```
1
                      UNITED STATES OF AMERICA
2
                     NUCLEAR REGULATORY COMMISSION
                                 ***
3
                 BRIEFING ON STATUS OF LICENSE RENEWAL
 4
5
6
                           PUBLIC MEETING
7
                                  Nuclear Regulatory Commission
                                  Commission Hearing Room
                                  11555 Rockville Pike
10
11
                                  Rockville, Maryland
12
13
                                  Thursday, June 12, 1997
14
15
               The Commission met in open session, pursuant to
     notice, at 9:35 a.m., the Honorable SHIRLEY A. JACKSON,
16
17
     Chairman of the Commission, presiding.
18
19
     COMMISSIONERS PRESENT:
20
              SHIRLEY A. JACKSON, Chairman of the Commission
21
              KENNETH C. ROGERS, Member of the Commission
22
              GRETA J. DICUS, Member of the Commission
23
               EDWARD McGAFFIGAN, JR., Member of the Commission
24
               NILS J. DIAZ, Member of the Commission
25
     STAFF AND PRESENTERS SEATED AT COMMISSION TABLE:
1
               KAREN D. CYR, General Counsel
              JOHN C. HOYLE, Secretary
 3
              JOSEPH CALLAN, EDO
4
5
              SAM COLLINS, Director, NRR
              MARYLEE SLOSSON, Acting Director, Division of
                Reactor Program Management, NRR
8
              DAVID MATTHEWS, Chief, Generic Issues and
9
                Environmental Projects Branch, NRR
1.0
              STEPHEN HOFFMAN, SR., Project Manager, License
11
                Renewal Directorate, NRR
12
13
14
15
16
17
18
19
20
21
22
23
24
25
                         PROCEEDINGS
1
2
                                                    [1:33 p.m.]
               CHAIRMAN JACKSON: Good afternoon. I don't
4
     usually name names, but good afternoon, Marylee, Steve, Joe,
5
     Sam, and Dave.
             The purpose of today's meeting between the
6
7
     Commission and the NRC staff is to discuss the status of
    activities associated with the implementation of the license
```

renewal rule for nuclear powerplants, which is 10 CFR Part

10

54.

```
11
               Since the original license renewal rule was issued
     in December of 1991, the staff and the nuclear power
12
      industry have been working to implement the requirements of
13
     the rule effectively. After about two years of experience
14
      with activities related to implementing the rule, the staff
15
      and the nuclear power industry identified several key issues
16
17
      that needed to be resolved in order to provide a more stable
18
      and predictable regulatory process for license renewal.
19
               In February 1994 the Commission directed the staff
20
      to proceed with rulemaking to amend 10 CFR Part 54, and in
21
      May 1995 a revised license renewal rule was published. The
      revised rule focused on the management of the effects of
22
23
      aging on certain systems, structures, and components during
      the period of extended operation. Since the revised rule
2.4
25
      was published in 1995 the staff and the nuclear power
1
      industry have continued to work on acceptable strategies and
      guidance to implement the requirements of the rule
      effectively. In SECY 97-118, entitled "Activities
      Associated with the Implementation of 10 CFR Part 54," the
      staff has provided the Commission with an update on the
      status of ongoing staff and industry initiatives associated
6
7
      with the license renewal rule.
               The Commission therefore looks forward to the
     discussion with our staff on license renewal activities. In
9
      particular, the Commission is interested in first
10
11
     understanding what if any potential policy issues might
     require Commission decision, and, second, understanding how
12
13
      all the ongoing activities associated with, for example,
     regulatory guide development, standard review plan
14
15
      development, the license renewal demonstration program,
16
      industry report template development, will all coalesce into
17
      timely, clear, and coherent implementation guidance.
18
               Now I understand that copies of your presentation
      are available at the entrances to the meeting, and so unless
19
     my fellow Commissioners have any opening comments, Mr.
20
21
      Callan, please proceed.
               MR. CALLAN: Well, Chairman, you covered all the
22
      points I was going to make at the outset.
23
2.4
               CHAIRMAN JACKSON: Good. We'll go on the next
25
     person.
1
               MR. CALLAN: In fact, you even identified
      everybody at the table.
3
               [Laughter.]
4
               But I'll go through it again and provide their
      full names and their titles.
               Once again, Sam Collins; he's the Director of NRR.
6
      Marylee Slosson, the Acting Director of the Division of
8
     Reactor Program Management. Dave Matthews, the Project
     Director of the Generic Issues and Environmental Projects
9
10
      Branch. And then finally Steve Hoffman, the Senior Project
11
      Manager in the License Renewal Project Directorate.
               Marylee Slosson will begin the presentation for
12
13
      the staff.
14
               MS. SLOSSON: Thank you.
15
               Good afternoon. I'm going to go ahead and start
      with the second slide, because the Chairman very aptly went
16
17
     through the kind of the history and brief summary of the
     license renewal a little, but I was going to go through, so
18
      if we could go ahead and have the second slide, with the
19
     license renewal program as with any program, the program is
20
21
     developed on key principles.
22
               In the case of license renewal, the two principles
```

on which the staff has proceeded are based on some 24 significant Commission determinations during the rulemaking process as outlined on this slide. The first principle of 25 license renewal is that with the possible exception of the 1 2 detrimental effects of aging on the functionality of certain plant systems, structures, and components in the period of extended operation, and possibly a few other issues related 5 to safety only during the extended period of operation, the regulatory process is adequate to ensure that the licensing basis of all currently operating plants provides and maintains an acceptable level of safety so that operation 8 will not be inimical to public health and safety or common defense and security. 10 11 The second principle of license renewal is that 12 the licensing basis must be maintained in the same manner 13 and to the same extent during the period of extended operation as it was during the original licensing term. 14 15 Issues that may arise relevant to current plan operation must be addressed as part of the current plant license and 16 17 cannot be deferred to a renewal review. For example, the issues that have resulted from Millstone and Maine Yankee 18 19 lessons-learned reviews related to 10 CFR 5059, licensing, and design bases are being addressed as part of the 20 operating reactors program. Any process improvements that 21 2.2 are realized as a result of the lessons-learned initiatives 23 will carry forward into the renewal term. Therefore, this 24 approach fully supports the principles upon which license 25 renewal is based. 1 If I can have the third slide, please. 2 We'd now like to begin the status portion of 3 today's briefing, during which we'll discuss ongoing industry and staff activities and plant-specific and owners 4 5 groups areas. We'll also discuss development of implementation guidance, environmental activities, and our planned future activities. If there are not any questions at this time I'd like to turn the presentation over to Mr. Stephen Hoffman. CHAIRMAN JACKSON: Before you go --10 11 [Laughter.] 12 So given what you were just saying about the 13 licensing basis issues coming out of the various initiatives 14 that are already under way, would you say that given what we 15 already are doing that there's nothing in our recent 16 regulatory experiences since the Commission laid out these 17 principles that have caused us to reexamine the adequacy of 18 those principles? MS. SLOSSON: That's right, I don't believe within 19 any of the Millstone lessons-learned issues we've identified 20 21 anything. 22 CHAIRMAN JACKSON: Okay. And then the second 23 question is whether you can give us some sense in the aggregate of whether industry interest in pursuing license 24 25 renewal has decreased, remained the same, or increased as a 1 consequence of the economic deregulation and restructuring 2 in the industry, and a related question is $\ensuremath{\mathsf{I}}$ notice that the CE owners group appears to be the only owners group not sponsoring a license renewal effort, and do you know if they 4 5 plan to do so, and are they supportive of the BG&E license renewal effort?

