I absolutely would agree, but I would expect you to do that before you make your 52.99 notice that we agree that this one's been met rather than at the end.

MR. FOLEY: Well, that's it. That's what I meant was --

MR. PAULK: I don't think any of us at this table can speak for the Commission. If the Commission wants to do an assessment, the Commission

will do an assessment.

MR. GRANT: Absolutely, I only ask what you envision for that last block.

MR. PAULK: I don't think -- they haven't given us their -- their ideas on it yet.

MR. FOLEY: Oh, just the last block.

MR. BELL: What's raising our concern perhaps is staff's paper and this is the staff will do is perform an independent review. Okay? To make sure -- I forget what the words are exactly. To I think evaluate that it has received all the ITAAC determination letters and that the staff agrees that all the ITAAC have been met. So, this is when all the ITAAC are met and what's being called for is an independent review. That sounds like something more than mechanistic, more than accounting. Yet --

MR. ISOM: Are you referring to the Operational Readiness Assessment Team inspection?

MR. BELL: No.

MR. ISOM: Is that what you're referring to?

MR. BELL: No. This is the ITAAC. This is on page 19 of the framework document.

MR. RICHARDS: So, your question is -- is that we've decided all the ITAAC have been met to the

degree we're going to do an inspection. Is there anything beyond that that the staff intends? Is that the question?

MR. BELL: That's correct. I'll answer it for you and you can agree or disagree. I think it's appropriate for the staff prior to making a recommendation to the Director of NRR and to the Commission that the staff confirm that all the letters have been received and that the staff has agreed through 52.99 that all the ITAAC have been met, but to me, those are fairly mechanistic steps at this point in the process and not a new -- not a new assessment. I'll tell you why that's important.

The last of these ITAAC may be completed just shortly before the schedule date of fuel load. Now, fuel -- fuel load won't occur until the NRC says it's okay to proceed, but the point is there will be a very small amount of time to -- to -- and I think it will be choreographed exactly what happens. The -- the licensee completes the ITAAC. They give the -- they the NRC the last notification that the last ITAAC was met. All of this is well -- signalled well ahead of time. The staff in parallel has been confirming that they have all the letters received and previously agree that all have been met and again, in short

order, a recommendation -- those recommendations go on up the line.

We -- we think at this point in the process so close to the fuel load that necessarily has to be a mechanistic one and this is why we're -- one of the reasons why we stress the importance of the 52.99 process. Why each and every 52.99 must be a -- not interim, but final staff conclusion as to the completion of an ITAAC subject, of course, to new information that might come -- come to light regarding.

MR. BLAKE: I'd like to try to field that question. I -- I think the team that put this together which I was part of had in mind here was that as a check on the inspection team that was assigned to that particular docket, then we would like to have some independent group of NRC people that were not directly assigned to that docket, run a verification to say yes, we received letters on all of the ITAAC and yes, we did respond as appropriately to all the ITAAC and that's why the following sentence says this could be done by the same team that would be doing an operational readiness assessment.

That is what we meant we put the words in there an independent review. It would be another

group of NRC people, could be headquarters, could be another region, could be some -- independent of the people assigned to that docket.

Does that answer the question?

MR. ISOM: Can I add -- can I add another comment there, Russ? The timing on the inspection would be such that you will not be in critical path to the -- you know, the decision made by the Commission. So, it would done -- you know, it won't be done the very last day obviously. It would be done somewhere between the six month -- you know, when we get your letter saying you want to load fuel and the time which -- which you indicate to us you're ready and the bulk of your ITAACs were done which -- monitor and independently verify just to make sure the team that we had assigned to the project actually didn't miss something that -- that should have been caught.

And -- and they may -- you know, we haven't really written the scope of what the team will do. But, they also kind of do a vertical slice look at a couple of ITAAC just to make sure it looks, you know, fairly -- fairly good.

MR. BELL: Okay. That will be a critical time. I know you don't want to be on anybody's critical path with -- with that step. Given the

volume of information that you're suggesting would be independently reviewed, I -- I guess I'd ask you to carefully think about the scope of that -- that review. How it could be significantly -- you know, if a different person punches the same keys on CIPIMS to get the same printout that says yes, we've got all the documentation if you -- you want to consider that an independent review, but beyond pressing keys in CIPIMS, there may be little time to do much of any other type of independent review. At least that's certainly a concern.

