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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

OFFICE OF THE SECRETARY

BRIEFING ON TREATMENT OF EXISTING

PROGRAMS FOR LICENSE RENEWAL

PUBLIC MEETING

Nuclear Regulatory Commission

One White Flint North

Building 1, Room 1F-16

11555 Rockville Pike

Rockville, Maryland

Tuesday, July 13, 1999

The Commission met in open session, pursuant to
notice, at 9:30 a.m., the Honorable GRETA J. DICUS,
Chairman of the Commission, presiding.

COMMISSIONERS PRESENT:

GRETA J. DICUS, Chairman of the Commission

NILS J. DIAZ, Member of the Commission

EDWARD McGAFFIGAN, JR., Member of the Commission

JEFFREY S. MERRIFIELD, Member of the Commission

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P R O C E E D I N G S

[9:30 a.m.]

CHAIRMAN DICUS: Well, good morning, ladies and gentlemen, and I welcome you on behalf of my fellow commissioners. Today, we will be hearing from the Nuclear Energy Institute, the Union of Concerned Scientists, as well as the NRC staff, on the topic of credit for existing programs for license renewal.

First, I'd like to recognize that this briefing is part of an ongoing and what I think is a very healthy dialogue on a very important topic for the nuclear industry. And we appreciate the input from all of our stakeholders. I'd also like to recognize the efforts of the staff, as well as the stakeholders, in the progress that they have made to date of the two applications, the license renewal, that are currently under review.

Today, we will hear first from the NEI about the credit that they believe should be given to existing programs. And next, we will hear from the Union of Concerned Scientists, regarding their views on this issue. And as I said, finally, we will hear from the NRC staff and they will provide their perspective, as discussed in SECY-99-148.

Although normally, the NRC would present first, in this case, the order of presentation was reversed, since NEI

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1 specifically requested this briefing and the NRC staff paper
2 was in response, at least in part, to a letter from NEI on
3 this subject. To NEI and to Mr. Beedle, as part of this
4 presentation, I would ask that you make clear how you'd like
5 to depart from the practices used so far in the reviews of
6 the first applications for license renewal, and I would also
7 ask that you make clear the basis for this departure in
8 practice. Now, I understand that copies of the briefing
9 material are available at the entrances to this room, and I
10 would ask if any of my colleagues have any opening comments
11 that you would like to make.

12 [No response.]

13 CHAIRMAN DICUS: Thank you. And, therefore, Mr.
14 Beedle, you may proceed.

15 MR. BEEDLE: Chairman Dicus, Mr. Diaz, Mr.
16 McGaffigan, Mr. Merrifield, I want to thank you for the
17 opportunity to present our point -- points at this briefing.
18 This panel today consists of Mike Tuckman, the Chairman of
19 our License Renewal Working Group from Duke; Barth Doroshuk
20 from Baltimore Gas & Electric; Tony Pietrangelo from NEI;
21 and Doug Walters from NEI. We're here on behalf of the --
22 in the interest of all the potential licensees that will
23 pursue license renewal. There's no question that the review
24 of the two applications is going -- going well, and we
25 complement the Commission on their oversight of these

1 reviews and the NRC staff in meeting these milestone dates.

2 Our objective today is to talk to you and express
3 views that would ensure that the 20th renewal applicant
4 receives the same discipline review as the first two; and as
5 the number of applications increase, so long as safety is
6 not compromised, that it's appropriate to make the renewal
7 process as efficient as possible. This means incorporating
8 lessons learned, which I'm sure is one of the objectives of
9 both the industry and the NRC. So with that, I'd like to
10 turn to Mike Tuckman to make the formal presentation.

11 MR. TUCKMAN: Thank you, Ralph. Chairman Dicus,
12 it's a pleasure to be here. Commissioners, I've visited
13 with each of you and it's a pleasure to be with you today.

14 I've had the distinction of chairing the NEI
15 Working Group since 1993 on license renewal and wearing my
16 NEI hat, I will tell you that the process has been thorough
17 for the two applicants that have been going through. It has
18 been somewhat excruciating in detail. It has been very open
19 to the public and we very much thank you for what has
20 transpired, recognizing that we don't have a decision yet.
21 That's yet to come. But, thus far, the process has played
22 itself out very well and we think it has been a very
23 thorough process.

24 I'd also like to clarify, we're not here today to
25 talk about BG&E and Duke's applications per se, although

1 there are some lessons learned from those two applications
2 that may be useful in the discussion today. But, we're not
3 here complaining about those two applications. They're
4 going quite well and we do very much appreciate what has
5 transpired. As Ralph said, I'm more worried about my next
6 applications that come along, as well as the rest of the
7 industry, and there will be many, as you know, coming, as
8 the result of the experience that we've had thus far.

9 You can go to slide two, the next one. Thank you.
10 Why are we here? That's what I'd like to talk about. I'd
11 like to also give you a little background on what the
12 licensees actually do in the license renewal process,
13 describe the issue, describe some observations on the
14 staff's SECY paper 99-148, give you an idea of
15 recommendations, too.

16 Slide three, please. The concerns why we're here
17 is as Ralph described, we have concerns with the stability
18 and predictability of renewal review process over time.
19 It's a regulatory process, and as with most regulatory
20 processes, there are -- there is the opportunity for the
21 scope to continue to grow in this process, and we very much
22 want to provide that level of stability, since, as Ralph
23 said, the 20th or the 40th client comes along for license
24 renewal, it will be a safe plant, it will be demonstrated
25 safe, but the process will still be within bounds. There

1 have been examples of processes that have arisen. I think
2 back on my original FSAR, it was this big; my next FSAR was
3 this big; and my next FSAR was this big. We want to make
4 sure that we get thoroughly reviewed on the things that need
5 to be handled; make sure the lesson is learned.

6 You have slide four. I thought it was -- it would
7 be descriptive -- I know that's a bit of an eye test for the
8 folks up there; I hope your slide is a little bit larger.

9 CHAIRMAN DICUS: The same size.

10 MR. TUCKMAN: Same size. I'll try to talk you
11 through it. What the licensees do -- but we're looking just
12 for a rubber stamp or a three-by-five mailing, like my
13 driver's license. I do have to take an eye test for a
14 driver's license. We start by basically scoping everything
15 into the process, every plant structure system or component
16 is considered in the license renewal application. The rule
17 then says you apply scoping and screening criteria, and that
18 kind of whittle the things that you have to look at in
19 license renewal down to a more manageable set and a set that
20 is not covered in other areas. As an example, active
21 components are not required to be covered in license
22 renewal, because they're self-evident when they're working.

23 So, you whittle that list of overall structure
24 systems and components down into those that apply to the
25 scope of the rule. You try and use those to identify what

1 function do they perform in the operation of the plant. You
2 look -- as you know, they basically boil down to long
3 passive structures and systems -- structures and components
4 that need to be looked at.

5 Once that is arrived at, you take the whole plant,
6 you've whittled it down to those structures and components
7 that need to be looked at, you then determine what are the
8 aging effects that are in existence or could be in existence
9 for those structures and components; a very detailed
10 evaluation, from a technical standpoint, of the aging
11 mechanisms.

12 You then look and see what are your existing
13 programs. How do they map to the aging mechanism for that
14 structure or component that you have? How does -- does your
15 program, in fact, manage that aging, or is it a new aging
16 effect that was not presently considered that needs -- you
17 need to modify your program or create potentially a new
18 program? So, that's the process we use.

19 I would maintain that there is no requirement to
20 do that for the 40 year life of plants today. There is an
21 assumption that the existing license life is all
22 encompassing. And what we have found is that, by and large,
23 that is true, when you go into a very detailed review of
24 your plant, a very detailed review, you find very few things
25 that need to be considered beyond what you already have

1 programs for. And I think that's a good confirmation for
2 the existing plants. But, most programs you will find are
3 covered by the existing programs. So, we're not trying to
4 cut down any work at all on the identification of structures
5 of components, the aging mechanisms, or mapping to the
6 programs that we presently have or need to have.

7 Let's demonstrate it on slide five. Basically,
8 what is shown here -- the large portion of the circle, it's
9 shown as purple on the overheads, are the existing programs.
10 Those programs are existing. They are either what we call
11 CLB programs or non-CLB programs. They're really, as we
12 have looked through the applications of both BG&E and Duke,
13 have had very -- many of the programs are, in fact, covered.

14 There's a smaller block, that's the red block,
15 those are modified programs. And those programs, as we look
16 at the aging effects, potentially, they don't have the
17 administrative controls on it. Maybe they weren't -- have a
18 review criteria on it. Maybe they are not formalized in
19 procedures. Maybe we have actually missed a component or
20 two. So, those are the modified programs, and I'll give you
21 some examples of those as we go forward.

22 Then, there's the narrow slice, which is the
23 yellow slice, which are new programs, which are -- we have
24 found that are many times one time inspections; that is, we
25 did not find an aging mechanism; but for expediency

1 purposes, we said, maybe we just go do an inspection one
2 time and verify that that program -- that that program is --
3 or component is actually being managed and managed well.
4 So, many of those in the yellow slice or the small slice are
5 one time inspection programs that we deal with.

6 If you go to slide six, the industry position here
7 is that -- and I'll describe it more in a second -- on page
8 six, the large block, again the purple block, is that those
9 programs, which are existing CLB programs, in particular,
10 are programs, which are very well defined in the
11 regulations. They may be technical specifications, required
12 programs. They may be regulatory required programs. They
13 may be a generic letter; as an example, generic letter 89-13
14 on raw water. It's very descriptive in nature of what we --
15 what we would do with our plants. Our feeling is that a lot
16 of the time that we have spent in the process is spent
17 describing those programs, reviewing those programs, and we
18 believe that NUREG-1412, which was issued in 1991, was the
19 basis for excluding those programs, saying that they were
20 well managed in the period of license renewal, as well as
21 today, as the period of license renewal continues forward.

22 What I've done is on -- the next slide, I've asked
23 Barth Doroshuk, just for his plant, specifically just to
24 gain some perspective, put together a couple of slides. I
25 don't know if they're in your book, but they are on the

1 overhead; not particularly well done. But, let me ask Barth
2 to talk you through what you're seeing up there.

3 MR. DOROSHUK: Good morning, Chairman.

4 CHAIRMAN DICUS: Good Morning.

5 MR. DOROSHUK: Commissioners. As Mike said, my
6 name is Barth Doroshuk, and I'm the project director for
7 this license renewal project. And I start out by saying
8 that you're going to see a lot of statistics this morning,
9 based on what we know. Everybody is going to present their
10 spread on what existing programs exists, etc. I'm the
11 statistics guy for the industry, so I'll be presenting some
12 numbers.

13 These particular --

14 COMMISSIONER MERRIFIELD: Madam Chairman?

15 CHAIRMAN DICUS: Yes.

16 COMMISSIONER MERRIFIELD: If I may inquire, do we
17 have copies of those slides for us to review?

18 CHAIRMAN DICUS: Okay. We have one that they're
19 passing around.

20 COMMISSIONER MERRIFIELD: Do you have additional
21 copies?

22 MR. DOROSHUK: There's one right here.

23 COMMISSIONER MERRIFIELD: Just as a matter of
24 procedure, I think we should encourage licensees, when they
25 have new slides, to present those in sufficient time, so

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1 that we can review them.

2 CHAIRMAN DICUS: Are these available?

3 MR. TUCKMAN: Yes.

4 COMMISSIONER MERRIFIELD: So there should be three
5 slides?

6 MR. DOROSHUK: I'm only going to show one this
7 morning for the sake of saving some time. The previous
8 slide you just saw was just a large pie chart. This
9 particular slide shows approximately -- in the Calvert
10 Cliffs applications, there are approximately 430 programs
11 out of 446 that were credited for managing the aging of the
12 plant. These 430 programs, out of the 446, were either
13 existing programs that we credited as is or we had to make
14 some modifications to the program to make sure that they met
15 the requirements that would meet a 5429 finding for the
16 staff. Statistically speaking, this is over 90 percent of
17 the aging management commitments that we have submitted in
18 our application. And I think this is a strong vote of
19 confidence on how -- at least what the licensees today are
20 managing aging. We are doing a good job doing it.

21 What the breakdown of this particular slide shows
22 is that there are about 309 preventive maintenance tasks,
23 which are individual activities that the inspectors do that
24 we took credit for. An example would be that the inspector
25 would go out and inspect a particular condition of a pump

1 casing, a piping structure, etc., and those are embodied in
2 our preventive maintenance program. So, a good majority of
3 those standard nine activities is the p.m. program, the one
4 program. The other breakdown shows the surveillance tests,
5 special tests and inspections, maintenance procedures,
6 engineering programs, operations procedures, chemistry
7 procedures, maintenance programs, as well. Many of these
8 programs are based on current licensing basis requirements.
9 Many of these programs, such as primary water chemistry,
10 fire protection, fatigue monitoring, in-service inspection,
11 Appendix H, surveillance programs, and others are well based
12 on regulatory space and technology.

13 And there are others that are not borne out of the
14 current licensing basis, and those are the p.m.s that the
15 individual inspectors do, which would be go inspect a
16 particular wall, that we are calling non-current licensing
17 basis programs. So, there is a division out of these 430,
18 that Mike is going to get into in more detail, that says we
19 believe that there are some efficiencies in the process that
20 we should give credit to, with respect the existing
21 programs: those that are based on the current licensing
22 basis and those that have yet to be reviewed by the staff.
23 This is for illustration purposes only to support Mike's
24 presentation.

25 MR. TUCKMAN: In slide seven, we -- about the

1 issue, the issue is basically to what extent should the
2 staff review existing programs, relied on license renewal to
3 conclude that the applicant has demonstrated reasonable
4 assurance. Essentially, the programs will be effective in
5 managing effects of aging on functionality of structures and
6 components in the created extended operation.

7 On page eight, it's just an observation of the
8 SECY that was provided by the staff on option one. We don't
9 necessarily believe it conveys the industry position
10 exactly; that is, we believe that existing programs are
11 reviewed vigorously and we believe that the NUREG-1412 did,
12 in fact, provide that review, document that that is the
13 licensing basis and that it will carry forward. We believe
14 the staff's position is that they need to reverify or
15 validate that that program is still acceptable. We believe
16 that the basic principle is that NUREG-1412 provided the
17 technical basis, if you will, that the current licensing
18 basis would, in fact, be adequate.

19 On page nine, it's just an observation of the GALL
20 reporting process. To us, it seems to undermine the
21 NUREG-1412 conclusion, in that it is trying to document the
22 adequacy of existing programs or any extension of those
23 programs, where, in fact, we believe that NUREG-1412 did do
24 a very credible job of determining the existence of existing
25 programs and why they should, in fact, be credited. We are

1 concerned with the regulatory process and controls with
2 imposition of new activities. Whenever an opportunity
3 exists for a program to be reviewed, obviously, questions
4 arise from that review. Those questions then become, if you
5 will, tort law, if you will, for the next applicant.

6 Just to give you a simple example: in the Ocone
7 generic report on reactor and system piping, there was a
8 concern that the small bore piping may not be adequately
9 addressed. In essence, rather than continue to pipe that
10 issue, it was something we could do, we went ahead and
11 considered we'd do it. In BG&E's case, as they were
12 preparing their application, they recognized that that was a
13 requirement that had been levied, if you will, and, hence,
14 they went ahead and committed the work to that before the
15 question ever came, again, in the expediency of time. But,
16 I think you see how the process can be played out, if the
17 regulatory requirements will continue to grow, if you will.

18 On page 10, you asked, what should we do about
19 this. Our recommendation is that the Commission should
20 clarify the first principle of license renewal; that is,
21 that certain plant systems and structures and components,
22 meaning long-lived passive structures and components, where
23 aging is not managed. That is, if there's an aging
24 management program that falls within a very strict
25 definition, if you will, of regulatory current licensing

1 basis, we believe that that should be the acceptable
2 demonstration. If the program exists, we should not have to
3 describe the program, nor should you review it, nor should
4 we answer RAIs. Just, again, to throw out a number, in the
5 Duke application, about 20 percent of the RAIs that we
6 received were dealt with current licensing basis programs
7 that are very well covered in the regulations that we deal
8 with -- 20 percent out of the 324 questions. It's just an
9 opportunity for continued accretion.

10 On page 11, another recommendation: we believe
11 the Commission should affirm that the concerns about
12 adequacy of the current licensing basis should be addressed
13 under 10 CFR Part 50, not Part 54. There is an opportunity,
14 if you will, as an applicant comes in, in Part 54, for a
15 question to be raised -- to be asked, if you will, because
16 there was not the emphasis to ask it in Part 50 space.
17 Well, our intention would be that if it's -- if it's an
18 issue of that import, it ought to be covered in Part 50, go
19 through those rules and procedures rather than be captured
20 in Part 54.

21 And the third recommendation on page 12, the NRC
22 staff should work to expeditiously finalize the standard
23 review plan through the following: that is, the SRT has
24 been a work in progress and we recognize it's a work in
25 progress. We're contributing to it, as well as the staff.

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1 But, that, ultimately, will be the measuring stake, if you
2 will, that is being used.