There are only five questions.

I guess with respect to economic deregulation I think it's --10 11 CHAIRMAN JACKSON: Let's leave it -- let's just 12 put it in a more neutral tone. 13 Have you noticed any change over the last year, couple of years in terms of any waning or increase of 14 15 interest in the license renewal area in an active way? MS. SLOSSON: Do you want to --17 MR. HOFFMAN: I'd say generally it's stayed the 18 same or maybe we've actually gotten a little more certain interest from licensees in the process. 19 CHAIRMAN JACKSON: What about the question related 20 21 to the CE owners group activities? 22 MR. HOFFMAN: They have not approached us as to any intent to submit anything with the staff. I think they 23 2.4 are letting BG&E take the lead. CHAIRMAN JACKSON: Are they providing support for 1 that effort? MR. HOFFMAN: That I can't answer. CHAIRMAN JACKSON: Okav. Thanks. 3 MS. SLOSSON: All right, Steve, if you can go through the status. MR. HOFFMAN: All right. Industry approach to 6 date for license renewal has been to actually submit 8 technical reports and methodologies for staff review and approval in advance of actually submitting a formal 9 10 application. The intent is that, and it's allowed by the 11 rules, that once they obtain this approval, they could 12 incorporate by reference these reports that have been 13 accepted by the staff. This gives them better information on which to decide whether to continue operation after the 14 15 current license term and give them some idea as to the cost 16 of the aging management programs. 17 As was indicated in the previous slide, we've got 18 two licensees that are three owners groups that have been preparing reports and submitting them to the staff. Other 19 licensees we are aware of have also been active supporting 20 21 the owners groups activities as well as the NEI generic $\,$ effort like on the Reg Guide, but we've gotten no formal 23 indication from them as to, you know, planned submittals at 24 this time. The slide on BG&E, please. 1 Baltimore Gas & Electric has been active since practically 1990 in license renewal. They incorporated license renewal as part of their life-cycle management for 3 program for Calvert Cliffs. Although no decision has been 4 made yet to submit an application by BG&E, they currently expect to complete preparation of their application by fall 6 of 1997. So it will be ready. They actually made their first submittal back in 1993 with their methodology for performing the integrated plan assessment. We were reviewing that when the staff decided to go back and amend 10 11 the rule. After the rule was issued they revised that 12 methodology, resubmitted it, and we have reviewed it and found it acceptable in a final staff safety evaluation 13 14 report. BG&E's approach has been to prepare the reports for 15 the systems structures and in some cases major components such as the vessel internals that they handle in separate 16 17 reports.

As part of a demonstration program for the Reg Guide, which I'll talk about a little bit more later on, the

MS. SLOSSON: Only five questions to answer.

8

staff was on site, and we looked at some of the reports that 21 they were preparing, and we found that in a number of areas 22 they contained sufficient information for the staff to begin 23 its technical review and submit it, but there was some concern in a couple areas as to whether or not there was 24 25 enough detail there. In response BG&E agreed to prepare a formal and 1 2 3 resolve implementation issues based on some examples they 5

content template, and between May of '96 and January of this year the staff and BG&E worked to review that report and to used to implement that. We concluded that if that template is properly implemented, the reports that are prepared on that and submitted to the staff should have sufficient information for us to begin our renewal review.

In parallel with that template review they asked and we agreed, they actually submitted five technical reports and asked for us to review them in the area that we did not have any concerns identified as part of the demonstration program. That review is going on. We have issued a request for information and they're responding.

End of May we just received four new reports. These were prepared using the template and we've just begun our review on that.

Their plan is to submit a total of 28 technical reports by fall of this year, which will constitute pretty much the technical portion of a renewal application.

CHAIRMAN JACKSON: Let me ask you this question, can you give us some sense of what level of staff resources and over what time frame will be necessary to complete the review of the BG&E technical reports? Have you been able to consider that? I don't know who wants to answer that.

MS. SLOSSON: I will answer that.

10

11 12

13 14

15 16

17

18

19

20

21

22

23

24

25

1

2

4

6 7

22

23

24

25

We anticipate that the review of the reports will be completed by the end of 1999 if we get them on the schedule as indicated. And our level of effort for license renewal for '98 is approximately 20 FTE and \$900,000 and, in '99, approximately 25 FTE and a million dollars for review of those reports.

CHAIRMAN JACKSON: Let me ask you the next 8 question. And this has to do, really, with kind of stability of the regulatory framework. So that is the 1.0 11 context in which I am asking this question. And it may be a 12 bit early to address it and, if it is, you know, tell me and 13 then I'll ask you, you know, in another meeting or in another way, can you discuss the relationship 14 15 between -- which you have said the staff has basically 16 approved between the BG&E report template, NEI guidance 17 91-10, which has been, I guess, reg guide endorsed, and the draft license renewal standard review plan? 18

19 You know, there is a NUREG 1568, owners groups 20 topical reports and the plant-specific application. Now, 21 that's a lot.