MR. BLAKE: Based on -- on the programs that we're conducting today, I'm -- I'm sure that we're not going to wait until the final hour to do the independent review. It will probably be something -- somebody from the program office doing some kind of quarterly or semi-annual assessments as we go along.

MR. BELL: That's helpful. It does relate to -- I have another type of question and Jim alluded to it.

Six months prior to the scheduled date of fuel, a notice must be issued notifying the public of schedule date for fuel load and offering an opportunity for hearing on the ITAAC.

To my estimation, you're -- you're paper

is silent on what triggers that 52.103(a) notice, but in our white paper, we envision that the licensee would send you a letter identifying the schedule date of fuel load at least six months out, state that all ITAAC have been met or will be met by that date, and request the 52.103(a) notice.

At that point, we'd -- we would expect the staff based on that information to inform the Commission regarding the status of ITAAC completion and to publish the required notice and despite the existence of open QA fee deficiencies or other incomplete activities provided that those deficiencies and incomplete activities do not impact the termination that ITAAC have been or will be satisfied with fuel load and I guess -- I guess I would suggest that the paper, you know, address this important milestone because without this trigger, the 52.103 process does not start and I think it's important to understand what staff will go through in order to get that process underway.

MR. WEISMAN: Okay. If I can -- I'll just briefly address that because we are crafting a position on how that should work. We are looking -- we looked real closely at your white paper and LGC and NRR working together to -- to put something together

in writing to tell you how we think that ought to work and I don't know exactly what the schedule is, but it shouldn't be more than a few weeks before we're done with that.

MR. RICHARDS: Are we going to make that publicly available or --

MR. SEBROSKY: Yes, it'll be -- it'll come out of -- we knew we had these -- these comments just as -- as background, but we didn't think that it was appropriate to put the hearing process in the construction inspection framework document. That's an issue that in the New Reactors Sections we've -- we've said that we would deal with separately from the -- from the framework document. So, what Bob was talking about is a letter that'll most likely come from Jim Lyons to NEI stating what our position is relative to the hearing.

MR. RICHARDS: All right. Anything else, Russ?

MR. BELL: No, Bob shortcircuited my last comment which was that the feedback on the 103 process is frankly long overdue. We can look forward to it in the next couple of few weeks. That would be -- that would be most helpful.

MR. FOLEY: Yes, I think that's a --

that's a reasonable expectation.

MR. RICHARDS: Other comments. George, you stood up a couple of times.

MR. ZINKE: Just a -- a question. Quick -- quick question. George Zinke, Entergy.

On the examples that you gave for thing that would invalidate ITAAC at least I didn't see it stated, but we noticed all of the examples dealt with discovery of a condition that existed prior to or at the time an ITAAC was being determined by the utility. So, you -- you might call it a pre-existing condition or -- but -- but, they all related to that kind of a -- a timing versus a timing of you verified the ITAAC, the pump float and now pump breaks and now you're into maintenance and you -- you are now in a different -- you're in a corrective action process. You're in a maintenance process and you're maintaining configuration.

My question is was that intentional or -- or do -- did that just -- because we agreed with that. We just weren't sure if that was your intent or if that just happened to be the examples you picked.

MR. BLAKE: I -- I believe if that's part of the discussion on -- on the -- on the next subject of discussion which is Manual Chapter 2504 which does

cover the -- once -- what happens to -- you know, what you do and what involvement there is with things that have been accepted and what kind of treatments you give them until the time you put them in service.

I think that is -- it was done deliberately. That is a separate inspection. The fact that you dropped heavy on a pump that passed an ITAAC doesn't say that we invalidated -- you know, who wouldn't invalidate the ITAAC on that pump, but if you drop something on -- on the suction line for that pump wouldn't -- and so, it couldn't pull that kind of a flow and it would not invalidate the ITAAC, but it would be a maintenance issue for you that we would certainly expect to see fixed before you put -- before you loaded fuel.

So, yes, those things have been considered. We deliberately looked at things that -- things that come up. Because of knowing, you know, the only three people that see 100 percent of the work are the craftsmen that put it together. A good QC inspection problem -- program will probably see 20 percent. A QA program will see maybe 4 to 5 percent and we're going to see some small percentage of that for the NRC's standpoint.

So, yes, things can be discovered later on

that say wait a minute, we may not be as smart as we thought we were. Something happened. Let's invalidate that ITAAC.

