## UNITED STATES OF AMERICA

2	NUCLEAR REGULATORY COMMISSION
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4	OFFICE OF THE SECRETARY
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6 7	COMMISSION BRIEFING on LICENSE RENEWAL DOCUMENTS
8	Nuclear Regulatory Commission
9	One White Flint North
10	Commissioners Hearing Room
11	11555 Rockville Pike
12	Rockville, Maryland
13	
14	Monday, December 4, 2000
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16	The above-entitled Commission met in open session,
17	pursuant to notice, at 2:01 p.m., the Honorable RICHARD A.
18	MESERVE, Chairman of the Commission, presiding.
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20	COMMISSIONERS PRESENT:
21	RICHARD A. MESERVE, CHAIRMAN
22	GRETA J. DICUS, Member of the Commission
23	NILS J. DIAZ, Member of the Commission
24	EDWARD McGAFFIGAN, JR., Member of the Commission
25	JEFFREY S. MERRIFIELD, Member of the Commission
1	STAFF AND PRESENTERS:
2	FRANK MIRAGLIA, Operations P. T. KUO, Chief,
3	Engineering Section, License Renewal and Standards
4	Branch, NRR
5	SAM LEE, Sr. Engineer, License Renewal and
6	Standards Branch, NRR
7	SCOTT NEWBERRY, Deputy Director, Division of
8	Regulatory Improvement Programs, NRR
9	BRIAN SHERON, AD, Project Licensing and Technical
10	Analysis, NRR.
11	JITENDRA VORA, Team Leader, License Renewal and
12	Special Materials, Research
13	DAVID LOCHBAUM, Nuclear Safety Engineer, Union of
14	Concerned Scientists
15	RALPH BEEDLE, Sr. VP, Nuclear Generation and Chief
16	Nuclear Officer, NEI
17	DOUG WALTERS, Nuclear Energy Institute
18	ANNETTE L. VIETTI-COOK, Secretary
19	KAREN D. CYR, General Counsel
20	
21	
22	

23 24 25 3 1 PROCEEDINGS [2:01 p.m.] CHAIRMAN MESERVE: We're here today for a 3 4 Commission briefing on a variety of reports that the 5 Commission has prepared that relate to license renewal. This has been a very important activity, 6 7 generally, for the Commission over the past few years, and 8 we've had the good fortune to be able to handle two license 9 renewal applications in an expeditious manner, and we have a large number which are in the queue to be handled in the 10 11 future. One of the directions that the Commission had 12 13 provided to the Staff was that there should be the development of certain guidance documents, and we're here 14 15 today to have a discussion of the Generic Aging Lessons 16 Learned Report, the Standard Review Plan, and the Draft 17 Regulatory Guides, which are a cluster of interlinked 18 documents that provide assistance to the licensees and to the Staff as they're developing their applications, and the 19 20 Staff in processing the applications. 21 The Commission had asked that all of these 22 documents be submitted for public comment, and our briefing 23 today is consistent with the SRM on this matter, which was 24 that we have a Commission meeting to discuss the variety of 25

We have two of the organizations --

comments.

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2 representatives of two different organizations that commented on the briefing in our first panel, and we'll be 3 hearing from the Staff in the second panel. We'll hear 4 initially from the Nuclear Energy Institute, with, I 5 presume, Mr. Ralph Beedle will take the lead there with Mr. 6 Doug Walters. And then we'll hear from David Lochbaum, who is with the Union of Concerned Scientists. 8 9 Let me turn to my colleagues and see if they have 10 any opening statements? 11 [No response.] 12 CHAIRMAN MESERVE: If not, Mr. Beedle, you may 13 proceed. 14 MR. BEEDLE: Thank you Mr. Chairman and 15 Commissioners. Good afternoon. With me, as you indicated, 16 is Doug Walters. Doug is responsible for license renewal 17 issues at NEI.

on various guidance documents that will be used by the

We appreciate the opportunity to share our views

2.0 industry and the NRC Staff for the preparation and review of 21 license renewal applications. 22 May I have our first slide up there, please? 23 The industry's interest in renewal continues to 24 grow, and the importance of the guidance documents here 25 cannot be overstated. We commend the Commission for 1 dedicating the resources for preparing these documents, and 2 the Staff for managing the effort, soliciting input from the stakeholders, and producing the documents in a timely 3 4 fashion. 5 We also acknowledge the NRC's contribution to NEI 6 95-10, the industry guideline for requirements of the 7 license renewal rule 10 CFR Part 54. Next slide, please. 8 As the industry moves forward with license 9 renewal, these documents will serve as a road map for preparing an application. The documents are interrelated as 10 11 noted in this slide, but in our view, the GALL report is one 12 of the building blocks for the license renewal application. 13 Given the number of applications expected to be 14 submitted over the next few years, it is imperative that the 15 process be thorough, but focused on those activities that are necessary to ensure aging is managed such that there is 16 a reasonable assurance that the equipment functions are 17 maintained in the period of extended operation. 18 19 Expectations are that the use of the documents and the incorporation of lessons learned will result in a more 20 21 efficient preparation of the application, and we should 22 expect to see an improvement in the current NRC 30-month 23 scheduled review period. Next slide, please. 24 I'd now like to speak to our review of the 25 documents, and I want to begin by going back to July of 6 1 1999. The industry raised a concern regarding credit for 2 existing programs in the license renewal application. 3 In response to this issue, the Staff prepared SECY 4 99-148, Credit for Existing Programs for License Renewal. The SECY includes a number of options for addressing 5 industry concerns. 6 7 Option 3 was ultimately endorsed by the Commission, and was to, quote, "focus Staff review guidance 8 9 in Standard Review Plan on areas where existing programs should be augmented." Next slide, please. 10 In directing the Staff to proceed with this 11 option, the Staff Requirements Memorandum delineated three 12 13 objectives that guided the development of the GALL and the 14 Standard Review Plan: 15 First, ensure that the documents receive the

16 benefit of the experience of Staff members who conducted the 17 review of license renewal applications; 18 Second, ensure that the lessons learned on the 19 initial license renewal application are incorporated into the documents; and, 20 21 Third, ensure that the guidance is clear and understandable to stakeholders. Next slide, please. 22 23 I think we need to back up one on the slides, 24 please. 25 [Pause.] There we go. With this guidance in mind, our 1 concept of the GALL process is depicted here. 2 The GALL report comments or documents, the Staff's evaluation of 3 4 existing programs, and identifies where augmentation is 5 necessary. The GALL conclusions are then reflected in the 6 7 Standard Review Plan. Simply stated, the GALL process 8 evaluates existing programs against attributes that 9 typically exist in an aging management program. 10 If the GALL evaluation determines that one or more 11 of the attributes are not satisfied, then augmentation may 12 be necessary. A one-time inspection is a typical 13 augmentation process. 14 If the evaluation determines that the attributes 15 are satisfied, then the conclusion is that the program is 16 adequate for managing aging effects in the period of 17 extended operation. 18 It was and still is the industry's expectation 19 that a program evaluated in GALL is adequate, would preclude 20 the need for a detailed review of a similar program by a 21 license renewal applicant. Next slide, please. 22 The NRC issued the license renewal guidance 23 document in August, and we submitted comments in October. 24 Over the next few weeks, we met with the Staff to discuss 25 and clarify those comments. 1 Our comments reflect our understanding of how 2 aging managing programs are implemented, and what was 3 accepted by the first two license renewal reviews. Since 4 GALL identifies systems, structures, and components, as well 5 as aging effects and licensing management programs, the 6 potential exists for it to be used as a checklist for 7 determining the scope of the license renewal and the 8 screening of aging effects requiring management. 9 The rule requires and applicant to develop a 10 scope, a methodology, and to provide a description of that 11 methodology in the application. So we caution against the 12 use of the GALL as a list of systems, structures, and

components that should be in the scope of the renewal.

We believe the Staff's review should focus on the applicant's scoping methodology.

16 A second concern is that the GALL, and ultimately
17 the SRP, impose actions without justification that are

the SRP, impose actions without justification that are

beyond current regulatory requirements.

For example, inspection of inaccessible areas is addressed in 10 CFR 5555(a), and it endorses ASME Code Section 11 for aging management.

The ASME Section 11 provides that inaccessible areas are only examined if the adjacent accessible area indicates degradation in the inaccessible area. The GALL rejects this position and states that certain inaccessible

1 areas need to be inspected for license renewal.

It is unclear in reading the GALL evaluation, which attribute is not satisfied by Section 11 in that inspection process.

Another concern reflected in our comments is that the GALL identifies items that are not addressed or identified in previous applications. As such, the GALL has become more than just a lessons-learned document.

The personnel airlock is an example. The airlock is in the scope of the license renewal and requires an aging management review. However, GALL identifies the aging mechanism for the personnel airlock as mechanical wear of locks, hinges, and closure mechanisms.

By default, the GALL has now identified locks, hinges, and closure mechanisms as requiring an aging management review process, when, in fact, it is the airlock that requires the review.

In at least one of the previous applications, locks, hinges, and closure mechanisms had been the subject of aging management review, and were determined to be acceptable by the Staff.

The final concern I'd like to touch on is that new programs are being added to the GALL report. For example, the GALL includes a program for managing age on the outer surfaces of buried piping and components. The GALL

evaluation indicates that the program is based on the National Association of Corrosion Engineers, or NACE standard.

We don't disagree that it may be necessary to
manage the aging of buried pipes and components, however,
licensees do not have programs based on this NACE standard.
Further, programs based on that standard are beyond that

that was found acceptable in the first two license renewal

applications. Next slide, please.

In concluding, I want to revisit the objectives that the Commission established in the SRM, and also make one observation. Regarding the objective, it is our view that for the most part, the guidance documents have received the benefit of experience of Staff members that have been involved in previous reviews.

We are concerned that the lessons learned from the previous reviews are not incorporated as lessons learned into the GALL. In our October comment letter, we identified inconsistencies between the guidance documents and what the NRC Staff found acceptable in the previous applications.

In a November meeting with the NRC Staff, we discussed the use of GALL and the SRP. And it is our understanding that the renewal applicant needs to certify that their plant programs match the programs evaluated in GALL.

And to make that certification, the applicant must evaluate the program, that is, evaluate it against the program attributes, and then compare the evaluation to the evaluation in GALL.

And our understanding is that that comparison would be done on a line-by-line item against the GALL.

An applicant may end up expending more resources to complete that certification than he would to simply describe and justify his program in the application without any reference to GALL.

This issue is relatively new, and we've discussed it with the NRC License Renewal Steering Committee, and they have an action to look into that matter, and we expect to discuss it further in our meeting scheduled in February of 2001.

The observations that I would like to leave you with come from our review of GALL, but are also an observation based on other aspects of the renewal process. We must be extremely careful that the renewal does not become an opportunity for imposing requirements that could not be imposed in the current operating term.

There is no backfit protection in the license renewal rule. With more than 2/3 of the 103 units expected to file renewal applications, the potential exists for circumventing the regulatory process for establishing new

1 requirements.

Why go through the backfit when the requirement can be imposed in the majority of the fleet when they apply for license renewal seems to be a potential?

We must make certain that the industry and the NRC

understand why a specific action or a new requirement is necessary for extending the license of a current operating

8 nuclear power plant.

We thank you again for the opportunity to share our views and expand on the comments that we provided earlier. Thank you.