But I guess, you know, and I'm not asking you necessarily to go through each one chapter and verse but I want to understand the sense in which these things are all consistent or not consistent so that we are not in a

1 position where things get approved and then a standard review plan or some other guidance comes along that is a little different, et cetera, et cetera, because our staff needs to know what they are going to review against and the

```
industry needs to know going forward beyond BG&E's template
     is that going to be the game? You know, what it is they are
6
      going to be reviewed against?
               MR. HOFFMAN: Okay, if I leave anything out let me
8
9
     know
               Regarding BG&E's template, BG&E actually was
10
11
     further along when we started the reg guide in review of NEI
      95-10, so their template, their methodology is more plant
12
13
      specific, it is equivalent to the staff is making sure that
      what is in their approach is consistent with what we are
14
15
     doing with 95-10.
               As far as the various documents, they all really
16
      are interrelated. You know, if we are looking at something
17
18
      on an owners group report or for BG&E, it turns out it is
19
      also typically coming up like in the review of NEI 95-10 or
     it's an area that we are looking at for incorporating the
2.0
21
     guidance in the SRP. So as we go through this, the rest of
22
     the presentation, you are going to see there are a lot of
23
     activities going on and we are trying to pull it all
24
      together at the same time to come up with consistent
      guidance that will be of use to both the staff and the
     industry.
1
               CHAIRMAN JACKSON: Right, and it is important that
     they are all knit together, so that you are not all doing
3
      this one and then the next guy, you know, you tell him to
5
      bring you his rock and you're going to review it against
      some separate criteria and that's what the concern is.
6
               MS. SLOSSON: And the first two review cycles that
      we are going through are very, very important because they
8
9
     do provide us with specific issues that we are using to
10
      develop that guidance that will be used generically.
11
               CHAIRMAN JACKSON: So it is almost like a pilot?
12
               MS. SLOSSON: It is very similar to a pilot.
               CHAIRMAN JACKSON: All right.
13
               MS. SLOSSON: And the resource numbers I gave you
14
15
     were for the entire license renewal, it wasn't just for
16
     BG&E.
               CHAIRMAN JACKSON: I see. Okay.
17
18
               MS. SLOSSON: That was a total effort. But I
19
     wanted to clarify that.
               [Laughter.]
20
21
               MR. CALLAN: Including environmental.
22
               CHAIRMAN JACKSON: Is that right?
               MS. SLOSSON: Right.
23
24
               CHAIRMAN JACKSON: Okav.
               MR. HOFFMAN: Slide five, please.
                                                15
1
               Duke Power Company has also been very active in
     license renewal since around early 1993, not only on
     Oconee-specific activities but they have also been
3
4
      supporting the NEI effort, the B&W Owners Group and
5
     Westinghouse Owners Group activities.
               Their approach is a little different than BG&E.
 6
      They are preparing one report with five major sections.
     They are taking a discipline approach similar to the format
9
      of the FSAR. They are going to be evaluating all of the
      electrical instrumentation and control components in one
10
11
     group, mechanical components, the structures and then they
     will address the reactor building and reactor coolant
12
13
      systems separately.
14
               They have indicated that they intend to
15
     incorporate by reference the topical reports that are under
```

review by the B&W Owners Group and one of the Westinghouse

Owners Group topicals.

17

25

14 15

16

18 19

21

22

23

24 25

3

5

6

10

11

12 13

Their goal is to complete the application and be
prepared for a submittal in late 1998 if the company makes
the decision to formally apply. They have indicated that
some of their considerations they are looking at besides
technical and environmental include the regulatory aspects,
the financial and the political concerns associated with
actually applying for renewal.

In July of '96, they submitted their first section

16

1 on the reactor building. The staff looked at it and found that it didn't have, in some areas, sufficient information 2 for us to begin our review. In response, they committed to preparing this generic format and content document using the 4 reactor building as a guide. Kind of like the BG&E template effort to establish the -- what's necessary for a report to begin review. They submitted that in late '96. We reviewed it. Actually went on site in January of '97 to look at some of the backup documentation and how it was being implemented and we found that between the document itself and some 1.0 11 commitments they made in response to comments that it should 12 provide the quidance necessary to prepare reports sufficient 13 for our review.

They revised the reactor building report and submitted it in March of this year and we are currently reviewing that.

The remaining four sections are scheduled to come in by fall of this year with essentially complete -- there may be a couple holes. But those will be finished by the end of the year. And, again, that should constitute pretty much the technical portion of an application.

CHAIRMAN JACKSON: Let me ask you this question. You mentioned that Duke may incorporate by reference both B&W Owners Group and Westinghouse Owners Group topical reports. Are there any concerns vis-a-vis proprietary

17

1 material?

MR. HOFFMAN: Not with these reports.

CHAIRMAN JACKSON: And the other question is, would an a la carte, you know, approach be allowed where an applicant can pick and choose sections of topical reports and, if so, will this facilitate or complicate our reviews?

MR. HOFFMAN: Well, Duke has been very active in

the B&W Owners Group effort and so I wouldn't expect them to be taking parts of the topicals. If they chose not to use the entire topical, we would have to look at it more as a plat-specific submittal as opposed to a preapproved approach because we have discussed with the industry and it is in the guideline that, if you are going to use a topical, you have to show how you are enveloped and how any site-specific commitments are being made before you can use it.

14 15 16 Okay, next slide. 17 Babcock & Wilcox Owners Group is active. They were actually the first owners group to make a submittal. 18 19 They've got a generic program for five operating plants 20 which are the three Oconee units of Duke's, GPU's CMI-1 and Entergy's two Arkansas units. They have submitted three of 21 22 the four planned component topical reports on reactor coolant system piping, pressurizer and the reactor vessel. Based on the review, we have already found one acceptable on 24 25 the final safety evaluation report. We have issued another

```
report and draft. We expect the final report this month on
     the vessel internals.
3
               Our review -- actually what they have indicated
      is, in the future, after they complete the topical work,
5
      they will take on the longer term generic issues that may be
6
      identified in renewal as well as provide support to Duke and
      the other licensees who may apply for renewal.
8
               A review of the reports to date has been more
9
10
      advanced on B&W than the others because they have been in
      longer, has been that generally existing programs have been
11
12
      sufficient
               We have found in some cases where enhancements
13
     have been needed, say on small bore piping and augmented
14
15
      inspection but in general the existing programs have been
      sufficient.
17
               CHAIRMAN JACKSON: Is the B&W generic license
18
     renewal effort still broadly supported by the members?
19
              MR. HOFFMAN: It's been supported for some time by
      three of the five.
20
21
               One member, Florida Power, was involved early on,
22
      but our understanding is that they dropped out due to
23
     financial reasons, not for lack of interest.
24
               One never was involved -- Toledo Edison.
               Westinghouse Owners Group -- their program has
                                                19
     been very active too. They are preparing 15 topical reports
      for major components and structures. The intent is to bound
     all Westinghouse plants with the reports.
3
4
               Their reports give the attributes of an acceptable
5
      aging management program as opposed to B&W's, where with the
      smaller population of plants they have actually made
 6
      commitments to specific programs.
               They have submitted four topical reports that are
8
9
      under review. We're preparing a draft safety evaluation
     report on the reactor coolant system supports and the
10
     remainder in various stages of requests for information and
11
12
      responses.
               The fifth report on the vessel internals is
13
      scheduled to be submitted this month, and then they have
14
15
     indicated that they plan to submit an additional two to
16
     three reports.
17
               The Boiling Water Reactor Owners Group program was
18
      based on preparing topic reports for reference design. They
19
      picked the BWR Mark I and an applicant that came in, if
     there were any differences would justify those in their
20
21
      plant-specific application.
22
              They submitted the first of their six planned
      reports on the containment in December of '95 which the
23
24
      Staff reviewed and issued a request for additional
25
     information on in February '96. That review was put on hold
1
      by the BWR Owners Group initially because of funding.
               We just received a letter from them in May
      indicating that they are going to maintain that hold on
3
      their program and let the implementation issues, the process
 4
      issues that have been identified as part of their report
      review and the Reg Guide, let them be resolved by the lead
 6
               CHAIRMAN JACKSON: So that is all BWR Owners Group
8
9
      license renewal activities?
10
               MR. HOFFMAN: In the Owners Group, yes.
               CHAIRMAN JACKSON: And if some of the technical
11
12
     issues are associated with the BWR containments, how does
```