3 I think I need to give you some specifics to help
4 you understand. If you turn to page 13, there are five
5 areas, if you will, that we talk about in our
6 recommendations. The first is an existing current licensing
7 basis program or activity; that is something that's covered
8 by regulations, by technical specifications, by generic
9 letter, by regulatory commitment. In those cases, the
10 applicant's responsibility is to map that program or
11 activity to the aging effect and scope, to verify the aging
12 mechanism is covered by that program. And the staff action
13 in that case would be to verify for the inspections that
14 they do on site that that program is still being effectively
15 managed and will continue forward.

16 The second -- some examples of that are very well
17 regulated programs, like environmental qualification or
18 Appendix H, which is the reactor vessel, or in-service
19 inspection programs, including the containment inspection,
20 maybe even structural monitoring programs that fall under
21 maintenance rule. Those are examples that I would give for
22 existing current licensing basic programs.

23 Beyond that, there are modified current licensing
24 basis programs. That is, these are programs that are well
25 covered, but maybe you have to modify some. As an example,

1 in Appendix H, which is reactor vessel surveillance, maybe
2 you have to readjust the withdrawal schedule of your
3 capsules, in order to lead and get the data that you need;
4 or maybe you have to restructure your EQ program to provide
5 the temperature monitoring data that you might need. Those
6 would be modifications of a CLB program and we believe that
7 that, again, would be something that we would map to our
8 aging program and you would -- the NRC would verify the
9 scope of the program.

10 The third category is existing non-current
11 licensing basis program activities. These are programs that
12 we have, but we have not submitted to you. We're not
13 required, in many cases. And we believe that we have to
14 describe those programs to you in sufficient detail, to
15 allow you to make a demonstration that that program will, in
16 effect, manage the effects of aging. Some examples of that
17 are closed cooling chemistry or the alloy 600 program, which
18 has no regulatory requirement for today, but it is a program
19 that we determined, as well as you, that needs to be in
20 place and, hence, we ought to describe that program to you.

21 Modified existing non-current licensing basis
22 programs, again, if I haven't described the non-CLB program
23 before and I modified, I have an obligation to provide that
24 information to you and let you draw your conclusions from
25 that. That's why the preventative maintenance and system

1 walk downs that Barth talked about in his example fall in
2 that category. Then, we have new programs and activities.
3 These are things that are new and they may be things like
4 one-time inspections, which we agreed to do, and they need
5 to be described as well and need to be reviewed.

6 So, I think what you see is there's a spectrum of
7 existing programs or new programs and how we would recommend
8 they be dispositioned for a lot of their clarity. I believe
9 it will provide an overall opportunity for improvements in
10 the regulatory process. We believe it can be done under the
11 existing rules. You take credit for the NUREG-1412 and
12 believe it should take place.

13 On page 14, our conclusions, we've had the first
14 two reviews and they basically have demonstrated that the
15 aging effects on long-lived passive structures and
16 components are almost entirely captured by existing programs
17 and activities or modifications thereto. I think that's a
18 vote of confidence in the existing plants that we -- the
19 existing programs. We have to manage the aging within the
20 current term. But, I believe it, also, shows you, with a
21 very detailed analysis, that most of the programs that are
22 necessary are, in fact, in place. This will allow the staff
23 reviews to be much more focused on those things, which are
24 new, unusual, an different, and, hence, be more -- get more
25 effective than they have been thus far. We believe it will

1 provide the opportunity for long-term stability in this
2 process, by keeping us all within the guide post of the
3 rules.

4 We thank you, very much, for the opportunity to
5 present today to you.

6 CHAIRMAN DICUS: Okay. Thank you, very much. Let
7 me ask a couple of questions and then I'll ask my fellow
8 Commissioners to have any questions that they have.

9 I know that your proposal, you discussed how it
10 might allow the staff to making findings, if there's
11 reasonable assurance that existing programs will adequately
12 consider the age-related effects. But, I want to probe this
13 just a little bit. Specifically, if you could just comment
14 a little bit, there are going to be many plant specific
15 issues involved, such as differences in plant designs, as we
16 get down the road with more applications coming in, that
17 could cause differences in plant-specific existing programs.
18 Could you address that a little bit?

19 MR. TUCKMAN: My -- when we answer a regulatory
20 generic letter or have a check, invariably, we do that
21 specific to the plant that we have. As an example, my plant
22 is not on salt water; Barth, I think yours is. So the
23 program content would be different for how you manage the
24 effects of raw water fouling or corrosion in my plant than
25 in Barth's plant. So, the regulatory responses that the

1 various utilities have provided for meeting that regulatory
2 requirement will differ somewhat. But, they are involving
3 -- they are all part of the regulatory process. They have
4 been submitted, they are inspectable, and, hence, I don't
5 believe that the plant design differences really enter into
6 this part.

7 MR. PIETRANGELO: That's why the mapping has to be
8 done, too, to verify for that specific plant. If it's got a
9 different design, it may have a different aging effect and
10 mechanism, and they'll have to map it to their specific
11 programs.

12 MR. WALTERS: And, also, I think that's why we
13 have the second principle of the rules, which says the
14 plant-specific licensing basis has to be maintained to the
15 same extent --

16 CHAIRMAN DICUS: Okay. You mentioned the SRP.
17 And let me just ask actually, really for the record, because
18 I'm looking for a pathway for success here to resolve this
19 apparent difference: would an SRP that lays out the lessons
20 learned from the first reviews and is constantly kept
21 current, as we continue with reviews, help to more firmly
22 establish the requirements for future reviews?

23 MR. TUCKMAN: I believe that an SRP would, in
24 fact, provide better stability, but we do wind up with the
25 program of regulatory accretion. It's already occurred --

1 and I'm not complaining -- it has already occurred --

2 CHAIRMAN DICUS: We hear you.

3 MR. TUCKMAN: -- to some extent, as we have gone
4 through the existing process. New requirements have been
5 levied. If they were levied on Barth, I took them; if
6 they're levied on me, Barth took them. And, hence, the next
7 time --

8 CHAIRMAN DICUS: NA Health is probably looking at
9 them.

10 MR. TUCKMAN: Absolutely. So, every time there is
11 a new requirement that comes up, that is -- we tend to
12 capture that in the SRP, if you will, of going through this
13 process. My own experience would be that I would hope that
14 with time, as some of these one-time inspections are
15 completed, that we'll gain additional knowledge that the
16 20th plant to through process would say there's no point in
17 looking at that anymore, because we have looked at it at
18 five other plants and it's not going to be a problem.

19 CHAIRMAN DICUS: Okay, thank you. Commissioner
20 Diaz?

21 COMMISSIONER DIAZ: Yeah. Let's see, let me first
22 go to your slide number eight. I'd like to understand when
23 you say, existing programs are reviewed rigorously. Could
24 you put that in context for me, rigorously review by the
25 licensee and then by the NRC? What is the division in there

1 of responsibilities?

2 MR. TUCKMAN: The current licensing basis programs
3 are very well reviewed by the utility, because we've
4 developed them and we do a very detailed mapping.

5 COMMISSIONER DIAZ: I understand.

6 MR. TUCKMAN: Also, at the time that those
7 regulatory programs are submitted to the Commission, in most
8 cases, the Commission does a very detailed review and
9 follow-up inspections are done at the plants. And in all
10 cases, whatever we have in place are subject to review
11 whenever the inspection wishes to do so at the site.

12 COMMISSIONER DIAZ: In license renewal space, how
13 does the Commission know that those existing programs are
14 reviewed rigorously by the NRC staff, you know, together
15 with the licensee? What is the process? I don't understand
16 it.

17 MR. TUCKMAN: My concept would be that if it is an
18 existing current license-based program, we would suggest
19 that the staff does not have to review that for license
20 renewal. We would say that carries forward in the period of
21 extended operation, as NUREG-1412 alluded to, and it's
22 certainly inspectable when you do your on-site inspections
23 to verify that we are, in fact, implementing the programs
24 that we had previously committed to.

25 COMMISSIONER DIAZ: Okay. Now, you say that

1 modified CLB programs in slide 13, not to be rated for
2 technical adequacy. Based on that previous premise of the
3 rigorous review, then we have, you know, followed it
4 through, how is that -- how do you justify not considering
5 an adequate review of the modified CLB programs?

6 MR. TUCKMAN: Well, if we take an example,
7 Appendix H, as an example, the regulations are very clear on
8 what you have to do, in order to meet your fractured
9 toughness requirements of the reactor vessel. I have to
10 comply with the regulations. That's not an option and we
11 believe the regulations do imply that if you follow them,
12 you will provide a safe plant. So, why would I have to
13 specify in my program exactly how I intend to implement that
14 program, when it's very well described in the regulation?

15 Environmental qualification is another example.
16 We seem to draw a line at age 40, relative to justification
17 of either continuing to operate a piece of equipment or
18 replacing the equipment. There are many environmental
19 qualified pieces of equipment that have five- or ten-year
20 lives. The program is exactly the same for those pieces of
21 equipment as for anything that would go beyond 40. And
22 compliance with the regulation does, in fact, validate or
23 manage the effects of aging.

24 COMMISSIONER DIAZ: But demonstrated
25 accountability is something that fits in that --

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1 MR. TUCKMAN: Yes, sir. We have that
2 responsibility. We have a regulation. We have to comply at
3 all times with that regulation. And you verify that --

4 COMMISSIONER DIAZ: I think that's what this staff
5 is asking. Okay, and finally, I need to understand what the
6 differences between what I think is the staff overall
7 position of aging and yours. And I don't see clear
8 differences. The staff states that, you know, the licensee
9 needs to identify the program relied upon to manage certain
10 aging effects. You agree, you have to have that?

11 MR. TUCKMAN: Yes.

12 COMMISSIONER DIAZ: There's no difference, right.
13 The second thing, the staff clearly states that licensee
14 needs to state that the program manages the aging effects.
15 Do you agree with that?

16 MR. TUCKMAN: Yes.

17 COMMISSIONER DIAZ: Okay. So, we've got two out
18 of three.

19 [Laughter.]

20 COMMISSIONER DIAZ: Now, the next one is, describe
21 how the program will manage those aging effects, and that's
22 what the difference is, if I understand, right?

23 MR. TUCKMAN: Yes, sir, that is correct.

24 COMMISSIONER DIAZ: Okay. Could you briefly --
25 because, you know, my time is running out; I was just given

1 only 45 minutes for this question period, you know -- where
2 do you see the difference, to demonstrate how the program --

3 MR. TUCKMAN: The difference, I would say, was
4 that the licensee has described previously a program. It's
5 in place and it carries forward. The staff is asking us to
6 do a full description of that program and is second guessing
7 whether or not the program is, in fact, adequate, in
8 essence. And in many cases, they are finding them adequate.
9 In some cases, they are finding -- or perceiving that
10 additional things need to be added to the program, whether
11 that's justifiable or not. It is the process of them having
12 to demonstrate that you're describing your program and they
13 reach the conclusion that the program is adequate. Well,
14 our view is that the program has been in place, is in place,
15 and is working, and the current licensing basis carries
16 forward and they should not have to review that current
17 licensing basis.

18 COMMISSIONER DIAZ: As to how --

19 MR. TUCKMAN: Yes.

20 MR. WALTERS: I'll just offer that I see the
21 difference as we go into the process perhaps with the
22 assumption that if the aging is managed today, like it is on
23 environmental qualified equipment -- environmentally
24 qualified equipment, because the regulation talks
25 specifically about aging, if the program we use to implement

1 our regulation is managing the aging today, our going in
2 assumption is it's going to be adequate in the renewal
3 period. And what the mapping will do will tell us if there
4 is something different, whether it be a new aging effect --
5 and I'll stay on that point. And so, I think the staff's
6 going in assumption is, no, even though it manages the aging
7 today, it may not manage it in the renewal period; and that,
8 in fact, the only way we will know whether it is adequate is
9 to have a review of it; is for the applicant to provide
10 sufficient information so we can draw that conclusion that,
11 yes, it's adequate today and will be adequate in the future.

12 But, there is somehow some step change, when you
13 go from renewal -- or excuse me, when you go from current
14 operating term into the renewal term. And I think the
15 concern there and the difference is that we don't know what
16 that threshold is.

17 MR. PIETRANGELO: A perfect example is the ASME
18 Section 11 one that's been bandied back and forth in the
19 correspondence. I mean, that effect is no different an area
20 than it is tomorrow. The staff has made a conclusion and
21 relayed a SECY on the rulemaking. It says that Section 11
22 provides adequate protection. What's different about
23 renewal for that cracking? We haven't identified any
24 difference. Yet, there's a -- they're saying that cracking
25 isn't managed by Section 11, that you've got to do something

1 extra for renewal. That's a current licensing basis
2 program. Why isn't -- why aren't we asking that question in
3 Part 50?

4 COMMISSIONER DIAZ: Okay. But, of course, aging
5 is a time dependent phenomenon and, eventually, you're going
6 to have to have some assurances that as time goes on, that
7 the -- not only the management of the actual phenomenon,
8 itself, is being taken into consideration for safety
9 purposes.

10 MR. BEEDLE: I don't think we disagree with that,
11 Commission. But, I think his point is that if you have a
12 program that manages the aging today, it ought to be
13 adequate to manage the aging tomorrow. You know, nothing
14 miraculous takes place at the 40-year point.

15 MR. TUCKMAN: There is nothing unique to license
16 renewal.

17 COMMISSIONER DIAZ: But that presumes that there
18 is an adequacy, you know, that continues as a function of
19 time, and that's what I think is how -- the how comes to
20 play into the issue.

21 MR. BEEDLE: But the question is: is it adequate
22 of year 39 and then not adequate at year 41?

23 COMMISSIONER DIAZ: I don't know.

24 CHAIRMAN DICUS: It's a sliding scale.

25 MR. PIETRANGELO: But, is the current regulatory

1 process robust enough to deal with those things? It has
2 been in the past. If there's an issue that comes up,
3 there's means to deal with it. And the finding wasn't just
4 about CLB; it was about the regulatory process that ensures
5 that the CLB is adequate. So, even if let's say this became
6 a concern in year 55, even under the existing Part 50 rules,
7 there are ways to deal with it.

8 COMMISSIONER DIAZ: Thank you, Madam Chairman.

9 CHAIRMAN DICUS: Thank you. Commissioner
10 McGaffigan?

11 COMMISSIONER MCGAFFIGAN: Let me just go to slide
12 13 and stay on it. The programs that you suggest that the
13 staff look at, the adequacy of program or activity and
14 evaluate it, are the last three. For the first two
15 applicants, how many programs would that be? If I go back
16 to those charts of the industry position, is that the very
17 narrow wedge, those three, or is that part of the bigger
18 wedge?

19 MR. PIETRANGELO: It's part of the bigger wedge.

20 COMMISSIONER MCGAFFIGAN: It's part of the bigger
21 wedge, plus the narrow wedge?

22 MR. TUCKMAN: Yes.

23 COMMISSIONER MCGAFFIGAN: Approximately what
24 percent would you guess those three categories constitute?
25 I'm just trying to see how big the difference is between the

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1 staff, in terms of numbers of programs that would be
2 evaluated.

3 MR. TUCKMAN: Within the Duke application, we
4 thought the current licensing basis programs and modified
5 current licensing basis programs, which is the area that we
6 would say, that's about -- we thought about 20 percent of
7 the questions that we received --

8 COMMISSIONER MCGAFFIGAN: So, you're arguing about
9 the 20 percent, not the 80 percent?

10 MR. TUCKMAN: That's correct.

11 COMMISSIONER MCGAFFIGAN: Okay. And is that the
12 same for Calvert?

13 MR. DOROSHUK: We -- our breakdown on CLB or
14 non-CLB was along the same lines as Duke.

15 COMMISSIONER MCGAFFIGAN: What happens to these
16 non-CLB programs, the new programs, do they get captured in
17 the CLB post --

18 MR. TUCKMAN: Yes.

19 COMMISSIONER MCGAFFIGAN: -- post-licensing rule?

20 MR. TUCKMAN: They become CLB requirements, part
21 of our licensing rule requirements.

22 COMMISSIONER MCGAFFIGAN: So the last three
23 categories, even the existing non-CLBs, all become part of
24 the --

25 MR. TUCKMAN: That's the new license.

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1 COMMISSIONER MCGAFFIGAN: That's the new license,
2 okay. I look back at the -- I mean, we are arguing about
3 the same thing that we were arguing about in 1995. I look
4 back at those statements of consideration, long-lived
5 structures and components, and one commenter stated the
6 Commissioner should consider dividing long-lived passive
7 structures and components into two categories: those that
8 have a less rigorous approach to oversight and maintenance,
9 and those that have a sufficiently higher level of
10 regulatory licensee programs and regulatory oversight. The
11 commenter suggests the rule should recognize the quality,
12 etc. The staff reaction was not to do it. However, as the
13 Commission gains more experience with industry activities
14 for management of tests of long-lived structures and
15 components, it may consider further narrowing the scope of
16 those structures and components requiring an aging
17 management review.

18 That's what we're talking about, right? We're
19 talking about how much of the narrowing occurs. And it
20 seems to me that your real issue has to do with fears of a
21 slippery slope into a much larger review. Is that not the
22 case?

23 MR. TUCKMAN: That is exactly the case.

24 COMMISSIONER MCGAFFIGAN: And you're calling for
25 Part 50 rather than Part 54. Part 50 gives you back

1 protection. Is that -- is that what you're looking for?

