

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

Title: BRIEFING ON RESULTS OF OPERATOR LICENSING
PROGRAM RECENTRALIZATION STUDY

Location: ROCKVILLE, MARYLAND

Date: DECEMBER 14, 1993

Pages: 54 PAGES

SECRETARIAT RECORD COPY

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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**BRIEFING ON RESULTS OF OPERATOR LICENSING
PROGRAM RECENTRALIZATION STUDY**

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PUBLIC MEETING

**Nuclear Regulatory Commission
One White Flint North
Rockville, Maryland**

Tuesday, December 14, 1993

The Commission met in open session,
pursuant to notice, at 10:00 a.m., Kenneth C. Rogers,
Commissioner, presiding.

COMMISSIONERS PRESENT:

**KENNETH C. ROGERS, Commissioner
FORREST J. REMICK, Commissioner
E. GAIL de PLANQUE, Commissioner**

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STAFF SEATED AT THE COMMISSION TABLE:

SAMUEL J. CHILK, Secretary

WILLIAM C. PARLER, General Counsel

JAMES TAYLOR, Executive Director for Operations

THOMAS MURLEY, Director, NRR

WILLIAM RUSSELL, Associate Director for Inspection and
Tech. Assessment, NRR

BRUCE BOGER, Director, Division of Reactor Controls
and Human Factors, NRR

ROBERT GALLO, Chief, Operator Licensing Branch, NRR

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

10:00 a.m.

COMMISSIONER ROGERS: Good morning, ladies and gentlemen.

Chairman Selin is on international travel and won't be with us today.

Today the Commission will be briefed by the staff on the results of a study that was initiated as a result of a Commission request to the staff in November of 1991. Prior to 1984, reactor operator licensing examinations were prepared and administered by a team of examiners within the Operator Licensing Branch at NRC Headquarters. However, in 1984, in order to improved perceived shortcomings in the operator licensing process, the operator licensing function was transferred to each of the five NRC regions.

In the fall of 1991, prompted by a recommendation by Commissioner Remick, the Commission requested the staff to conduct a study because of a concern that there inconsistencies among regions in the development and administration of licensing examinations. The study was to examine the inconsistencies in the operator licensing program and address the advantages and disadvantages of

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1 recentralizing the function. The staff was also
2 requested to make a recommendation as to whether or
3 not to change the present structure of the operator
4 licensing program.

5 We're looking forward to hearing the
6 results of the study which began in June of this year.

7 The floor is now yours, Mr. Taylor.

8 MR. TAYLOR: Good morning. With me at the
9 table are Tom Murley, Bill Russell, Bruce Boger and
10 Bob Gallo from NRR. In addition, present at the
11 meeting, Ms. Rena Keval, Mr. Craig Dean of ICF
12 Incorporated, who are representing the firm who
13 conducted the study under contract with the staff.
14 They are also available to respond to questions
15 regarding this survey methodology and any related
16 issues from their survey.

17 The Commission, of course, has the study.
18 The staff agrees with the conclusion that
19 recentralization of the examining function is not
20 needed. However, there is a potential to improve the
21 current program by adopting some of the enhancements
22 from this report which will be discussed.

23 Tom Murley will continue.

24 DOCTOR MURLEY: Thank you, Jim.

25 Commissioners.

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1 I view this as a continuation of the
2 evolution of the operator requalification program and
3 the evaluations that we have done on this program over
4 the years. It's, I think, one of the most important
5 programs we have and it does bear continued scrutiny.

6 Just to recall some of the history, in the
7 1980s, say ten years ago, I recall when I was in
8 Region I there was generally a dissatisfaction on the
9 part of the operators because the exams that the NRC
10 was giving at the time were not practical enough, much
11 too theoretical, and they felt that they were -- two
12 problems that the operators had with it. One is they
13 were having to waste their time, they felt, studying
14 for theoretical things that they never really used in
15 their day to day operations, number one. Number two
16 is they felt threatened in their livelihood, in their
17 jobs that they had to take such a tough exam.

18 Well, the new rule, the current rule on
19 requalification became effective in early 1987 and at
20 that time it required each licensed operator to pass
21 a requalification exam. So, for the first time, it
22 put their license at risk if they were to fail. Up
23 until that time, if they failed, it had a bearing on
24 the program at a utility. So, for the first time in
25 1987, individual operator licenses were at risk.

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1 That, coupled with the fact that they felt that the
2 exams were not practical and were too theoretical led
3 to a near revolt, to the point where in September 1987
4 I decided to stop all requalification exams until we
5 restudied it and modified the program.

6 We did that. The staff, I think, did a
7 very good job in restructuring the program for
8 requalification exams, made them more operationally
9 oriented. We did a few pilot exams in each region.
10 We worked very, very closely with the regions and we
11 developed what I think is now a more solid program,
12 including, I should say, simulator exams.

13 In recent years, there have been questions
14 about the practicality of some of the scenarios used
15 in the simulator exams. The staff at the highest
16 levels looked at that. We concluded that there could
17 be some modifications but that by and large the
18 simulator exam and the scenarios were, in fact,
19 important methods for studying how -- examining how
20 operators worked with their emergency operating
21 procedures.

22 So, in that sense then, I think the
23 current study is valuable and Bruce Boger will talk
24 about the results of the study and the recommendations
25 for some of the changes that are going to come from

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1 the study.

2 COMMISSIONER ROGERS: Just before you
3 begin.

4 DOCTOR MURLEY: Yes.

5 COMMISSIONER ROGERS: I'd like to say that
6 I really did admire very much your decision to stop
7 that program, just absolutely stop it. Not try to
8 diddle with it or try to Band-Aid it, but to
9 absolutely stop it and reevaluate it at that time.

10 DOCTOR MURLEY: I think that's what was
11 needed.

12 COMMISSIONER ROGERS: That was absolutely
13 what was needed, but it was really the thing to do and
14 it's so rare that we decide to do things quite that
15 way. We usually kind of dither along on it. At the
16 time, I remember I just really thought it was a proper
17 decision, but one which rarely do you see. I think
18 you should be commended for it, Doctor Murley.

19 DOCTOR MURLEY: Thank you.

20 COMMISSIONER REMICK: Tom, one of the
21 things before proceeding -- I think historically I'm
22 correct here. You indicated in 1987 when the
23 Commission decided that all operators should have
24 their requalification exam administered by the NRC,
25 but I think about 1982 the Commission did have the

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1 staff do something like 20 percent of the operators at
2 50 percent of the facilities, something like that,
3 which was a ten percent goal. So, starting at about
4 1982, I think about ten percent of the operators --
5 I'm not sure the staff ever reached ten percent --
6 also were placed at risk.

7 So, the first time was not '87. '87 was
8 the first that all operators were affected.

9 DOCTOR MURLEY: Yes. The point I was
10 trying -- you're right. There were exams going on,
11 but until 1987 my recollection is that individual
12 operators may have failed an exam, but it didn't place
13 their actual license at risk. It only bore on whether
14 the program was found to be effective or not.

15 MR. RUSSELL: That's correct. The focus
16 in the time frame after TMI was to look at the
17 programs and how effective the licensees were
18 maintaining their operators through the
19 requalification program and we were using the vehicle
20 of requalification examinations to make judgments
21 about programs. It was in '87 with the rule change
22 that we tried to do both at the same time. That is
23 evaluate programs and evaluate individual performance.