suspending action resolve those issues?

interpretation of the guidance, which I will get into more 15 16 in the Reg Guide effort and where -- what is going to be 17 necessary in an application. CHAIRMAN JACKSON: Okay. 18 19 MR. HOFFMAN: So they are going to let the lead 20 plants take those on. 21 The regulatory guide development began in earnest 22 in May of '95 when we amended the rule. A little bit of 23 background for you. About that time Nuclear Energy 2.4 Institute approached us and indicated they were preparing 25 the industry guideline, NEI 95-10, and requested our review and endorsement if it was found acceptable. 1 We agreed to that, and there were extensive interactions between August of '95 and March of '96 that 3 4 resulted in us preparing the draft Reg Guide that was published for comment in August of '96 that proposed 5 endorsement of NEI 95-10, rev. zero. 6 During this development process, that was March to August of '96, we participated in a trial application of the 8 95-10 guidance. NEI sponsored an industry demonstration 9 10 program in which six utilities participated. That was Baltimore Gas & Electric, Duke, Southern Nuclear, Wisconsin 11 12 Electric, Philadelphia Electric, and Virginia Power. 13 The Staff actually sent a team out to each of the 14 licensees with the exception of Virginia Power, which chose not to participate in the Staff site visit but underwent an 15 16 NEI-led peer review. 17 The intent was to look at, assess the adequacy of 18 the guidance and the ability of the participants to 19 implement the guidance and obviously identify any needs for 20 21 In the demonstration program the licensees used 22 the guidance to select certain system structures and 23 components and then they kind of ran it through the process of doing the integrated plan assessment, evaluated time 24 limited aging analysis, and prepared sample application 25 1 materials that the Staff reviewed. 2 Generally what we found was that the 95-10, rev. 3 zero contains the basic guidance needed to prepare an 4 application, but we did see some inconsistent application of the guidance as well as some areas where improvements could be made or additional clarification would avoid conflicts in 6 7 the future. We did publish our lessons learned in a NUREG 9 Report 1568. 10 During the public comment period we also conducted a public workshop to allow as much opportunity for the 11 public to be involved in this. We discussed the rule, the 12 13 Reg Guide and 95-10 guidance, and the demonstration program 14 lessons learned, since that was being completed towards the end of the public comment period. 15 16 The comment period ended at the end of November of 17 '96 and we received comments from NEI, five licensees, two 18 owners groups, and the Department of Energy. No comments 19 from the general public. 20 The comments received on the Reg Guide raised some issues with interpretation of the wording and some of the 21 22 guidance contained in the draft Reg Guide and 95-10. 23 Discussions with industry on the issues raised by

the comments helped establish a better understanding of the

24

MR. HOFFMAN: Well, some of them deal with the

Examples of some of the areas that were discussed
were the amount of information needed to demonstrate the
adequacy of existing programs being credited for aging
management, the amount of detail needed in an application
versus onsite available for Staff inspection, and the level
at which intended functions must be maintained and whether
component failure was allowed.

After extensive discussions with the industry, the

After extensive discussions with the industry, the Staff now believes that the issues associated with the guidance can best be resolved through trial application of the draft guidance on specific structure and component reviews.

10

11

12

13

14 15

16

17

18

19

20 21

22

23

5

8

10

11 12

13

14 15

16

17

18

19

20 21

22

23

24

25

6

Therefore, we have modified our approach for developing the final Reg Guide and instead of issuing it final in September of '97, as currently planned, we intend to focus on plant-specific and owners group reviews using the draft Reg Guide and the working draft standard review plan for license renewal that I will talk about next to gain the needed experience with implementation of the rule and use that to help finalize the Reg Guide as well as the standard review plan.

CHAIRMAN JACKSON: So then where would that track you to when you think you would finalize the Reg Guide?

24 MR. HOFFMAN: What we would expect to do is 25 actually the guidance would not just sit. We would

24

incorporate a lot of that guidance that has been developed and is being developed into the working draft of the standard review plan, which is scheduled to be updated and put in the public document room in September.

CHAIRMAN JACKSON: How appropriate would it be to incorporate or to endorse, to publish a Reg Guide that endorses those portions of 95-10 that we feel are appropriate and then to supplement the Reg Guide on the issues that have yet to be resolved at a later date?

MR. HOFFMAN: We considered that, but what we are seeing is the interpretation by some of the -- like the commenters that there's some principles that run throughout that if we did that it would get the guidance out there, but we are not certain that it is really a document that the industry in the majority would embrace and would feel would be useful for pursuing renewal.

What we are finding is that we have got two licensees and two owners groups that are proceeding using the guidance that is available. They have indicated that they don't need the Reg Guide in order to proceed.

Generally what we find is that when we focus on a specific structure on component with a licensee or an owners group that we can work through these issues and we can come to agreement as to what is acceptable for an application.

It is when we go back up and start talking in broad terms,

25

broad policy type statements that we then start debating
 interpretations of the wording.