CHAIRMAN MESERVE: Mr. Lochbaum?

MR. LOCHBAUM: Good afternoon. UCS will focus this afternoon on only three issues: The fairness of the public comment period for the GALL report, the weight placed on one-time aging inspections, and what I'll term as regulatory diffusion.

Slide 3, please. Earlier this year the NRC Staff solicited public comment on a version of the draft GALL report that it had no intention of issuing.

The reason we came to that conclusion was that in parallel with the public comment period, the Staff had contracted with Argon to significantly revise the document.

And the document, as revised, was not the one that was issued for public comment.

UCS therefore recommends that the NRC Staff try again with a version of the Draft GALL Report that it actually intends to issue.

Slide 4, please. One-time inspections are the regulatory equivalent of get-out-of-jail-free cards in the board game, Monopoly. Any structure, system, or component not covered by an aging management mechanism can be handled by one-time inspection.

The problem is that one-time inspections will not be conducted until after the majority of license renewals are determined by the NRC Staff, too late for any generic lessons learned to be useful in the process, and also too late for any member of the public to intervene on the basis of challenging that aging mechanism.

Slide 5, please. The last and most substantive issue that we have today is the issue of what we call regulatory diffusion.

In looking at generics, one of the key parameters of the definition seems to be that it pertains to large classes. From this definition we would assume that the NRC Staff intends for the Generic Aging Lessons Learned Report and documents to apply to a large number of the plants seeking license renewal.

The question is, will it?

Slide 6. The fact is that the NRC is developing

regulatory initiatives such as risk-informed special 3 treatment requirements.

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The question we have is a fidelity question: How does it all fit together? Will it all fit together?

Slide 7, please. This is somewhat busy. I actually left off one set of voluntary initiatives, Voluntary Initiative E, because that got way too busy.

But basically what this chart purports or attempts to do is show that each plant owner facing a voluntary initiative can either just agree to do it or decide not to do it. And the more voluntary initiatives you have, the more diffuse the spectrum of plant options is.

At the top of the option is where a plant owner has no to every voluntary initiative, and we've compared that to the St. Louis Rams, because Missouri is the Show-Me State.

The bottom of the chart -- and top and bottom is just relative here; we're not indicating performance -- are the plant owners who have accepted every voluntary initiative. So this would be the Tennessee Titans for the Volunteer State.

And you could have a spectrum in between where plant owners chose some voluntary initiatives and not others.

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The other thing is that chart could be much more complicated in that it's not time-dependent as the process really is. The plant owners don't have to go through Voluntary Initiative A, B, C, and D; they can mix and match as they see fit.

Now, also, apparently they could opt to go back to an old scheme, unless they've adopted one, if they try and don't like it. So I couldn't figure out how to do that on my chart, so I left that option out.

The part is that apparently generic also seems to imply some concept of entropy where entropy is defined as a measure of the disorder of a system. Systems tend to go from a state of order or low entropy to a maximum -- a state of maximum disorder or high entropy.

It seems that on this course, that the NRC is going to be dialing up 11 on its regulatory entropy scale, in, again, what we call regulatory diffusion.

Slide 8, please. We had a couple of questions at the September Workshop on the GALL Report and related documents, and they're kind of encapsulated on Slide 8.

Is the license renewal granted based on GALL invalidated by later adoption of voluntary regulatory initiatives by any plant licensee? And also the other way around; is GALL rendered obsolete is plants adopt voluntary 1 renewal?

Quite frankly, I don't know the answer to these questions. When I asked them at the September workshop, Mr. Grimes indicated that the GALL report is written for today's regulatory scheme, and might have to be revised to accommodate a plant owner adopting voluntary initiatives such as risk-informed special treatment requirements.

I think the regulatory diffusion would seem to pose a significant challenge to the Staff's goal of improved efficiency and effectiveness if it has to develop a custom GALL for every license renewal application.

And the issue is larger than just GALL. I mean, it applies to all of the voluntary initiatives and the fidelity of how they all fit together or perhaps don't fit together.

So what we thought needed to be done would be to postpone any final issuance of GALL and the related documents until the NRC has looked at these voluntary initiatives and reached a determination that they do or they do not fit altogether at some point, or at least to the point where they don't jeopardize GALL down the road.

As a minimum, the best thing would be to do a broader look and look at all initiatives, not just how they affect GALL.

We think that delay would also allow the Staff to

reissue the GALL Report for public comment in a form that matches what they intend to do, rather than the one that they foisted earlier this year. Thank you.

[TAPE 2 WAS BAD]

I would like to thank both of you for helpful. As usual, we will go around with a round of questions.

Let me turn to Commissioner Dicus first.

COMMISSIONER DICUS: I am going to address one question for NEI and you mentioned the issues that you have currently pending with where we are with the GALL Report and with just where we are headed for license renewal.

Maybe I missed it, but I didn't hear you say how or what you envision of if you do what the really next step should be in improving license renewal.

Would you care to comment on that?

MR. BEEDLE: Well, I think we need to have a clearer understanding of how the Staff intends to utilize the GALL in the process of doing their license reviews and we see some opportunities that would give us the ability to take the GALL and the lessons that are learned in the GALL,

the reviews that were done, and reduce the magnitude of the 21 22 work that has to be done in a license renewal process rather 23 than increase that. 24 The practice or a practice of using that GALL as a 25 checklist for the Applicant I think will do nothing more 18 1 than add to the increased cost of producing a license renewal application. 2 COMMISSIONER DICUS: Okay. 3 4 MR. BEEDLE: Do you want to add something on that, 5 Doug? MR. WALTERS: One thing that we are looking at is 6 7 we do have a task force at NEI and the makeup of that task force includes a number of the Applicants that are scheduled 8 9 to submit in 2002 and 2003. We have thought about and we 10 are giving some consideration to kind of a demonstration program where we would take whatever the final version of 11 GALL and the SRP and have those Applicants actually apply it 12 13 to a limited number of, say, systems and programs and see 14 are we meeting the expectation or exactly how would it be 15 used and give the Staff some data to look at and give us 16 feedback on, so that is an option that we are looking at 17 right now. 18 COMMISSIONER DICUS: Okay. Mr. Lochbaum, I 19 appreciated your comparison to the Super Bowl since I am a 20 football fan, but I wonder if it would not have been more 21 appropriate for you to consider the subway World Series we 22 recently had where there is a common background, deep 23 emotion, and franchise history. Now getting a little serious at the moment, you 2.4 25 want to minimize this one-time inspection and I wonder 19 whether you see that as truly providing enough information 1 that we would need. 2 3 Don't you think a maximized one-time inspection is 4 better? Obviously you don't, but I don't understand -- are 5 you saying we should go in many times? I don't understand 6 your point. 7 MR. LOCHBAUM: Oh, no. The number of times that 8 the Staff or the licensee relies on one-time aging 9 inspections in lieu of an aging management mechanism is what we are trying to minimize, not how often you go out and look 10 11 at something. 12 COMMISSIONER DICUS: Okay. I needed that 13 clarification. 14 Thank you, Mr. Chairman. 15 CHAIRMAN MESERVE: Commissioner Diaz. COMMISSIONER DIAZ: Thank you, Mr. Chairman. 16 17 Good afternoon, Mr. Beedle and Mr. Walters.

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                I was looking at your slides before your
      presentation and I think you probably realize better than we
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      do the dynamic nature of some of these processes and how
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      difficult it is to take a snapshot of any one of these
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      things and then say we are going to keep it like that.
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                I mean from the very beginning I think the
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      Commission said we are going to be learning from these
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      processes and we accept the dynamic nature of these process,
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      and then we need to accept that there are going to be things
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      that are going to be cutting both ways.
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                Some are going to become less demanding on the
      licensees and occasionally some will be a little more
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      demanding on the licensee, sometimes maybe a lot more
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      demanding on the licensee and I think you agree with that.
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                You know, I want to understand, your main
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      objection is lack of discipline with the backfit process
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      regarding aging management?
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                MR. BEEDLE: Well, let me just take as just one
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      example in the case of inspection of the inaccessible areas.
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      Here we have got an ASME standard that we adhere to. It
      clearly defines when you need to do inspection in an
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      inaccessible area, yet the GALL expands on that and provides
      other criteria for inspection in those areas and so there is
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      a case where we have created a new requirement for an
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      inspection program that is done without the benefit of any
      review by the Staff, by the Commission and it basically
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      establishes a new regulatory requirements, and we are saying
      that we think that that is an inappropriate way to levy a
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      new requirement on the industry.
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                COMMISSIONER DIAZ: And is this something that is
      widespread in the GALL or just very specific issues that you
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      have identified, like Section 11 and the air lock?
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                I mean are there many? I can't gauge or know
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      whether you are talking of a large number of large issues or
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      two large issues or many small issues.
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                What is the magnitude of the difference between
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      the Staff and you regarding how we go about this?
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                MR. BEEDLE: Well, I think that there are enough
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      of them that it has got a number of our members of the
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      Working Group concerned about it.
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                Doug, you might want to expand on the extent of
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      that issue.
                MR. WALTERS: Ralph is right. I mean it's -- if
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      you look at, in that example that is an example of the
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      program.
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                There are, you know, some 20-some programs in
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GALL. We may have a problem in the way we describe it here 14 15 with half, maybe more -- it's something like that. 16 COMMISSIONER DIAZ: I see. 17 CHAIRMAN MESERVE: I apologize for the 18 distraction. I think we may have some leaf-blowers outside. 19 We will take care of that. MR. WALTERS: But if I could just for a moment go 20 21 back to the IWE or the Section 11 example, let me be clear 22 that we have talked to the Staff about that one and I think 23 we are going to come to some closure on that. 24 Just for illustration, that is an example of a 25 program that was or where Section 11 was incorporated into 22 1 the regulation and if you read the statements of 2 consideration from August of '96 it was looked at 3 specifically for renewal and if you will indulge me, it says the NRC also believes that with implementation of 4 subsections IWE and IWL the detrimental effects of 5 6 containment aging will be managed during the current term as 7 well as during the license renewal term. 8 To see an evaluation in GALL that says you have 9 got to do something more than what the regulation says and 10 appears to have at least been evaluated for renewal seems 11 confusing at best, at least to me. 12 COMMISSIONER DIAZ: I am sure the Staff will have 13 something to say. 14 MR. WALTERS: I am sure they will, and again I 15 think it may be a bad example, because I think we have worked past that one. 16 COMMISSIONER DIAZ: Mr. Lochbaum, good afternoon. 17 18 MR. LOCHBAUM: Good afternoon. COMMISSIONER DIAZ: One time inspections -- is 19 there any such thing in the NRC? Do we really do anything 20 that is one time? 21 22 [Laughter.] 23 MR. LOCHBAUM: Reading GALL seems like a one-time 24 thing. COMMISSIONER DIAZ: No, I'm serious. Do we -- you 25 23 know, I mean we just heard about Section 11. We can do a 1 2 one-time inspection and then as we continue to work with the 3 plant we see some efficiency or some degradation we will 4 immediately, and I hope the licensees would be doing that 5 even before we take -- you know, we have become aware of it, so isn't it mostly just a fact of maybe the way that it is 6 7 cast as in some issue of finality, but there is no finality 8 in the way that the NRC allows plants to operate. We continue to be intrusive in the way they 9 operate. We continue to demand on safety. It might be, you 10