24 DOCTOR MURLEY: Bruce?

25 MR. BOGER: Good morning.

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1 I'm going to have to retread some of the
2 background that we've already had because I have some
3 other perspectives to share with you.

4 (Slide) Back in the early '80s, we saw
5 some rapid changes in the examination process -- I'm
6 on slide 2 -- primarily because of a lot of changes
7 that came after the Three Mile Island accident. It
8 was at this time that we started to take a hard look
9 at the examination and the process and we introduced
10 to the staff folks that had experience in testing
11 reliability and validity and terms like that that were
12 unknown to us as examiners, but we kind of understood
13 what they meant. But we started making them be a
14 requirement of the examining process.

15 The other thing that happened was that
16 between 1980 and 1985 we saw that there were a lot of
17 plants that were going to be licensed in that time
18 period. As it turns out, there were about 30
19 facilities that were licensed in that six year time
20 frame. This led us to wonder where we were going to
21 get all the examiners to conduct those exams. We felt
22 that the best place to do that was in the region. We
23 felt that the regions would have the capability to
24 recruit and retain qualified personnel that we were
25 unable to do in Headquarters. A lot of that had to do

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1 with people wanting to stay near home or stay in the
2 country and not come to Headquarters, the cost of
3 living notwithstanding.

4 So, we saw this need to reach out and get
5 additional examiners. We needed to make sure that we
6 had a plant-specific slant to the exams, to make sure
7 that the exams were valid. So, we decided to
8 regionalize at that time.

9 At the time we recognized that there was
10 the potential for inconsistencies and to address that
11 we made changes to the examiner standards. We
12 provided additional training to examiners and we also
13 instituted a program of oversight of the exams in the
14 regional offices.

15 As Tom was alluding to, there was a period
16 there where we were facing a lot of obstacles, not the
17 least of which was the rule change in 1987 which
18 required the requalification exams as the condition of
19 license renewal. But we also had the advent of
20 simulators. That same rule change required plants to
21 obtain a simulation facility. So, we were faced with
22 a situation where we had a new tool, which was a
23 simulator. We had a new requirement to conduct exams,
24 requalification exams, and so we were struggling with
25 how to do that. We had the pause in the program.

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1 After that, we made a couple of changes to the
2 examiner standards and we were trying to be responsive
3 to industry concerns, industry issues that were being
4 raised to our attention and it was kind of tough. It
5 was also a time when requalification programs were
6 growing and we had to reach this balance between the
7 threshold of what the NRC thought was an appropriate
8 testing level and what a utility did. So, we had this
9 steadying out process that really didn't finally
10 steady out until 1990 or so. As I'll indicate later
11 on, that's the time frame that we used to conduct the
12 study, because that was where we felt we had reached
13 a steady level.

14 As Commissioner Rogers indicated, in 1991
15 the Commission did have some concerns and desired
16 additional information on examination inconsistencies
17 and the problems associated with those. We did
18 contract with ICF, Incorporated to conduct the study
19 that the Commission requested.

20 (Slide) In accordance with the staff
21 requirements memo, the study objectives were to assess
22 examination quality and consistency and determine
23 possible solutions to any identified inconsistencies.
24 In addition, the study was intended to identify
25 advantages and disadvantages of various centralized

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1 and decentralized organizational structures. Finally,
2 the study was to determine any career alternatives
3 that might have been available to examiners in the
4 various alternatives.

5 (Slide) As I mentioned, the surveys
6 focused on the 1990 to 1992 time frame. This is a
7 period where we had Revision 6 to the examiner
8 standards in place. We had gained the experience
9 through the late 1980s and felt that it was a steady
10 time that we could get the best results from people to
11 survey. The survey included written questionnaires
12 and then that was followed up with in-depth
13 interviews, basically to provide additional
14 information, to confirm the original written survey
15 results and also to uncover any new issues that might
16 have existed.

17 The surveys and interviews were what I
18 would characterize as a biased random sample because
19 what we had to do, we wanted to survey the groups that
20 we thought had the most information related to the
21 examining process.

22 So, we surveyed all Headquarters, regional
23 and contract examiners and their supervisors and then
24 we looked at a random sample of sites across each of
25 the five regions and surveyed training managers,

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1 operations managers and reactor operators and senior
2 reactor operators. We also looked for information
3 from two of the support groups that utilities use.
4 One of them is NUMARC and the other is the
5 professional reactor operator's society, or PROS.

6 The interviews again were conducted on all
7 Headquarters and regional managers and then a random
8 sample of examiners and contract examiners, and then
9 another random sample of the operators that responded
10 to the survey.

11 (Slide) Next slide, please. Slide 5,
12 please.

13 This slide represents a breakout of the
14 study respondents. We're one ahead upstairs.
15 Basically, the slide identifies the number of people
16 that responded to the survey. I did want to point out
17 that the industry personnel that are on the slide
18 that's shown now is really the reactor operators, the
19 senior reactor operators and the training managers,
20 and then the PROS and NUMARC are indicated separately
21 from that.

22 We felt that --

23 COMMISSIONER REMICK: Excuse me.

24 MR. BOGER: Yes, sir.

25 COMMISSIONER REMICK: Why did you separate

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1 PROS from operators? Aren't all members of PROS
2 operators?

3 MR. GALLO: Well, no, not all of them.

4 COMMISSIONER REMICK: Not all, but most.

5 MR. GALLO: Some of them are training
6 managers.

7 COMMISSIONER REMICK: Ah-ha. But most
8 are --

9 MR. GALLO: Some of them are NRC
10 employees.

11 COMMISSIONER REMICK: I see.

12 MR. GALLO: So, there are a few unusual
13 types, but most of them are operators.

14 COMMISSIONER de PLANQUE: Any sense as to
15 why the responses were so low in that category?
16 In?

17 COMMISSIONER de PLANQUE: In the PROS
18 NUMARC category.

19 MR. GALLO: I'd have to look at the
20 numbers again.

21 MR. BOGER: I don't know. We had a fairly
22 short time frame in which to get the answers. We
23 looked for about a month turnaround. When we were
24 seeking the reactor operators, there was an emphasis
25 in the survey to try and make sure the people were

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1 going to be on shift or available during the survey
2 period so that we had pretty good confidence that we
3 would get answers back from them. I'm not sure
4 whether we used the same methodology when we went to
5 PROS to seek their input.

6 COMMISSIONER de PLANQUE: Which is strange
7 because I would think they would have a keen interest.

8 MR. BOGER: (Slide) Slide 7.

9 COMMISSIONER REMICK: Excuse me. Just for
10 verification, do you know when they went to PROS, did
11 they look at a membership list of PROS and randomly
12 select? I'm still a little curious how you separate
13 out operators from PROS, or does PROS mean that there
14 are people who are not -- members of PROS who are not
15 operators? I was just curious about the numbers.

16 MR. DEAN: My name is Craig Dean with ICF,
17 Incorporated.

18 The process that we used for PROS and
19 NUMARC was not to attempt in either case to interview
20 the overall membership or take a sample from the
21 membership. But rather we interviewed and took a
22 sample of the executives of those organizations. So,
23 the PROS people would be the people who were the
24 individuals at a particular reactor facility who'd
25 been elected or otherwise chosen as the PROS person

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1 representing that facility.