3 CHAIRMAN JACKSON: And that is why you are saying 4 that you want to incorporate the experience gained from 5 implementing it on plant-specific and the owners group.

You were going to make a comment, Sam?

7 MR. COLLINS: No.

8 CHAIRMAN JACKSON: Just showing your interest?

9 MR. COLLINS: Right.

10 CHAIRMAN JACKSON: Okay.

```
COMMISSIONER McGAFFIGAN: What would be the
      plan -- it will be several years before you try to
12
13
      finalize -- but there would be another round of public
      comment at that point where you would put out a new revised
14
      draft and go through a process at that point? Is that the
15
16
      thought?
17
               MR. HOFFMAN: I think we'll have to.
               We haven't really looked at it in detail but it is
18
19
      most likely we would.
20
               We wouldn't terminate actually the process with
21
     Nuclear Energy Institute. The idea is not to stop. It's
22
     just to -- I think it would be better to focus our resources
23
     on these lead plant reviews and finishing the owners group
      topicals, and then continue the interaction with NEI, just
24
      not on as high a priority basis.
25
1
               During the draft work we were meeting with them
      weekly. We had -- it was a very intensive effort trying to
2
     produce the final document, so we would continue the effort
3
      with NEI during this time.
4
               CHAIRMAN JACKSON: Okay.
               MR. HOFFMAN: We have already covered part of
6
7
      this. We placed -- the original draft standard review plan
      for license renewal was issued for comment back in 1990 but
     it was based on the '91 rule so we updated that to reflect
10
      actually it was the '94 proposed rule wording and agreements
11
      that were reached from -- back in that timeframe there was a
12
      NUMARC initiative in which were prepared industry reports
13
      that addressed aging management for some structures and
14
     components.
15
               The Staff had been doing a review. We
16
      incorporated the agreements from that into that working
17
     draft standard review plan.
               Currently we are working on updating and expanding
18
19
     that to capture -- there were some modifications for the
20
     final '95 amended rule wording, the experience we have
     gained from the plant and owners group reviews to date, the
21
      experience from the draft Reg Guide development and also
22
23
      some additional administrative requirements and that should
24
     be in the PDR by September.
25
               The current schedule is to publish the draft
1
     standard review plan for public comment after the review of
2
      several renewal applications to allow experience to be
3
      gained.
 4
               Next I would like to discuss two areas that we are
      monitoring for potential effect on implementation of the
 5
     license renewal.
6
               That is use of risk insights and maintenance rule
               Regarding the use of risk insights, the Staff
10
      recently received Commission approval to publish the draft
11
     regulatory guides and standard review plan that provide
      guidance for using probabilistic risk assessment and risk
12
13
      informed decisions on plant-specific changes to the current
14
      licensing basis.
15
              These Reg Guides and SRPs were submitted to the
16
     Commission in SECY 97-077.
17
               Once issued final, licensees will be able to use
     this guidance to make changes to its COB during the current
18
19
      operating term, and, consistent with the principles of
20
      license renewal, the regulatory process carries forward into
     the renewal term so a renewal applicant would be able to use
21
```

this guidance in preparing its application as well as in the 22 renewal term. 23 Specifically for license renewal, when the amended 24 25 license renewal was issued, the Commission stated in the statement's consideration that PRA could be used by a renewal applicant when assessing the relative importance of a structure or component subject to an aging management review and for developing the aging management program. The PRA Reg Guides that were just approved for 6 issuance for draft for comment could also be used for guidance for an applicant in performing these assessments. We also plan to use risk insights when we develop 8 9 the inspection program for license renewal, which I will 10 talk about again in a minute. Maintenance rule experience -- the license renewal 11 12 relies on existing licensee programs, in particular the 13 maintenance rule -- that was clear in the amended '95 rule -- to conclude that active components can be 14 15 generically excluded from the scope of renewal review because the effects of aging are more readily detectable. 16 Although passive structures and components are 17 18 technically within the scope of the maintenance rule, the 19 Commission at that time believed that there was insufficient experience regarding the evaluation of long-term effects of 20 21 aging on passive functions to be able to generically exclude 22 them from renewal review. 23 Because of this dependence on the maintenance 24 rule, license renewal staff is monitoring the implementation 25 of the maintenance rule and the baseline inspections being performed to determine how lessons learned from the maintenance rule can best be factored into the license 3 renewal process. One example of an issue identified by the 4 maintenance rule, inspections, has been the need for 5 6 additional guidance for monitoring the structures. That was described in the maintenance rule status paper, SECY 97-055. In that case license renewal staff has been 8 9 participating in the Staff activities to develop guidance 10 for both operating reactors as well as for the renewal term. 11 The help the exchange of information, both the 12 maintenance rule and license renewal staffs have been 13 monitoring and participating in each other's activities. 14 Maintenance rule staff was active in our development of the 15 draft Reg Guide and participated in the demonstration 16 program for the Reg Guide. License renewal staff is going to be participating 17 18 in a maintenance rule baseline inspection, and we are 19 monitoring the results of their ongoing inspections for any lessons learned. 2.0 21 Okay, Inspection Program Development. The intent 22 is to prepare a draft of the inspection program for license renewal to support review of the first application. We're 2.3 24 using the ongoing dialogue with industry and the experience gained from reviews of the owners group and plant-specific documents to help staff know where to focus its inspection 1 efforts and where there's a need for new or modified 3 programs both for the renewal review as well as on into the renewal term. We also like I said plan to use risk insights in establishing that program, consistent with like the SRP we