2 MR. TUCKMAN: That's correct.

3 MR. PIETRANGELO: Well, it, also, provides --
4 focus more on safety; make sure that the action has some
5 safety significance.

6 COMMISSIONER MCGAFFIGAN: It's a substantial
7 benefit?

8 MR. PIETRANGELO: Yeah. There's two parts.
9 There's the part -- the what if and why not scenario. And
10 those are the aging management programs that I think the
11 future licensees want to avoid, is the what if and why not.

12 MR. WALTERS: Could I just make a comment on --
13 you know, I'm not sure that we're necessarily arguing that
14 the scope needs to be winnowed down. And I -- and at the
15 start of your question, you indicated in our chart on slide
16 13, that the first two rows, I guess, were -- are areas
17 where the staff would not look. That's really not what
18 we're saying. We believe and -- we believe that the staff
19 has the right to look at any program. I think the point you
20 just made about do they look at it under 54 or Part 50 is
21 one of the issues with the first two rows here. We don't
22 object to them questioning the existing CLB program or the
23 modified CLB program.

24 MR. TUCKMAN: And certainly verifying during
25 inspection that those programs are in place and are

1 effective.

2 MR. WALTERS: Right. So, I'm taking those off the
3 table.

4 COMMISSIONER MCGAFFIGAN: So, it's the standard
5 for whether there will be a change required. I mean, verify
6 effects of scope are mapped to program activities, pretty
7 much, you know, check and go on. That seems to be what
8 you're suggesting.

9 MR. WALTERS: Right, because we believe --

10 COMMISSIONER MCGAFFIGAN: The current licensing
11 basis is adequate.

12 MR. WALTERS: Right.

13 COMMISSIONER MCGAFFIGAN: And, therefore, we
14 should -- that all I have to know is that it's covered by
15 the current licensing basis or minor modifications of
16 current licensing basis and I can go on. And what you're
17 saying is, if the staff, at that point, wants to require
18 something more, a different rule should apply, mainly the
19 substantial benefit test in Part 50?

20 MR. WALTERS: Yes. I mean, if we can agree -- if
21 the staff and the industry can agree that the mapping is
22 done and, in fact, the program is managing the aging today,
23 it's our view that a question, then, regarding the manner or
24 the -- let's say the adequacy of the way that program is
25 managing the aging, has to be a question that you would ask

1 today.

2 COMMISSIONER MCGAFFIGAN: One last question, if I
3 could. You mention NUREG-1412 and I'm honestly not familiar
4 with the document. It's a 1991 document that was issued
5 four years before this, or presumably with the previous
6 rule. What do you believe its status is?

7 MR. PIETRANGELO: This was a supplement to the
8 original rule statement of considerations, and this was what
9 the principles license renewal are founded upon. The second
10 rulemaking affirmed those principles. They didn't undermine
11 them; they confirmed them and reiterated them. So, we still
12 think this is in play. This is part of the SOC of the first
13 rule. And it went through things like -- it was limited to
14 active versus passive components. It looked at all the
15 programs.

16 MR. WALTERS: There was --

17 MR. PIETRANGELO: There was a thorough review
18 associated with it.

19 MR. WALTERS: There was some debate, when we -- I
20 think when we first looked at developing a rule -- or the
21 agency looked at developing a rule for renewal, as to
22 whether licensees would need to compile their CLB, and that
23 was a long debate with the staff. And the final conclusion
24 of that was that the applicants did not have to compile
25 their CLB. And that was a debate that occurred before the

1 '91 rule and NUREG-1412 provided the foundation for the
2 conclusion that -- the Commission found in the '91 rule that
3 the CLB didn't need -- did not need to be compiled, and
4 that, then, turned into the principles.

5 CHAIRMAN DICUS: Thank you.

6 MR. TUCKMAN: Could I make one quick statement?

7 CHAIRMAN DICUS: Uh-huh.

8 MR. TUCKMAN: One, I'd like to thank the
9 Commissioners for their -- the opportunity to present this.
10 Secondly, you, as well as we, have only one goal in mind and
11 that's to have a safe plant, not only today, but in the
12 future. I mean, that's key. Some would look at the fact
13 that 75 percent are existing programs and 30 percent are
14 newer modified programs incorrectly. I would say that we
15 found the vast majority of everything we do manages the
16 effects of aging very, very well. All we're trying to do is
17 claim some regulatory protection and efficiency for future
18 plants on those areas that are very well documented. And
19 that's really all we're looking for. We do very much
20 appreciate your consideration for this.

21 By the way, words are written in the regulation.
22 Reasonable people both read them and read them a little bit
23 differently. We have been meeting very effectively with the
24 staff and the Executive Steering Committee monthly or
25 bi-monthly basis. We've basically agreed to disagree and

1 came to the fountain of knowledge, if you will, in this
2 part, and that was the reason we're here.

3 CHAIRMAN DICUS: Thank you. Commissioner
4 Merrifield? A fountain of knowledge.

5 COMMISSIONER MERRIFIELD: I demure from that
6 characterization. I'm just -- I want to go back to slide
7 three, sort of the why we are here, just so I can frame, in
8 my own mind, on clarifying. It seems to me that there are
9 two issues primarily that we're concerned with: the first
10 one is regulatory creep, we have a fixed program and we
11 don't want that to backslide or forward slide, however one
12 characterizes that; and the second one really is the extent
13 that we review existing programs. And I'm wondering, are
14 there -- do those two statements frame essentially your
15 basic concerns?

16 MR. TUCKMAN: Yes.

17 COMMISSIONER MERRIFIELD: I guess I've got a
18 couple of -- a couple of thoughts really to those. I
19 certainly understand and appreciate the issue of regulatory
20 creep. There's a fine line that we have to balance, as an
21 agency. You mentioned that you had some additional things
22 to do at Duke, based on the experience that Baltimore Gas &
23 Electric went through and vice versa.

24 There's a balance between regulatory creep and
25 fixing oneself at a given point in time. And I think we, as

1 an agency, have to be very careful. Well, I am very
2 concerned about regulatory creep and have spoken about it
3 frequently. We, also, are concerned that we don't lock
4 ourselves in and not be able to take advantage of things
5 that we learn. I mean, it would be shocking to me that if
6 we go 20 plants in this -- assuming that there are 20 plants
7 that want to go through this process, if we went 20 plants
8 in the process and the way in which we review the 20th plant
9 is precisely the same as we reviewed the first one, that
10 would -- that would seem to me to characterize an agency
11 that doesn't work. And I don't think that's -- I hope
12 that's not where your --

13 MR. TUCKMAN: Commissioner Merrifield, in most of
14 our programs, there's also the opportunity for learning;
15 that is, we have all corrective action programs and that
16 takes lessons learned from a new aging effect or whatever we
17 come across and we plough that back into the new -- existing
18 program. The agency does, also. The agency issues new
19 generic letters or new information and they eventually come
20 part of these current licensing basis. I would certainly
21 expect that to continue.

22 COMMISSIONER MERRIFIELD: I think -- so for the
23 most part, I think the regulatory creep issue is one which
24 is a management issue. It's one which I see the Commission
25 has to be engaged in. And I agree with Commissioner --

1 Chairman Dicus, that the standard review plans to go a long
2 way to helping ensure that we do that and have sufficient
3 regulatory discipline.

4 The second issue regarding reviewing existing
5 programs, clearly, that's a policy issue. It falls within
6 what's considered within SECY-99-148 and one that certainly,
7 I think, comes to -- will help us tremendously.

8 I'm interested in exploring a little bit more the
9 specific examples. I know you want to come up and talk
10 about your own issues, so many I can frame this to Ralph and
11 the folks at NEI. But, it would be instructive to know the
12 concrete kind of examples that you've gone through in these
13 first two renewals, which engender the concerns that we have
14 today, in terms of information requested or particular
15 requirements placed on these renewal applications, as we've
16 gone through.

17 MR. TUCKMAN: We found early in this process that
18 when we're talking the abstract, it doesn't make as much
19 sense as when we talk to concrete examples. Maybe, I'll ask
20 Barth to give an example and I'll give one.

21 COMMISSIONER MERRIFIELD: Okay.

22 MR. DOROSHUK: The Appendix H program is a good
23 example, where it's a very well founded program technically
24 and regulatory-wise. And we took credit for the Appendix H
25 program for managing in the Calvert Cliffs reactor vessels.

1 The staff reviewed the program and their line of questioning
2 was not -- this is a success story -- was not at the
3 adequacy of the Appendix H regulation, but was there an
4 adequate number of surveillance capsules in the renewal
5 period. And as a result of that exchange, we considered
6 implementing Appendix H to something would do and we would
7 put those capsules in place. What the staff said was, no,
8 we'd like you to agree with us up-front that those capsules
9 ought to -- the withdrawal sequence ought to be modified.
10 And we agreed to that. So, there's a success story, where
11 an existing program -- CLB program was properly interrogated
12 by the staff. It was -- there was no regulatory creep and
13 there was a successful closure on it.

14 We do feel in the EQ program area that although we
15 ended up concluding that the EQ program was acceptable, we
16 had to go and explain how we were implementing the EQ
17 program to extraordinary lengths -- unextraordinary lengths
18 and, specifically, how we actually did day-to-day
19 operations. Now, we questioned that path we took to get to
20 the answer, where it was an acceptable program.

21 Where the concern is, I think, from the industry
22 is if not that -- the current staff and the staff management
23 are trying to pursue regulatory creeps, the management
24 oversight has been very strong. The concern is, is when
25 everybody leaves and 10 years from now and there's a whole

1 new Commission, there's a whole new set of staff, a whole
2 new group of licensees, are we going to remember that EQ was
3 an acceptable program and we shouldn't be wondering way out
4 here. That's the concern there is. So, there's a success
5 story, but there's an indication, and I think that's where
6 the industry is concerned about.

7 MR. TUCKMAN: We've all that experience, where the
8 end result we finally got to was acceptable. And I'll give
9 you the example of IWEI, which is containment inspection
10 programs. Again, they're very well defined and the segment
11 of considerations for that rule and the 50.55(a), you gave
12 credence to the inspection program as being valid in the
13 period of extended license renewal. But, we wound up with
14 quite a number of questions to deal with in that area. So,
15 we wound up with no additional requirements. There was a
16 long circuitous process to get -- I'm sorry, they're not all
17 resolved yet, but we wound up with a lot of questioning that
18 was, in my view, a lot of wasted motion.

19 Did that help?

20 COMMISSIONER MERRIFIELD: Uh-huh.

21 MR. WALTERS: I would just comment, if I may, that
22 the standard review plan, even though it's a working draft,
23 has a number of examples, I think, that go to this issue,
24 because that is the guidance that is being used by the staff
25 to review the applications. So, there are a number of --

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1 we'd be happy to provide that to you, as a follow up to this
2 meeting.

3 COMMISSIONER MERRIFIELD: Okay, please. One last
4 quick question. On slide six, in the efforts that our staff
5 has been taking and we're talking about today, we talk about
6 sufficient detail to show program manages aging, talking
7 about managing aging effects. The last bullet on this
8 slide, slide six, says "sufficient detail to show link to
9 aging effects." There seems to be a different between link
10 and managing aging effects. I'm wondering if you could
11 explain for me the difference between link --

12 MR. TUCKMAN: Link would say there's an aging
13 effect and we believe that the program covers that
14 particular aging effect; demonstrated, you would say, okay,
15 now, it manages -- show me that it is, in fact, managing it.
16 What we're doing is showing our link from the aging effect
17 to the place in the program, and they're saying show me that
18 the program, itself, is effective in managing the aging.

19 COMMISSIONER MERRIFIELD: Okay. Thank you.

20 CHAIRMAN DICUS: Okay.

21 MR. BEEDLE: Which, in fact, is something that
22 could be done, whether or not you're in license renewal
23 application review or not -- you know, how are you managing
24 that program today.

25 COMMISSIONER MERRIFIELD: Yeah. I'm still -- I

1 mean, it's like anything else. I can have -- as we do right
2 here, you have a set of procedures saying how well you're
3 going to do something. In the end, to quote our former
4 chairman, results are those that matter. And I think, you
5 know, to show the link -- you know, does that really
6 demonstrate the fact that that's affected.

7 CHAIRMAN DICUS: Okay. Thank you, very much. We
8 have people next here from the Union of Concerned
9 Scientists, through the voice of Mr. Lochbaum. Thank you.

10 MR. LOCHBAUM: Good morning.

11 CHAIRMAN DICUS: Good morning.

12 MR. LOCHBAUM: Slide two, please. UCS reviewed
13 the SECY paper. Basically, we don't think any of the three
14 options should be followed. We're proposing option four,
15 which is to continue doing what's been done for the first
16 two applications. The reason we think that is that the
17 license -- the current license renewal rule was based on the
18 assumption that the current licensing basis are adequate.

19 I think recent experience or the lessons learned
20 since NUREG-1412 came out, which showed that that's not
21 necessarily a valid assumption, Millstone, Salem, Haddam
22 Neck. If that assumption were correct, D.C. Cook wouldn't
23 be shut down today. Several U.S. General Accounting Office
24 reports show that the current licensing basis is not a
25 precisely understood issue and that several plants may or

1 may not be operating consistent in conformance with that
2 licensing basis.

3 With that foundation, the industry now wants the
4 NRC to give it credit for the adequacy of existing age
5 management programs. As I understand -- if I understand the
6 argument correctly, anything that's covered under an
7 existing rule should not -- should be outside the scope of
8 NRC's license renewal. If one extended that logic to the
9 illogical end, so even the new things wouldn't have to be
10 covered, because they were required by 10(c)(4) or the Part
11 54 license renewal rule. So, therefore, everything is
12 essentially covered by a regulation. And I don't --
13 hopefully, that's not what the industry wants, but it's
14 definitely not what UCS wants to see happen either.

15 Slide three basically provide the three options,
16 which have been covered previously.

17 Slide four. The SECY paper -- in the SECY paper,
18 the staff said, "The public may view the license renewal
19 process as unjustifiably narrow in scope and could perceive
20 the Commission as granting renewed licenses without a
21 sufficient technical basis." I think we would agree with
22 that staff's interpretation of the public's mind set, at
23 least segment of the public's mind set.

24 In addition, the staff said, "The staff and the
25 initial license renewal applicants have found that about 30

1 percent of the aging management programs for license renewal
2 required some modifications of existing programs or new
3 programs." I think USC believes that 70 percent is not a
4 passing grade when it comes to nuclear safety. I think the
5 evidence to date suggests that the staff's reviews of age
6 management programs needs to continue, as it has in the
7 past, at least until we have more than two data points on
8 which to base our solid conclusion.

9 Slide five. In addition, the two applicants to
10 date are both pressurized water reactors. We don't have any
11 data that shows that the lessons learned apply to boiling
12 water reactors. Unless no boiler water reactors go through
13 the license renewal process, then that data may or may not
14 be valid or acceptable. In addition, the current applicants
15 don't see license renewal until the year -- at least the
16 year 2013. The 20 or so license applicants that have been
17 discussed previous -- by the previous panel will probably
18 already be concluded, upper bound, before the first plant
19 reaches those past 40 years. So, essentially, we're
20 conducting a grand experiment, the results of which -- or
21 the proof of which cannot be shown until after all those
22 processes have gone through. So, if the process is unsound,
23 we may not know until it's too late to make corrections.
24 So, I think we need to proceed with due diligence and
25 prudence, and not proceed on reducing regulatory burdens

1 just for the sake of reducing regulatory burdens.

2 An example I'd like to show where that has
3 happened in the past, extremely desirous of avoiding in the
4 future, was Grand Gulf. In 1982, the NRC issued an
5 operating license to Grand Gulf, which was also known as
6 "Grand Goof," at the time. In July of 1984, the NRC
7 admitted to Congress that it had approved a license
8 containing hundreds of errors. I know from personal
9 experience, because I worked as a consultant on a tech spec
10 review project at Grand Gulf in '83 and '84, the operating
11 license contained a permit that wasn't even in the plant.

12 Basically what had happened, the architect
13 engineer and others had taken the technical specifications
14 for a boiling water reactor four and just changed the name,
15 to make it a boiling water reactor six, the Grand Gulf type.
16 So the equipment for boiling water BWR-4 was contained in
17 the BWR-6 tech spec and vice versa, BWR-6 contained
18 equipment that wasn't in their tech specs. It wasn't
19 captured. The FSAR for Grand Gulf contained as many, if not
20 more, errors, including descriptions of non-existing
21 equipment. Grand Gulf's owner reported that it took 5,600
22 man-hours to identify and correct all these problems, and I
23 spent more than my share of that 5,600 man-hours working on
24 that.

25 COMMISSIONER MCGAFFIGAN: Fifty-six hundred or

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1 fifty-six thousand?

2 MR. LOCHBAUM: Fifty-six thousand, I'm sorry. The
3 slide is correct, but my testimony is wrong. The NRC
4 attributed its inability to catch even one of the hundreds
5 of problems to a large number of plants being licensed
6 concurrently and "excessive informality by both the
7 applicant and the NRC staff."

8 Slide eight. The current schedule -- or the
9 forecast shows that the NRC will be -- may be receiving a
10 large number of license renewal applications concurrently.
11 Options one, two, and three, in the SECY paper, to us
12 represent varying degrees of informalities in NRC's
13 demonstration that age management programs are adequate.
14 Therefore, we feel that none of these options are -- should
15 be pursued, because they would risk repeating the Grand Goof
16 mistake.