2 Unfortunately, rather than sending the
3 surveys to the sites of the facilities, PROS supplied
4 us with the home addresses of the particular people
5 involved. There may have been a slightly lower
6 response because if they weren't at home when the
7 survey arrived, if they were on vacation or something,
8 there was no process for it to be forwarded to them.

9 MR. GALLO: They do have the lowest
10 individual rate of all the groups.

11 COMMISSIONER de PLANQUE: There was a
12 statement in the report that, I don't know, may also
13 shed some light on it. It said, "In contrast, the
14 high percentage of reactor operators and senior
15 reactor operators, including those who were contacted
16 as representatives of PROS, said that they were unable
17 to state views on consistency of examinations during
18 the period under investigation because they had only
19 experienced one or two examinations or had no
20 experience at other facilities and other regions."

21 Was that accounted for, what was labeled
22 a low rate of response?

23 MR. DEAN: Yes, I think that is an
24 accurate statement. The reactor operators were chosen
25 from the list of people who had experience in

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1 examination in the period of time under study, but we
2 couldn't be certain that the PROS executives had an
3 examination in that period. So, some of them may have
4 actually not undertaken an exam during the period that
5 we were looking at.

6 COMMISSIONER de PLANQUE: Okay. Thank
7 you.

8 MR. BOGER: Okay. Slide 7 now.

9 The study revealed six major conclusions
10 and I'll be addressing them and Bob Gallo will address
11 the recommendations made in the study.

12 (Slide) Slide 8, please.

13 The first study conclusion was that the
14 program has made significant improvements. This was
15 attributed to the improved guidance in the examiner
16 standards and uniform training that's now provided to
17 examiners.

18 The second study conclusion was that the
19 examinations are generally consistent.
20 Inconsistencies that exist are minor in nature and are
21 within the bounds established within the examiner
22 standards.

23 COMMISSIONER REMICK: Although if I recall
24 the industry views were more spread than staff views
25 on that question. Is that correct?

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1 MR. GALLO: If you look at table 2-1 in
2 the first part of the study, I don't think it has a
3 page number, the two horizontal tables.

4 COMMISSIONER REMICK: Yes.

5 MR. GALLO: Look at the operators. The
6 operators gave us overall the best grades in both
7 initial and requal.

8 COMMISSIONER REMICK: Well, that's an
9 interesting point, Bob, because how would one expect
10 operators to know whether their exam was consistent
11 with either another facility in the region or
12 somewhere else in the country?

13 MR. GALLO: Right. I think that's the
14 point Craig Dean was mentioning. They did try to
15 account for that.

16 COMMISSIONER REMICK: I really applaud
17 operators' participation and input in other areas, but
18 I'm not sure they are in the position, unless they've
19 worked at another facility elsewhere in the country,
20 they would know whether their exam was consistent with
21 others.

22 MR. BOGER: The study tried to recognize
23 that some groups had more to offer in certain areas
24 and that was one where the operators would not have
25 been expected to know across regions or across other

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1 facilities.

2 COMMISSIONER REMICK: I'm not differing
3 with the conclusion, but I would not have been
4 surprised that operators didn't know and I would not
5 be surprised that our own staff felt that examinations
6 were consistent. But I am not surprised also that I
7 think that in the case of industry people the review
8 was somewhat different. Not largely different, but
9 somewhat different.

10 MR. BOGER: I think in some regards we
11 were more critical of ourselves. We felt that were
12 more inconsistent.

13 MR. GALLO: Initial exams we are more
14 critical than the industry was.

15 COMMISSIONER REMICK: Yes. At initial,
16 you're right. Yes. Okay.

17 COMMISSIONER de PLANQUE: Well, on page
18 217 of the report, the statement is made that it was
19 the contractor staff who did indeed have the
20 experience with all the regions who saw the most
21 differences.

22 MR. GALLO: That's our contractors, yes.

23 COMMISSIONER de PLANQUE: Yes. And
24 presumably they'd be in the best position to see that.

25 MR. BOGER: Yes. They write exams across

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1 all regions.

2 COMMISSIONER de PLANQUE: Yes.

3 MR. BOGER: And reactor types.

4 In that same conclusion, I think more
5 importantly is that even though the inconsistencies
6 exist, they don't effect the licensing decision. So,
7 we're making the right licensing decision and
8 licensing the right people.

9 In addition, the inconsistencies exist
10 somewhat across all exams, whether they're requal
11 exams or initial exams, although the requalification
12 exams, in particular the simulator and walk through
13 portions, were identified as the most inconsistent.

14 We're hoping that the change to Part 55,
15 which has recently been sent to the Commission, will
16 eliminate that -- or reduce that issue because that
17 proposed change would eliminate the requirement for
18 the NRC to conduct a requalification examination as a
19 condition for renewal. So, that would reduce that
20 issue.

21 The third conclusion maintained that the
22 variation in level of difficulty appears to be the
23 underlying cause of inconsistency. This is mainly
24 because the level of difficulty is primarily dependent
25 upon the examiner standard as interpreted by the

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1 examiners. Examiners have a different view of what
2 mental competency is for operators and that can cause
3 a variation.

4 I would like to point out that we
5 implemented a revision to the examiner standards which
6 was not able to be included in the study last January
7 which became effective in August which addresses this
8 very area. It was an area that we were concerned
9 about as well. So, we've taken steps to address the
10 level of difficulty issue on requalification exams.

11 COMMISSIONER ROGERS: Just on that, I was
12 just a little bit puzzled by that in the sense that
13 I'm not quite sure exactly what it means in the sense
14 that if there are variations that you're concerned
15 about with exams. What would be the types of
16 variations other than level of difficulty? The level
17 of difficulty and the grading of these, of course, are
18 somewhat connected, I think.

19 How do you sort out, for example, how do
20 you draw a distinction between variations in level of
21 difficulty and variations in expectations of the
22 examiners of whether a good job or not was done on a
23 particular type of exam. Is it clear that you can
24 separate that? Sometimes it's pretty difficult to
25 draw a distinction between difficulty in the

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1 examination and difficulty of the graders' standards
2 that are applied to the exam.

3 MR. RUSSELL: Let me address that. That
4 issue did come up in the past and I think there are
5 two things that we did in the process. One is that we
6 used parallel grading between the facility and the
7 staff so that issues of consistency and observed
8 performance are generally discussed and we expect that
9 the facility staff would identify the results first
10 and then the NRC staff would then provide their
11 observations. At one point in time we actually used
12 a criteria of the degree of agreement between the
13 candidate evaluation by the facility and the staff as
14 part of our program evaluation process. We've
15 subsequently dropped that with Revision 7 of the
16 examiner standards.

17 The other thing that we did to address the
18 level of difficulty issue, Tom Murley mentioned we had
19 the senior managers look at the simulator scenarios
20 and we provided examples in the standards of scenarios
21 that were acceptable from the standpoint of degree of
22 difficulty. We also put in what we called some speed
23 limits or road signs as it relates to structuring
24 those scenarios. But I think the most important thing
25 we did is we provided an opportunity for management

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1 review by the facility of the simulator scenario on
2 the simulator prior to examination administration such
3 that if there were issues, disputes regarding degree
4 of difficulty of the examination, that those would be
5 addressed prior to candidate evaluation rather than
6 having the question come up afterwards. After you
7 have a program that's determined to be unsatisfactory
8 because you've had some failures of performance and
9 then arguing, well, the issue was that you didn't have
10 a valid test. It was the NRC that was too hard in the
11 exam.