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      know, that we want to be cautious in how we demand in the
      regulations, but that doesn't really relieve us or the
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      licensees from their responsibility to maintain operational
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      safety, and that includes every component of the plant.
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                MR. LOCHBAUM: Perhaps, but my understanding of
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      the one-time inspections, that they would be for things that
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      have not been looked at since perhaps construction days --
                COMMISSIONER DIAZ: That's true, but they, you
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      know, it is not an issue that is -- that there is a
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      finality.
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                I am trying to understand when you see these as a
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      finality issue, but we do have all of the series of
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      mechanisms that do come in, around and behind anything that
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      we do that actually, you know, detects degradation and
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      whether it is in components that are active or passive, and
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      that is not going to go away and if we detect degradation in
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      any one component, we are going to go at it.
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                Maybe that is not clear from the generic report,
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      but it is obviously clear from where we sit that we will not
      abandon all other mechanisms at the disposal of the
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      Commission.
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                MR. LOCHBAUM: I think without looking for
      degradation, the only way to find it is through a failure
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      and I would assume that NRC's regulatory process would be to
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      try to find problems before they are found through failure,
      but that is not what the GALL Report has set up.
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                If you do everything under one --
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                COMMISSIONER DIAZ: No, I understand. I am going
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      beyond all of it, not isolating it, because sometimes in
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      isolation things look different than what they are and I am
      trying to go beyond what it is to look at the Agency as a
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      whole and not create the impression that a one-time
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      inspection is in isolation of all other requirements that
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      the Agency has.
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                MR. LOCHBAUM: In that context I would agree with
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      you, because otherwise we would have recommended one-time
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      inspections be disallowed altogether --
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                COMMISSIONER DIAZ: That's right.
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                MR. LOCHBAUM: -- and we didn't do that. We just
      thought that they should be very judicious in when they are
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      applied.
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                COMMISSIONER DIAZ: Okay. All right, thank you,
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3 Mr. Chairman.

4 CHAIRMAN MESERVE: Commissioner McGaffigan.

5 COMMISSIONER McGAFFIGAN: Mr. Beedle, I am partly

6 responding to your remarks but also to the Inside NRC this

morning, Mr. Tuckman's remarks at a meeting last week as reported in Inside NRC.

I had some of the same reaction that I guess Brian Sheron had at the meeting itself. If things are as bad as being talked about, no one is going to match the GALL program and GALL is not much of a document, et cetera, aren't we headed towards customized reviews?

We have not budgeted for customized reviews. We have assumed that we are going to get some resource savings as we go forward with license renewal and if at least parts of things can't be laid aside because somebody says my program matches, and we can with high assurance bank on that and say okay, we can cut our review back in this area, then there isn't going to be much benefit. There isn't going to be much efficiency.

So how bad are things? I mean are we, are you all saying that GALL is so specific, so prescriptive, so dominated by new requirements you never heard of before, et cetera, et cetera, that people are just going to take their

chances and disregard the document and basically come in with their own license applications and each will be different and these efficiencies will not be there?

I mean you are worried about efficiencies for you all putting together applications.

I am worried about efficiencies for us which have been assumed in our budgets in reviewing the applications if we don't have a template, if everybody isn't working to a template and if things are not getting checked off.

MR. BEEDLE: Commissioner, I think we are certainly concerned about the resources of our members.

We are also concerned about the resources that the NRC has to devote to this and that is why the use of the Standard Review Plan, the GALL, NEI's guidance document on how to prepare the license renewal -- all those we thought work together to provide an efficient mechanism by which we would produce an application and one would be reviewed by the Staff in an expeditious manner.

The resources that the NRC devotes to license renewal above and beyond what they currently have schedule have got to come from somewhere and we see them coming from other programs that we would like to have reviewed and other efforts that are ongoing within the agency, so it is very important to us on both the NRC side and on the industry side from a resource point of view.

What to do with GALL? I think GALL is a good product. We are not condemning the entire, the work that has been done in there. I think our objective is to try and

capitalize on that review so that we don't have to expend as many resources even in development of applications or in review of applications, and use the information in GALL to make that possible.

The thing we see in a number of cases are additional requirements that the authors of GALL thought were good ideas -- and we are not necessarily saying that they are not good ideas -- we are saying they are ideas that haven't been subjected to the scrutiny and review of the regulatory process and we don't want to see them imposed on the industry as new requirements.

I think in a lot of cases it is going to boil down to how that is applied to the license review process.

COMMISSIONER McGAFFIGAN: I have not reviewed your comments, detailed NEI comments, that you are summarizing here. How voluminous were they? Were they a half inch thick or an inch?

Do I detect the possibility that you and Mr.

Lochbaum are in agreement that perhaps this report -- the comments having been analyzed of all parties might need to be re-put out for public comment? What is the process?

We have had other things like 50.59 Reg Guides and

2.8

the rule itself where we have gone through extended processes, lots of public meetings, obviously the Revised Reactor Oversight Process, putting that together.

We had lots of public meetings. Is this a place where at this point focused public meetings would be useful to go through some of the stuff?

MR. BEEDLE: Public meetings may be worthwhile.

I think subjecting the documents to additional stakeholder review would be beneficial to all of us.

MR. WALTERS: If I could just add, I think the fundamental issue that is reported in the Inside NRC article is really one of what is the expectation of the Staff when an Applicant chooses to use GALL?

The meeting we had in November with the Staff was very helpful in that regard, and what we thought we learned is that in order to use a program evaluation in GALL or do the match you have got to do -- if I am a license renewal applicant, I have got to do an attribute evaluation, if you will, of that program, put it next to the evaluation in GALL and say do I match?

The example we used in the meetings -- suppose GALL in that program evaluation says you do a walkdown every week, but your walkdown is every other week.

Have you met what is in GALL? The answer is no.

So what that requires me to do as an Applicant is

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- 1 identify that in my application and then provide a 2 justification of why every other week is okay. 3 Conversely, if I do it daily, I can say I met 4 what's in GALL, so --5 COMMISSIONER McGAFFIGAN: But why isn't that -- I 6 mean I am just from Missouri on this stuff. 7 Why isn't that okay? For efficiency we are 8 talking about there is a separate article in Inside NRC about contractors and whether they have been brought up to 9 10 speed rapidly enough on Arkansas Nuclear Is and Hatch's 11 applications, et cetera, but part of the efficiencies in the 12 out-years is we are going to be relying on contractors, and presumably, not to make policy judgments, not to make -- to 13 14 the extent that "more judgment is required" is one of the 15 quotes, you know, the quotes in the article suggest that you 16 all want the reviewer to have more ability to exercise judgment. 17 18 That raises questions about our strategy that we 19 are going to rely more on contractors, because contractors can definitely check boxes and say everything is okay here. 20 21 I hope they are not making judgements. They are not supposed to be making judgments that go to the heart of 22 23 whether an applicant should be renewed. 24 MR. WALTERS: My response to that is what I 25 thought we were getting or what the industry thought we 1 would get out of GALL is if it is an existing program, like Section 11, that I am required to implement by regulation, 2 the conclusion that ought to be drawn in GALL is that GALL 3 evaluated it. It concluded that if you have a program that 5 is entitled "Section 11" --COMMISSIONER McGAFFIGAN: You're off. 6 7 MR. WALTERS: You're done. The GALL evaluation 8 stands. I equate it frankly to what was done in the 9 10 environmental area with Category 1 and Category 2 issues, because Category 1 environmental impact, the conclusion is 11 12
- the evaluation and the GIS applies to all licensees and the licensee's obligation is only to identify new and 13 significant information. 14 15 We don't have that same kind of conclusion on a

16 generic evaluation, it seems to me, in GALL.

COMMISSIONER McGAFFIGAN: Maybe the nuances 17 whether --18

19 MR. WALTERS: I understand.

20 COMMISSIONER McGAFFIGAN: -- whether to bring it 21 every 14 days as opposed to seven is new information.

22 The one other place where I sense a similarity between NEI and Mr. Lochbaum is again based on Mr. Beedle's

separate recent letter with regard to the need for Part 54

25 to be adjusted -- or license renewal to be adjusted for

1 50.69 if 50.69 goes forward.

I think you are coming at it slightly differently
but I think you are both saying you want a risk-informed
license renewal and your fear that you don't have it if you
don't amend Part 54.

Mr. Lochbaum fears you already have it but he is just -- although he admits he doesn't have the answers to all of his questions -- but it strikes me that you are both asking for how complicated is license renewal going to be for somebody who doesn't exist at the moment but who has implemented Part 69 before he comes in for a license renewal application, and you favor selective implementation and so it would be Part 69 for some systems and not others, and Mr. Lochbaum doesn't favor that and we'll see what happens.

That gets to his chart about how complicated it is going to be, but are you -- I'll let David answer this one -- do you sense some closeness there in wanting clarity at least as to how license renewal interacts with initiatives such as Part 50.69?

MR. LOCHBAUM: I can't speak for NEI but I think

more clarity would be helpful, I assume for all parties.

I don't think it is just for licensees who adopt risk-informed special treatments before. It is also for

ones who have gotten your license application based on GALL,

in part on GALL, and you adopt it afterwards.

The issue is germane irrespective of when the license renewal application comes in, I think, or at least it could be.

COMMISSIONER McGAFFIGAN: I am not sure. I mean I saw that in your thing, but I don't want to dominate the discussion, but I am not sure -- I am less worried about that, the case where it is adopted afterwards, because it is now a license, it has a certain period, and we are just looking at it, and so if they adopt 50.69 I don't quite see that, but it could be. I better shut up though.

CHAIRMAN MESERVE: Commissioner Merrifield.

COMMISSIONER MERRIFIELD: Thank you, Mr. Chairman.

Mr. Beedle, in terms of some of your comments today, I know some of the concerns about where the Staff is going on GALL have come to fruition as a result of discussions we have had, some generic safety issues, fatigue, GSI-190, and also ongoing issues associated with cable aging in GSI-168, and you have gone into some degree

of detail about the concerns you have.

You like GALL but you have got some concerns about the direction the Staff is going.

Do you have some specific recommendations about methods the Commission can work with our Staff to improve this process in order to get the outcomes that you would like?

MR. BEEDLE: Well, let me go back to a question that Commissioner McGaffigan raised about the use of other than your Staff to do the review.

If the intent is to utilize contractor support to do the review of the license renewal process, then you need \*to provide those contractors with some guidelines on how to go about that process of review.

Right now that GALL report is a fundamental document that will be used by those contractors and that means that the GALL Report has to be pretty clear as to its use and the examples and requirements in there need to be pretty faithful to the requirements that exist for the plants today.

We can't allow the GALL -- and that is what our big concern is -- that the GALL becomes a document that drives the development of new regulations for the industry.

I think the answer to your question lies in the faithfulness to the GALL to reflect the lessons learned and to be faithful to the regulations that exist today.

COMMISSIONER MERRIFIELD: There is a careful balance that I think Chris Grimes and his staff have tried to achieve, and perhaps we'll go into this during new testimony, and that is making sure that they continue to process the license renewals in a timely manner that is expected by the Commission and not put too many resources

1 into the GALL that would take away from that balance.

That is certainly something we can continue to consider.

I different area I think for me is some issues learning from what we have done relative to Calvert Cliffs and Oconee.