The question did come up and I think we did offer to you guys the opportunity to weigh in with your -- what kind of examples you would think and we had to sit down and -- and we pulled some examples out of the past that were real life examples that said things that happened where we had to go back and re-look at things that we thought were finalized.

So, yes, it -- it's something that happened in the past that we missed.

MR. RICHARDS: Are there any other questions before we move on to the next presentation?

If not, Jim.

MR. ISOM: Let me move on to 2504 Transition to Operations. We -- we covered some of this topic already.

But, slide 52 please. Next slide.

Yes, this is where it all comes together. All through this four and a half year period, we've been verifying the ITAACs and looking at your operational programs and coming to the conclusion as to I guess now we're considering calling the NRC ITAAC 52.39 conclusions and then eventually, we're going to

integrate all that information. We're going to do an independent review, do an Operational Readiness Assessment Team inspection and then make a recommendation. The regional administrator of that region will make a recommendation to the Director -- Office Direct of NRR and eventually culminate in a decision made -- being made by the Commission as to whether or not the utility are allowed to load fuel.

The next slide please.

This is kind of a busy slide, but I want to kind of point out a couple of things to you. The upper portion here is basically the construction activity that's occurring at the -- at the facility. This is about 18 months. This is about 36 months. This is the fuel load point and these two timelines are basically the inspection timelines that we envision during this process.

The first inspection timeline for example we indicate here the ITAAC would be begin at the -- before the combined licensed is issued and that's -- that's because of various large -- and then being ordered before you actually come in for a combined license.

Here is the Commission decision on ITAAC that we have been discussing here. What -- what that

-- what that would not -- would take place and -- and the -- this is the operational readiness assessment inspection or the ORAT inspection that we talked about for a few minutes, but the idea there was this team would come in and to provide some help to the regional administrator who is responsible for making this decision and recommendation to the Office of the Director NRR. Some independent group coming in to make sure that the ITAACs were completed and they'll probably do a sampling program.

I -- I got the sense that perhaps that you were thinking that we would do a 100 percent review, but based on just this kind of team inspections in the past, we've done a sampling review of the ITAACs that -- that's been completed to make sure that, you know, whatever we decided was -- was good -- was acceptable.

It still is and -- and this recommendation from this independent group, the ORAT team, along with the -- the other group that's been overseeing the construction project for four and half/five years will go to the regional administrator. The regional administrator will take a look at these two pieces of information and based on -- based on the recommendations from these two groups, he will forward that on to the Office of the Director of NRR and

eventually their recommendation will make it to the Commission at which point the Commission will make decision whether you can load fuel or not.

I think this is all I have for this part of the presentation. I'll be happy to answer any questions at this point.

MR. RICHARDS: Any questions for Jim Isom?

MR. BURNS: Ed Burns. One question I've dealt with. The sampling. You're saying after you get toward the end there, you'll going to be using a sampling premise and the basis of sampling a certain number of percentage, 20, 30, 40, 50, 60 percent of the ITAACs, you'll be able to conclude that the overall -- the remaining ones you haven't looked at are good.

If indeed you can make that statement now, why isn't that done at the COL stage when you are indeed saying we can conclude that the applicant can safely construct and operate this plant to -- to public safely, but why at that point in time when we decide which ITAACs to look at in the future to help us do that confirmation, why is the sampling not done there, which it is, it is already done, than at the end?

Because you're saying you're actually

going through two steps. At the COL stage, you're narrowing your future look to certain ITAACs and that maybe a certain thousand, maybe 4,000, refer to the numbers and then at the final stage, you're doing another narrowing and on the basis of your sampling, you're confident that your conclusion covers those items you didn't look at.

I think we need to rethink that and make certain we get the proper legal understanding of what that physical sampling -- what the sampling looks like. Because I could easily make a challenge that if -- if it was important enough to be an ITAAC at the COL stage, it's important enough for the NRC staff not to overlook it. That they must go out and do an inspection on that if the inspection already ordered and not allow themselves to be drawn into a statistical sampling of an already reduced inspection program.

MR. ISOM: Okay. I think the question is as I hear correctly why don't we do the sampling before the COL stage? Why they would do a two-step process?

MR. BURNS: At the COL stage you'll be deciding at that point in time what are the important ITAACs that need to be confirmed during construction

or upon completion of the fabrication and construction. That is a subset of the overall plan, of the overall program and on the basis of those ITAAC, you're just confirming what you already know at the COL stage because that's the way the language is.