12 Those two changes, that is putting out
13 specific guidance on management's expectations as it
14 relates to degree of difficulty with some sample
15 scenarios and having management review of the facility
16 management prior to has essentially eliminated a lot
17 of the controversy that we were seeing in the '91, '92
18 time frame associated with requal examinations.

19 So, I think they are the two mechanisms
20 we've used to address level of difficulty and also the
21 issue of consistency of evaluation.

22 I'd also point out that because of the
23 stronger role that the utility plays in providing
24 examination materials, exam banks and developing of
25 materials, that some of the inconsistency can come

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1 from differences in approach that are taken by
2 individual utilities. Since we depend upon their
3 materials, their examiners, they propose scenarios
4 depending upon what they're doing in their own
5 training program, that can result in some differences
6 as well.

7 COMMISSIONER ROGERS: Is the variation in
8 level of difficulty principally related -- maybe not
9 entirely, but principally related to the simulator
10 portions of the exam?

11 MR. RUSSELL: That's the area that we saw
12 most of the management concerns. Less so with the
13 written examinations, which are able to be reviewed
14 more objectively after the fact. Most of the
15 complaints in the '91, '92 time frame were associated
16 with the operating portion of the test on the
17 simulator.

18 DOCTOR MURLEY: That's still the case.

19 COMMISSIONER ROGERS: I would imagine
20 that's the one that's really pretty difficult to
21 develop at a uniform level of difficulty. You have to
22 keep inventing scenarios here that are different. I
23 would imagine that there would be a tendency for them
24 to creep up in difficulty, you know, just
25 automatically. You've used up all the simple

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1 scenarios and you've got to go to one, and the only
2 thing you can think of that's different is a little
3 more difficult. So, there's a gradual creep upward in
4 the difficulty.

5 MR. RUSSELL: In fact, that was the case
6 because we had a process where we had to develop
7 scenarios that had critical tasks to be performed by
8 individuals. So, coming up with a scenario that had
9 a sufficient number of tasks to be performed, to be
10 evaluated for each individual drove the complexity of
11 the scenario. When we changed to a crew evaluation
12 and we looked at teamwork and went to a team
13 evaluation process where if an individual makes an
14 error but another member of the team corrects it and
15 the team performs successfully, it's not considered an
16 unsatisfactory performance. That has had a
17 significant improvement and that was the revision to
18 the examiner standard that Bruce mentioned that has
19 only recently gone into effect. But we have not had
20 the same types of problems and I think it's had a
21 desired effect and it has encouraged team performance
22 on the simulator portion of the exam, both in training
23 and what we've been seeing with examining.

24 COMMISSIONER REMICK: I think the degree
25 of difficulty was probably more prevalent in the BWR

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1 because the EOPs go farther out into the interaction
2 space and --

3 MR. RUSSELL: It was interesting. We saw
4 a shift. Early on there was a higher failure rate on
5 the PWR examinations, but that shifted and by about
6 1992 it was principally a BWR issue, BWRs with the
7 structure of the EOPs and having to maintain
8 cognizance of a number of critical parameters and
9 taking action on those in parallel and going further
10 into difficulty with respect to some potential severe
11 accident scenarios made the BWR exams more difficult.
12 In fact, that's an issue we're still addressing as it
13 relates to accident management procedures and how they
14 will be factored into training now. That's ongoing
15 with the owners' group.

16 DOCTOR MURLEY: But one area, I think Bill
17 mentioned it, but it would emphasize it. We have
18 standardized the scenarios, have we not, for BWR
19 simulator exams. So, that was one area we felt did
20 need some attention and we've taken steps to do that.

21 COMMISSIONER REMICK: No, I definitely
22 stipulated I think the whole examining procedure has
23 improved dramatically in recent years, in the great
24 sensitivity shown by the staff, in the problems that
25 we were hearing about and it goes back to Jack Rowe

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1 and Ted Perkins and Bruce and Bob, they have done a
2 good job.

3 MR. BOGER: Let me address the fourth
4 study conclusion now that the current regional
5 structure is not a key contributor to the
6 inconsistency. As we've discussed somewhat, even
7 though there are differences in regional approaches to
8 the exam, the quality assurance people that are giving
9 the exams, the single most important factor is the
10 individual examiner him or herself in determining the
11 inconsistency.

12 COMMISSIONER REMICK: Bruce, that's one
13 that -- I agree with what's said, but at the same
14 time, and I'm not pushing for centralization at
15 Headquarters or anything, but don't you agree that if
16 all the operator examiners were at one location and
17 there was cross communication, better opportunity for
18 cross communication, that there would be greater
19 chance for consistency among examiners, being it's
20 distributed five or six different locations in the
21 country.

22 MR. BOGER: There would be an improvement
23 there. But I guess I would have to draw from my own
24 knowledge and perhaps you should too. What I found
25 was that -- I still had my own experience at a plant

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1 and would draw on that to get my exams. I would
2 expect that others would too. So, there would
3 certainly be a leveling of experience that way.

4 COMMISSIONER REMICK: But still some
5 differences.

6 MR. BOGER: Some inconsistencies along the
7 way.

8 Before I talk about the last two study
9 conclusions, I wanted to digress for a moment and talk
10 about the organizational structures that were
11 considered in the study for comparison. The study
12 analyzed the current structure, it viewed a
13 centralized version where all the examiners were in
14 Headquarters or in the technical training center in
15 Chattanooga or in Region II and it also looked at
16 another structure which maintained the examiners and
17 section chiefs in the region, but had them report to
18 a central organization in Headquarters.

19 COMMISSIONER REMICK: The one thing,
20 Bruce, that it did not look at, it's very closely
21 related, and that is the people stay in the regions
22 where they can participate in other regional
23 activities and therefore make the job perhaps more
24 interesting to them but be very helpful to the
25 regions, still be able to do those things, but their

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1 function as operator licensing examiners be centrally
2 directed.

3 In other words, that means they have two
4 bosses, which has disadvantages, but that's one aspect
5 that I don't think came out in the study. It said if
6 they stayed in the region and the function or it's
7 called centralize the line of authority with
8 Headquarters, that they'd be 100 percent on operator
9 licensing. That is not necessarily the only option.
10 They could continue to be part-time operator licensing
11 examiner, part-time inspectors or AIT members, but
12 when they are functioning as examiners that line of
13 authority could be centrally -- that option I don't
14 think was brought out in the study, at least that I
15 could find.

16 MR. BOGER: That sounds pretty close to
17 what we have now.

18 COMMISSIONER REMICK: And it might be.
19 That was a question I had.

20 MR. BOGER: It's very close to what we
21 have.

22 COMMISSIONER REMICK: Or close to the
23 recommendations of closer oversight.

24 MR. BOGER: Yes.

25 COMMISSIONER REMICK: Yes.

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1 MR. BOGER: I did want to point out some
2 of the contrasting information that comes out of the
3 various alternatives. We do gain benefits from
4 centralization. Certainly the cross talk among
5 examiners is a big benefit. But then we lose things
6 like travel time. We lose things like perhaps the
7 unique knowledge of the facility, the opportunity to
8 walk down the hall and talk to the regional project
9 section chief that understands what's going on
10 currently at a plant. The technical training center
11 offers the benefit of having simulators for the
12 examiners to test out their scenarios. But again,
13 travel is very difficult out of Chattanooga.