17 Slide nine. Options one, two, and three -- our
18 conclusion is that options one, two, and three do not
19 provide adequate protection of public health and safety and,
20 therefore, should not be adopted. Instead, we think the
21 staff should continue to determine all license renewal
22 applicants have adequate age management programs.

23 I think one of the things that was discussed was
24 ASME-11 and some of the existing programs. Our concern is
25 that some of those programs and inspections may be based or

1 predicated on the assumption of a 40-year life time, as far
2 as how often you go out and look at something, how often you
3 inspect something. If you go beyond 40, for another 10
4 years, there is nothing magic about year 41, but there may
5 be something magic about year 59. So, there needs to be
6 some review, to make sure that the frequency of testing is
7 adequate for an additional 20 years. If that can be done
8 generically, that would be one thing. But to do it on a
9 frame based on two license applicants is probably not the
10 right way to do it.

11 Thank you.

12 CHAIRMAN DICUS: Okay, thank you. I have one
13 question I'd like to bring up with you. You used the
14 example of Grand Gulf and the issues that -- issues that you
15 raised with regard to that. Would, in your opinion, a
16 periodic updates to the staff's SRP reduce the likelihood of
17 a Grand Gulf sort of situation in license renewal?

18 MR. LOCHBAUM: A strong argument could mean that
19 it would. But at the same time, the Grand Gulf was licensed
20 with the benefit of a SRP that was being updated along the
21 way. So, we had that mechanism before and it didn't prevent
22 the Grand Gulf, so having an equivalent mechanism again may
23 not prevent another Grand Gulf.

24 CHAIRMAN DICUS: That would be obviously on the
25 quality of the SRP and how it was used, I would think.

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1 MR. LOCHBAUM: It would be better than not having,
2 I definitely concede that.

3 CHAIRMAN DICUS: Mr. Diaz?

4 COMMISSIONER DIAZ: Yeah, I think in following the
5 same argument, I mean, I believe we need to learn from the
6 lessons of the past. But that was many, many years ago. I
7 would probably state, you know, unequivocally, that we all
8 have learned, on all sides of the fence, that --

9 MR. LOCHBAUM: Since I was there, I'm going to say
10 it seemed like yesterday.

11 [Laughter.]

12 COMMISSIONER DIAZ: I was also on a team there at
13 the time. But, you know, specifically, since, you know, we
14 have seen these things happen and we are taking steps to
15 avoid repetition of those areas. The questions keeps coming
16 down to, you know, not that people are not going to look at
17 the programs, everybody agrees that everybody is going to be
18 required to map what the structure systems and components
19 that require management. They're also going to be requiring
20 that those structure systems and components that require
21 management have to clearly state what those, you know,
22 programs are and how they're being managed.

23 The issue, then, comes back to, you know, the how.
24 And the how is where the distinction comes in between things
25 that could fall through the cracks. Because, I think you're

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1 more concerned -- or maybe you're not, maybe I'm putting
2 words in your mouth -- with things that will fall through
3 the crack, rather than those that are really actively
4 managed and continue to be managed and continue to be, you
5 know, not only by the licensee, but continue to be, you
6 know, regulated in an active manner. And the question is:
7 what can we do to assure -- what is your recommendation to
8 assure that things will not fall through the crack?

9 MR. LOCHBAUM: I think -- our concern is a little
10 of both. It's not only things that might fall through the
11 cracks, but also the adequacy of existing programs. There
12 are a number of different licensees and their performance is
13 a spectrum. We view the NRC's goal to make sure that the
14 most -- the least well-performing licensee going through
15 license renewal is at or above the minimum standards. So,
16 we think the NRC's obligation is to review some of the age
17 management programs, to make sure that they are adequate
18 before we go into another 20 years of operation.

19 That's separate from looking for things that might
20 fall through the cracks. I think the review of new or
21 modified programs needs to be done, to make sure that they
22 cover those areas that might be cracks or things that might
23 fall through that. So, I think, really, both things need to
24 be done and our recommendation would be continue to have
25 more dated -- five or ten plants go through this. And what

1 we're seeing -- like the earlier panel said, that it doesn't
2 -- they don't need to look at this area anymore, then it
3 might be time to scale things back and only do a cursory
4 review of licensee's performance in that area. But, based
5 on only two, that's not a big enough data set to reach that
6 conclusion, at this point.

7 COMMISSIONER DIAZ: And by falling through the
8 cracks, I don't mean -- I mean, in the overall context of
9 the adequacy of those programs, whether something is not
10 being addressed properly or not. Because, that's really the
11 issue, that you address the existing, the modified or the
12 new programs in a proper fashion, then I think you would be
13 satisfied. Is that correct?

14 MR. LOCHBAUM: Well, satisfied may not be the
15 right word, because we fought license renewal once.
16 Satisfied probably never applied.

17 [Laughter.]

18 COMMISSIONER DIAZ: That's acceptable. Less upset
19 with it, then.

20 MR. LOCHBAUM: Right.

21 CHAIRMAN DICUS: Commissioner McGaffigan?

22 COMMISSIONER MCGAFFIGAN: Let me just explore the
23 regulatory creep issue with you, because you have been on
24 the licensee side of the fence, at one point. You heard
25 folks talk about the concern that when you look at the

1 current licensing basis and they suggest we verify that the
2 effects and scope of the map are mapped to the program
3 activity, that that's the extent of our review for some of
4 these CLB programs. The concern is when a staffer, at that
5 point, starts asking REIs and the -- and the requirement
6 that it will not pass a test and if it were considered in
7 Part 50 space, what is your reaction to that, that when you
8 deal with current licensing basis -- it may well be that
9 this matter of what standard is for making an augmentation
10 to the current licensing basis, rather than whether we
11 should be looking at it, if I listened to them -- where do
12 you come down in their sympathies, with regard to what the
13 standard should be for adding a new bell or whistle to the
14 CLB?

15 MR. LOCHBAUM: I think it's a very valid point.
16 However, I think the proper response to that would be
17 instead of the first two applicants just accepting
18 everything, in order to get the thing done within 30 months,
19 if they would fight some of those things they feel are
20 abuses and establish a precedent for all subsequent
21 applicants would be better than to take the questions away
22 from the staff. If they feel those abuses, they should
23 fight those abuses when they come up, not frantically take
24 away that ability to question down the road.

25 COMMISSIONER MCGAFFIGAN: My understanding from

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1 talking to some of these folks about the staff, and I don't
2 go to these public meetings they have every month, so they
3 have some vigorous conversations, as I understand it, during
4 these meetings. This IWE/IWL issue, I'm going to raise with
5 the staff later, and Mr. Tuckman says he gets questions on
6 that, yet the statements of consideration only did it --
7 specifically said it's good enough for aging management.
8 So, it's -- and there, you start to wonder, you know, do we
9 have -- the staffs are at war with each other or not, and
10 they'll get the answer in a few minutes. But, it does
11 strike me that the issue is one of standard.

12 I agree we may not be ready, at this point, to
13 declare a victory on all these things. But, if we said
14 something, we can take a generic determination somewhere and
15 presumably we shouldn't be reopening it.

16 MR. LOCHBAUM: I would agree with that.

17 CHAIRMAN DICUS: Mr. Merrifield?

18 COMMISSIONER MERRIFIELD: Yeah. Mr. Lochbaum, my
19 first question revolves around slide five of your
20 presentation, okay. In the second bullet, you talk about
21 the fact that Calvert Cliff and Oconee licenses don't expire
22 until 2013 and 2016. You said, "Thus, proof that existing
23 age management programs are adequate will not be available
24 for over a decade."

25 I guess I'd like to understand a little bit of

1 what your position means. At what stage of the original
2 40-year term that you believe that the licensees and the NRC
3 will have sufficient information to determine the plant's
4 existing age management programs are adequate? Do we have
5 to wait 40 years before we can make such a determination?
6 That's what this bullet seems to indicate.

7 MR. LOCHBAUM: It's one of those catch 22s. You
8 never -- until you go beyond 40, you'll never get that
9 proof, and none of the plants will be in that position. But
10 by having the plants apply more than a decade early -- I
11 mean, virtually all the plants lined up will follow that.
12 The process in which the NRC determines that the age
13 management programs are adequate or not, will not be really
14 tested until all of them -- all the license applicants are
15 granted or are not granted, whatever that process will be
16 done. So, we won't have any proof of whether the reviews
17 and the frequencies are adequate, until it's too late to do
18 anything about it.

19 COMMISSIONER MERRIFIELD: So -- but, again, it
20 begs the question: at what point is it sufficient? You're
21 saying it's insufficient now; we need more time to really
22 determine it is sufficient. What point do we determine is
23 sufficient, to have the ability to go through this process?

24 MR. LOCHBAUM: I think if you look at PWRs and
25 BWRs, you know, on more than two and you looked at the

1 frequencies that things were looked at, vessels, piping,
2 whatever, and you had a larger data set to say that the
3 frequency we have for a 40-year life time will cover the
4 remaining 20 years with or without modification or whatever
5 the conclusion is, then you have a reasonable sample size on
6 which to say for the next ones that come through, we don't
7 need to do this.

8 COMMISSIONER MERRIFIELD: So, you're saying it's
9 more -- it's more the issue of the breadth of the sample,
10 necessarily, than the time period?

11 MR. LOCHBAUM: Yeah, I think it's more of a
12 timing; not that this approach won't work, it's just that
13 right now being a little premature to do it.

14 COMMISSIONER MERRIFIELD: Okay. Second and final
15 question I have goes to slide nine. You say, "Options one,
16 two, three do not provide adequate protection of public
17 health and safety and therefore should not be adopted.
18 Recommendation: the staff should determine that all license
19 renewal applicants have adequate age management programs."
20 Now, you further underscored this a little bit at the very
21 beginning of your oral testimony, basically saying, you
22 ought to just keep doing what you're doing. And that -- you
23 know, for the purposes of trying to direct where we're going
24 to go, that is a little vague.

25 I'm wondering if you could focus for us a little

1 bit. There's things that we aren't covering in option
2 three, for example, which is the broadest of the three, that
3 we, otherwise, you feel, that what we're doing now, what you
4 term option four, the current baseline. What are the
5 differences you think we're missing in between those two?

6 MR. LOCHBAUM: Let's go back and look at option
7 three. I think, for example, the difference between option
8 three and our recommendation would be option three would be
9 based on the assumption that we knew where the areas of
10 importance are. We know where things can be streamlines.
11 That's what option three is basically -- seems to be headed.
12 Based on the review of two applicants, we know where the fat
13 is and we just focus elsewhere.

14 Our point is two applicants, none of which being
15 boiling water reactor, may not be the data set that truly
16 defines the fat. If we're to do these two applicants over
17 again, yes, this would work. But to apply those lessons
18 learned from only two applicants to future applicants
19 doesn't seem to be -- this approach seems to be pen struck
20 by that.

21 COMMISSIONER MERRIFIELD: Well, again, this seems
22 to -- this seems to relate to your issue of the breadth of
23 the sample that we're taking. And so, I guess that spurs my
24 follow-up questions: how broad a sample would you, under
25 your proposal, take? I mean, should it be -- should it be

1 three boiling water reactors and three pressured water
2 reactors? Should it be 20?

3 MR. LOCHBAUM: I think the actual answer to that
4 question won't be any specific number. I think there will
5 be certain things after two or three, with all them from the
6 same fact that you might say a good argument for reducing in
7 the future. If you've looked at 10 and certain things show
8 up in some and don't show up in others, then you'd have to
9 look at a few more to get a larger sample size.

10 COMMISSIONER MERRIFIELD: With the standard of
11 review plan, as Chairman Dicus has mentioned, where you're
12 going to have periodic resamplings of that by the
13 Commission, in the fine tuning of the way the staff is
14 going, can we get there with that? You know, we're saying
15 we're going to streamline, to a certain extent, the lessons
16 we've learned from the first two. But, presumably, as the
17 staff moves forward and we do four and five and six,
18 presumably if they come in, there will be additional lessons
19 to be learned. We're not going to do this immediately.
20 Presumably, it will be a gradual processes.

21 MR. LOCHBAUM: Our concerns with that approach
22 would be if any of those retching -- not retching -- but if
23 any of those evolutions went to far and the lessons seems to
24 suggest we need to back up a little bit, that that wouldn't
25 happen. The history has been one direction. We never back

1 up and make things safe again.

2 COMMISSIONER MERRIFIELD: I don't mean -- this is
3 sort of interesting, just one last thing, in that -- as you
4 can imagine, that is entirely contradictory. I don't mean
5 this in a derogatory. But, we've just heard from the
6 licensee and their fear is, oh, good gosh, we're going to
7 have this regulatory creep on our staff. It's just going to
8 keep going and going and going. And what you're saying here
9 is, you know, once we ratchet up, we're not going to do
10 anymore. The ratchet only goes one way. We'll only narrow
11 the areas that we're looking at.

12 How -- as Commissioners, how do -- do you
13 understand where I am right now? I'm getting it from both
14 ends, how do we balance that act?

15 MR. LOCHBAUM: I don't think safety --

16 COMMISSIONER MERRIFIELD: Maybe, we've got it
17 right; I don't know.

18 MR. LOCHBAUM: I don't think safety is measured by
19 the number of RAIs, so just having 30 or 40 RAIs doesn't
20 mean you have a safe process. So, if you can cut that back
21 down to 10, we can still have a safe process. I don't think
22 we're as contradictory with the industry as it seems. I
23 recognize there does seem to be a conflict. But, I think
24 our position -- if you look traditionally to things where
25 UCS has looked at something in NEI, we pointed out things

1 that were excesses and things where there was -- for the
2 industry, there was a shortfall and there was an excess.

3 The industry only sees one-half of the ledger --
4 well, they see both; they only talk about one side. And I
5 think that you can look at who influences NRC policy and
6 regulations. It's not UCS and the public; it's the industry
7 right now. So, we're concerned that if we get an SRP and we
8 get revisions, what we see as the shortfalls will not be --
9 there won't be balance between some of the regulatory uses
10 that the industry reports.

11 COMMISSIONER MERRIFIELD: Well, I would not, in
12 any way, want to characterize what the licensees do. I do
13 have to say, you have been fair, I know, since I've been a
14 Commissioner, in pointing out the areas where you think it
15 goes both way, so I'm going to score you right on that. I
16 think you discourage yourself needlessly. I think this --
17 you know, this -- you know, at least from the part of this
18 Commissioner, and I think the others would agree with me,
19 that the positions of UCS do influence the decisions we
20 make.

21 MR. LOCHBAUM: Well, I appreciate that. I do
22 appreciate that.

23 CHAIRMAN DICUS: I have a follow-up comment, then
24 I think Commissioner McGaffigan has a question, and perhaps
25 Commissioner Diaz, as well. You made a comment that we're

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1 trying to make decisions now that will be 10 or 15 years
2 before we know whether those are good decisions or bad
3 decisions. I think in the comment, we might find ourselves
4 in trouble, or something of that nature. I think we have to
5 keep in mind that this is a process that's a moving process.
6 And should we discover, at some point down the road, after
7 we've made a decision that that is a decision to get a
8 license, that some issue has surfaced, I think the
9 Commission and staff has the ability to identify that and to
10 successfully deal with it. So, I think we have to keep that
11 in mind. It's not a decision and then you walk away. It's
12 an ongoing process. That's the point I have. Commissioner
13 McGaffigan?

14 COMMISSIONER MCGAFFIGAN: I just want to follow up
15 on this generic aging lessons learned effort that the staff
16 has underway and which is the heart of option three. Would
17 you have more confidence in it, if -- and I suspect it's
18 what the staff intends, that it be a public report? You get
19 a public comment, and I'm sure you would get the comment,
20 the industry would get the comment. This report, to my
21 knowledge, doesn't exist, unless they're going to tell us it
22 does and it certainly hasn't received comment. I've never
23 seen it. But, if we go through a process where this report
24 constantly is updated, it's going to be referenced in the
25 standard review plan. The SRPs typically do go out for some

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1 comments; but if it can be referenced, maybe it, also, goes
2 out for comment and it's something where it's very
3 transparent what we're doing.

4 Would transparency and the ability to comment on
5 what we're doing, help the process?

6 MR. LOCHBAUM: I don't think so, at least from our
7 standpoint, because we've got allegedly an opportunity to
8 comment on the 2206 process that was recently advised, and
9 none of those -- virtually none of those comments were
10 incorporated into the final version or even responded back
11 why they weren't. So --

12 COMMISSIONER MCGAFFIGAN: Well, let me -- let me
13 -- I mean, I think you've raised some interesting points in
14 the 2206 process, and I'm sure we're going to be hearing
15 more about it. That was something Mr. Lochbaum and I had a
16 discussion about last Friday. But, that's the exception, I
17 think, compared to, say, the oversight process, where you
18 have been integrally involved, where you're on a panel now
19 that's going to review the pilot efforts, etc., and where
20 there has been --

21 MR. LOCHBAUM: I would argue that that's the
22 exception and not --

23 COMMISSIONER MCGAFFIGAN: Well, what if that were
24 -- what if that were -- I understand your concerns about the
25 2206, that there were comments you made and others made and

1 apparently, you were given an opportunity for a private
2 viewing and you refused it, because it was not going to be a
3 broad public viewing, etc.