MR. ISOM: Well, go ahead --

MR. RICHARDS: Yes, I -- I guess the first thing is the ITAAC or -- or for the licensee. Right? The licensee is going to have to verify that 100 percent of those ITAAC are complete and the resources that the licensee has way outnumbers the resources that the NRC has.

Now, your -- your question gets back to the question that Doug Coe has challenged us. Is -- the NRC is -- is required to -- to make a -- a finding or whether or not those acceptance criteria are met and what are the necessary and sufficient inspections to support that finding.

It's clearly not 100 percent. We don't have the resources to do that and we're trying to come up with a rationale for -- for how we would do that and we just in the framework document discuss the techniques that we would use, PRA, risk. We would heavily QA, but we don't get into the nuts and bolts of how we would do that. We know we got that as an

IOU.

MR. ISOM: I also want to point out that the sampling process to validate ITAACs were completed, the actual direct inspection part is being done by one group of people. The other group of people assigned to the site. The inspectors that come to validate the ITAAC.

The -- the ORAT team is a checker on the checker. The independent team that looks at the -- the ITAACs independently to come -- see if they come up with the same conclusion that this -- this group of inspectors who have been on the site doing this inspection for the last four and a half or five years.

MR. BURNS: That may not be clear in what you're -- what you're saying in the document.

MR. ISOM: Right.

MR. BURNS: Where the sampling comes into play.

MR. ISOM: Right. Does that -- does that answer your question? I think.

MR. BURNS: Yes.

MR. ISOM: Okay.

MR. RICHARDS: Russ, I think you're up.

MR. BELL: Thank you again. At one point in this section of the document, you talk about a --

a regulatory gap. I think it has to do between the time an ITAAC is declared to be complete and the 103(g) finding. I wonder if -- we're talking about a licensee who's subject to all the NRC requirements that are appropriate at -- at the time based on where he is in the process.

I mean we didn't perceive a -- a gap per se in the responsibilities of the licensee. Perhaps could you explain what you had in mind?

MR. ISOM: Yes, we did not intend that there should be a response during the gap. It's what -- we're trying to indicate that fact that once we take a look at a particular ITAAC, for example, just say a pump that was able to meet 100 gallons per minute. That could have been in the very early stages of the construction process.

We may not visit inspection of that particular system or that pump because we're looking at other things. So, there is a period of time where you -- we may not do a direct inspection there. So, we're sensitive to issues that come along with the care and maintenance of that -- of that system or the pump and in the event that some event occurs or we have some issues with quality with respect to maintaining that pump, we may come back and visit to

see if that pump actually still can make, you know, can actually 100 gallons per minutes.

It doesn't necessarily invalidate the ITAAC, but we need -- we need to look at the -- assess the operational impact from that. For example, now it may maintain that system for three and a half/four years.

MR. BLAKE: I'd like to add a little bit to that.

I think the -- the -- the regulatory gap that we envisioned when we -- when we drafted this part of it came about from what Jim was talking about, an ITAAC that was signed off relatively early in construction and the consideration that your tech spec requirements and your surveillance requirements would not come into play until you had fuel load authorization.

So, we have -- that's why we delayed or put this part into the 2504 where we say we're -- we're going to do some look at what kind of program do you have, what is your -- you know what kind of corrective action on your program do you have, what kind of monitoring program do you have, are you getting hits in that area, are you having damage to the plant? The -- the -- that -- this part of 2504

was to fill that gap between ITAAC completion and the onset of tech spec required surveillances.

MR. BELL: Thank you. I might just suggest the image of a gap is -- might not be the right one. I -- I don't think there is one. I think QA, design control, work control, configuration control will all be in effect and the responsibility of the licensee from the time that ITAAC is declared complete and I'm not sure you need to refer to a gap and I probably will provide that comment.

Talk about inspections to ensure that a licensee is managing this gap appropriately. Rather than that, you know, effectiveness of the work and configuration controls could be assessed as part of other ongoing NRC inspections and that'll be the nature of our comments.

MR. JORDAN: I guess my concern goes back to the interim terminology we used before. That's why I -- I totally agree with what Russ is saying. This should be ongoing activity of the NRC inspection branch not something that's waited to the end to reverify all this stuff right at the end if -- if that's what your intention is.