14 So, there are pluses and minuses among all
15 of them and the study tried to look at those and we
16 considered them as well in our analysis.

17 Now, moving on to number 5 on the study
18 conclusions, the career advancement opportunities as
19 they are perceived by the examiners differ somewhat by
20 region because some of the regions are larger. Some
21 of the regions have more opportunities, more slots for
22 examiners to move into. The same could be said true
23 of Headquarters. There are other project management
24 slots or other technical slots that the examiners
25 could move into.

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1 The examiners that I talked to like being
2 examiners. They think it's a very important job and
3 they treat it that way. But they also realize that
4 being an examiner only is very boring and it becomes
5 humdrum and they like going out on AITs, participating
6 in inspections, but they like the best of both. But
7 we realize that that is what causes some of the
8 inconsistency. If we take time away from being an
9 examiner, doing something else, then it lessens the
10 emphasis that that can place on exams. So, that's the
11 dichotomy that we face.

12 What we're trying to do are to encourage
13 the regions to allow the examiners to obtain inspector
14 certifications. This has been going on for a couple
15 of years. So, the examiners suddenly have another
16 qualification. Not only are they valuable to the
17 regional administrator because of the operational
18 experience that they bring to the table, but they also
19 will have an inspection background that will allow
20 them to inspect in other areas. So, that's broadened
21 the career opportunities for them. In addition, the
22 Region IV/V alignment will combine two of the smaller
23 regions and give them a little better shot at the
24 opportunities there.

25 But we'd all be first to admit that the

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1 examiners have the opportunity to bid on all the jobs
2 that we have and we've seen that they've been
3 successful in moving to other areas of the
4 organization because of their expertise.

5 COMMISSIONER REMICK: Bruce, I might say
6 that this bit of career advancement opportunities is
7 what stimulated me on top of going back at that time
8 frame when -- came up with this idea of still a lot of
9 complaints of inconsistency. But in talking to some
10 of the examining people, particularly consultants,
11 trying to get a feeling why this was the case, it was
12 pointed out to me that very point, that in a small
13 region if a person really wanted to progress in the
14 organization in that region as an operator examiner,
15 he didn't stand much chance. He might be one or two
16 people. So, if he wanted to advance or do other
17 things, he kind of had to go into inspection or
18 something like that. This resulted in, I was told, a
19 large turnover of people. People who might be happy
20 being examiners, but who also would like to advance
21 over a period of time in the organization had to kind
22 of go another direction. So there was a large
23 turnover of these people, new people coming in, not
24 having experienced examiners and so forth, resulting
25 in inconsistency.

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1 It was this that made me feel that we
2 really ought to look at this. If that's the case,
3 maybe perhaps by centralizing either the whole
4 function or just the lines of authority might lead
5 people to be a part of a bigger pool and therefore
6 stand for chances to become a section chief or branch
7 chief and so forth, but it was this bit of what I was
8 told of lack of career opportunity in the small
9 regions that I really thought we should look at, and
10 that was on top of hearing complaints about
11 inconsistency at that time.

12 MR. RUSSELL: If I could provide a
13 comment, when I went to Region I in 1987 one of the
14 things that I did was at that time cross-qualifying
15 examiners as inspectors and we reorganized the
16 Operations Branch and essentially had a section that
17 focused on BWRs and one that focused on PWRs. I found
18 them very capable individuals and they particularly
19 made significant contributions on the mandatory team
20 inspections on emergency operating procedures in other
21 areas and I think a number of those people have
22 succeeded in management positions. One of them is
23 here at the table who started out as a section leader,
24 is now a branch chief at Headquarters. So, there is
25 a benefit to that.

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1 I believe also the proposal that we have
2 pending with the Commission now, the rule change in
3 which a fundamental shift is from conducting examining
4 activities to conducting inspecting activities, we're
5 going to necessarily have to qualify our examiners to
6 be inspectors. Although it will clearly be in their
7 area of expertise, it's going to be focusing on
8 operations aspects. But I think that will result in
9 broadening assignments, because once they are
10 qualified as inspectors they can be used on AITs and
11 other types of inspections, so I think that this will
12 have a positive benefit.

13 I know that from an emergency response
14 standpoint when you have to man the emergency
15 facilities in the regions, it's very desirable to have
16 somebody who knows the EOPs well that can provide
17 information as to what's going on at the time, and
18 that's a role that I think is also very valuable from
19 a regional administrator perspective of having that in
20 the regions.

21 COMMISSIONER REMICK: No question about
22 it.

23 MR. RUSSELL: And you'd lose that, I
24 think, if you were to centralize it.

25 MR. BOGER: The regional administrators

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1 are very cagey in how they use their resources, and,
2 even though we give them, say, seven FTE to perform
3 the operator licensing function, they may have ten or
4 twelve certified examiners. So they conduct the
5 licensing function, but they are able to use the
6 people in other avenues very much to their advantage.

7 The final study conclusion was that
8 recentralization would not eliminate inconsistency.
9 It speaks that recentralization could provide some
10 modest gains in inconsistency because of the issues
11 that we've talked about, but we still have to control
12 the differences among examiners and that's probably
13 the thing that we have to address most.

14 (Slide) Next slide, please.

15 Now our assessment of the study is that we
16 should retain the current organizational structure,
17 again because the human element or the examiners
18 rather than the organizational structure is what
19 drives the inconsistencies in the program. And I
20 would have to say again that those inconsistencies are
21 viewed to be minor and not an impediment to the
22 licensing process.

23 In addition, we just feel that an overhaul
24 of the program wouldn't be beneficial right now, that
25 we're pretty stable.

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1 I'd like Bob Gallo now to discuss the
2 changes that we'll consider as a result of the
3 recommendations.

4 MR. GALLO: Thank you, Bruce.

5 Yes, I'd like to call attention -- we're
6 evaluating the contractor's recommendations to
7 determine the most cost-effective way to maximize
8 examination consistency and the staff will give
9 priority to those recommendations that can be
10 implemented with the existing staffing levels.

11 I would like to talk about study
12 recommendation number 1 and then study recommendation
13 number 3, because I believe they are closely related.

14 Study recommendation number 1 discusses in
15 general the expand Headquarters oversight activities
16 and there are two bullets there: increase field audits
17 of chief examiners, and audit exams from a measurement
18 perspective.

19 In response to recommendation number 1,
20 Operator Licensing Branch will conduct a pilot post-
21 examination audit process, and that pilot audit will
22 be conducted as a table-top review of several initial
23 licensing examinations from all five regions to
24 determine if such an audit is a cost effective way for
25 measuring examination quality and level of difficulty.

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1 We do now do a number of field audits
2 every year. We've done in the neighborhood of 15 to
3 20 per year, going out and observing exams. We have
4 not done an in-office audit of exams to look at exam
5 level of difficulty or quality. As a matter of fact,
6 if you look at recommendation number 3, it addresses
7 the fact that the examiner standards do need or are
8 recommended to have some enhancements and it is in the
9 area of providing additional guidance or examples on
10 appropriate level of difficulty.