4 MR. LOCHBAUM: Right.

5 COMMISSIONER MCGAFFIGAN: But, if we fix that, if
6 we pursued something closer to the oversight process of
7 involving the public, as opposed to a 2206 process involving
8 the public, would that -- would that transparent -- that
9 degree of transparency and having your comments commented
10 upon, so that you knew why, if they were rejected, they were
11 rejected, would a process of that sort, which may be an idea
12 we're working towards, work?

13 MR. LOCHBAUM: It would, because I don't expect
14 the Commission and the staff and industry to always view --
15 to agree with our position. But, I do -- we, generally, try
16 to keep an open mind, and if I can see why something can't
17 be done, why something else is better, then we could at
18 least agree that that seems to be the way to go. But, just
19 when we provide comments and we get nothing back, that's --

20 COMMISSIONER MCGAFFIGAN: And the other thing that
21 I think you've enjoyed in the past and want to be a part of
22 the process is some ability to appeal, to -- I mean, if the
23 comment is dealt with, it's not dealt with well, a paper
24 comes from the Commission, it's out there and you're
25 basically saying, here's why I think the comment wasn't

1 dealt with properly, and we may disagree with you, and I
2 guess you would take us to court or something. But, it's a
3 transparent process for your appeal rights, etc. That's
4 what you're looking for?

5 MR. LOCHBAUM: I think going back to the Millstone
6 restart last year, we didn't agree along the way, but we
7 were -- our concerns were clearly entertained by the
8 Commission. We thought that was fair. Even though we
9 didn't necessary get the outcome, we thought the process was
10 fair.

11 COMMISSIONER MCGAFFIGAN: Thank you.

12 CHAIRMAN DICUS: Commissioner Diaz?

13 COMMISSIONER DIAZ: Just very quickly on that
14 statement, that, you know, we work towards what I would call
15 a negative safety slope. We work always to make our goal --
16 you're probably older than I am, but --

17 [Laughter.]

18 MR. LOCHBAUM: I feel that way.

19 COMMISSIONER DIAZ: But, you know, I remember when
20 the government took qualifications that were imposing on the
21 industry. I was -- when Grand Gulf was being built, that
22 certainly added a significant -- and we added a few quirks,
23 like station blackout and -- the maintenance rule very
24 recently added. So, I think we work both ways. And I do
25 not want to characterize the Commissioner, but from my

1 viewpoint, we're trying to do both things. We're trying to
2 add safety when it's needed and we're trying to reduce that
3 that is not needed. But, I think the main thing, the point
4 is that that process, we're trying to make it open, so there
5 can be, you know, clear discussion on the issues. Thank
6 you.

7 COMMISSIONER MERRIFIELD: I would agree
8 enthusiastically with my Commissioner.

9 CHAIRMAN DICUS: Okay, thank you, Mr. Lochbaum.
10 We will now get a very succinct presentation by
11 the staff.

12 MR. MIRAGLIA: Good morning, Chairman Dicus,
13 Commissioners.

14 CHAIRMAN DICUS: Good morning.

15 MR. MIRAGLIA: The license renewal process has
16 been an agency priority for quite some time. It's involved
17 a significant amount of Commission attention, as well as
18 senior management attention. As you've heard today, the
19 staff review for the two applications that are underway at
20 Calvert Cliffs and Oconee, we've completed significant
21 milestones. And the issue that you hear discussing today
22 haven't impacted that decision, but is focused on
23 applications in the future.

24 Lots have been said about the SRP. The staff's
25 intent has clearly been -- always been, and we've

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1 articulated to the Commission, that these pilots, we took
2 draft SRPs and the reg guides that are out there as is, used
3 them as is, and to inform the process, and our intent is to
4 capture those lessons learned and improve the SRP. And that
5 is, as the Commissioner -- the Chairman said, is going to be
6 a living process.

7 With me today is Roy Zimmerman, to my left, Deputy
8 Director of the Office of Nuclear Regulation and also the
9 Chair of the License Renewal Steering Committee; Chris
10 Grimes is the Chief of the License Renewal and
11 Standardization Branch; and Sam Lee, a senior engineer in
12 that branch. We'll move properly along to Roy for a few
13 remarks and then we'll get on the presentation with Chris.

14 MR. ZIMMERMAN: And I'll be short, as well.
15 Before Chris begins our presentation, I'd like to take just
16 a couple of moments to talk about the staff's License
17 Renewal Steering Committee efforts. There are several
18 aspects that committee performs and we began those efforts
19 back in the spring of 1998. The committee monitors the
20 staff's review of the initial applications in house. We
21 dialogue with Chris's staff about the status of Calvert
22 Cliffs, the status of Oconee.

23 The committee, also, makes recommendations to
24 improve the license renewal process, and this goes hand and
25 glove with what we're talking about, with regard to the

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1 standard of review plan and looking for opportunities to
2 gain efficiencies and predictability in the process. The
3 committee, also, identifies issues that it feels should be
4 conveyed to the Executive Council and to the Commission.
5 That background supported the development of the Commission
6 paper, as well as this meeting.

7 The committee consists of senior managers from
8 NRR, from Research, from the Office of General Counsel, and
9 we, also, have a senior manager from Region 4 as part of the
10 committee. We, also, invite managers from the other regions
11 to participate, as an observer and dialogue with us, but not
12 necessarily as a member of the committee. We've been
13 meeting about monthly internally with Chris's staff and, as
14 Mike Tuckman indicated, we meet about every other month with
15 the Peer Industry Executive Committee in NEI. And we've
16 also been meeting routinely with the Executive Council, to
17 provide a status on license renewal activities.

18 Today's issue that we're talking about on credit
19 for license renewal programs has been a centerpiece
20 discussion over the last three or four meetings. And there
21 has been considerable dialogue, considerable energy that we
22 bring to the table. But very candidly, we have struggled,
23 in terms of trying to identify the areas of common ground
24 and the areas -- the difference that we're trying to get
25 into -- get into focus. We've done that for a number of

1 hours. NEI has worked to provide examples to help
2 facilitate the discussions, provide written documentation.
3 And I think that that helps us frame the discussion today,
4 which Chris will lead us through. So with that, Chris?

5 MR. GRIMES: Thank you, Roy. Could I have slide
6 two, please. I'd like to start off by saying my issue
7 statement is exactly the same issue statement that NEI
8 presented. NEI explained their concern, in terms of how the
9 NRC staff has been challenging the adequacy of existing
10 programs and practices that the NRC has deemed acceptable by
11 regulation, license provision, regulatory guidance, or the
12 current licensing basis. In January -- on January 13th,
13 when we discussed regulatory improvement programs with the
14 Commission, NEI opposed the policy question, is it the
15 intent of the rule to reverify existing CLB programs and
16 activities. And, hopefully, today, we're going to address
17 that question, as completely as we can.

18 This issue statement, as amplified by the NEI
19 letters, dated March 3 and May 4, 1999, might also be
20 stated, should the staff review existing programs to any
21 extent, given the regulatory footprint that exists on almost
22 all of the existing programs. This formed the basis for
23 SECY-99-148 and how we develop recommendations and options
24 to address this issue.

25 Could I have slide three, please?

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1 COMMISSIONER MERRIFIELD: Madam Chairman?

2 CHAIRMAN DICUS: Yes.

3 COMMISSIONER MERRIFIELD: I don't have a question,
4 but I do want to frame something.

5 CHAIRMAN DICUS: Okay.

6 COMMISSIONER MERRIFIELD: I think this issue
7 statement frames probably only half of the issue. The other
8 half is the issue, which has been raised by NEI -- by NEI,
9 the issue of remaining discipline in our process, so we
10 don't have regulatory creep. And, subsequently, Mr.
11 Lochbaum is concerned that we don't have such a high degree
12 of informality in the public's confidence in what we're
13 doing. So, I just -- as Mr. Grimes and the others go
14 through their presentation, I hope we'll pick up on some of
15 those and leave that in your --

16 CHAIRMAN DICUS: Keep it in mind.

17 MR. MIRAGLIA: I think you made the observation,
18 Commissioner Merrifield, that that's a management issue and
19 the paper that we're here to discuss is the policy -- is the
20 policy issue. That management issue exists, not only for
21 license renewal, but every activity of the staff, and in our
22 processes underway by which we manage those kinds of issues,
23 as well.

24 CHAIRMAN DICUS: Okay. Let's move on. We'll come
25 back to this, because there is an issue with management that

1 we will bring up at the end.

2 COMMISSIONER MERRIFIELD: My clarification, though
3 -- I mean, are you going to weave that in or --

4 MR. MIRAGLIA: Yes, and I believe we have -- we
5 have installed processes in place, even above the normal
6 process, in the context of the Steering Committee reports to
7 the Executive Committee. So, I mean, those processes are in
8 place very definitely. And I think Chris can tell you the
9 number of times he's met with various management within the
10 office of NRR, within the Steering Committee, and the
11 Executive Committee. So, that is a management issue and I
12 think it's -- we'll try to address that in very much more
13 detail than normal processes, so we won't --

14 MR. GRIMES: Commissioner Merrifield, and I, also,
15 intend to get to that point, in terms of what -- what it
16 holds for the future, as well, in terms of what are the
17 appropriate ways to deal with both the aspect about the
18 appropriate scope and also the issue about discipline. So,
19 I hope to pick up on that later on in this presentation.

20 MR. ZIMMERMAN: One last piece along the lines
21 from the Steering Committee standpoint, is the Steering
22 Committee is very focused on the predictability and
23 consistency of the process. The aspect of regulatory
24 creeping is very much on our minds. We've had these
25 frequent dialogues with the industry and that serves as a

1 lightening rod. If there are issues where the industry
2 wants to bring to our attention that they feel that they're
3 seeing creep, that's an opportunity to do it. And, again,
4 right now, we're meeting at least every couple of months.

5 MR. GRIMES: Slide three. We go back to these
6 direct quotes from the statements of consideration for Part
7 54 in the 1995 amendment. NEI, also, quoted the statements
8 of consideration in their letter, dated March 3rd, and they
9 have referred to NUREG-1412, as those documents describe the
10 basis for extending the current licensing basis through the
11 period of extended operation and the basis for excluding
12 accurate components from a direct review, as part of license
13 renewal, but not the important exception of the detrimental
14 affects of aging and the functionality of system structures
15 and components in the period of extended operation, which we
16 will refer to more simply as aging management for passive
17 stuff. We believe that the purpose of the rule is clearly
18 stated: safety is maintained by the existing regulatory
19 process, except for the possible detrimental affects of
20 aging on passive long-lived system structures and
21 components.

22 Could I have slide four, please? The license
23 renewal rule provides for a focus on managing aging effects.
24 Part 54 ensures plant safety, by ensuring aging for
25 important system structures and components, will be

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1 maintained through the period of extended operation. Part
2 54 credits existing programs, particularly the maintenance
3 rule, by excluding active components. We believe that the
4 Commission specifically addressed this policy issue in the
5 1995 amendment to the rule, when it recognized that there
6 are no aging effects that are unique to the renewal term.
7 We, also, believe that anything different than a review of
8 the programs that are relied upon to manage aging effects,
9 the scope of system structures and components defined by the
10 rule, that anything different than a review of those
11 programs during the period of extended operation would be a
12 reinterpretation of the rule. We're asking this Commission
13 to reaffirm or decide anew what is the appropriate review
14 scope for license renewal.

15 Slide five, please. I'm now going to turn over
16 our presentation to Dr. Sam Lee, who is the principle author
17 of, and now the responsible engineer for the standard review
18 plan, of which you have heard so much about. Sam is also
19 responsible for managing the feedback of lessons learned and
20 to improvements in the standard review plan. And I don't
21 think that you need to ask NEI for -- to identify the areas
22 where they have problems with the SRP. We're tracking 109
23 issues associated with potential changes to the SRP,
24 including things like improving the guidance on how to --
25 how to review EQ, how to account for IWE/IWL, the five or

1 six issues associated with that. So, all of the comments
2 and concerns about where the SRP might go beyond what the
3 industry believes is an appropriate scope and review are
4 being addressed by managing the resolution of those issues
5 and incorporating other feedback from the first two reviews.
6 And Sam is going to start by identifying the review cast, as
7 it relates to how the staff has been instructed to explore
8 existing unmodified, modified, and new programs, for the
9 purpose of aging management. Sam?

10 MR. LEE: The staff sees his job to be review of
11 the applicant's demonstration of managing aging, and that's
12 on slide five. The NEI describes the staff rule of the
13 existing program as a reverification of the current
14 licensing basis. The staff is not challenging the adequacy
15 of the current -- or the existing program, in meeting the
16 CLB requirements. The staff is reviewing the existing
17 program of the effectiveness to manage aging, as made by the
18 applicant. I would predict the staff -- the situation,
19 where the -- where we are identifying additional information
20 on activities after year 40 that are not required before
21 year 40. And the staff is using the process to address
22 these additional activities, to see if they fit for the
23 long-term, before the year 40.

24 Can I have the next slide, please? This is a pie
25 chart you have seen before, from NEI. This shows the aging

1 management program for license renewal. It's identified by
2 the initial applicants. The Calvert Cliffs pie chart on the
3 left shows that -- in the blue area, it shows about 70
4 percent of the license renewal program are existing programs
5 before modification; and the other 30 percent are modified
6 and new programs. And Oconee has, similarly, 60 percent of
7 existing programs before modification and 40 percent are
8 modified and new programs. And the staff have reviewed the
9 applications and have identified open items and confirmatory
10 items across all these programs.

11 I guess, Commissioner McGaffigan asked the
12 question early on, in terms of how many CLB existing
13 programs. The March letter from NEI provided an example of
14 22, they call the CLB existing programs, and they were
15 submitted to the Oconee programs and they do compare them --
16 it's like 40 or 50 percent of the -- of the built programs,
17 what they call the CLB existing programs. I guess the
18 observation we're trying to make here is that if you just
19 look at this pie chart, this confirms NEI's statement
20 earlier that most of the license renewal programs are
21 existing programs. However, we do identify 30 percent or so
22 that are modified and new programs, and this is what we see
23 as the contribution of the license renewal effort.

24 MR. ZIMMERMAN: The way I tend to look at this is,
25 in the first panel, it was indicated that the agency has

1 looked at the CLB under Part 50. And we agree with that, so
2 that's common ground there. The first panel also said that
3 we shouldn't necessarily need to look at the CLB, if it's
4 adequate the first 40 years. But to me, we need to look at
5 the CLBs for Part 54 to know where we are, so we can ask the
6 question to look forward. If we don't look at the existing
7 programs, then how will we determine what needs to be
8 augmented, what's satisfactory? How do we independently
9 make that call that it's been adequately demonstrated? So
10 when we look back at the CLB, it's not to apply it to Part
11 50; it's to get the information we need, to be able to make
12 the Part 54 call. And if we stay out of that regime, then
13 we have little information available for us to help us make
14 that determination.

15 MR. MIRAGLIA: I think in the discussion with NEI,
16 it came up in a number of instances. In fact, I believe
17 Commissioner McGaffigan went back to the slide 13 of NEI.
18 And the answer was, is that the scope of all of those
19 programs are fair game to ask the question, and it goes to
20 what Commissioner Diaz talked about two out of the three,
21 and it's a question of how. The scope is not in question;
22 it's the depth that one goes to. And I believe Commissioner
23 Merrifield pointed out the fact that it's not only to say
24 it's linked to managing, but you have to making the finding
25 that it's adequate for the renewal period.

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1 The exception that's in the rule, the unique
2 difference here, in terms of looking at this as a technical
3 issue, you can come to one kind of common understanding.
4 But this technical issue needs to be implemented within a
5 process framework. We are issuing a new license and the
6 rule requires that there be a demonstration that we've
7 applied the rule, such that we can grant another 20 years.
8 And so, we are making those decisions, what is required
9 beyond 40, and it is a different -- a different license.

10 So, we have a process issue and a technical issue.
11 And I think that's perhaps why we're having a hard time
12 understanding and articulating what that difference is.
13 Because, I think as Roy said, there's a lot more common
14 ground here than uncommon ground.

15 CHAIRMAN DICUS: Okay. Let's move on.

16 MR. LEE: I just want to add when we review the
17 existing programs, the 70 percent in the pie chart, we do
18 identify additional inspections that's to be performed for
19 license renewal in some areas.

20 Slide seven shows some examples of acceptable
21 programs, based on the review of the initial applications.
22 Environmental qualification, you have this earlier from NEI.
23 This is an example that have live issues. It's not
24 extensive interaction with the applicants on how the 5049,
25 you can program manage aging effects. And in the end, it's

1 not concluded this is an acceptable program before
2 modification.

3 However, there are existing programs that require
4 modification. As NEI indicated earlier, this covers a big
5 spectrum. It's not simply enhancing administrative
6 controls. The more technical, I have some in here, like the
7 in service inspection program. In some areas, it does not
8 address aging of certain components. I give an example of
9 this piping. The next example is the surveillance program,
10 and that is based on a 40-year program now and need to be
11 modified after 60 years. And there's an example of a new
12 program, which is the management of corrosion of piping.

13 And I guess the industry concern is what's the
14 standard for deciding what program needs to be modified and
15 new programs. I would say this is a management discipline
16 issue.