I mean if something's been there for three and half years, we'll be -- we'll be maintaining

configuration management. We'll be using our QA program.

I'm hoping you're right there with us. You know, it's part of your -- it's doing your appropriate inspections. What I would hate to see is all this is done by a -- you might say a team at the end and suddenly there's -- there's a number of issues that -- that -- that you're going to suddenly bring to light that we were not aware of.

MR. ISOM: No, that -- that wasn't our intent. Our intent was to communicate to you just because ITAAC were completed for a particular system or a pump early on in the construction, that doesn't mean the inspections will stop. We'll continue to keep an eye on that system as you will, I'm sure.

MR. BLAKE: I think if you look at -- on page 22 of our framework document, figure four, you'll see that -- that the timeline for 2504 begins very early. That's the bottom line on there and that's why we backed up -- we don't know when the beginning is going to be needed for 2504. We know what the endpoint is is when you reach 100 percent power. The beginning point is when you've got signed off ITAACs that warrant our attention.

MR. JORDAN: Thank you.

MR. ISOM: Also, I want to add -- bring up another point that I didn't mention. This ORAT team that we -- Operational Readiness Assessment Team, they will take a look at the -- I guess the implementation and quality of your operational programs before fuel load and they will make a recommendation to the regional administrator. WE haven't looked at that before, but obviously we've done that kind of inspection in the past with plants that were being started up and that's in addition to the high tech verification which is -- which is in addition to what they haven't done in the past -- historically in the past.

So, I wanted to just make -- point that out to you and, of course, this is very important because once the Commission -- when -- when the Commission decides that -- that you're allowed to load fuel, your tech specs will apply and obviously we want to make sure all your operational programs are running and they're satisfactory.

MR. RICHARDS: Any other comments or questions for Jim? If not, we'll move on to our last presenter, Doug.

MR. COE: Actually, I will offer one last comment on that last topic. Browns Ferry Unit 1 is in

a state of -- of restart activity wherein the plant is being brought up to current standards and -- and the utility intends to operate it once that's complete and we're implementing an inspection program there that is quite different from the current reactor oversight process and is probably more akin to Construction Site Inspection Program than anything else and the way that we're transitioning that plant or that we envision that that plant be transitioned into the ROP has been captured in a new manual chapter that was recently issued.

So, just a thought that we are hoping to gain experience with Browns Ferry 1 that might perhaps be useful -- generate useful insights in the development of a construction inspection program and how to transition a -- a newly constructed plant into the -- into an operational reactor oversight process.

With that, I'll just reference the last slide which lays our some of our intended milestones which include some that have already passed and the workshop that we're currently involved in here.

Beyond that, the end of the public comment period has already been identified as the 15th of next month.

The issuance of the framework document is

intended to be in -- in August.

The completion the work on the manual chapters that we've discussed will -- will -- is intended to take place in the calendar year '03/'04 time frame and, of course, that last bullet is -- is somewhat speculative, but it continues to be our challenge to monitor interest level and the commitment level of the industry and to try to gauge our -- our resources and apply our resources in a manner that does -- that -- that does produce an inspection program that will meet the needs of the industry and will achieve the goals of -- of predictability and -- and lack of -- or lack of unnecessary burden in the licensing, construction, and operation of the -- of a new nuclear powerplant should a utility decide to build one.

So, with that, I would conclude by saying our there any other issues of interest or concern that have not yet been developed or raised at this meeting that you'd like to take the time now while we have the -- the opportunity to discuss?

MR. RICHARDS: Before we adjourn, I think one of the things we wanted to do was Tom Foley had been keeping notes of the topics that we had as take aways. So.

MR. COE: Good. Okay.

MR. RICHARDS: Tom wanted to review that, too.

MR. FOLEY: Yes, this is our parking lot that we failed to maintain up there.

Well, I guess what we're taking back is we're going to go back and look at the RS -- the specific examples in RS002, our ESP guidance. We're going to look at the applicability of 2.790 to -- to our -- to our document. We'll look at SAYGO ITAAC conclusions and the terminology we're using there and the -- maybe perhaps an example 52.99 notice. We'll -- we'll work on -- maybe we'll take that into consideration and put that on a document.

These are the things we're -- we're looking at.