11 So, our plan is that the -- well, we use
12 the results of the pilot examination or the pilot
13 audit to determine if additional guidance is needed
14 regarding the appropriate level of difficulty for
15 initial examination development. The revised guidance
16 would then be used as criteria for future examination
17 development and for auditing process.

18 As previously mentioned, we did do a
19 similar evaluation of examination scenarios in 1991
20 and that was limited specifically to requalification
21 examinations. From that the results were used to
22 develop -- we called it a complexity study, which I
23 think is closely related to level of difficulty and we
24 used that study to provide Revision 7 quantitative and
25 qualitative criteria for scenarios. We did not put

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1 those same criteria into the standards for initial
2 examinations. The exams conducted under Rev. 7, as
3 Bruce mentioned, was published in January '93 and the
4 exams were fully implemented in August of '93. So,
5 the results of the Rev. 7 exams really aren't
6 incorporated into the study. We have had -- I have
7 checked with regions and with our NUMARC contacts and
8 we've had zero complaints about the Rev. 7 exams that
9 have occurred on any level of complaint.

10 The results of the new pilot exam audit
11 will be used to also rereview the level of difficulty
12 guidance that's in Rev. 7 for regualification exams.
13 So, we will look at it again in the initial exam area
14 and decide what is needed for guidance. If it's
15 quantitative and qualitative criteria, we'll have to
16 insert those into the standards.

17 Okay. So, that was the end of number one
18 and number three.

19 In number two, the study recommendations
20 had to do with increasing trading opportunities and
21 there were three separate bullets. The staff, HOLB,
22 will conduct a training needs assessment for the
23 examiners to identify any additional specific training
24 activities needed. There were several recommendations
25 in the study. Some of them are outside the scope of

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1 NRR. They're more Office of Personnel courses and
2 they are available, but we'd like to write them down,
3 the ones that we think examiners or supervisors need
4 to have as opposed to would like to have.

5 We did do such a needs assessment back in
6 about 1987, '88, and about 1989 we started giving our
7 own two week course at the TTC for new examiners.
8 That's a written exam, techniques, and an operating
9 techniques course that examiners take, and in the last
10 two years or so we've developed a refresher techniques
11 course that we give here in Headquarters which is one
12 week and it's based on the prior course but it talks
13 a lot about developing exams and giving exams and
14 professionalism during exams and those types of
15 activities.

16 So, we do have a two week basic course for
17 all examiners and a one week refresher course that are
18 techniques-based. Of course, there are technical
19 courses all the examiners complete too. So the
20 training needs assessments will tell us more
21 specifically if there are additional courses needed.

22 One of the things that's in the study is
23 specific training for examiners on examiner standard
24 revisions. When REV 7 came out we talked about it we
25 thought in sufficient detail at the examiners

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1 conference last summer, but the survey says different,
2 that people think they need a more structured course
3 on the examiner standards themselves, especially when
4 there's a change, a major change that was made, so
5 that's one area we'll be specifically looking at.

6 The fourth recommendation regards
7 promoting regional interaction and communication, and
8 one had to do with a quarterly examination newsletter.
9 The staff is going to pursue an electronic bulletin
10 board concept accessible by NRC staff and by NRC
11 contractors. We've got a couple options in that area
12 right now that we're looking at and we think one of
13 those will work.

14 The last bullet has to do with regional
15 rotations and interaction and, again, we're going to
16 explore some alternatives to increase regional staff
17 assignments in other regions. We've done this in the
18 past, but it's never been on a periodic basis or
19 specifically required of any particular examiner to
20 rotate. It's been a little more hit or miss activity.
21 When somebody needed help they could go to another
22 region and regional people have participated across
23 region and I think it's traditionally been going on
24 for years but it's never been a program. It's been an
25 activity that's happened.

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1 I think that concludes the summary of our
2 proposals on the recommendations.

3 MR. TAYLOR: That concludes the staff's
4 presentation.

5 COMMISSIONER ROGERS: Commissioner Remick?

6 COMMISSIONER REMICK: What is the average
7 tenure of an examiner these days as an examiner? I
8 realize they might leave the Agency, but they might
9 move on within the Agency.

10 MR. GALLO: I'd say recently, since I've
11 been in Headquarters, I think their turnover has been
12 very low. I know some examiners have been doing it
13 for eight or ten years. Recently there has been a
14 little more turnover, particularly in one region. One
15 section in one region all of a sudden has had quite a
16 bit of turnover, but I'm not sure I could pick out a
17 number right now. We could find out.

18 MR. TAYLOR: We can give you that number.

19 MR. GALLO: Turnover, as has been typical
20 of the rest of the NRC, has not been high.

21 COMMISSIONER REMICK: Since I originated
22 the concept of the study, perhaps a couple of things
23 I should say.

24 One, I found the study generally good. In
25 other words, the pros and cons of certain things that

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1 I had not thought about before and so forth I thought
2 were brought out in the study, so generally I thought
3 it was very good.

4 I must admit I was disappointed it took us
5 over two years to get a couple months study completed,
6 but in hindsight perhaps that wasn't bad either
7 because I think probably things have improved in that
8 time period and maybe there is less inconsistency than
9 one heard about two or three years ago when it was
10 more prevalent, I believe, and there's no question in
11 my mind that both the training and the examination of
12 operators has improved from the standpoint of
13 consistency and fairness and so forth, but I still
14 think it was good to have the study done because I
15 think some important things were brought out.

16 If I look at the study, and generally
17 agree, one that came out is that centralizing the
18 people at Headquarters is a no-no. Examiners in
19 general, I know, are a slightly different breed of
20 individual. They like to be out in the plants, and so
21 forth, and many of them like to live in the region, so
22 I think that could be disastrous from the standpoint
23 of losing the current ones.

24 The concept of centralizing elsewhere
25 apparently might be possible, as you point out. The

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1 Technical Training Center has some advantages, but
2 certainly transportation is not good and it would
3 require the movement of a number of people. And
4 although there might be a preference for Region II,
5 removing the Operator Licensing Branch from
6 Headquarters would be, I think, a disadvantage to the
7 rest of the staff because I think the Operator
8 Licensing Branch input into staff activities is
9 extremely important at Headquarters.

10 I think there's no question about it from
11 my standpoint that retaining the examiners at the
12 regions is the best course. I guess I was a little
13 concerned in there. There seemed to be some strong
14 implications that anything other than that the
15 regional administrators would oppose. I can
16 understand it personally, but I'm not sure that's what
17 would drive me.

18 MR. TAYLOR: Didn't you say they were
19 cagey?

20 MR. GALLO: I don't think they were part
21 of the survey either.

22 MR. BOGER: There's two at the table.
23 Maybe they can speak for themselves.

24 COMMISSIONER REMICK: It came out fairly
25 clear they'd be opposed and I'm not too surprised.

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1 Unquestionably, I think the examiners
2 would prefer to stay in the regions. One, either
3 living conditions or being -- have greater chance to
4 be involved in other regional activities and I really
5 do think they, like OLB contributes to Headquarters,
6 I know that the operator licensing examiners help the
7 regions also with the insight they have on operational
8 problems.