17 MR. GRIMES: At this point in the examples, I
18 would like to point out that this gets into the area where
19 we talk about management discipline. We originally
20 approached EQ, in order to determine how it managed aging
21 effects. It wasn't clear what we would do with the
22 findings. It could have gone either way. We might have
23 gone back and said, well, you don't need to change the EQ
24 rule. And both applicants describe our exploration in EQ as
25 scary. When I went -- took the issue about, well, how does

1 the Federal Energy Regulatory Commission manage aging
2 effects for dams, that was scary for us. I was -- it wasn't
3 quite sure what we would do, if we concluded that FERC did
4 not have an adequate aging management program for dams. So,
5 to a certain extent, there's this natural fear of the
6 unknown. But, as Frank mentioned before, there are
7 processes by which we take the results that we come up with
8 and then we have to make decisions about should we change
9 the existing rules, should we back the requirements, and
10 what's the appropriate standard for aging management.

11 Those areas where the applicants propose
12 modifications to these existing programs presents a
13 challenge to us, in terms of how are we going to decide
14 whether that's good enough. And to that extent, we intend
15 on capturing that experience and putting it in a standard
16 review plan. Stan?

17 MR. LEE: As we have seen, a lot of this -- most
18 of these license renewal programs are existing programs.
19 So, we believe we can improve efficiency of the license
20 renewal process, by crediting existing programs. So, we
21 agree with NEI on that. And the SECY paper describes
22 certain options and Chris Grimes will talk about these
23 options.

24 MR. GRIMES: Based on the -- you know, this
25 question about, well, what should be the appropriate scope

1 and depth to be. We developed three options on where the
2 Commission should specifically address this policy issue.
3 We respectfully disagree with NEI's assertion that a
4 selective review of the existing programs could be conducted
5 under the existing review, which is why option one does not
6 represent NEI's view. But, we do believe that a variation
7 on that could be that we could codify the concept and revise
8 Part 54, in order to explicitly provide that an applicant
9 can come in and declare an existing program and we take that
10 and then verify that under the existing license process, and
11 limit the scope of this test with use for the purpose of
12 license renewal through their -- those things that are
13 modified now.

14 The staff does not favor this approach, because
15 you're bound, that at least with the first two applicants,
16 that 30 to 40 percent of the existing programs warranted
17 some change and are questions to cover all three areas. So,
18 we end up with a question about trying to verify -- the
19 adequacy of aging management is not going to be mixed
20 between Part 54 and Part 50.

21 Slide nine, please.

22 MR. ZIMMERMAN: Before you go on, Chris, I think
23 the other point that needs to be made is the reason why we
24 don't want to go that route has to do with safety. As been
25 mentioned, there's only a couple of plants that have been

1 done. We don't have enough experience yet to move away from
2 reviewing existing programs to get that knowledge, to be
3 able to apply the track record over a period of time, in the
4 case that that may be appropriate. Down the road, we may be
5 able to do more. But, right now, to maintain safety, it
6 doesn't appear that that's the step that we want to go.

7 MR. MIRAGLIA: And what Roy has just articulated,
8 Commissioner McGaffigan, is that the staff's position was
9 articulated in the SOC, the revised rules, it's just that
10 we'd like more experience before we take that step, and
11 we've looked at our experience and then reexamine them.

12 MR. GRIMES: Slide nine. Option two is a
13 variation of option one; basically, that option two would
14 grab the obvious existing programs, like EQ, that are well
15 established and fairly common, and articulate those in the
16 rule and say that those are outside the scope, which is what
17 we think the sense of the characterization and the
18 NUREG-1412, in terms of how far the Commission intended to
19 go in the 1995 amendment. In light of this approach,
20 programs that might need to be augmented to affectively
21 manage aging effects would be reviewed, but there would
22 still be a situation where there are differences between the
23 current licensing basis and the programs for the renewal
24 period of extended operation.

25 Slide 10. Option three is -- basically represents

1 a continuation of the review practice years for the first
2 two applications. It, also, represents an expansion of the
3 scope of the improvements to the standard review plan and an
4 expansion of public involvement, including whatever comments
5 UCS would like to make on the scope and the review, as part
6 of a more elaborate update to the standard review plan. The
7 staff agrees with NEI that there should be a graduated
8 review for existing programs, and this approach provides for
9 a structured and systematic way to achieve that outcome.

10 Slide 11, please. During the development of the
11 1995 amendment to the license renewal rule, the staff worked
12 with the industry to develop the generic aging lessons
13 learned, or the GALL report, which catalogued applicable
14 aging effects for specific structures and components. In
15 this -- in the proposed option three, the staff would expand
16 the catalogue to include aging management attributes for
17 particular existing programs and include that information in
18 the standard review plan, basically to provide a template
19 for all of the existing programs, to identify what areas are
20 commonly recognized and which areas are possible areas for
21 modifications or changes.

22 We had intended an approach like this, when we
23 sent our office letter 805 that explains the feedback
24 process for developing changes to the SRP. Safety would be
25 maintained in this approach, as well as the desire,

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1 stability, and predictability, by focusing on those programs
2 that might warrant changes to effectively manage aging
3 effects and identify those areas in the standard review
4 plans of the staff review. We would expect NEI to make
5 corresponding changes to the industry guide, NEI-95-10, on
6 the license renewal application content, so that applicants
7 would include both the necessary, but only sufficient detail
8 of program descriptions in their renewal applications.

9 Slide 12, please. Option three would achieve a
10 graduated approach that NEI and the NRC staff consider too
11 important -- consider important, to optimizing the effort
12 needed for a license renewal review, while still achieving a
13 critical review effort and appropriate focus of the staff's
14 efforts. In addition, the catalogue of program attributes
15 that this effort would produce will identify areas where
16 further generic efforts might be helpful to develop more
17 standardized approaches for aging management, including
18 areas where further research might be useful to develop
19 improvement processes.

20 Slide 13, please. I guess you're not surprised
21 that we're going to recommend that you approve option three.
22 The staff recommends that you recognize that you could
23 change Part 54, in a different review, but we believe that
24 the Commission in 1995 shows the right scope of review and
25 that is to focus on aging management for passive long-lived

1 system structures and components. We want to emphasize that
2 the purpose of a license renewal review is not to challenge
3 the adequacy of the CLB, the existing programs, or the
4 existing regulatory process. We agree that NUREG-1412
5 established that principle and that that carries forward.

6 The industry is fundamentally concerned about the
7 justification for any requirements and the enlargement of
8 the renewal review and documentation requirements, the
9 expansion from three volumes to 20 volumes, like what
10 happened with the FSARs. We believe this is a management
11 issue that can and should be controlled by appropriate
12 review guidance; that is, adding more detail to the standard
13 review plan, and NRC discipline, and that is basically
14 holding managers accountable to doing the right job.

15 Although the review process is working well for
16 the first two applicants, we, also, need more experience.
17 As Roy mentioned before, we assume two PWRs, but we expect
18 that we're going to also need to incorporate some BWR
19 lessons and the other PWR design into the standard review
20 plan. Inasmuch as this fundamental question about the
21 purpose of the renewal review has endured since 1995, it's
22 unrealistic to expect that the standard review plan can be
23 brought to the final condition before more lessons are
24 learned and more improvements can be developed from the
25 process. That was the last we had to develop important

1 lessons that we can incorporate and will incorporate into
2 the standard review plan, as soon as they finish addressing
3 this issue about credit for existing programs.

4 The staff tends to routinely reflect on the
5 effectiveness and the outcomes of the program, to determine
6 whether further process improvements and changes are
7 warranted. And we will also expect that in the future, when
8 we come back and recommend a rule change, we'll have
9 sufficient experience to justify it. That concludes our
10 presentation.

11 MR. MIRAGLIA: It might be -- I might ask Chris to
12 address the issue that was raised, in terms of the
13 transparency of this SRP process. We have gone out to
14 comment on documents and receive comments, and that
15 certainly would be done here. And maybe Chris can amplify
16 to that.

17 The other -- there's been lots of discussion of
18 1412, and 1412 did provide technical foundations with
19 principles of the license renewal. And the 1412 established
20 the robustness of our process, in terms of learning lessons.
21 Madam Chairman, you indicated it's a dynamic process. And
22 in 1412, it says, if information is received, in terms of
23 research, in terms of operating experience, a process is one
24 in which we can enclose additional requirements following --
25 following the renewal process. So, that's part of the

1 robustness of the process. So, it's not a stagnant process.
2 But, current licensing basis, if you don't take it as is and
3 forever, that the process does have opportunities to change,
4 if you apply the processes in like manner.

5 Maybe Chris, you can talk a little bit more about
6 the -- how we would interact, in terms of making changes to
7 the SRP.

8 MR. GRIMES: We've only had a little -- we've had
9 less experience with feeding back lessons learned to the SRP
10 than we have with the first two applicants, and I think it's
11 important to recognize. We've just started going to keep
12 those milestones -- keep up the milestones for the first two
13 applicants. But, we have sent NEI proposed positions to
14 address our changes. For nine of the issues, we've finished
15 one with a complete cycle, and that was an issue related to
16 human effects on aging managements.

17 But, we have developed some positions on others.
18 For example, we took the position that credited FERC as an
19 aging management program for the control of dams. And we
20 would expect that -- we would get NEI responses to those
21 issues, and I will intend on enlarging that to include a
22 broader interested public to comment on the proposed changes
23 for the SRP and get feedback on how well we've articulated
24 what the appropriate scope and depth of the staff reviewers
25 and then start folding those into a formal update of the

1 SRP. We had envisioned that we would start something in the
2 fall, when we have completion of the first three applicants,
3 and I still think that that's a reasonable time frame.

4 MR. GRIMES: That completes the staff
5 presentation, Madam Chairman.

6 CHAIRMAN DICUS: Okay, thank you. I want to
7 address one of the -- go back to the management issue that
8 Mr. Merrifield brought up. You described -- you know,
9 obviously, we're all probably going to be talking about
10 regulatory creep. This is something we're very concerned
11 about. We've made statements -- this Commission has made
12 statements that we think, as we continue the process with
13 additional renewals, we should be able to shorten the time
14 necessary, without any negative impact on safety, obviously.
15 And we should be able to make the process even more
16 efficient and effective and so forth. And we're hearing a
17 great deal of concern from the industry that they may be
18 going -- the potential, at least, of going in the opposite
19 direction. You've defined the management process that the
20 staff has, the feedback, how you're trying to address this
21 issue of creep, and that you are in conversation with the
22 licensees on this issue.

23 I guess my question goes to whether -- whether
24 you've identified ways to improve, from staff's perspective,
25 your management of this issue. I note from the Commission's

1 point of view, we're clearly very interested in it. We're
2 clearly watching it very closely. Five years from now, will
3 there be a Commission that will do the same thing. So what
4 do we need to consider putting in place now to address this
5 issue?

6 MR. ZIMMERMAN: I think there's a number of
7 things. Chris mentioned the internal structure within NRR,
8 and the office letter, and the management expectations
9 there. And then what gets to the Steering Committee, in
10 terms of the issues, I don't know if one can say how many
11 will be resolved at the staff level and within the Office of
12 NRR and what came to the license renewal, but I know there's
13 lots of dialogue that doesn't come to the committee and then
14 very little comes to the -- comes to the EC, other than this
15 issue certainly bubbled up. And that's the process; it's a
16 layered process, and perhaps Roy can talk about some
17 specifics that came to the Steering Committee.

18 MR. MIRAGLIA: The way I look at it is it's more
19 of a potential, than something than something that actually
20 has occurred. I think the issue that was raised by the
21 first panel, with regard to the small bore piping, I think
22 that we have a slightly different view on that, in terms of
23 what may come for existing licensees in that area. So, we
24 don't put that in the category of creep. And I'm not aware
25 of any other issues. And the dialogues we've had in the

1 Steering Committee have been along the lines of potential.
2 Both the Ocone and the Calvert licensees are satisfied with
3 the initial plant reviews in progress. There may be some
4 aspects where there are certain RAIs that they may request
5 additional information, that were not necessary.

6 And one of the things that we've put in place is
7 that after we complete the applications for those
8 facilities, to do a lessons learned. And I think that's
9 going to help, as one of the aspects, to try to make sure
10 that we stay a learning organization. So that's a formal
11 process that we intend on going through with those
12 applicants.

13 MR. MIRAGLIA: In terms of the review process, as
14 well, Madam Chairman, realize early on, in terms of
15 generating the request for additional information, a clear
16 understanding of the issues and questions. Some issues were
17 looked at and did come through management and some actually
18 came -- well, I don't know if any came to the committee.
19 The committee received reports on that process, I guess, so
20 there's a discipline imposed with the review process with
21 respect to the RAIs. They try to focus on issues of
22 potential concern.

23 MR. GRIMES: Mr. Tuckman and Mr. Doroshuk both
24 mentioned examples of where they felt that their staff, you
25 know, have been probing an area where we didn't need to be

1 probing. EQ was the large example. That issue went to the
2 Steering Committee on three separate occasions, just trying
3 to frame this problem. But, there are other areas, where we
4 essentially put into place the same procedural controls that
5 we've established for RAIs on license amendment
6 applications. That basically is to ensure that the staff is
7 staying focused on the purpose and make sure that managers
8 are checking to make sure that the questions are going to
9 serve some purpose.

10 CHAIRMAN DICUS: It's just that we do not want
11 this potential to become an unnecessary reality. We're
12 running short on term, so we'll give it to Commissioner
13 Diaz.

14 COMMISSIONER DIAZ: Okay. The GALL report, can
15 you tell me a little bit about how complete or thorough is
16 it going to be and when you expect to finish it.

17 MR. GRIMES: Sam, do you want to comment about how
18 much territory it covers?

19 MR. LEE: Actually, the GALL report, we intend for
20 it to cover the whole part, if you remember the pie chart,
21 and it will cover PWRs, BWRs. And they go from -- you
22 identify the components, you identify aging effects
23 associated with the components, and identify any programs --
24 existing programs otherwise managing the aging effects. And
25 then, the you weight the elements of the programs, see if

1 they actually affect -- manages that aging effect. And then
2 the purpose is to try to identify that program, in the 70
3 percent, if it's adequate for modifications or if it's in 30
4 percent, where some modifications is needed. And then the
5 extent of the group, capture and focus on the 30 percent,
6 and establish that that process is not easy. We had two
7 contractors working on that -- working on the core effort,
8 and we got the first bid and we dropped the contractors.
9 And the staff hasn't provided another contractor.

10 COMMISSIONER DIAZ: Will you think that that
11 report finally will have some bearing in one of the further
12 process efficiencies that need to be achieved? Will it be
13 something that it's -- be needed to refine the process?

14 MR. GRIMES: I would expect that it would -- that
15 its value to the process improvement would be evident, as
16 we're trying to find a way to fit it into the standard
17 review plan, and at the same time, dialogue with NEI and the
18 interested public, in terms of how it might fit into
19 improving the guidance for standard -- for a standard
20 renewal application content.

21 MR. MIRAGLIA: It would improve the regulatory
22 guidance, as to what needs to be in an application, and then
23 also establish the basis for acceptance criteria for the
24 specific issues. And, again, that would provide focus, as
25 to what the acceptance criteria and what the standard for

1 renewal and support of those issues.

2 COMMISSIONER DIAZ: Okay. In this issue of
3 further process efficiencies, I hope the staff will keep
4 that issue very clearly and above board, because it will
5 send chills both to the industry and Mr. Lochbaum, having
6 different matters, one upside down, one upside up.

7 MR. GRIMES: Mr. French has routine offered him an
8 opportunity to both defend enough or less. So, it's a very
9 delicate balance.

10 MR. MIRAGLIA: It's a top agency priority. I
11 think the staff recognizes it and the management recognizes
12 it.

13 COMMISSIONER DIAZ: And just a final comment, I
14 think the -- you know, the issue of stability, of course, is
15 an issue that we are all concerned with. I think, you know,
16 proceeding stability is the issue of predictability. So,
17 people can be engaged and then, you know, closure, and those
18 two things would be very important to the stability of the
19 rule. Thank you, Madam Chairman.

20 CHAIRMAN DICUS: Commissioner McGaffigan.

21 COMMISSIONER MCGAFFIGAN: Let me try to go through
22 a few questions fairly promptly. Let's go back to this GALL
23 report. When will it be available for public viewing -- NEI
24 and interested public?

25 MR. GRIMES: Probably in a couple of months,

1 because we still have to -- we have to get the experienced
2 staff away from these first two applicants, long enough to
3 sit down and reflect on the GALL report. And then, we would
4 want to go out for public comment or perhaps even a
5 workshop.

6 COMMISSIONER MCGAFFIGAN: Why are labs working on
7 it? I mean, I would think that the experience on this,
8 unless these are labs that are helping you with the review
9 process, would not be -- would be with the people, who are
10 actually doing the review.

11 MR. GRIMES: These are labs, who have experience
12 in the aging effects that contributed to the original
13 effort. We originally lined them up as a resource to tap,
14 to support the license renewal reviews. And early last year
15 -- the middle of last year, I decided to shift the labs to
16 working on lessons learned activities, so that our technical
17 staff could concentrate on doing the production work.