What -- what triggers the 52.103(a), I thing Bob Weisman's going to take that away as an action item and let me see and I guess here's a -- this is a -- one -- one of the topics was this mixed bag of verifications that the NRC's going to be doing and what kind of implications that might have in the -- in -- in the open market. I mean open to the public. That is versus -- versus a hard data and -- and a -- and a -- for the results of an ITAAC. You

know, that -- that whole issue. It's a little bit vague, but we're going to take that away and toss it around.

One question I have is what about the overall document? Are we on the right track? Are we going the right way? This, you know, we -- we divided it up into four manual chapters. Does anybody have any comments about the document? Rather we've talked about specific issues, but are we on the right track? You know, can we -- you know, is this generally okay? I mean or is it generally not okay? Could -- could anybody speak to that or could we have a raise of hands, thumbs or something?

MR. BELL: Well, the task force is thinking about more a specific answer, I think I'd just like to take the opportunity to commend the staff. I think the document was a -- a big step in the direction. We had a number of conversations about this general topic. We put our thoughts in writing to you and we're grateful to have your thoughts in writing to -- to us.

I wanted to say this because at points during the day, you might have gotten the wrong impression that we're at wits in over some particular issues. There's no question we -- we would like you

to take some of those things away. All those things away you just mentioned and give them some more thought. We'll provide you follow-up comments along those lines.

And at least a couple of them might be fodder for follow-up meetings. I'm thinking the 52-99 notice what that looks like. I think that links to this question of the distinction between the ITAAC documentation versus supporting quality assurance program documentation.

The other one that we might want to spend some time on is the construction schedule -- inspection schedule interface issue and at an appropriate time to talk more about how those things would work. I don't think you had that on your -- on your list.

But, I'm -- I'm filling time with just a general commendation regarding the -- the document and the -- the workshop today. Obviously, it was a forum that allowed us to bring forth the concerns that we have and I think that was certainly our purpose and presumably yours going in.

MR. FOLEY: Communication. That's what it's about. We're trying to communicate with you and trying to improve the document and -- and also pass

this -- this information onto the public stakeholders and would like to get any feedback that you have and remember there are feedback forms on the -- on those -- on the back of the agendas and the information that we sent out. Please either send them to us by mail or if you'd like pass them up here to the front, you know, or just leave them out there on the table. I'll pick them up.

I guess -- I guess we didn't breeze right straight through this, but we are -- we are ending up a little bit ahead of time.

Is there anything else? Any members of the panel?

MR. BLAKE: I think you left off verify the applicability of Part 21. That was done this morning.

MR. FOLEY: Didn't I do that? Oh, I had 2.790. I meant Part 21.

MR. BLAKE: Okay.

MR. FOLEY: Same thing. Right? Is that it? Does anybody have any other questions? Well, I -- oh, one more.

MR. JORDAN: I think, Tom, you also were going to make that clarification of the document regarding interim. Pertains to 52.99.

MR. FOLEY: Yes, I've got that.

MR. JORDAN: Okay.

MR. FOLEY: Any conclusions.

MR. SHELL: I'm Ralph Shell. I'm from TBA. I have a question regarding your inspection reports. If we assume as -- as Doug was saying that all of your inspections relate to an ITAAC in some form --

MR. FOLEY: Should. Yes, I would --

MR. SHELL: Yes. When you write an inspection -- a negative inspection finding and we're going to have to take corrective actions to correct that -- that finding and you're going to have to come back and close that out --

MR. FOLEY: I would think so.

MR. SHELL: -- at some point in time, have you thought about the wording your would use to close that out as it relates to ITAACs? A picture here is if I have over a four-year period, and I'll just use a number as an example, 200 findings that could relate to an ITAAC, what's the picture being painted on my successful completion of that ITAAC? So -- so, you're going to have to as I see it when you close these things out, maybe relate them to the successful completion or it's final impact on an ITAAC.

MR. FOLEY: I see your point. You're getting down into the details of the IMC-2503 and we're -- we're struggling -- we're trying to develop that manual chapter, you know, currently and we're -- we're -- we're struggling with that particular issue in -- in developing the -- the -- the manual chapter and I think as we go on, we'll probably have more workshops maybe with the -- these -- the other manual chapters as we go along through and develop them and we'd look forward to your input on those, but I don't have an answer for that right now. But, I -- I'll take -- we're taking that into consideration.