I think there is the impression of some that the GALL Report wraps into all of the lessons that we have learned from those two initial license renewal cases and as a fact of the matter, it doesn't. It does incorporate some of the lessons that we have learned and indeed our Standard Review Plan also incorporates some of those as well.

Right now I think it is the Staff's intention, at least I have been told that we are not going to have a separate NUREG incorporating the Calvert Cliffs and lessons

learned from Oconee but instead we will be updating NRR 17 Office Letter 805 that will serve as that mechanism. 18 I guess the question I have coming out of this is 19 do you think that that will appropriately -- is that an appropriate mechanism to be able to incorporate those things 20 21 for which we have learned about Calvert Cliffs and Oconee in 22 the process. MR. BEEDLE: Well, I think it is probably an 23 24 appropriate mechanism -- you know, what is included in it is going to really be the issue and how the industry is able to 25 1 review that and look at it before it becomes a document used 2 in the review of the license application. 3 COMMISSIONER MERRIFIELD: But at this juncture you 4 cannot determine whether what we are looking at as the 5 result of those two license renewals is appropriate. Would that be fair? Or do you think we are going in the right 6 7 direction? MR. BEEDLE: I don't know. Doug, would you --8 MR. WALTERS: If I understand the question, you 9 10 are saying are we headed in a direction --COMMISSIONER MERRIFIELD: Well, we have learned a 11 lot from Oconee and Calvert Cliffs. 12 MR. WALTERS: Right. 13 COMMISSIONER MERRIFIELD: Are we taking best 14 15 advantage of it irrespective of some of the things we are doing in the GALL, but the other means that we are using to 16 17 take those lessons, are we getting the value that we should 18 out of it for future license renewals? 19 MR. WALTERS: My reaction would be yes, in 20 general. 21 I think so. Obviously we have pointed out, 22 identified some areas where that was not the case, but 23 probably in general we are headed in that direction. COMMISSIONER MERRIFIELD: Okay. 2.4 25 MR. WALTERS: And I am not sure on the Office 36 Letter whether that is the right mechanism or vehicle. That 1 2 is probably the right area to talk about some of these 3 things like using GALL as a checklist and what I would consider to be the misuses of GALL but in terms of the 4 5 adequacy or I will call it the technical adequacy of GALL I am not sure you can address that in the Office Letter. 6 7 COMMISSIONER MERRIFIELD: Okay. Mr. Lochbaum, you 8 used a football analogy. One of the main issues you have come up with is 9 10 the notion that we put a draft GALL report out, asked you to

comment on it, and then at the same time we have asked our

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contractors to begin efforts towards doing a next revision.

I haven't accepted or rejected the notion we should have an additional comment period, but like in football one doesn't want to sit on the ball.

I think there was an interest on the part of our staff given the fact that this is a living document that they continue to move the ball down the field in tandem, recognizing that perhaps that document can further be affected and changed by the comments that they receive from you and others -- and perhaps our folks didn't want to be treated like Norv Turner and get canned because of it -- but I just -- how do we, recognizing this is a living document, how do we move through that process?

I mean really what you are saying is once we lay

that out as a draft for public comment we have to freeze our actions.

Really that seems to me what you are saying, that we can't really do anything else on that document until we wait the 90 days, receive all these public comments, and then we can move forward.

Given what we have to do with the resources we have, simply stopping in place doesn't necessarily seem responsible from a regulatory perspective.

MR. LOCHBAUM: I agree with that fully. However, I don't think it was necessary that the document be issued in August 31 other than to meet some date that was arbitrarily set at a prior Commission briefing.

Knowing that Argonne already had a contract to significantly revise the document, the Staff could have waited until Argonne at least had a first cut at the revisions and issued that version of the draft document and still allowed minor changes to continue on.

We are definitely in favor of progress, but that document that Argonne produced or is preparing is significantly different than the document that the public was asked to look for.

If the Argonne document or its derivative is issued, the people who wasted their time looking through the document the Staff issued are not going to be very happy,

- because it is significantly different and they are going to think that their comments were pretty much neglected by the
- 3 Staff.

- 4 COMMISSIONER MERRIFIELD: That is a fair question.
- 5 I am hopeful that the Staff will address that in their
- 6 presentation.
- 7 The last point, very quickly, you have some 8 concerns about one-time inspections. To borrow one of your

analogies, certainly Goldilocks determined whether the porridge is too warm or too cool. You know, obviously, time is important but there also has to be some flexibility for the Staff because they are situations we have to deal with.

One could lock oneself into a very rigid timeline for when we conduct one-time inspections, which may or may not be appropriate, even along the lines of what you want to do.

How do we get a balance there, so that we provide our Staff with some flexibility in terms of that timing and get meet some of the requirements that you want to have the information mover further forward?

MR. LOCHBAUM: Well, I think by minimizing the number of times that one-time inspections are utilized in lieu of other mechanisms you have minimized, you haven't eliminated your problem, but you have indeed minimized the problem of timing.

I was encouraged during the September workshop

when there was some suggestion that the industry could go out and do the one-time inspections today or tomorrow, and the Staff said no, we want them to be further or closer towards the license renewal period, not today, because that may not be a reflective indication of degradation, so that was -- I understand that argument and I am in favor of that but our concern was every time a licensee comes up with a hard spot if they fall back on one-time inspections that then gets very, very large, and if there is anything in there that shouldn't be in there you are not going to know until it is too late to really factor that back into the regulatory process.

So if you keep that bin as small as possible and only put things in there that really should be in there, then I think everybody wins.

COMMISSIONER MERRIFIELD: Thank you, Mr. Chairman.

CHAIRMAN MESERVE: Thank you. Mr. Beedle and Mr.

Walters, I would like to come back to something the others
have raised. It's obvious that this whole activity is a
very important one to the Agency.

One of the great benefits that we had anticipated getting out of this exercise is the capacity to be able to handle the large number of license extension applications so we anticipate in an efficient fashion.

You have indicated, maybe a little grudgingly, that you thought the GALL Report was a good product, but the main thrust of this has been very grave concerns about various aspects of this product, and I am trying to pin you

down a little further.

Are we a year away from having a document that would be acceptable from your point of view? What effort do you think would be necessary to have this serve the purposes that you think the document should have?

MR. BEEDLE: Well, I think I would like to reserve answering that question until after the Staff tells you what they intend to do with that GALL.

[Laughter.]

MR. BEEDLE: I mean we have been in this position before where I wish I had changed my entire presentation after hearing the Staff, but it goes to how the GALL will be used.

If the GALL is used as a mechanism to reduce the amount of detailed review that the licensee has to do for programs that have already been reviewed and discussed in GALL, then I think we have probably got an effective mechanism for streamlining and making more efficient the process for the licensee as well as the NRC Staff, but if the GALL is used as a detailed checklist and it is used to impose new requirements, if it is used as a line by line

review against the review that the industry has done and we end up having to answer questions in a BWR for PWR plant systems, then I don't think we have really accomplished our objective -- so it is implementation.

CHAIRMAN MESERVE: Let me make sure I understand one of your concerns. I mean obviously the reason why this whole effort was undertaken by the NRC is because of issues that are raised by the extended period of operation and as a result of that, I think one ought to expect that there may be some things that are acceptable in the regulations for the existing term that may have to be augmented as a result of extended period of operation.

If I understood your criticism of the checklist approach, it was not so much that at least for the existing plants that have been evaluated, Oconee and Calvert Cliffs, they've gone in and they have found some things in the existing system that need to be augmented for the extended term.

To the extent that that actually has been the determination, as I understand it, that you don't have a problem with that being described in the GALL in those terms, it's where you perceive the GALL has added issues that were not addressed in those particular plants.

MR. WALTERS: That's correct. Yes, sir.

CHAIRMAN MESERVE: And I mean you have given an

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      GALL Report where you perceive the Staff is laying down
      requirements, considerations, items that could become a
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      checklist that were ones that were not exposed as a result
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      of the experience with Calvert Cliffs and Oconee?
                MR. WALTERS: I would say that the list of issues
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      that represent that concern is probably 20.
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                CHAIRMAN MESERVE: Twenty items?
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                MR. WALTERS: Yes, and we have got an agreement
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      with the Staff that we will look at those, and some are of
      more importance to us than others.
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                CHAIRMAN MESERVE: Mr. Lochbaum, I would like to
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      come to what you had indicated was the main concern was the
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      fidelity issue and the consequences of a large number of
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      voluntary options and the diversity that that might then
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                I am puzzled about one aspect of your
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      presentation. I understand the issue as you have presented
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      it. What I don't really appreciate is the -- I don't
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      understand fully is the reason that that presentation is
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      given to us today in the context of license renewal and that
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      it seems to me that this is an issue that exists with regard
      to any of various efforts to produce the possibility that
23
      there will be two options, and it is not a license renewal
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      specific issue at all.
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                I recognize it may be with us longer because of
      license renewal but as a regulatory issue it seems to me it
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      is there regardless of whether we have license renewal going
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      on now or not.
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                MR. LOCHBAUM: A couple of reasons. One, the
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      opportunity was here today --
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                [Laughter.]
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                MR. LOCHBAUM: -- but perhaps more importantly is
      I have heard numbers that two-thirds of the licensees will
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      go for a license renewal application. I haven't gotten
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      numbers that would indicate what the breakdown is for other
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      voluntary initiatives, so it seems to be the one I have
      heard that most plant owners will be going through, so it
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14
      seemed to be the most applicable of the various voluntary
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      initiatives.
                However right or wrong that is, that was the
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      rationale.
                CHAIRMAN MESERVE: I appreciate the point and I
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      think that it is one that is one that the Commission will
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      continue to grapple with as we go forward as we deal with
      various of these proposals that might have a voluntary
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      component to them and how far we should go and I think we
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      are going to work our way through that.
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other side of the table, that we do have basically a situation where we don't have standardized plants in the United States, that the current licensing plans for most operating plants differ one from the other.

We already have a great deal of complexity and the fact that you have the variety of options at any given plant isn't all that different from what we have today, at least to the extent that we don't have standard tech specs that are in place.

MR. LOCHBAUM: That's true. There is a greater consistency among the regulations as they are applied to the licensees. It is true that how those regulations were then applied to individual plants varied fairly largely depending on age of the plant and a number of other factors, so that the regulations as applied to a specific plant vary from the regulations as applied to an adjacent plant, perhaps even a sister plant, sometimes even at the same site.

But I think that situation is different than when you have the regulations themselves different and the rules of the game are significantly different for all the fleet of operating plants.

I think then you have constant regulations applied differently and then you go through a whole potpourri of regulations that are applied inconsistent -- not inconsistent but variously.

I think it just makes it harder for the Staff down the road to do a backfit analysis for generic communication or any response to an industry event applies because we don't have a constant set of regulations as the evaluation tool.

You would have to go through all the various options on that chart or however the final chart ends up to figure out whether you are or are not going to impose a generic requirement.

CHAIRMAN MESERVE: I appreciate the problem. It is one that we will be working with.

I would like to thank the panel. I very much appreciated the reason why we have reversed the order here and have the Staff come second is that they are presumably -- the function of this meeting was to hear the Staff's response to comments and we wanted to hear the comments directly first and then we'll hear what the Staff has to say about it, so thank you very much.