would finalize that inspection program after we've gained

If there's no additional questions, I'll let Dave 9 10 Matthews discuss environmental. 11 MR. MATTHEWS: Good afternoon. 12 Before I present a description of the status of 13 our environmental review activities associated with license 14 renewal. I think it would be helpful to review just briefly in contrast to the Part 54 rulemaking activities that there 15 16 was a companion rulemaking activity in the environmental 17 protection area associated with an amendment to Part 51 to 18 address license renewal. 19 Part 51 was revised finally to address license 20 renewal issues in December of 1996, just last year. That rule revision was based on a generic Environmental Impact 21 Statement to address the environmental impacts attendant to 22 23 license renewal, which was issued in final form in May of 24 1996. In turn that GEIS was based on operating experience from an environmental perspective of the 118 reactors that 25 1 were either operating at the time or planned in 1991 when this effort was undertaken. The result of that rulemaking activity and GEIS 3 4 development focused on 92 impacts associated with license renewal that related to environmental protection. Those 92 impacts were sorted and classified in the final rule into 6 two categories. Category 1 impacts, and there were 68 of those that were dealt with by the Commission's approval in a generic capacity, and 24 site-specific impacts, referred to 9 10 as category 2 impacts, that were to be left for 11 determination during the site-specific evaluation of the 12 environmental impacts. 13 I think it would also be helpful if I could turn 14 to background slide 6, to just briefly describe the process that is outlined in part 51 for a plant-specific review. 15 And the major steps are the staff's environmental review of 16 17 an application. In this case we're talking the licensee's environmental report. That would then result in the staff 18 issuing a site-specific supplemental Environmental Impact 19 20 Statement in draft form addressing those 24 issues that were 21 left to site-specific review. 22 The staff at that point following the draft and 23 the scoping process and public comment would issue a final 24 Environmental Impact Statement and would make a 25 determination of the acceptability of the license renewal 1 action. At that point the responsibility turns to the Commission to issue a record of decision based on that 2 Environmental Impact Statement and the staff's conclusion, and the wording of that record of decision that's called for in Part 51 relates to preserving the option of license renewal for energy-planning decision makers. That is a 7 little different from the traditional cost-benefit balancing that is usually done in environmental reviews, and that's articulated in the final rule. 10 Turning back now to the status slide, which is 11 slide 12, at the time that the Commission approved for final publication the revisions to Part 51 they also requested the 12 13 staff to address the issue of guidance associated with the 14 implementation of that rule, and the two elements of that quidance and the staff responded to the Commission with a 15 schedule for these, were the environmental standard review 16

plan, which we plan to publish for public comment in August

1997, and we're on schedule to do that, and the hope is

17

18

the experience of several renewal application reviews.

```
19
     provided the comments are such that we can resolve them
      expeditiously, is to issue a final environmental standard
20
      review plan in August of 1998. In addition a regulatory
21
22
     guide is under preparation, with the planned schedule for
     that of being published for public comment in July of 1997.
23
      with a reg guide to be finalized in March of 1998.
24
25
               Consistent with the approach you've just heard
      with regard to Part 54 review efforts, we have had
     discussions and extensive interaction with Baltimore Gas &
3
      Electric on a template process for the format and content of
      an environmental report that would support an application.
5
     The goal of that process was to ensure that an environmental
 6
      report when submitted would be considered suitable for
      further staff review as part of an actual application. So
     we weren't making determinations on the acceptability of the
8
9
     material contained therein, only acceptability of its scope
10
      associated with the staff's ongoing review.
11
               We concluded that template process through a
12
      management meeting which took place on Thursday, June 5,
13
      where we provided our assessment to BG&E management that we
      thought the process had culminated in a format and content
14
15
      document that they had prepared that if they were to prepare
16
     an environmental report along those lines it would meet that
     requirement, namely that it would pass our acceptability
17
18
      review.
19
               We've had interactions with NEI and Duke. With
     Duke with regard to the fact that they have under
20
21
      preparation an environmental report to support a possible
22
     application, and we've also talked with NEI with regard to
23
      their desires to consider the development of guidance for
24
      the industry in this area.
25
               COMMISSIONER McGAFFIGAN: Does that conclude the
      environmental part?
1
2
               CHAIRMAN JACKSON: I think so.
3
               Do you have a question?
               COMMISSIONER McGAFFIGAN: Can I ask a question?
 4
               CHAIRMAN JACKSON: Sure.
5
 6
               COMMISSIONER McGAFFIGAN: I've gone back and
      looked at Part 51, and one of the issues that you've
     mentioned in the paper before us on page 7, an area that
8
      needs some clarification, and you're discussing it with
10
      industry, is the generic and cumulative impacts associated
11
      with transportation operation in the vicinity of a
12
     high-level waste repository site.
13
               That's one of these category 2 items under the
     rule that was published. And it strikes me that sort of
14
15
      puts people in a pretty tough situation in that it probably
16
      should be dealt with generically maybe by ourselves. And so
     how do we get ourselves out of the fix that we're probably
17
18
     not going to deal with the generic transportation issues of
19
     Yucca Mountain for a few years yet, and yet some of these
      folks are on a time line to come in as early as late this
2.0
      year or next year? So do you have any thoughts as to how we
21
22
      deal with that issue? What has been the nature of the
2.3
      discussions?
               MR. MATTHEWS: Yeah, based on our discussions with
24
25
     BG&E and with Duke, it is clear that that is probably, if
```