MR. COE: I think there is a high-level answer and that is at the time that the staff reports to the Commission that we will -- we will have had to satisfied ourselves that any of the open items that may currently exist do not impact the -- the determination that the ITAAC or the conclusion that the ITAAC had been met.

And I think we can also draw some insights again from our Browns Ferry 1 experience. Because at the point at which Browns Ferry 1 gets ready to operate there, is undoubtedly going to be a set of open items that exist in the corrective action program and the -- the oversight of that plant as it -- as it

proceeds into operation will be accompanied by a staff determination that none of those open items impact safety to the point where they can't -- can't proceed.

So -- so, again, there's -- there's some parallel there and -- and we -- but -- and we would hope to use that to -- to help define our -- our construction inspection.

MR. BLAKE: I'd like to add one more comment on this. I think we -- we are -- at least the -- the -- the team that's been working on this are sensitive to the fact that if we do publicly put in -- into the record a finding that has a negative connotation on an ITAAC, then it will probably -- it will have to be balanced by a positive statement at the time that we -- we find it having been corrected.

We can't -- we're going to have to think very carefully and that's one of the things that's in -- being formulated is that for documentation in that -- the -- they impact ITAACs, we cannot just document negative findings. WE're going to have make sure that the -- for the -- this type of a -- a licensing process -- inspection of this kind of a licensing process, that there's a balance shown and -- and that yes, there are, in fact, positive findings.

MR. JORDAN: On that subject, Jerry, I

guess -- the one thing -- do let me say first of all, Tom, I do like the document. I think you guys done a great job putting it together and I appreciate the opportunity for this interchange.

But, when we're talking about negative ITAAC findings, when I was reading through that document, I really didn't -- didn't see any acknowledgement of working with the licensee through their corrective action program. Because that's really where it's going to happen and I -- I'd like to see -- I guess maybe you guys consider -- consider that because I don't think you'll be making a negative finding without going back to us and -- and, you know, having us evaluate that as part of a corrective action program.

MR. ISOM: You mean like in the presence of similarly mentioned the licensee corrective action program associated with that deficiency.

MR. JORDAN: Right.

MR. ISOM: Yes, we could do that. So, it would help us strike it, too.

MR. JORDAN: Okay. Thank you.

MR. BELL: Sorry. I thought of one more, but it's process related.

Doug, the 050 -- 2502, 03, 04, we

appreciated the opportunity on 2501. Staff issued it in draft form and if I missed it, forgive me. But, will those -- will 02, 03, 04 also be issued in draft form for stakeholder comment?

MR. COE: As you know, that's not our -- our normal practice although we -- we take special exceptions on certain occasions. I don't -- has the team discussed that? Have not? Decision not made.

I mean again it -- I guess it depends on a lot of factors not the least of which would be your interest and our interest in making it available before it becomes final for a good thorough public discussion and -- and comment period.

If it's warranted, it's -- it's certainly not precluded. How's that for a bureaucratic answer?

MR. BELL: We'll -- we'll strongly encourage the staff.

MR. COE: Okay. Noted.

MR. BLAKE: I'd like to make one -- one comment on the previous question having to do with corrective action program. I fully expected questions on this particular slide and we didn't get any. Probably if we had -- we had reviewed QA too -- too much previously. But, on slide 46, where Joe talked about the sampling techniques that will be used, there

are four bullets under that. The bottom bullet is inspection of licensees QA program. With that bullet, we fully meant your corrective action program.

MR. BELL: Okay.

MR. BLAKE: Okay. We're not talking about your just blanket QA program. WE're talking about sampling your corrective action program to support our determinations.

MR. JORDAN: I guess, Jerry, what I was saying is before -- I would hope the NRC wouldn't have to go to the extent of publishing a negative finding. That -- that the deficiency would be in our Corrective Action Program.

We have an obligation under 50.9 to send -- if we sent you something that's not correct, to notify you according and take -- take appropriate action. So, I -- I would view that as an extreme case where -- where there was a --

MR. BLAKE: And that's one of the many topics we're going to be discussing over the next couple of years when we pull all the details.

MR. JORDAN: Okay.

MR. BLAKE: As Joe likes to say, the devil's in the details.

MR. JORDAN: Right. I -- and I agree with

that. Thank you.

MR. FOLEY: Okay. I think that's it. Anymore hands? Anymore conversation? Thank you very much. We appreciate your feedback.

(Whereupon, the meeting was concluded at 3:22 p.m.)