19 MR. BEEDLE: Thank you.

MR. WALTERS: Thank you.

MR. LOCHBAUM: Thank you. 21 22 MR. MIRAGLIA: Good afternoon, Mr. Chairman and 23 Commissioners. 24 We are here to brief you today on the comments we received from the industry and the public on the draft 25 46 1 license renewal documents that we have heard discussed by 2 the first panel. 3 We will attempt to address the key issues raised by the public comments and by Mr. Beedle and Mr. Lochbaum, 4 5 Mr. Walters in their presentation today. 6 It is important to point out that the license renewal documents are works in progress and we will continue 7 8 to work with our stakeholders as we progress to final 9 issuance. 10 There was discussion of the industry meeting with 11 the license renewal steering group putting some issues and 12 further discussions with the Staff at a meeting in November 13 and those discussions with all our stakeholders. We plan to 14 continue. 15 With me at the table today are Dr. Brian Sheron, Mr. Scott Newberry, Dr. P.T. Kuo, Dr. Sam Lee from the 16 17 Office of Nuclear Reactor Regulation, and Dr. Jitendra Vora from the Office of Nuclear Regulatory Research. 18 19 Drs. Kuo, Lee, and Vora were principals in 20 preparation of those documents. 21 We will have Dr. Sheron make some introductory remarks, and Drs. Kuo, Lee, and Vora will provide the 22 principal briefing. 23 24 DR. SHERON: Thanks. As Mr. Miraglia just 25 mentioned, we have completed and issued the drafts of the 47 1 GALL Report as well as our license renewal Standard Review 2 Plan and Regulatory Guide, and that was last August. 3 Our plan right now is to continue to have further 4 interactions with our stakeholders in the form of public 5 meetings as we continue to evaluate and incorporate the comments. 6 7 As I said, we have heard some comments here today. 8 We received some from the license renewal steering committee 9 meeting we had -- I think it was last week -- from the 10 industry, but the plan is to try and work through them, as Frank said, to hopefully come up with a final document that 11 meets everybody's intent by next April to submit to the 12 13 Commission. 14 At this recent meeting we had of the license 15 renewal steering committee, which was last week, we did hear

this concern from Mr. Tuckman with regard to the GALL

17	Report.
18	The way he described it was that basically if you
19	look at the GALL Report in terms of aging management
20	programs they feel that perhaps we have added for example,
21	if you go through two PWRs each one may have a different
22	program. Well, you put of them in GALL and then the next
23	licensee comes in and is expected to meet both of those and
24	there's maybe an overlap.
25	That was not the intent of GALL. We need to
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1	obviously do some more work, interact with the industry to
2	understand the concerns in a more specific matter, but we
3	have taken a commitment to work with the industry on that
4	specific concern.
5	Mr. Lochbaum expressed some concerns with that
6	report and I think we can address those as part of our
7	presentation or as part of the question and answer.
8	Basically we believe the GALL Report combined with
9	the Standard Review Plan does provide specific for focusing
10	Staff reviews on the elements of an acceptable Aging
11	Management Program or Programs.
12	Our draft Regulatory Guide endorses the NEI
13	guideline 95-10 without exception, which would facilitate
14	hopefully the preparation of license renewal applications
15	and we believe collectively the GALL Report along with the
16	Standard Review Plan and the Regulatory Guide will not only
17	help ensure safety and public confidence in the renewal
18	process but should significantly increase our Staff
19	effectiveness and efficiency in processing license renewal
20	applications and in addition we hope will reduce the
21	applicant's burden to that necessary to produce an
22	application that meets our requirements.
23	At this time I am going to turn it over to Dr.
24	P.T. Kuo, who will continue the presentation.
25	DR. KUO: Thank you, Dr. Sheron.
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1	Mr. Chairman and Commissioners, as directed by the
2	Commission in the Staff Requirements Memorandum for SECY
3	99-148, the Staff undertook the task to develop the guidance
4	documents to provide credit for existing programs for
5	license renewal.
6	We took advantage of a wide range of information
7	including past research reports published by the Office of
8	Research, operating experience, documents like NRC Generic
9	Letters, Information Notices, and Bulletins, as well as
10	licensees' event reports and the lessons learned from the
11	reviews of the first two license renewal applications.
12	As an existing program is evaluated for license

renewal, the technical basis for acceptance is documented in

accordance with the criteria set forth in the Standard Review Plan for license renewal.

Where existing programs need to be augmented, it is clearly identified in the documents. A development process has been open to all stakeholders. The Staff has had many public meetings and two workshops during this process. Next slide, please -- the one before that. Right.

As you heard from the first panel, the improved license renewal guidance consists of three Staff documents and the one NEI developed industry guidelines.

These four documents are kind of interrelated, as you already heard. The Standard Review Plan references the

GALL Report as the technical basis document for providing credit for existing program and also provides guidance to the Staff reviewers to focus their reviews on areas where existing programs should be augmented for license renewal or new programs proposed by an applicant.

The Staff Regulatory Guide, DG-1104, proposes to endorse the NEI guideline 95--10, as Dr. Sheron pointed out.

The Staff proposed to endorse this guideline without exceptions, but we'll ensure that it is consistent with the Standard Review Plan for license renewal. Next slide, please.

It has taken a considerable team effort for developing these three -- these documents. The team included the NRR staff from three divisions -- Division of Engineering, Division of Systems Safety Analysis, and Division of Inspection Program Management.

It also involved the Staff from the Office of Research and the Staff from the Office of General Counsel.

The Staff also had the benefit of assistance from two national laboratories, Argonne National Laboratory and the Brookhaven National Laboratory.

In addition, we also had two rotation assignees assisting us during their rotation period to the license renewal and the standardization branch, one from the Region II office and the other from the Office of the Nuclear

1 Materials Safety and Safeguards.

Furthermore, the Staff has significantly benefitted from the feedback provided by all stakeholders. The ACRS performed their reviews of the drafts issued in August 2000 and provided their views in a letter dated November 15th, 2000 to the Commission.

The Staff has also received constructive comments from the industry and the public interest groups during the two workshops in December, held on December 6, 1999, and

September 25, 2000 as well as many other meetings held after the earlier drafts were issued -- were made publicly available.

The Staff received a significant number of written comments from the industry, the public interest groups, and the general public after the August drafts were issued.

These comments are being evaluated by the Staff and they will be published as a separate NUREG report.

The details of these comments will be discussed later.

The Staff believes that for developing these documents the Staff has benefitted from the experience of the Staff members who conducted the reviews of license renewal applications, and the Staff has incorporated the lessons learned from the review of the initial license renewal applications and has aggressively sought and

continues to seek all stakeholders' participation during the entire development process to ensure clarity and the technical adequacy of these documents.

With this brief background, Mr. Jit Vora of Research Staff is going to brief the Commission on the Office of Research's contribution to this effort.

Mr. Vora?

MR. VORA: Good afternoon. In the next two viewgraphs Number 5 and Number 6, I'd would like to present to you, the key elements of the RES-sponsored aging research program that supported the development of the guidance document.

Research provided the technical bases for aging program assessment. From a technical perspective, the aging assessment of a system, structure, or component whether electrical or mechanical component or civil structure, involved the understanding of materials, stresses, the environment, and the interaction over time with the result into age-related degradation effects.

While the mitigation of the decremental effects of aging involve the effectiveness of testing, inspection, maintenance, replacement, refurbishment and quality assurance and environmental control.

The past aging research program addressed these elements of understanding in mitigating aging for selected

long-lived passive components and structures.

The ongoing research program continues to provide the technical basis for aging program assessment, and the development of the guidance document.

In this regard, the RES sponsored nuclear plant aging research or the NPAR program, provided significant

input and insight for the development of this guidance document.

The starting point for the original version of the GALL report that was published in 1996, involved a systematic compilation and comprehensive review and analysis of plant aging information.

The significant amount of data and information came from the review and analysis of some 141 technical reports that were developed as a part of the Nuclear Plant Aging Research Program over a ten-year period from 1984 to 1994.

The resolution of generic safety issues and other research programs also provided input for the development of the GALL report.

The current version of the GALL report is further refined and incorporates the technical data gained from the program of the resolution of generic safety issues, and the additional research that was completed from 1995 to year 2000, after the initial completion of the Nuclear Plant

Aging Research Program in 1994.

The reviews of the operating experience and expert opinion also provided data for building the foundation for understanding and mitigating aging in many of the safety-related components and structures within the scope of license renewal.

Now, in Viewgraph Number 6 I would like to present to you some of the specific contributions which Research made to the development of the GALL Report.

As I mentioned earlier, the experience gained from the research completed through the resolution of generic safety issues has contributed to the development of the GALL report.

Examples include the GSI-168 on the environmental qualification of low-voltage instrumentation control cables; GSI-190, on the fatigue evaluation of metal components for 60-year plant life.

The examples of specific Research programs that contributed to the development of GALL report include: The thermal aging of cast stainless steel; the steam generator tube integrity; fatigue; cable aging; reactor pressure vessel embrittlement; piping; non-destructive examination; the swelling of reactor internals; and stress corrosion cracking of reactor internals.

Further, the significant insights were gained from

1 the Staff expertise and Staff participation in activities of

2 the National Consensus Codes and Standards activities such

as IEEE, ASME, and American Concrete Institute.

in field inspections.

The members of the RES staff are active participants in guidance development teams involving the development of the GALL report, the certain elements of the Standard Review Plan, the resolution of generic technical issues related to license renewal, in the conduct of license renewal workshops, interactions with NRR contractors and with NEI for the resolution of specific technical issues and

As Dr. Kuo mentioned, it was a total team effort. The current version of the GALL report that exists today regards the benefits of the research results that we have completed over the last 15 years of research work.

Similarly, the ongoing research work we are doing today would benefit for the future improvements and development of guidance documents.

With this thing, I would now ask Dr. Lee who will make the next part of the presentation.

DR. LEE: Slide number 7. The GALL report is a catalog of aging effects, programs, and program evaluation.

It's based on extensive information from Office of Research programs, previous staff review of NUMARC which is now NEI, industry reports on license renewal, LERs, and NRC

generic -- and also the Staff review of the initial license renewal applications.

As PT described, the GALL evaluation follows the license renewal rule that requires aging management of structures and components, to maintain the internal function for the period of license renewal.

If the GALL report determines that an existing program is adequate, then they will indicate that no further staff evaluation is necessary; otherwise you point out that -- inspection, recommended programs should be implemented for license renewal.

Some of the examples are for programs that are adequate as is, the -- qualification, DEQ or electrical equipment, and erosion/corrosion monitoring of carbon steel piping.

Another example that you heard earlier in the first panel was the personnel airlock. In that, we identified aging mechanisms or aging effects for the hinges. But the program, the existing program have been determined to be adequate, so no further evaluation is required.

21 An example where the program should be augmented 22 are the in-service inspection, and reactor vessel --23 program. Those are examples.