18 COMMISSIONER MCGAFFIGAN: And does the GALL report
19 intended to resolve claims? I mean, is that two data
20 points, as was pointed out earlier, and you pointed out?
21 So, is it just a template on which we will resolve these 109
22 generic issues that are currently out there or -- and you
23 will have a lot of open items in it that will get resolved
24 over a period of years? Or is it something that's meant to
25 bring closure rapidly, so that you get a uniform application

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1 and NEI amends its document and you start to get uniform
2 applications within two or three years? What is the goal?

3 MR. GRIMES: It's more the latter. We know that
4 there's a lot of common ground out there and that this --
5 this issue was stimulated primarily by the -- you know,
6 there's -- I think Sam mentioned this to me a number of like
7 five percent, you know, where there's a -- where we tend to
8 cross over the line -- the comfort line. And so, this is
9 suppose to bring closure to as many areas, like EQ. We've
10 poked with that enough to know what's the standard that
11 we're working to, what's our expectation, and the applicants
12 ought to be able to produce less information about how they
13 do EQ than the first two applicants.

14 MR. MIRAGLIA: And we dialogue -- correct me if
15 I'm wrong, we dialogue with the industry, in saying what are
16 their issues that they've identified and what are their
17 priorities for resolution. And so, we prioritize, they
18 prioritize, and keep the common understanding that these are
19 the issues that have the biggest impact and we focus on them
20 first. And that's part of the process that we're using.
21 So, the issue is, Commissioner McGaffigan, we hope to move
22 on the big issues and get some of those out of the way and
23 get to the points that you indicate, and so we get a
24 predictable --

25 COMMISSIONER MCGAFFIGAN: I'm going to try to get

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1 back to transparency then, that the -- there are have been
2 several attempts at transparency in recent years and Roy
3 convened a meeting last Friday that talked about public
4 communication and transparency and making sure everybody
5 sees things at the same time. And Mr. Lockbaum talked about
6 the 2206 process, as opposed to the oversight process, as
7 two different experiences he's had. Is the intent that this
8 be more like the oversight process that we're really going
9 to seek to involve and make sure that the interested public
10 does see these documents as soon as the industry does?
11 Chris mentioned earlier these nine issues had been sent --
12 letters have been sent to NEI. Are those all on the PDR?

13 MR. GRIMES: All in the PDR.

14 COMMISSIONER MCGAFFIGAN: Has the public attended
15 any of the meetings -- these Steering Committee meetings
16 with the executive committee? Are those now routinely
17 attended by the public, or at least somewhat --

18 MR. ZIMMERMAN: They are attended by the public.
19 We want to do exactly what you're suggesting, in terms of
20 making the process as transparent as we can, to get the
21 meetings notices early, as we can. We have meetings at the
22 site, to talk about the individual issues. It's important
23 that we travel there, rather than have all of the meetings
24 here. And we want to continue to make sure that it requires
25 the standard review plan and we work through the GALL

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1 report, that there is good transparency at the various
2 steps, and what different documents be expected to be
3 available to the public.

4 COMMISSIONER MCGAFFIGAN: And the comments of the
5 public and industry will both be -- there won't be just
6 received, they'll be comments as to whether you took them or
7 didn't take them. I mean, it just strikes me there's a good
8 process that you can go through here that will build some
9 public confidences. As Mr. Lockbaum said, he might not
10 agree with us; as Mr. Pietrangelo and others would say, they
11 probably won't agree with us either. But, if it's
12 transparent, if it's out in the open, if everybody gets to
13 see how this GALL report is developed, at least no one will
14 know -- there won't be any back room deals or anything. It
15 will all be out there. And that's the --

16 MR. MIRAGLIA: The intent would be to issue that,
17 issue it for public comment, receive the public comments,
18 analyze it -- the public comments, as we would do in the
19 normal type of process.

20 COMMISSIONER MCGAFFIGAN: Thank you.

21 CHAIRMAN DICUS: thank you. Commissioner
22 Merrifield?

23 COMMISSIONER MERRIFIELD: Well, first of all, I
24 want to make a comment. I appreciate the line of
25 questioning that Commissioner McGaffigan has made. I think

1 it's important to have a full public participation, in both
2 the GALL report, as well as the Steering Committee. I hope
3 that the staff will work hard on that issue.

4 Two questions, the first one relates to attachment
5 two of SECY-99-148. That is a list of examples where
6 existing programs should be augmented. And my question is:
7 I'm wondering how you intend to provide discipline to the
8 process of determining which programs should be augmented
9 and how have you factored in an ability for disagreement,
10 whether it be by a licensee or by stakeholders in your
11 determination here?

12 MR. GRIMES: The simple answer to that question is
13 that the monthly management meetings provide the forum by
14 which we dialogue with the applicant and we try to find out
15 where -- as Mr. Lockbaum mentioned, we would expect that if
16 the applicant feels like we're ratcheting into the
17 resolution of an issue, that that should be brought to the
18 monthly management meeting, so that we can escalate it, so
19 we can decide whether or not we're doing the right thing.

20 COMMISSIONER MERRIFIELD: Have you found any
21 hesitation on the part of the licensees to raise issues in
22 that meeting and challenge the agency for things that were
23 requested? Is there any reticence there?

24 MR. GRIMES: Mr. Tuckman describes an expediency
25 that tends to drive the resolution of issues, which leaves

1 -- which leaves me with the sense that although we feel
2 liked we're challenged at these monthly management meetings,
3 perhaps they're holding something back, and we will intend
4 on exploring that at the next monthly management meeting.

5 MR. MIRAGLIA: Well, there's another -- there's
6 another avenue to that, and that avenue is being explored
7 and an evidence of that avenue being explored. That's why
8 we're here today. In terms of Baltimore Gas & Electric and
9 Duke Power, they have a vested interest in moving the
10 process. And as Chris indicated, there's an expediency. We
11 are also working in the license renewal steering committee
12 and the staff meetings with the NEI working task group, and
13 that was made very clear to us by the industry that if
14 agreements are reached on either, it doesn't necessary --
15 might not necessarily constitute resolution for industry,
16 and that they wanted to have a role in playing in that kind
17 of arena. So, recognizing there may be some expediciencies
18 there, the industry is looking at it in a more global sense.
19 And I think they made that clear, when we established the
20 task force. And that's another point, when we have the
21 meetings, we meet not only with the two applicants, but also
22 with the NEI. Now, it turns out that Mr. Tuckman is also
23 the chair of the industry group, and that's what he alluded
24 to.

25 COMMISSIONER MERRIFIELD: Have you seen any

1 reticence on the part of the NEI, on issues that they
2 believe are important?

3 MR. MIRAGLIA: I would say not.

4 MR. ZIMMERMAN: No. I've not detected any
5 hesitance on the part of the NEI or the representatives that
6 come from the applicants. The frustration that I think
7 that's occurred on this particular topic is just the fact
8 that there's a lot of -- there's quite a lot of energy going
9 into it, to try to get the other party to understand the
10 view, and we've struggled with that. But, there's been no
11 hesitancy to engage the issues.

12 COMMISSIONER MERRIFIELD: That is certainly -- I
13 would hope we wouldn't have an atmosphere where it would
14 have any kind of chilling effect.

15 The last issue, I'll give you an opportunity,
16 there were a number of recommendations raised by both Mr.
17 Lochbaum, as well as NEI, and a number of comments. Were
18 there any other issues that we haven't asked about that you
19 would like to touch on?

20 MR. MIRAGLIA: Well one issue, that the small bore
21 piping is one that was raised. In terms of -- I think in
22 the staff paper we sent the Commission, that said that why
23 aren't we looking at the existing Part 50, and that's an
24 issue the staff is physically looking at, do we need to do
25 something within the context of that. So, those questions

1 are being asked, as well. And I think we've hit the four
2 cornerstones and the four performance goals, that we're
3 measuring all our programs, maintaining safety and reducing
4 unnecessary burden, effectiveness and efficiency, and
5 increasing the public confidence. And those four
6 cornerstones are paramount to us, in everything we do, and
7 very high priority, within the context of the license
8 renewal program.

9 COMMISSIONER MERRIFIELD: Thank you.

10 CHAIRMAN DICUS: Commissioner McGaffigan, you will
11 be able to ask two more questions. And I'm sure they're
12 short. I'm sure they can be very short answer.

13 COMMISSIONER MCGAFFIGAN: The standard earlier,
14 the question of what the standard should be, if you look at
15 the CLB program that's effectiveness for aging management,
16 decide EQ -- you decided that it hadn't been, what is the
17 standard for deciding that it hasn't been? Mr. Lee, when he
18 talks, gives us -- you know, look at whether it warrants --
19 part 40 -- before the 40 years, that would be 51.09, that
20 would be a substantial increase. But what is the standard
21 in Part 54, if you let the CLB program and decide there
22 needs to be a modification? Is this an exception?

23 MR. GRIMES: The standard in 54.21 is to
24 demonstrable effectiveness of managing the aging effect.
25 And we have -- we've applied that standard, is it

1 demonstrably effective, either through operating experience
2 or routine inspection. And I think that those are your two
3 features that the advisory committee on the active
4 safeguards also pointed to as basically the telling feature.
5 As operating experience indicated, it has been a problem or
6 it hasn't -- is there an inspection activity that will
7 reveal that the problem is going to have an impact on
8 intended function. And so those are the basic features that
9 we look for. There are 10 elements describing the standard
10 review for an effective aging management program and GALL is
11 going to attempt to expand the catalogue to identify those
12 10 elements for all programs.

13 CHAIRMAN DICUS: I think Mr. Tuckman wanted to
14 make a comment, in response to this discussion.

15 MR. TUCKMAN: Madam Chairman, I just wanted to
16 respond to your question, was the industry reluctant to
17 bring up issues at the executive steering committee
18 meetings, and that categorically, we're not. They are
19 public meetings. The staff has entertained questions and
20 there's actually no reluctance.

21 COMMISSIONER MERRIFIELD: I hope you continue to
22 raise these issues with vigor. I make the same plea to Mr.
23 Lochbaum, as well.

24 CHAIRMAN DICUS: Okay, well, I would like to thank
25 NEI, UCS, and of course the staff for this rather frank, I

1 think, and though provoking discussion of the issues that
2 we've heard about today, but clearly very significant to the
3 future applicants for license renewal. I have to
4 reemphasize the need for predictability. Certainly, we are
5 very interested in the transparency of the process and
6 clearly meaningful, as efficiently and effectively as we
7 can, but without any negative impact on safety.

8 I would like reenforce my appreciation for the
9 progress made today in the first applications for license
10 renewal and encourage all the parties to continue this
11 rather worthwhile interaction. And I think that's the long
12 way toward the resolution of the issues that we have before
13 us. So, unless my colleagues have any other questions --

14 MR. WALTERS: I have a comment. I would like to
15 thank Chairman Dicus, especially my lower back, for
16 conducting a two-hour meeting in almost two hours.

17 [Laughter.]

18 CHAIRMAN DICUS: We're working in that direction.
19 Therefore, this meeting is now adjourned.

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

CERTIFICATE

This is to certify that the attached description of a meeting of the U.S. Nuclear Regulatory Commission entitled:

TITLE OF MEETING: BRIEFING ON TREATMENT OF EXISTING
PROGRAMS FOR LICENSE RENEWAL PUBLIC
MEETING

PLACE OF MEETING: Rockville, Maryland

DATE OF MEETING: Tuesday, July 13, 1999

was held as herein appears, is a true and accurate record of the meeting, and that this is the original transcript thereof taken stenographically by me, thereafter reduced to typewriting by me or under the direction of the court reporting company

Transcriber: Teresa Rawell

Reporter: Jon Hundley



CREDIT FOR EXISTING PROGRAMS FOR LICENSE RENEWAL

**Christopher Grimes and Sam Lee
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation**

July 13, 1999

ISSUE STATEMENT

To what extent should staff review existing programs relied on for license renewal, to conclude that applicant has demonstrated reasonable assurance that such programs will be effective in managing effects of aging on functionality of structures and components in period of extended operation ?

PRINCIPLES OF LICENSE RENEWAL

(Statements of Consideration for Part 54)

- 1. With the possible exception of the detrimental effects of aging on the functionality of certain plant systems, structures, and components in the period of extended operation, the regulatory process is adequate to ensure that the licensing bases provide an acceptable level of safety.**
- 2. The plant-specific licensing basis must be maintained during the renewal term.**

LICENSE RENEWAL RULE

- **Focus is aging management**
- **Functionality of active or short-lived structures and components is assured by existing regulatory process, existing licensee programs and activities, and maintenance rule**
- **License renewal rule requires aging management review of passive, long-lived structures and components**

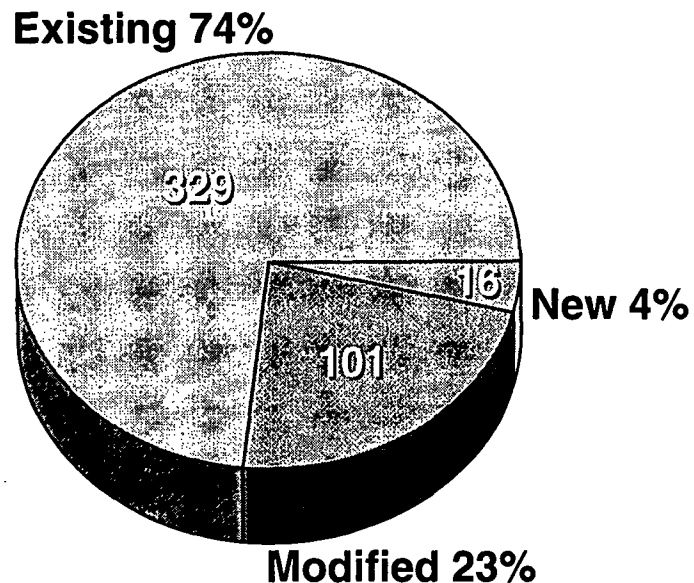
STAFF REVIEW TASK

Review applicant's demonstration that effects of aging will be managed for passive, long-lived structures and components during period of extended operation

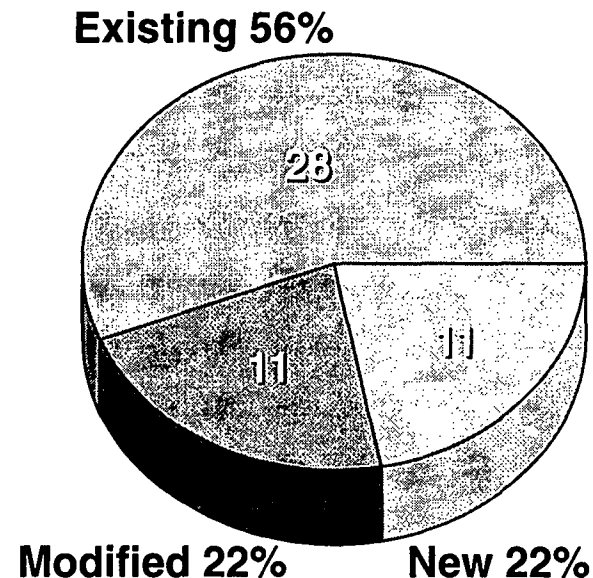
- **Existing programs are reviewed to confirm whether they manage aging effects for license renewal**
- **Staff review of existing programs sets up situation where actions needed to manage aging effects and maintain current licensing basis for period of extended operation might be increased beyond those considered necessary for current term**

AGING MANAGEMENT PROGRAMS

Calvert Cliffs



Oconee



30 to 40% of aging management programs for license renewal required some modifications of existing programs or new programs

EXAMPLES

Existing Programs Not Requiring Modifications:

- Environmental qualification (EQ) of electric equipment
- Erosion/corrosion piping management
- Federal Energy Regulatory Commission (FERC) dam

Existing Programs Requiring Modifications:

- Inservice inspection
- Reactor vessel material surveillance program

New Program:

- Buried piping inspection

OPTIONS FOR CREDITING EXISTING PROGRAMS

Option 1: Do Not Review Existing Programs

- **Staff believes this option requires rule change**
- **Relies on current regulatory process to address potential concerns with existing programs**
- **Applicant would indicate that certain existing programs manage aging effects and staff would not review these programs**
- **30 to 40% of aging management programs for license renewal required some modifications of existing programs or new programs**

OPTIONS FOR CREDITING EXISTING PROGRAMS (CONTINUED)

Option 2: Amend rule to exclude structures and components subject to existing programs

- **Similar to Option 1**
- **Explicitly excludes structures and components subject to existing programs from license renewal review by rulemaking**

OPTIONS FOR CREDITING EXISTING PROGRAMS (CONTINUED)

Option 3: Focus Staff Review Guidance in Standard Review Plan on Areas Where Existing Programs Should be Augmented

- **Standard Review Plan for License Renewal would focus staff review on augmented programs**
- **Lessons learned from staff review of initial license renewal applications and license renewal issues would improve Standard Review Plan for License Renewal**
- **Would provide for public involvement in developing documents**

OPTIONS FOR CREDITING EXISTING PROGRAMS

(Option 3 - Continued)

- **Staff effort in “Generic Aging Lessons Learned (GALL)” evaluates existing programs generically in aging management**
- **GALL report would be referenced in Standard Review Plan for License Renewal**
- **Safety is maintained during period of extended operation with focused review of aging management for license renewal**

OPTIONS FOR CREDITING EXISTING PROGRAMS

(Option 3 - Continued)

- **Reduces unnecessary burden by focusing staff review on augmented programs and incorporating lessons learned**
- **Identifies areas existing programs should be generically augmented for license renewal**

RECOMMENDATIONS

- **Staff should review existing programs relied on to manage aging effects for license renewal**
- **Develop GALL report and improve Standard Review Plan for License Renewal (Option 3)**
- **Staff will revisit issue after review of a broader spectrum of facilities to develop further process efficiencies based on additional review experience**


**UNION OF
CONCERNED
SCIENTISTS**



Comments on Credit for Existing Programs for License Renewal

David Lochbaum
Nuclear Safety Engineer
dlochbaum@ucsusa.org
July 13, 1999

Introduction

- 
- ① The existing license renewal rule assumes that the current licensing bases are adequate.**
 - ② Millstone, Salem, Haddam Neck, D C Cook, et al and several US GAO reports clearly document the fallacy of that assumption.**
 - ③ The industry now wants the NRC to give it credit for the adequacy of its existing age management programs.**
 - ④ Two wrongs don't make a right -- UCS proposes Option 4 - Staff determines adequacy of existing age management programs**

SECY-99-148 Options

**Option 1 - Do not review adequacy of existing
age management programs**

**Option 2 - Amend rule to exclude structures
and components subject to existing program**

**Option 3 - Focus staff review on areas where
existing age management programs should be
augmented**

Problems with Options 1 & 2

★Staff: “The public may view the license renewal process as unjustifiably narrow in scope and could perceive the Commission as granting renewed licenses without a sufficient technical basis.”