9 However, this bit of centralizing the
10 function, as I call it, to report, centralizing lines
11 of authority I still think is an option, not as I read
12 in the study that people then would be 100 percent
13 examiners, but their function as examiners would
14 receive closer scrutiny and let me say control or
15 management from Headquarters. Now maybe that's what
16 is intended by the recommendations in the report and,
17 as you've outlined, Bob, of closer audit and so forth.
18 I come out thinking that is the best option.

19 In other words, retain the operators in
20 the region -- examiners, excuse me, to remain in the
21 region, allow them to participate in other regional
22 activities but with closer lines of control centrally
23 so that we do have greater consistency in
24 communication. Now maybe that's what the report says
25 or comes close to it and maybe, as you point out,

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1 that's what you are doing now. I guess it's not
2 completely what you're doing now, because you've
3 indicated there are some changes that you would make.

4 But I must admit I was a little dubious
5 when I read the SECY itself, but, when I read the
6 report and so forth and read the explanations given,
7 I thought generally it was a good study in a very
8 short period of time and I don't differ, although I'm
9 not quite sure if what I am suggesting of the
10 centralizing the lines of authority is exactly what
11 you have in mind, close to mine. Would you want to
12 respond to that?

13 MR. BOGER: I think you pointed out that
14 in an organization like that the examiners would face
15 two masters.

16 COMMISSIONER REMICK: Yes.

17 MR. BOGER: And the same people that would
18 like them to go on AITs are competing with the next
19 exam. I guess we really hadn't thought about that,
20 but that's the competing interests and that requires
21 a higher level of management to decide which one is
22 more important at any given time, but we had not
23 really looked at that as one of the options.

24 MR. RUSSELL: If I could just comment, I
25 think the situation is not different for operator

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1 licensing than it is broadly for implementation of the
2 inspection program. That is, oversight by
3 Headquarters to ensure consistency with program intent
4 and guidance needs to be conducted, but I think the
5 individuals need to have clear accountability to their
6 supervisors and managers.

7 There has always been a degree of
8 Headquarters oversight. We have various protocols
9 that we use for conducting evaluations of the regions
10 in their performance of the operator licensing
11 functions as well as the inspection functions and I
12 think that's probably the appropriate focus with
13 ensuring that we have provided consistent guidance in
14 this area and then conducting sufficient oversight to
15 assure that the guidance is indeed being followed and
16 holding the managers in the regions accountable for,
17 one, knowing what the guidance is, and then in fact
18 implementing it.

19 So I believe the oversight role of the
20 program, which in the case of operator licensing is
21 one of the things that we hold Bob Gallo responsible
22 for, for actually conducting the oversight activities
23 of the regions, observing some examinations, et
24 cetera, and enhancing that oversight role is
25 essentially the focus that we're providing. And it's

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1 similar to the focus we're providing for the
2 inspection program in other areas, so I really believe
3 that that's the appropriate focus.

4 We need to make sure that the policies and
5 the guidance are understood and then we need to
6 follow-up to make sure that they are in fact being
7 followed, and so I think this is a broader question
8 than just in the operator licensing area. I think it
9 applies equally well to inspection and other
10 regionalized activities that would be conducted in
11 accordance with Headquarters policy and guidance.

12 COMMISSIONER REMICK: Very good point.
13 Very good.

14 That's all I have.

15 COMMISSIONER ROGERS: Commissioner de
16 Planque?

17 COMMISSIONER de PLANQUE: I have one
18 question that I'd just like a little more follow-up
19 on. I think I heard you say earlier that some of the
20 training needs might fall in the area of personnel
21 type. Could you just elaborate on that a little?

22 MR. GALLO: There were several in the
23 recommendation. I can't remember the -- I might
24 remember some of the specific courses, but they were
25 things like time management, interviewing

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1 techniques --

2 MR. BOGER: Providing feedback to
3 employees, correcting employees.

4 MR. GALLO: Some of the things I think
5 employees wanted their supervisors to take. That's
6 what it looked like. And some of them were things
7 that they would like more of, like interviewing
8 techniques and time management, because you've got to
9 get your exam done and you've got to get the exam in
10 in a week and you've got to schedule things, those
11 sort of things that were not technically related but
12 they do already exist in the Office of Personnel's
13 calendar. But they're not required, so if somebody
14 needs -- if we say they're required, then the region
15 will have to send them, so that's why we need to take
16 a close look at it and see whether it ought to be a
17 mandatory course or just an available optional course.
18 It's always been optional. If somebody has it on
19 their IDP, they'll probably eventually get to go to
20 the course.

21 COMMISSIONER de PLANQUE: It sounds like
22 the more generic management type courses that probably
23 everyone could profit from taking a little more of.

24 MR. GALLO: Yes. Yes.

25 COMMISSIONER de PLANQUE: Well, I would

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1 say I especially enjoyed reading the report. I
2 thought it was very well done and I especially
3 appreciate all the statistics in the appendix that
4 give you a feeling for the quality of some of the
5 conclusions and the confidence that you can have in
6 some of the conclusions, so I thought it was extremely
7 well done.

8 It's in retrospect not surprising that the
9 variations are probably more due to differences
10 individual to individual than almost anything else, so
11 it strikes me that the recommendations along the lines
12 of rotation and along the lines of more communication
13 among the individuals involved would indeed be
14 extremely helpful as it usually turns out to be in
15 most situations.

16 So I would just like to say it's been a
17 good briefing and I think it was a very well done
18 report.

19 Thank you.

20 COMMISSIONER ROGERS: I'd just like a
21 little clarification on how to read figure II-6, which
22 is on that same page, with respect to the NUMARC data.
23 This is a percent of those interviewed or how do I
24 read that, "NUMARC 100 percent inconsistent"?

25 MR. BOGER: I'm sure that refers to the

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1 people that actually responded.

2 COMMISSIONER ROGERS: So that everyone
3 from NUMARC who was interviewed in this survey said
4 that there was a problem across examiners with
5 consistency --

6 MR. BOGER: That population is 3.

7 COMMISSIONER ROGERS: -- in the
8 requalification?

9 Three?

10 MR. BOGER: That population is 3.

11 COMMISSIONER ROGERS: So it's 3, okay. So
12 they all just agreed that there was a problem in the
13 requalification exams with examiner uniformity? Is
14 that how one reads that?

15 MR. BOGER: Yes.

16 COMMISSIONER ROGERS: Not that 100 percent
17 of the exams are inconsistent, but just that there is
18 a problem?

19 MR. BOGER: Yes, sir. That's correct.

20 COMMISSIONER ROGERS: You can't read
21 anything more than that into it.

22 I wonder if you have thought yet about
23 schedules and costs for implementing the
24 recommendations 1 through 4 yet. Have you gotten to
25 that?

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1 MR. RUSSELL: I've provided some
2 management guidance.

3 COMMISSIONER ROGERS: Tomorrow at no cost?

4 MR. RUSSELL: We do have some discretion
5 within our oversight activities and what we've gotten
6 are we've gotten some ideas of areas to look into that
7 can be done, I believe, with a redirection of
8 resources. I'm not proposing to increase staff in the
9 Headquarters unit at this point and we are looking
10 broadly at management oversight and streamlining
11 activities and further empowerment of inspectors and
12 examiners as we reduce the number of management
13 positions.