there is an -- what appears at this point in time to be an

issue that's unresolved in this area, although there are 3

some other ones the resolution of which isn't completely

clear, this one would be less clear than the others.

```
However, this situation was anticipated in
      conjunction with the approval of the final rule in December
 6
      of last year. The staff and the Commission found themselves
      in the position of not having a sufficient generic analysis
      upon which to base a finding that this could be considered
 9
10
      as a category 1 issue. However, the Commission expected,
11
      and they expressed in the statement of consideration, that
      as part of its efforts to develop regulatory guidance for
12
13
      this rule, the Commission would consider whether further
14
      changes to the rule are desirable to generically address the
15
      issue of cumulative transportation impacts. And that's
      exactly what the staff is going at this juncture.
16
17
               CHAIRMAN JACKSON: So let me make sure -- so what
      is it that the staff is doing?
18
               MR. MATTHEWS: I was going to move on to that.
19
               COMMISSIONER McGAFFIGAN: Well, we'll both let you
20
21
      ao.
               MR. MATTHEWS: The staff has obtained and is
22
23
      currently evaluating information from DOE which we
      anticipate will provide the basis for a generic analysis of
24
      cumulative effects of transportation in the vicinity of a
25
1
     \verb|high-level| waste repository.\\
              CHAIRMAN JACKSON: And are you going to bring a
 2
 3
      paper forth to the Commission on this?
               MR. MATTHEWS: Yes, and in fact I will get to the
      issue of what options might be available.
               CHAIRMAN JACKSON: Okav. Good.
 6
 7
               MR. MATTHEWS: And certainly the Commission will
      be involved in the determination of the chosen one
               COMMISSIONER McGAFFIGAN: And what is the timing
 9
10
      for --
11
               MR. MATTHEWS: I wanted to make a comment that
     it's important, given that DOE has not vet issued an
12
13
      Environmental Impact Statement that would go the full
14
     distance in addressing this issue --
               COMMISSIONER McGAFFIGAN: And won't for some --
15
               MR. MATTHEWS: For some time.
16
17
               COMMISSIONER McGAFFIGAN: Yes.
               MR. MATTHEWS: We're of course concerned that we
18
19
     not act too precipitously, so we do want to have an analysis
20
     performed by the staff based on information that we receive
21
      from DOE as opposed to just quote "adopting" what they've
22
      provided. So we do want to do that.
23
               COMMISSIONER McGAFFIGAN: Is an option for dealing
2.4
      with the early appliers though -- this is something that
      obviously should be dealt with generically. We can't deal
25
                                                37
 1
      with it generically yet. Is this an area where we're going
      to have to use an exemption to -- or some sort of an
 3
      approach --
 4
               MR. MATTHEWS: I think there's a potential for
      that. The staff really hasn't considered what the
      implications of granting an exemption in this area is, and
 6
 7
      we'll certainly consider it if the need arises.
               CHAIRMAN JACKSON: Is that one of the options on
 8
9
     your list?
1.0
               MR. MATTHEWS: Yes. But I wanted to say we think
11
      that there's probably time to perform an analysis and
      proposed to you the possibility of an expeditious rulemaking
12
13
      that will resolve this issue.
14
               CHAIRMAN JACKSON: I see.
15
               MR. MATTHEWS: That was what was expected at the
```

```
time that the issue was not sufficiently dealt with in
16
     December, and our expectation is that provided the analysis
17
      of DOE's input and our analysis would provide a sufficient
      basis for that, that's the road that we'd like to go down.
19
               COMMISSIONER McGAFFIGAN: I've heard expeditious
20
21
      rulemaking --
2.2
               [Laughter.]
23
               COMMISSIONER DICUS: No, no, no, I have both of
24
      you on either side, so I don't have to worry about it.
25
               No, I'm not clear on the timing in here. You
      said, you know, we have to wait -- we had to wait a little
1
     bit, you know, obviously with DOE and other things to get
2
3
      the Environmental Impact Statement and then you talk about
 4
      an expeditious rulemaking, so I'm not --
5
               MS. CYR: If I could say something, I mean the
 6
      Commission and -- I mean, the obligation to examine this
     under NEPA is fundamentally ours, and we provide by
     regulation that licensees have to provide an environmental
8
      report to give us information basically that shortens our
     process, so, I mean, in a sense this is a slightly different
10
11
      situation if you were to quote "grant an exemption" if
12
      that -- in that context -- but what the Commission has done
13
      in the past is -- most notably in the waste confidence
      proceeding -- was where we had a generic issue that came up
14
      which the Commission decided that they wanted to address
15
16
      generically.
17
               They just provided that during the proceeding that
18
     issue in the rulemaking you would not address it in
19
     individual license proceedings and this licensing proceeding
20
      would be subject to whatever the outcome of that generic
21
      proceeding was, so we at least -- we have a situation in the
22
      past where we have just provided that the individual actions
2.3
      would be subject to whatever the outcome of the action was,
      if in fact the license -- their proposal to amend the
24
25
     existing findings in part 51 didn't terminate prior to the
      time that you had an application come in.
               MR. MATTHEWS: And I might clarify that I hope I
2
3
     didn't leave the impression we thought we needed to wait on
      DOE's final Environmental Impact Statement for us to review
     the issue and the associated environmental impacts, and we
5
      the NRC issue a generic document that would reflect the
      generic treatment of that issue short of DOE finalizing
8
      their activity. And that would be the document upon which a
9
     potential rulemaking would be potentially based. However,
10
     short of that, there might be an option of issuing such a
      generic environmental analysis that could be referenced by
11
12
      the utilities in individual environmental reports. But,
13
      again, the staff would then turn in development of their
     draft environmental impact statement of having to deal with
14
15
      that issue on a generic basis.
               So that is why I made the comment exemptions,
16
17
      while we haven't considered them in detail, may not really
18
      be the option.
19
               COMMISSIONER McGAFFIGAN: Could I clarify?
2.0
               What does expeditious rulemaking mean in this
21
22
               MR. MATTHEWS: Well --
2.3
               COMMISSIONER McGAFFIGAN: I mean, when would it
     begin and when would it end, just approximately?
24
               MR. MATTHEWS: I think that is the options that we
25
```

```
4
      listening to this discussion, BG&E or Duke, what am I to
      take away from it in terms of is this a problem for me or
     not and do I have to include very much on this in my draft
6
7
     report to the Commission or do I not?
               MR. MATTHEWS: In the current regulatory arena
     with the regulation as it exists, they need to address this
9
10
      issue in the environmental report and address what's phrased
11
     the generic and cumulative impacts so there is an obligation
     for them to do that. However, as I explained with regard to
12
13
     the process, we then, as Karen has pointed out, we the staff
14
     then assume the obligation for doing a sufficient
     environmental review and so we can bring to that review
15
      additional information that we may develop as well.
16
               CHAIRMAN JACKSON: I think perhaps a way to get at
17
     this is if you were -- well, let me ask two questions, a
18
19
      question and then make a comment.
20
              When were you expecting to propagate the options
21
      paper to the Commission?
22
               MR. MATTHEWS: Well, I have to admit that until I
23
     have a better feeling for when the staff can complete their
24
      environmental assessment of the information received by DOE,
      it is difficult for us to commit to what might be the next
25
1
      step and that was the difficulty I --
               CHAIRMAN JACKSON: I think we need a couple of
      things from you. I think one is that we need to have that
 3
 4
     readout of when the staff can complete its review of DOE's
      environmental assessment and it's tied into what they are
     doing. But I think we also need a readout relative to
6
     various options that the Commission would have, but
8
      particularly one related to rulemaking.
9
               We need to have some sense of what is possible in
10
     terms of speed and that may require input from OGC so we
11
     understand, you know, what the legal bounds are. And so if
     you could do that?
12
               MR. MATTHEWS: That was the path we were headed
13
      upon and we will proceed expeditiously.
14
               CHAIRMAN JACKSON: Sure, apace. Right. Thank
15
16
17
               MS. SLOSSON: If we could go to the last slide?
18
               In summary, the staff plans to focus its resources
19
     on the plant-specific and owners group reviews and
20
     applications if we receive it and use the information from
21
     those reviews to make sure that we have clear and concise
      guidance from the industry to use in pursuit of license
22
23
     renewal and in the development of that guidance, certainly,
2.4
      if we identify any policy issues, we will bring them forward
      to the Commission.
25
1
               CHAIRMAN JACKSON: Thank you.
 2
               Commissioner Rogers?
               COMMISSIONER ROGERS: I don't have anything.
 3
               CHAIRMAN JACKSON: Commissioner Dicus?
               COMMISSIONER DICUS: I have one more question.
6
               I recognize at the onset this is not specifically
7
     related to license renewal but I am particularly interested
     in learning a little bit more about the subject so, for
     information purposes, I would like to bring it up. This has
9
10
     to do with EQ, which I recognize is an ongoing issue with
11
      operating plants and was taken out of the renewal bin for
12
      that reason, at least that is what I understand.
```

expeditious such a rulemaking could be performed.