The GALL report describes one acceptable method to manage aging, and one of the examples that you heard earlier

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- 1 is on buried piping.
- 2 In there, we try to capture the lessons learned.
- 3 We know buried piping has aging effect, but in this case,
- 4 the Calvert Cliffs and Oconee, they took very different
- 5 approaches because of the plant-specific configuration and
- 6 environment.
- 7 So, we were struggling in terms of how we document
- 8 that, and when we actually did more looking into it, we
- 9 found a -- standard, National Association of Corrosion
- 10 Engineering. It's a standard that is quite generalized and
- 11 we thought that would be one acceptable way.
- We are not imposing that on all applicants; we
- just thought that was general enough that should fit some of
- 14 the applicants.
- 15 And although GALL is a catalog of aging
- 16 evaluations, it's not to be used to identify structures and
- 17 components within the scope of license renewal. That is
- 18 plant-specific, and it depends on the current licensing
- 19 basis for that plant.
- 20 You heard earlier about voluntary initiatives. If
- 21 an applicant adopts that or licensee adopts that to meet
- 22 regulations, that becomes part of their current licensing
- 23 basis, and they have to scope their plan for license renewal
- 24 according to that current licensing basis for that plant.
- Okay, the next slide. The extent of the -- the
  - staff guidance in reviewing a license renewal application,
- 2 and that is what the Staff used, they used the Standard
- 3 Review Plan.

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- 4 What you heard earlier from the NEI slide was the
- 5 GALL fits into the application. The way the SRP is
- 6 structured, it extracts the information from GALL report,
- 7 and we assess no further evaluation, and that just tells the
  - reviewer that's not -- you review the place where the
- 9 program should be augmented to focus the staff resources.
- 10 And like you heard before, it incorporates lessons
- 11 learned in accordance with the SRM, and the Staff will
- 12 perform the initial license application, and who are
- 13 actually doing the -- right now, part of the team in
- 14 preparing this document.
- 15 And you also heard earlier from NEI about
- implementation of GALL SRP, how the Staff is going to use
- 17 this SRP. We understand there is a concern raised by the
- 18 NEI, and this is something we need to work out with the
- 19 stakeholders.
- 20 The next slide. The Reg Guide proposed to endorse
- 21 NEI 95-10, which provides guidance to an applicant in

22	preparing a license renewal application. The Staff is
23	revising GALL and SRP to address public comments.
24	NEI plans on updating 95-10 to be consistent with
25	the final GALL and SRP.
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1	The next slide. You also heard this earlier. In
2	December of last year, we held our first corporate workshop.
3	We also make early draft of the GALL and SRP publicly
4	available to invite early stakeholder involvement.
5	We received significant comment from the industry
6	through the NEI License Renewal Task Force. As a result, we
7	have 12 public meetings with NEI before August to discuss
8	their comments, and also the Union of Concerned Scientists
9	provided five technical reports and we addressed them and
10	referenced them in the GALL report.
11	We issued this guidance document for public
12	comment in August, and during the comment period, we have
13	another public workshop that's in September.
14	And we received written comments from over 100
15	commenters. And despite our effort to explain the license
16	renewal process, we had a media article that misrepresented
17	the role of this guidance document.
18	And this prompted many individuals and public
19	interest groups to send in brief statements against license
20	renewal, thinking that we are going to grant generic renewal
21	licenses without public involvement. That is a
22	misunderstanding, but we are taking this opportunity to
23	provide written responses back to these individuals and
24	public interest groups to clarify the license renewal
25	process and to explain the opportunity for public hearings
1	60
1 2	in plant-specific applications.  We received significant comments from industry, as
3	<u> </u>
4	you heard before, and we already had like four meetings with  NEI to discuss the comments. And also like you heard before
5	from NEI, we are working on remaining items.
6	The next slide. We received wide ranges of
7	comments, and it goes from general statements to very
8	specific technical comments.
9	And we are addressing these comments after we
10	engage the stakeholders to further discuss the comments and
11	understand the basis for the comments. And the first panel
12	discussed some of the comments.
13	Here are some examples of comments. We can put
14	them into four categories here:
15	They are editorial, process-related, or comments
16	on GALL not providing sufficient credit for existing
17	programs; and also GALL provides too much credit.
18	In the first category of editorial, industry
	· · · · ·

19 recommends changing the GALL format to improve the clarity 20 of the document and also to be closer to the industry 21 documentation format. 22 And you also heard from the public interest, 23 indicating that this is unfair because the public is 24 commenting on a document that is still changing. To us, 25 this is editorial because the changes we contemplate are 61 1 format. 2 Some of these changes are like the current GALL is 3 like in two pages, side-by-side, is very cumbersome to 4 handle, and when you put it on the Web, you only see one 5 side of the page; you can't see the other side; it's not 6 very user-friendly. 7 And then also it has redundant information. So we 8 are considering simplifying it, streamlining it to take out 9 the redundant information, and also consolidating the 10 program evaluation to one place, rather than scattered throughout like right now. 11 12 Okay, but we are not making technically 13 substantively changes, to us, in terms of the format issue. In the category of process-related comments, the 14 15 industry commented that they want to maintain these guidance documents as living documents, to be updated, to capture 16 additional lessons learned from future reviews of 17 18 applications, and we also have a similar comment from ACRS on that. 19 20 And the next category is on GALL not providing 21 sufficient credit. NEI challenged the basis for GALL that 22 recommends to open certain existing programs with one-time 23 inspection. You heard that before. 24 The purpose of this one-time inspection to the 25 Staff is to confirm that aging is not significant. This is 62 part of the evaluation. If it determines that there is 1 2 active degradation going on, we do not use one-time 3 inspections; we ask for a proactive program. 4 So this is more confirmation to provide additional 5 assurance that aging is not significant, and that's why we 6 ask to defer these inspection as late as possible to give 7 time for the aging effect to manifest itself. 8 In the last category, this is where GALL provides 9 too much credit. The public interest groups cited the 10 experience of steam generator tube programs as an example 11 where a generic evaluation is not sufficient. The next slide, please. This is the status. We 12 13 have continued to evaluate public comment, and as you have

heard many time before, we have continued to engage the

15 stakeholders to discuss their comments and to understand the 16 basis of their comments, and to resolve the comments. 17 And also in accordance with the SRM, we plan to 18 submit the final document for Commission approval in April 19 2001. 20 And this concludes the Staff's presentation on the 21 status. 22 MR. MIRAGLIA: Thank you, Dr. Lee. I think what 23 the Commission heard from Panel I is that the GALL document has served a useful purpose. I think the process that we've 24 been engaged in has been a productive one for the Staff, as 25 well as the public stakeholders and the industry. 1 2 The questions that you hear are really in terms of 3 implementation. The GALL is to inform the SRP and the Reg 4 Guide that is eventually endorsed. I think the key to that is to have further 5 dialogue with our stakeholders so they can understand the 6 7 role of GALL in informing the acceptance criteria that are 8 in the Staff's Standard Review Plan. And as indicated, we intend to have future 10 interactions with our stakeholders on these matters. That 11 completes the Staff's presentation, and we'll take questions 12 from the Commission. 13 CHAIRMAN MESERVE: Thank you, Dr. Miraglia. 14 you all for the presentation. 15 Let me turn to my colleagues. First, Commissioner 16 Diaz. 17 COMMISSIONER DIAZ: Thank you, Mr. Chairman. Dr. Vora, you talked extensively about Research programs that 18 19 have been used in this context of license renewal and the aging effects. 20 Would you tell me, you know, all of this extensive 21 22 research programs, would you consider that they are necessary, the ones you used for the implementation of the 23 24 aging management program? 25 MR. VORA: The program that we have completed, Dr. 64 Diaz, on the Nuclear Plant Aging Research Program, over a 1 2 ten-year period, involved the aging assessment of both 3 active components as well as long-lived passive components 4 and structures. The active components also included like pumps and 6 valves, the breakers and relays, battery chargers which are 7 safety-related components. 8 And there, the focus was actually operability, as 9 well as the long-term performance. 10 While the work that we did for passive components 11 and structures, I feel was extremely beneficial for this

application, because what we did, we identified the basic approach and strategy to understand and manage aging in any component, system, or structure in operating nuclear power plants. And the approach was the same with the materials, the stresses, the environment, and their interactions over time achieved through the aging effects. And then we looked into mitigation aspects, so I think to answer your question, I think it provided significant insight and input, and approach and strategy, I think has been developed such that I think throughout the nuclear community around the world, and with interactions with IAEA and other entities, how to go about understanding and managing aging. COMMISSIONER DIAZ: Okay, so from using a 

COMMISSIONER DIAZ: Okay, so from using a
technical word, you think they are necessary?

MR. VORA: Yes, yes, sir.

COMMISSIONER DIAZ: Are they sufficient?

MR. VORA: I think the initial scope when we
started out, actually was actually based on the faith
approach to studies, and as scientists and engineers, o

approach to studies, and as scientists and engineers, of course, we like to get into more and more details about analyzing the microstructural aspects of it, but to be practical, I think we provided sufficient information.

 $\label{eq:commissioner} {\tt COMMISSIONER\ DIAZ:} \quad {\tt Okay,\ scientists\ on\ aging}$  always like to have more details.

[Laughter.]

MR. VORA: It provided the foundation and the start for the program.

COMMISSIONER DIAZ: Okay, they are presently sufficient.

MR. MIRAGLIA: I just wanted to add and to point out the comment you made to the earlier panel, and that is that the whole issue of -- you know, the license renewal rule is a process rule, and as you indicated in your comments and questions, Commissioner Diaz, we have a vast number of processes available, and some of them were discussed by Dr. Vora, Dr. Kuo and Lee, in terms of operating experience.

The research we've done, we feel, is sufficient to move forward, but in terms of sufficiency, we believe it's sufficient today.

But as we do further research, as we gain further operating experience, that's going to inform the process.

So in terms of finality, the regulatory process is not a final process; it's a dynamic process. The technical

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      process document that was the foundation for Part 54
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      recognizes that, in that we continue to learn.
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                That's why we're a rarity in terms of the
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      international community in nuclear power. We issue a
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      license for 40 years. Most countries issue it for a period
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      of time and reexamine.
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                We feel that we issue, we review, we license, and
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      we inspect, and we have a process that moves on in an
      orderly way, and we have a number of processes to take
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      action at any point in time to maintain and assure
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      reasonable assurance.
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                COMMISSIONER DIAZ: Let the record show that Mr.
19
      Miraglia enlarged on a point very well today. You earned
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      your keep today. Thank you, sir.
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22
                [Laughter.]
23
                MR. MIRAGLIA: I'm going to take the rest of the
24
      week off.
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                [Laughter.]
                COMMISSIONER DIAZ: Dr. Kuo, you talk about focus
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      on areas where assistant programs should be amended.
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                DR. KUO: Yes, sir.
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      worried about.
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                We wanted to say when programs existed, and
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COMMISSIONER DIAZ: Again, give me a sense of how large is this, this issue, where, you know, where there are existing programs. That's an issue that the Commission was

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they're justified, you know, that they should be augmented, of course, is a contentious issue or could be contentious. 10 I think NEI think it's contentious. 11

12 Where are we? How big is big? Give me a sense, 13 please.

[TAPE 6 WAS BAD]

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15 DR. KUO: Let me try. The example I will use is to use the experience from Calvert Cliffs and Oconee plant 16 reviews. 17

Based on the experience of those two plant 18 reviews, roughly there is a 30/70 split there. Probably 70 19 20 percent of existing programs are okay; they're acceptable. 21

But there are 30 percent of the programs that may need a little -- some degree of augmentation or maybe a few new programs.

COMMISSIONER DIAZ: I see. And so are you satisfied that you have identified the majority, realizing

1 that we're in a dynamic process?