☆UCS: Amen.

★Staff: “The staff and the initial license renewal applicants have found that about 30 percent of the aging management programs for license renewal required some modifications of existing programs or new programs.”

☆UCS: 70 percent is NOT a passing grade.

Problem with Option 3

- ★Staff: “Further, the staff’s experience thus far is limited to two license renewal applications, both for pressurized-water reactor (PWR) plants.”**
- ☆UCS: Calvert Cliffs’ licenses expire in 2014 and 2016. Oconee’s licenses expire in 2013, 2013, and 2014. Thus, proof that existing age management programs are adequate will not be available for over a decade. A public protection standard cannot be eliminated based on an unverifiable whim.**

Rush to Misjudgement

- ★NRC desires to streamline license renewal application review process down to 18 months.
- ★In 1982, NRC issued an operating license to the Grand Gulf (a.k.a. Grand Goof) nuclear plant.
- ★In July 1984, NRC admitted approving a license containing hundreds of errors.
- ★NRC: “The cumulative effect of the Technical Specifications errors could have led to operator confusion and operator error detrimental to safe operation.”

Rush to Misjudgement (continued)

- ★Grand Gulf's FSAR also contained many errors, including descriptions for non-existent equipment.
- ★Grand Gulf's owner reported it took 56,000 man-hours to identify and correct all the problems.
- ★NRC attributed its inability to catch even one of the hundreds of problems to a large number of plants being licensed concurrently and "excessive informality by both the applicant and the NRC staff."

Rush to Misjudgement (continued)

- ★ **The forecast calls for NRC to review a large number of license renewal applications concurrently.**
- ★ **Option 1, 2, and 3 represent varying levels of “informality” in NRC’s demonstration that age management programs are adequate.**
- ★ **UCS: Don’t repeat the Grand Goof mistake.**

Conclusion and Recommendation

★Conclusion: Options 1, 2, and 3 do not provide adequate protection of public health and safety and therefore should NOT be adopted.

★Recommendation: The staff should determine that all license renewal applicants have adequate age management programs.

A10

Panel Concedes Erring in Permit For Atom Plant Facility Given a License Despite the Mistakes

By MATTHEW L. WALD

The Nuclear Regulatory Commission has acknowledged that in 1982 it approved a license with hundreds of errors in its standards for equipment performance for a new nuclear power plant in Mississippi.

Because of the errors, the plant might have operated without properly functioning safety equipment, the commission said in a letter to a House subcommittee chairman.

The hazard was negligible, however, because the plant has only operated at low power, the commission said.

The errors "could have resulted in operation without assurance that equipment important to safety was, in fact, operational," the commission said. "The cumulative effect of the Technical Specifications errors could have led to operator confusion and operator error detrimental to safe operation."

Safe Temperature Range

The technical specifications set the ranges of temperatures, pressures and rates of flow permitted for safe operation, and the minimum level at which key pieces of equipment had to perform in order for the plant to run. Nuclear plant licenses are more like operating manuals than operators' permits.

In June 1982 the commission approved a low-power test license for the plant, Grand Gulf, in Port Gibson, Miss. The license included more than 300 technical specifications, many intended for an older-model plant.

Grand Gulf started its first nuclear chain reaction Aug. 18, 1982, but has never been licensed to operate at full power because of a variety of problems not directly related to the license errors.

The largest source of delay was the discovery that several key cooling and electrical systems were inadequate and required extensive modifications. The need for those modifications was not related to the licensing errors.

At 1,250 megawatts, Grand Gulf, built by Mississippi Power and Light, would be the largest nuclear plant in the country to be given an operating license.

Equipment That Did Not Exist

In response to questions from Representative Edward J. Markey, Democrat of Massachusetts, chairman of the Interior Committee's subcommittee on Oversight and Investigations, the commission said the Grand Gulf test license required periodic testing of equipment that did not exist. It said the license also failed to mention key valves and other parts that had been installed in the plant.

The commission staff has found that similar errors were included in the plant's Final Safety Analysis Report, an engineering analysis submitted by the utility to the commission before the test license was granted to demonstrate that the plant was safe. This report for Grand Gulf also described nonexistent equipment.

The utility applied several times for a license amendment, which the commission eventually granted, that also involved equipment that did not exist.

According to the letter and other commission documents, although Mississippi Power and Light assured the commission in October 1982 that all the errors had been found, at least five checks carried out later by the utility and Federal inspectors turned up more errors.

'Most Accurate in Industry'

A spokesman for the utility, Lincoln Warren, said yesterday that a later review, the most recent carried out by the utility, of the technical specifications, had produced specifications that "we believe are the most accurate in the industry." Mr. Warren said the review took a team more than 7,000 work days.

One member of the regulatory commission, James Asselstine, wrote in a separate message included with the letter to Mr. Markey: "This is a case where a licensee has casually, if not recklessly, approached a fundamental safety matter — the specifications under which the plant is to be maintained in a safe manner."

The letter from the commission, in response to a query by Mr. Markey, said that the errors should have been caught by Mississippi Power and Light before the test license became effective. It said that the commission staff had failed to spot the discrepancies for several reasons, including misunderstandings between the utility and the commission, a heavy burden of work at the commission because of a large number of reactors nearing completion simultaneously, and "excessive informality by both the applicant and the N.R.C. staff."

The commission has also been taken to task on its approach to the reactor by its own general counsel.

The commission ordered in May that plant operators disassemble an emergency diesel generator for inspection, but specified that the plant be allowed to operate while the generator was out of service. The plant's license, however, required that the plant be shut if any one of its three diesel engines is inoperable for more than a short time.

According to the commission's general counsel, Herzel H. E. Plaine, the commission did not follow its own rules in allowing the plant to continue test operations. He wrote in a memo to the commissioners on May 30 that the legal basis of the order on the diesel generator was "questionable."

Another subcommittee of the Interior Committee, on Energy and Environment, is scheduled to hold a hearing today on the granting of the license and the safety of the plant.

The reactor has had a variety of other problems. Four of its licensed plant operators failed a test given by the Nuclear Regulatory Commission and were barred from operating the reactor.



CREDIT FOR EXISTING PROGRAMS

COMMISSION BRIEFING

JULY 13, 1999

NEI



OVERVIEW

- Why we are here
- What licensees do
- The issue
- Observations on SECY-99-148
- Recommendations
- Conclusions



WHY WE ARE HERE

- Concern with stability and predictability in renewal review process over time
- Opportunity for Commission to take action to ensure long term stability
- Ensure lessons learned are factored into the renewal process



WHAT LICENSEES DO

Plant Systems Structures Components

Apply Scoping/Screening
Criteria

Identify Long Lived
Passive Structures and
Components



Identify Aging Effects
and Functions



Map to Programs/Activities

Existing Program/Activity

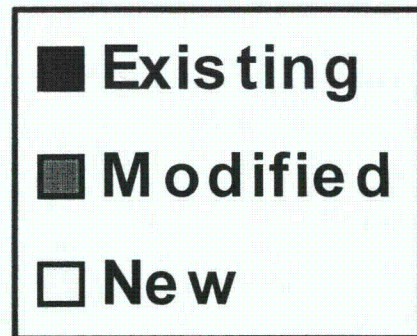
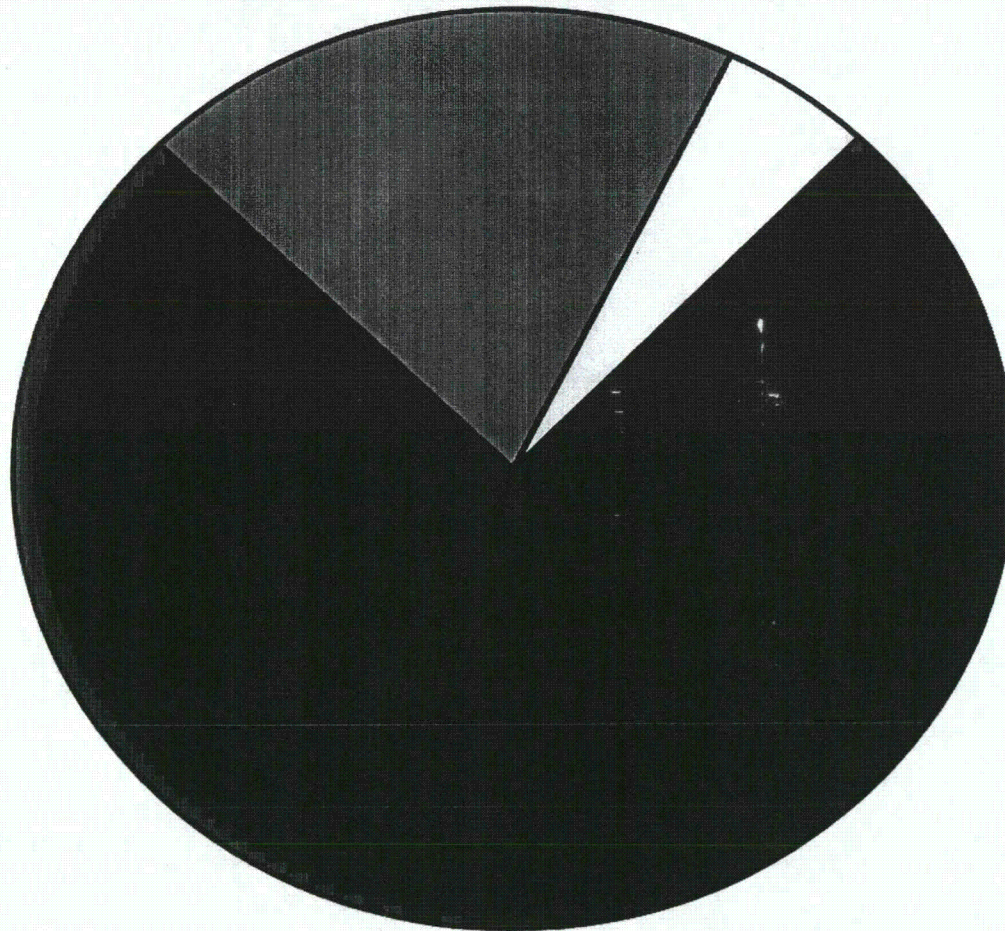
Modified Program/Activity

New Program/Activity

NEI

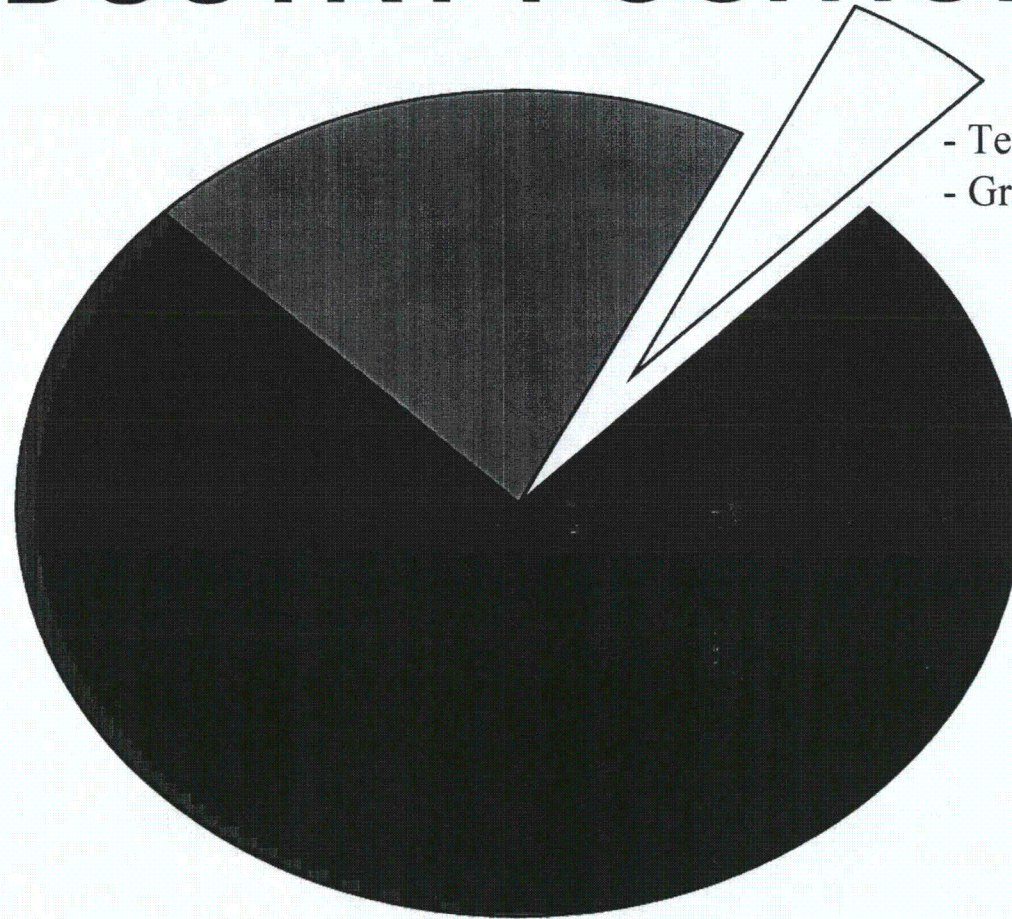
WHAT LICENSEES DO

TYPICAL RESULTS

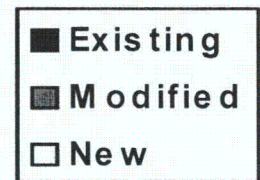


NEI

INDUSTRY POSITION



- Technical adequacy needs discussion
- Greatest level of detail



- CLB programs/activities technically adequate
- Non-CLB programs/activities need technical discussion
- Sufficient detail to show link to aging effects



THE ISSUE

To what extent should staff review existing programs relied on for license renewal, to conclude that the applicant has demonstrated reasonable assurance such that programs will be effective in managing effects of aging on functionality of structures and components in the period of extended operation ?

OBSERVATIONS ON SECY-99-148

■ Option 1

- Does not convey industry position
- Existing programs are reviewed rigorously
- Fails to credit NUREG-1412 as a basis for technical adequacy of current licensing basis

OBSERVATIONS (cont.)

- Concerns with GALL approach
 - Undermines NUREG-1412 conclusions
 - Focused on programmatic aspects rather than new information about aging effects
 - What regulatory process controls imposition of new activities?

RECOMMENDATIONS

- Commission should clarify the first principle of license renewal:
 - certain plant systems, structures, and components means those long-lived passive structures and components where aging is not managed

RECOMMENDATIONS

- Commission should affirm that concerns about adequacy of the current licensing basis should be addressed under 10 CFR Part 50, not under Part 54

RECOMMENDATIONS

- NRC staff should work with stakeholders to expeditiously finalize the Standard Review Plan to reflect the following:



RECOMMENDATIONS

DEMONSTRATION	APPLICANT ACTION	NRC STAFF ACTION
Existing CLB program/activity	Map program/activity to aging effect and scope	Verify effects and scope are mapped to program/activity
Modified CLB program/activity	Map program/activity to aging effect and scope	Verify effects and scope are mapped to program/activity
Existing non-CLB program or activity	Map program/activity to aging effect and scope. Provide description in application that demonstrated aging is managed.	Verify effects and scope are mapped to program/activity. Evaluate adequacy of program/activity.
Modified existing non - CLB program/activity	Map program/activity to aging effect and scope. Provide description in application that demonstrated aging is managed.	Verify effects and scope are mapped to program/activity. Evaluate adequacy of program/activity.
New programs or activities	Assure technical adequacy	Evaluate adequacy of program/activity.

CONCLUSIONS

- First two reviews demonstrate aging effects on long-lived passive structures and components almost entirely captured by existing programs and activities
- Staff reviews need to be focused; not a reverification of licensing basis
- Opportunity to ensure long term stability



Existing Calvert Cliffs Aging Management Programs & Procedures Relied on for License Renewal