3

COMMISSIONER McGAFFIGAN: If I am a licensee

```
expect licensees to address this in their renewal
14
15
      applications?
               MR. HOFFMAN: Well, EQ, actually that generic
16
     issue was identified as part of the early license renewal
17
     reviews along with, like metal fatigue which is another
18
19
      generic issue that we have identified.
20
               When we amended the rule, the statements of
21
      consideration talks about unresolved generic issues and it
     does state clearly that a renewed license can be issued with
22
23
      an unresolved issue. A couple options, it discusses like
      BG&E or Duke could use would be to -- they could come up
24
      with a plant-specific resolution of the issue or they could
25
                                                43
      give us a more or less a justification of why they can
2
      continue to operate until some period in the future when
3
      they could then incorporate the final resolution.
               We have been involved, you know, even though it
     has been taken out of more or less the license renewal's
5
      responsibility, we continue to be involved in the ongoing
      activities with research and the technical branches of NRR.
               COMMISSIONER DICUS: How many unresolved generic
8
9
      safety issues are there?
10
               MR. HOFFMAN: We are still looking at that. We
      are talking about -- well, unresolved generic issues that
11
12
      have to be addressed for renewal are only those that involve
13
      structures and components subject to the -- you know, within
     the scope of the rule and that involve aging effects. So we
14
15
      are talking passive, long-lived components with applicable
16
      aging effects. So it narrows it down quite a bit.
17
               Some initial cuts show less than 10, in that
18
      ballpark. And some reviews have shown two. It depends on
      who is doing the review right now. So we haven't got that
19
2.0
      final list.
21
               CHAIRMAN JACKSON: Okay, Commissioner Diaz?
               COMMISSIONER DIAZ: Yes, let's see. Following on
22
2.3
     that question, I think aging is the key issue on relicensing
      versus not the matter of aging but aging gracefully, that
24
      whole issue.
25
1
               [Laughter.]
               COMMISSIONER DIAZ: A concern that some of us have
2
      of late. But, you know that I think it is important to, and
      I don't quite see though, how are we developing the body of
5
      knowledge necessary to systematically use some criteria to
 6
     determine the degradation, not aging, per se, as a
      degradation of safety systems. Instead, is that process
     being developed with significant focus?
8
               MR. HOFFMAN: There have been a number of
10
     activities. To clarify, we are looking at the aging
11
     effects.
12
               COMMISSIONER DIAZ: Aging means degradation due to
13
      aging, right?
               MR. HOFFMAN: Right.
14
               We are looking at the effects as opposed to the
15
      mechanisms themselves because we want to ensure the
16
17
      functionality of structures and components.
               There -- and the intent is that we maintain that
18
19
     functionality in accordance with the current licensing basis
      and, in particular, the design basis. So that when you are
2.0
21
      looking at the effects of aging in a number of areas, you do
     go back and see what the design intent is and ensure that
22
23
      function can be maintained.
               There have been some additional -- it's really,
```

But what do you expect licensees or how do you

like before, in renewal, everything seems to be kind of 45 interrelated. The NUMARC reports in which they did some 1 studies on specific structures and components have added to it, the Office of Research has had their Nuclear Plant 3 4 Research -- I forget the exact name of it, that they have been developing. There was a generic aging lessons learned document that has been produced. 6 So we are pulling all of that data in as part of 8 this ongoing process and looking at it. COMMISSIONER DIAZ: And are we starting to assume 9 10 some criteria of pass, no pass, going to watch it? I mean, 11 there should be some body of knowledge that we develop systematically that will not only allow us to look at the 12 first one but will actually allow us to, in a critical 13 manner, analyze the functionality and/or potential 14 15 continuing effects. Because I think aging becomes the critical component of the process; is that correct? 16 17 MS. SLOSSON: Aging is the critical part of the license renewal review we do for the passive, long-lived 18 19 components. So we are evaluating and developing guidance for how the staff will look at and what criteria will we use 20 21 to determine if an aging management program is effective. So that is being done as part of the regulatory guidance 22 23 development. 2.4 MR. HOFFMAN: And the Standard Review Plan will 25 be, for the components and structures looked at, it will 1 contain specific guidance as to --2 COMMISSIONER DIAZ: I think that body of knowledge is critical to the entire process, to maintain it and 3 upgrade it and develop it to a point that will be useful in 5 a continuous manner because you are going to go back to it 6 over and over again. 7 CHAIRMAN JACKSON: Commissioner McGaffigan? COMMISSIONER McGAFFIGAN: Given how much time was devoted to the last question that was spurred by this 9 sentence, I am not sure I want to keep going on it, but 10 11 there is a list of other issues other than transportation 12 issues that you have been discussing with the industry and 13 the sentence that follows says, good progress has been made 14 on these issues and dialogue continues. 15 Are any of the other issues on the list, do they 16 rise to the same level that the transportation issue rises 17 to in terms of possibly involving Commission guidance or 18 whatever? MR. MATTHEWS: Not based on what discussions we 19 20 have had to date. 21 CHAIRMAN JACKSON: Well, I would like to thank the NRC staff for providing a very informative briefing to the 22 Commission regarding activities associated with the 23 2.4 implementation of the license renewal rule. It was important in 1994, when the Commission directed the staff to 1 revise the rule and it is just as important today that the 2 Commission provide a stable and predictable license renewal 3 process. 4 So I commend the staff for its perseverance in these license renewal efforts and the staff should continue to work with the nuclear power industry to resolve the

> technical and other implementation issues. And, as you have heard and you have heard specific ones, should the staff identify policy issues associated with the license renewal

rule implementation or with the environmental related 11 requirements contained in 10 CFR Part 51, the staff should forward these issues promptly to the Commission for timely resolution along the lines that we have already discussed. So, unless my fellow commissioners have any further comments, we are adjourned. [Whereupon, at 2:36 p.m., the briefing was concluded.]