2 DR. KUO: I believe so.

COMMISSIONER DIAZ: You believe so, okay. Let's 3 see, Dr. Lee, as you, you know, are continuing to evaluate 4

the sum total of these things, the issue comes up to a

question of value-added by safety-wise to us on some of

7 these programs.

Are we adding additional requirements? Could you briefly tell me what is the discipline that the Staff issues or will use to determine what additional requirements should be established? What is the discipline?

DR. LEE: We have been working on GALL -- the discipline -- we have the applications. And we have management involved. We have the same thing, okay? We have the Staff actually reviewing the applications, and also reviewing the initial applications. They bring that experience forward.

We are involved with the same managers.

COMMISSIONER DIAZ: No, I'm talking about the actual -- what we're dealing with today, the GALL report, the Standard Review Plan, you know, the Reg Guide, what is the discipline when additional requirements are added in there? What is the discipline that the Staff goes through to make sure that those are really appropriate and commensurate with safety?

DR. LEE: The Staff, I guess, the standard we use is the license renewal rule that requires aging management of structures and components to maintain the intended function consistent with the current licensing basis.

So we are not raising the bar, per se. We are just maintaining the licensing basis.

COMMISSIONER DIAZ: Okay.

MR. MIRAGLIA: Can I perhaps add to that,

Commissioner Diaz?

The Commission spoke to backfitting in license renewal when we issued Part 54 in terms that the Staff should not backfit to change the current licensing basis, other than for requirements that we felt were necessary to maintain the current licensing basis within the context of the renewal period.

Certainly, the Reg Guide is going to set limitations. The Standard Review Plan sets limitations.

The GALL report is essentially a compendium of technical evaluations that have been done to date. It's going to be essentially for one of the examples given, as the starting point, and I think it was in the discussion with Commissioner Merrifield as well -- perhaps it was Commissioner McGaffigan -- that talked about was it wise and at a reasonable point to start if that standard that Dr. Lee talked about for corrosion/erosion that wasn't part of the

experience to date, but we know it's an issue out there to try to deal with and identify. Here is a standard that would be acceptable to the Staff. The example that was given to Panel I is that if we compare against the GALL report and it says seven days and we have 14 days, then we have to discuss the points of departure. So if they could describe a disposition that 14 is good enough to handle it within the period of time, and it's consistent with the acceptance criteria in the SRP, then I 

technical evaluation.

think those would be the controls.

In addition, there was a discussion of Office

Letter 805. And there is a linkage between the 805. Letter

805 are process issues in terms of internal staff processes,
which are absent from the GALL report. And they're more the

So there is a relationship between those, so I think the broad guidance for backfitting, and how it's to be handled in 54, has been established by the Commission in the Statement of Considerations for that rule and the Staff is implementing that through the SRP and the internal guidance provided by the Staff.

COMMISSIONER DIAZ: Thank you, Mr. Chairman.

CHAIRMAN MESERVE: Commissioner McGaffigan?

COMMISSIONER McGAFFIGAN: Just to clarify one

point to start, Mr. Lee, you said that the Argon report or the Argon update has no technical changes; it's a formatting change.

And so that alone would not appear to require any additional public comment; is that right?

You have a different format if the technical substance -- if you're talking about, as you were saying, whether you can see two pages at once and things like that, whether it was web-friendly and all that -- if those are the changes, that would not require a round of public comment.

DR. LEE: That was our instruction to Argon, not to touch any technical substance. I can understand Mr. Lochbaum's concern, if someone just looked at the August version and the proposed version, they're quite different, okay?

Like one is two pages; one is one page. Okay, we look some more and see some columns have been deleted, okay? And then some of the information don't appear over here anymore; they got centralize someplace else.

So things have been moved around and we eliminated redundancy. And that is the direction we've given to the contractor.

23 COMMISSIONER McGAFFIGAN: This is a massive

24 document. How difficult would it be to have some sort of guide as to how one goes from the draft document to the 25 72 document that you'll be later giving to us, if these are 1 2 just format things? 3 You know, we have revised the format, see Appendix A to understand how to relate this document to the previous 4 5 document? 6

Is that something that's possible?

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MR. MIRAGLIA: I'm not sure how difficult that would be to do. But certainly it's the Staff's intent to have further dialogue with all the stakeholders to respond to their comments and to try to articulate where we are, and we'd do that in future meetings.

COMMISSIONER McGAFFIGAN: In terms of the process, if you continue to aim for an April date to present this to the Commission, how many -- I had the impression earlier that there was a large number of issues in response to the Chairman who talked about maybe 20 issues that really need to be resolved.

Do you agree with 20, and how many meetings is it going to take to resolve these 20 issues? And some of them may not be resolvable.

How many more meetings do you envision, based on your comments so far, based on the meeting last week? How many more meetings do you envision, and how do you plan to structure them?

MR. MIRAGLIA: In terms of the technical issues

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that was 20, I'm not sure of the substance, and based on Mr. Walter's comments, I would assume that are more important, and some may be less tractable than others, so it's

difficult to make an assessment.

That staff meeting between the stakeholders was just last week. In addition, the meeting with the steering group, the licensing steering group, was just last week and raised the issue of the relationship of GALL to the SRP and a clear understanding of the acceptance criteria.

And that's going to take some time, and I think the Staff is willing to tackle those issues in a disciplined kind of way.

13 COMMISSIONER McGAFFIGAN: I don't want to set an 14 artificial deadline.

MR. MIRAGLIA: And to give something at this time, without really understanding --

COMMISSIONER McGAFFIGAN: We have set an 17 artificial deadline, but that doesn't mean we can't recant 18 19 it.

MR. MIRAGLIA: Well, with respect to that last 20 21 comment, the Staff is being responsive to the Commission's 22 direction, and to have this thing published in that kind of timeframe that we are. 23 24 COMMISSIONER McGAFFIGAN: The comment document, 25 one of the presenters, and I forget which, mentioned that 74 1 there was going to be a NUREG that will consist of the 2 comments -- was it Dr. Kuo -- and presumably the responses to the comments. Is that going to all be in a large NUREG 3 document? 4 DR. KUO: Yes, sir. COMMISSIONER McGAFFIGAN: Is that going to be 6 7 presented to us in April as well? I mean, I'm just trying 8 to understand the process. DR. KUO: That's all --9 COMMISSIONER McGAFFIGAN: The whole thing. So you 10 give us what you propose to be the final SRP -- not -- all 11 12 these are living documents, but an SRP and GALL report as it exists next April or whenever, and a document saying how you 13 14 -- dealt with the comments that you received one each of 15 those documents? MR. MIRAGLIA: We would prepare those drafts to 16 17 the comments, and those would be used as the basis for discussions in public meetings, and that would all be 18 19 documented in a NUREG. 20 DR. KUO: That is correct. See, before we can 21 finalize the GALL SRP, all that, we have to be able to resolve all the comments, in our mind. 22 COMMISSIONER McGAFFIGAN: One way or the another? 23 24 DR. KUO: One way or the other. 25 COMMISSIONER McGAFFIGAN: Agree with them or 75 disagree with them? 1 2 DR. KUO: Right. COMMISSIONER McGAFFIGAN: I'll go back to a 3 comment that Dr. Miraglia made and it was picking up on me, 4 so I'm just -- I guess we're in a compliment Frank day here 5 6 -- but I really do think that the Staff -- Mr. Lee said that 7 when you dealt with corrosion of underground piping, you 8 found this National Association of Corrosion Engineers 9 thing, because Oconee and Calvert had dealt with it so 10 differently, and you were --11 This is a good faith effort to toss out something 12 that might be a mechanism that everybody could adhere to. 13 That sounds to me like a not unreasonable thing. 14 The alternative is to get each licensee from now 15 till 130 or whatever number of plants it is, dealing with 16 the issue differently.

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So I'm not sure that that's imposing an additional
      requirement. It's saying here is something we have found
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      that makes sense. That's what you're trying to do, Dr. Lee?
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                DR. LEE: That's correct, yes.
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                COMMISSIONER McGAFFIGAN: And on the 14 days
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      versus seven days, I don't see why it's a tremendous burden
      to say 14 days is different from seven, but we think it's
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24
      okay.
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                But that gets to -- well, whatever. These are
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      issues that you all have to work out in the next few months.
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                When this all is presented to us, there's
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      effectively -- if we put -- if we put these documents out
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      while they're sitting before us for our vote, there will be
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      effectively another round of public comment, we'll
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      effectively find out at that point, whether everything has
 7
      been resolved adequately or we'll get a sense of the debate
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      that still remains come next April or May or whenever it is,
      just by the act of putting the papers out while we're voting
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      on them.
                And I personally will advocate that because these
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      are pretty massive. I'd just as soon somebody else help me
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      sort out what the real issues are in this four inches of
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      document, than do it all on my own.
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                COMMISSIONER DIAZ: Commissioner McGaffigan, you
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      have not read the document?
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                [Laughter.]
                COMMISSIONER McGAFFIGAN: I have not memorized it.
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                [Discussion off the record.]
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                CHAIRMAN MESERVE: Commissioner Merrifield?
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                COMMISSIONER MERRIFIELD: Thank you, Mr. Chairman.
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      I want to follow up a little bit on the issue that
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      Commissioner McGaffigan brought up. It strikes me that we
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      are in a period where there is a balance.
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                And that is we can't be in a position where we
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      have a program, a generic program locked in using the same
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      program for years. There's got to be some flexibility, yet
      at the same time, we have to recognize that we have to be
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      very disciplined in allowing ourselves to have -- so that we
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      don't have a position where each -- is dealing with
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      something dramatic and different.
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                How do we strike that balance? How do we do so in
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      a manner that appropriately brings into play, concerns
      raised by all of our stakeholders?
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                MR. MIRAGLIA: I think the process that we laid
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      out is going to help us doing that. Will there always be
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      issues of are we doing more or are we doing less? For
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example, some of the things that we've talked about, the focus has been in the GALL, are to identify programs that need augmentation.

And if the 70/30 split remains that Dr. Kuo talked about, remains true for all others, we've taken 70 percent of the issues off the table, perhaps.

The GALL document is going to be comprehensive, in that it's going to try to evolve and identify what industry is doing for both B's and P's, and I hope the Staff would be receptive enough to hear an industry issue of that the program we're asking for is not applicable to their plant, or BRP.

So, I think we have a process for doing that.

think a lot of the concern is a better understanding of how we're going to implement and move forward. I think the guidance is out there, and it becomes one of managing the process.

This was true with the first two reviews. There was lots of skepticism as to whether the Staff would be able to deliver in terms of the issues, and we have lots of mechanisms in place. There's a -- starting with the interest of the Commission, we have management review, we have licensing renewal steering group, and I think there are mechanisms to bring the issues of debate to the Commission.

So I think the process is our friend, so to speak, in this area, and I think we've laid the process out. I think we need to implement it, and we need to pay attention and manage the process.

COMMISSIONER MERRIFIELD: I talked a little bit earlier about the NRR Office Letter 805, and as it relates to the GALL. Is it your feeling that those two pieces will encompass all of which we need to take from Calvert Cliffs and Oconee, or are there other things we need to be doing to make sure we have the full benefit of that process?

MR. MIRAGLIA: Well, perhaps Dr. Sheron, but as I recall, what was in the 805 was the to lay out the process and then have the management, the review processes, the management of the RAI kinds of issues, and those internal

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1 processes.

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2 And maybe my Division is clearer than it is, but 3 Brian, do you want to add to that in terms of 805?

DR. SHERON: It was basically a process office letter in terms of how one conducts the reviews to keep the Staff on track, to make sure things didn't get bogged down, and management never knew about it, and the like.

It was always a matter of here's the process, and,

9 you know, if you hit a snag in the process, here is how we move to resolve it.

Okay, that's rather than, you know, having it drag on where management doesn't even know what's going until the licensee comes in and calls us at the last minute, saying, you know, gee, we've been working this issue for three years with the Staff, and we're not resolving it, and management says, you know, we didn't even know that.

So, you know, the other thing we're trying to do also is add to it. As we learn new things, as we see improvements, way we can improve the process, we issue revisions. I think we're up to Revision 3 right now or something like that.

So we are, as we -- as we learn, okay, we try and modify, add to it, again, to improve the process and make it more efficient.

COMMISSIONER MERRIFIELD: The followup question I

have is associated and deals with the issue of resource implications. One of the things we talked about for a long time is recognizing the need to take the benefits of the Calvert Cliffs and Oconee license renewal to make sure that our process is disciplined and we're utilizing our staffing balance between plant-specific issues and finding the more generic concerns.

But we had also recognized that we expected that as we went along in this license renewal process, as we go from having two in hand, having eight in hand or 12 in hand, that there are resource expenditures and savings that we expect to get down the line.

We haven't talked too much about those resource implications, but I was wondering if you could briefly touch on how this, how the GALL report and how other efforts to take advantage of those will result in some of those anticipated resource savings down the line?

MR. MIRAGLIA: Well, this has been a concern, not only to the Commission, but to the Staff, in recognizing the needs to manage, manage the resources. And we've been working with the industry in attempting to project what our workload would be.

Those are basically incorporated into our budget assumptions, and clearly the GALL report is aimed at making the process more effective and efficient in terms of the

technical reviews.

To the extent that we're successful in taking 70 percent of the existing programs, and taking them off the table, that certainly is a step in the right direction.

We're still going to learn more. We're doing our

first BWR review, and to the best of my knowledge, we

haven't hit major new snags in terms of issues that are

8 being raised by a boiler that we haven't seen before.

9 But that knowledge is going to be gained. The

10 issue and question and concern that came up is the use of

11 contractors.

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To the extent that we're able to provide guidance in terms of a GALL and its relationship to an SRP that's specifically, that will facilitate our use of contractors, and the Staff will have to manage and make sure that the contractor understands the review and are applying the

acceptance criteria in the appropriate kind of way.

These are all mechanisms that are in place. We review what the project work load is, manage the schedules in terms of the internal processes, and I think the Staff is very sensitive to any potential adverse impacts on schedule, and would have to apply resources as needed to address emerging issues.

emerging issues.

DR. SHERON: Frank, could I comment, too? That's

a good question, and we were just talking last week about

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1 Chris Grimes and his staff are setting up a very detailed

tracking process with the new Work Planning Center in NRR to

watch our resource expenditures as related to our budget

models as we proceed this fiscal year.

We've set an ambitious goal to become more efficient as we enter into FY02. So, what we're setting up is a month-by-month, quarter-by-quarter process to track how we're doing this year, so we can make that comparison, look at the deltas and apply feedback as necessary.

I think the Work Planning Center and the process we've set up is going to help us do that.

COMMISSIONER MERRIFIELD: One last comment, Mr.

Chairman. There was a comment on the previous panel about

an attempt by our staff to meet a deadline imposed by the

15 Commission.

And I wouldn't want to leave out there, any belief other than I would personally endorse the strong attempts of the staff to meet the Commission's deadlines. I think that's meritorious thing. Thank you, Mr. Chairman.

MR. MIRAGLIA: We see the guidance no other way.

21 COMMISSIONER MERRIFIELD: You get a gold star from

22 me, too.

[Laughter.]

24 CHAIRMAN MESERVE: I'd like to come back to 25 something that was raised by Mr. Beedle, and actually the

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specifics maybe aren't so important as the generic issue he

2 raised.

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He indicated that -- he mentioned several times,
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      this standard for inaccessible areas, which I gather is an
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      ASME standard and the perception that the industry has on
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      that standard that the GALL report has found that standard
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      to be inadequate and that there was need to go beyond it.
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      And that this was, as I understood it, was something that
      was not a determination that had been made in the Oconee and
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      Calvert Cliffs reviews themselves.
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                Perhaps you might explain how we got there? I'm
      just sort of curious, because, as you know, we have an
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      effort to try to rely on standards, where appropriate.
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                DR. LEE: Actually in this case, for BG&E; and
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      Oconee, we actually asked the question about inaccessible
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      areas for containment, and for both cases, they provided
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      adequate answers. So they did not offer a new program, per
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      se, of containment.
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                Recently, an inaccessible area of containment
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      becomes an issue was when we start compiling the GALL
      report. We found their operating experience in inaccessible
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      areas of containment has degraded.
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                And based on that, we looked for a program that
      will address that. And we found out that the SME Section
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      11, the in-service inspection, does not really focus in that
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      area. And that's why the GALL report points that out as an
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      area we need to look at.
                CHAIRMAN MESERVE: You can appreciate the issue
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      that that presents for the industry that all of a sudden,
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      not only are we opening up a new regulatory issue perhaps
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      for them, but it is one which goes beyond, apparently,
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      relevant standards.
                DR. LEE: That's correct, yes. In this case, what
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      we did was, we did not start with the standard. We start
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      out with the component and what aging effects it sees.
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                And then we looked for a program. If it matches
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      Section 11, great. If it doesn't, then we said, gee,
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      there's something missing and we have to do something.
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                MR. MIRAGLIA: The key is that the issue is -- the
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      question was raised in both of the reviews that we've done,
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      and it was an acceptable answer to address the question.
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                The question didn't point to -- it goes to
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      something very similar to what Commissioner McGaffigan
      pointed out, is that we could not say that, and then
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      everyone would have to address that issue.
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                And this, the Staff was saying, here's a standard
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      out here, that if you use that, that would be an acceptable
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      way of responding to the issue.
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                CHAIRMAN MESERVE: Except in this case, it was
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1 it.

MR. MIRAGLIA: As augmented.

DR. KUO: If I may, I think the question hinges on that the Section 11 IWE and IWL, that is endorsed by the NRC's regulation 50.55(a). In that section, it basically says that for inaccessible areas, the user can look for signs in the surrounding areas.

If there are degradations in the surrounding areas, then the user will go further to inspect the inaccessible areas.

However, I think the Staff had evidence that there are cases where there are -- there may be degradation in the inaccessible areas, that will not give any signs in the surrounding areas, therefore, the Staff said, well, you will have to address the inaccessible areas, but never required any program, inspection program, per se. It's really up to the applicant to make an argument why the inaccessible areas is not of concern.

And a case in point is Calvert Cliffs and Oconee.

CHAIRMAN MESERVE: I don't want to suggest that
the Staff should deal with this issue or any --

22 MR. MIRAGLIA: I'm sure it's among the 20 that we're looking at.

CHAIRMAN MESERVE: Yes, it does seem to me, however, that this is an example of an area where the

comment that, gee, if we have a disciplined process to make
sure that when we're adding additional requirements,

particularly ones that are inconsistent with or where we
find an applicable standard to be inadequate, that we've

gone through a process that we've flagged those issues and
evaluated them fairly and made sure that we have something
that can withstand scrutiny as being justified.

MR. MIRAGLIA: That's fair.

CHAIRMAN MESERVE: You heard Mr. Lochbaum's concerns about the Staff having to deal with multiple regulatory configurations and the complexity that that adds. The Staff is obviously on the front line in having to deal with this issue, and perhaps it would be helpful if you provided your perception on the problem.

MR. MIRAGLIA: As you indicated during the first panel, this is an issue that's not unique to renewal. And the question of as you have voluntary initiatives, you can be coming up with multiple regulatory schemes.

The fact that the process is a dynamic process, when we're in the renewal process, we look at the licensing basis, and we're reviewing the issuance of the renewal

22 document. So it's a point in time where the licensing basis 23 is timed and the decisions are made at the licensing basis. 24 If subsequent to issuance of a renewal license, 25 future amendments come in, future changes come in, then it's going to be incumbent upon the Staff to look at those in the 1 2 context of the renewed license. And so in terms of Mr. Lochbaum's questions of 3 4 making it a little bit more challenging to the Staff, I 5 think we would have to agree that this is not an issue that 6 hasn't been raised in the context of voluntary initiatives, 7 as you pointed out, Mr. Chairman. 8 So hopefully it doesn't have as many branches and 9 forks in the road as indicated by David's Superbowl analogy. 10 But it is a challenge. CHAIRMAN MESERVE: We'd like to see the Redskins 11 12 on that chart. 13 MR. MIRAGLIA: I've given up. 14 DR. SHERON: Not this year. 15 COMMISSIONER DICUS: Thank you. Of these issues 16 that you have identified and of all the input that has come 17 from so many public comments and trying to finalize these draft documents, are any of these policy issues or are they 18 technical issues? 19 20 DR. LEE: What we have seen so far is not policy 21 issues that we have identified. 22 MR. MIRAGLIA: I think they are focused more on 23 the implementation of the policy than questioning the policy itself. 24 25 COMMISSIONER DICUS: Process, okay. 88 MR. MIRAGLIA: Yes. 1 COMMISSIONER DICUS: I will follow up on 2 3 Commissioner Diaz's question regarding Research activities and what has been done that were extended to the 4 5 international community. 6 We do get valuable research help from some of our 7 partners internationally. To what extent have any of them 8 been involved in drafting the GALL, the SRP, or the Reg 9 Guide? DR. KUO: I can give you an example -- the metal 10 11 fatigue. We have actively been talking to the people in Japan and they actually provide some input or insight rather 12 to the resolution of GSI-190. 13 MR. MIRAGLIA: I think to be precise in terms of 14 whether we have sought international comment on the GALL 15 16 Report, I don't believe that is the case, but in terms of

utilizing our programs and sharing research information --

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18	COMMISSIONER DICUS: That is what I was looking
19	for.
20	MR. MIRAGLIA: I think that is incorporated.
21	COMMISSIONER DICUS: Are they interested in these
22	three documents?
23	MR. MIRAGLIA: I believe so.
24	DR. KUO: Yes, they are. Very much so.
25	MR. VORA: In that regard, I have been interacting
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1	with my counterparts in IAEA, for instance, and there is a
2	lot of interest in the cable aging as part of the program.
3	Also, actually I had an opportunity to present to
4	them and discuss about some of the attributes of the GALL
5	Report and the Standard Review Plan and there is significant
6	interest in that regard.
7	COMMISSIONER DICUS: Okay, thank you very much,
8	Mr. Chairman.
9	CHAIRMAN MESERVE: Good. I would like to thank
10	both panels for a very helpful presentation. License
11	renewal activity is one that is singularly important to the
12	Agency and I commend you for the work you have done to date
13	and there's obviously some further work that you plan to do
14	that is also going to be important to complete.
15	With that, we stand adjourned.
16	[Whereupon, at 4:02 p.m., the meeting was

17 concluded.]