14 So there are things which are pulling both
15 directions at this time and, while it's very easy to
16 say "provide more management oversight and direction,"
17 you cannot do that at the same time that you're
18 reducing management oversight and direction. So
19 within the context of our budget resources, as Bob
20 laid out, we've looked at the things that we can
21 accomplish which we think are responsive that are
22 consistent with the resources that we have available
23 in the near term, and that's what we're proposing to
24 do starting this fiscal year.

25 COMMISSIONER ROGERS: Do you expect to

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1 have any follow-up report to the Commission on exactly
2 how you have implemented the recommendations after
3 you've finished?

4 MR. RUSSELL: We had not anticipated that,
5 but we certainly could. We do our annual evaluations.

6 MR. TAYLOR: We can provide that
7 information to the Commission.

8 MR. RUSSELL: We provide an annual report
9 and we can incorporate this into our annual report.

10 COMMISSIONER ROGERS: In that section of
11 the annual report.

12 MR. TAYLOR: That might be good. Do you
13 know when the next one is due?

14 MR. GALLO: February.

15 MR. TAYLOR: February. We may have
16 something by then.

17 MR. GALLO: Maybe an outline.

18 MR. RUSSELL: May be short by February,
19 but we can incorporate it into our upcoming annual
20 reports. Just from the standpoint of implementing it,
21 completing the studies and having results by February
22 would be quite tight, I think.

23 COMMISSIONER ROGERS: Yes. Yes.

24 MR. GALLO: I really think this is a
25 several year project, some of these activities.

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1 COMMISSIONER ROGERS: Well, I think
2 someplace indicating to us where it stands and what
3 has been accomplished and closed out and whether
4 there've been any costs and how in fact you've managed
5 the cost problem, you know, what the trade-offs are
6 that have been made in carrying out a recommendation
7 at no net increase in cost.

8 MR. RUSSELL: I think the biggest issue
9 right now in the operator licensing program is the
10 decision that's pending before the Commission on the
11 final operator licensing rule and the implications for
12 staff resources of going forward with that rulemaking
13 and shifting to an inspection mode rather than an
14 examining mode.

15 MR. TAYLOR: I agree.

16 MR. RUSSELL: So we're going to have to
17 digest those changes once the Commission acts.

18 COMMISSIONER ROGERS: So you're leaving a
19 message with us.

20 MR. TAYLOR: Yes.

21 MR. RUSSELL: Trying to.

22 MR. TAYLOR: I agree with what Mr. Russell
23 said.

24 COMMISSIONER ROGERS: Well, on behalf of
25 all of us, I'd like to thank you very much for an

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1 interesting briefing and also to commend the work of
2 the contractors or the contractor in producing this
3 study. It looks like a very professional, very
4 complete job, well documented, but I do have to agree
5 with Commissioner Remick that it is a little bit
6 puzzling as to how it took two years to decide to do
7 a study that took two months, but maybe that's just
8 the way things are, that maybe other things
9 interfered, but one would hope that perhaps that's not
10 a way of life in the future.

11 Thank you very much for a very informative
12 briefing.

13 (Whereupon, at 11:06 a.m., the above-
14 entitled matter was adjourned.)
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TITLE OF MEETING: BRIEFING ON RESULTS OF OPERATOR LICENSING
PROGRAM RECENTRALIZATION STUDY
PLACE OF MEETING: ROCKVILLE, MARYLAND

DATE OF MEETING: DECEMBER 14, 1993

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**COMMISSION BRIEFING ON
EVALUATION OF THE OPERATOR EXAMINATION
AND LICENSING FUNCTION**

DECEMBER 14, 1993

**Contact: Robert M. Gallo
Phone: 504-1031**

BACKGROUND

- **Operator licensing decentralized in the early 1980s**
- **Created potential for regional inconsistency**
 - **Enhanced Examiner Standards**
 - **Implemented regional oversight program**
- **1991 - Commission directed study of issue**
- **1993 - ICF, Incorporated, conducted its study**

STUDY OBJECTIVES

- **Assess examination quality and consistency**
- **Determine possible solutions to identified problems**
- **Identify advantages and disadvantages of centralized and decentralized structures**
- **Determine career alternatives available to examiners**

STUDY METHODOLOGY

- **Surveys focused on the 1990-1992 time frame**
- **Survey included questionnaires and indepth interviews**
- **Surveys and interviews were randomly selected**

STUDY POPULATION

**83 NRC
Personnel**

Examiners

**Division
Directors**

Branch Chiefs

Section Chiefs

**36 Contractor
Personnel**

Examiners

Managers

**177 Industry
Personnel**

Operators (128)

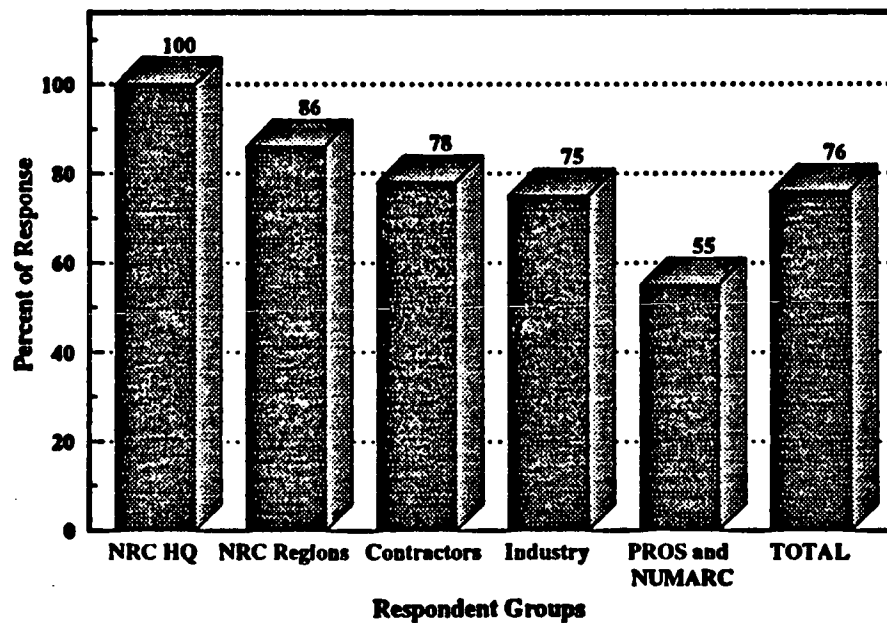
Managers (17)

NUMARC (3)

PROS (29)

SURVEY RESPONSE RATES

- Survey population of 390
- 296 responses (76%) received within 30 days



STUDY RESULTS

- **6 Major conclusions**
- **4 Recommendations**

STUDY CONCLUSIONS

- **The program has made significant improvements**
- **Examinations are generally consistent**
- **Variation in level of difficulty is a concern**
- **Regional structure is not a key contributor to inconsistency**
- **Career advancement opportunities differ by region**
- **Recentralization would not eliminate inconsistency**

STAFF CONCLUSION

Retain the current organizational structure

- **The human element is the primary determinant of inconsistencies**
- **Current level of variation does not warrant a major overhaul**

STUDY RECOMMENDATION 1

Expand Headquarters Oversight Activities

- **Increase Field Audits of Chief Examiners**
- **Audit Exams from a Measurement Perspective**

STUDY RECOMMENDATION 2

Increase Training Opportunities

- **Conduct a Training Needs Assessment**
- **Explore New Formats for Training Delivery**
- **Develop a Manager Refresher Training Course**

STUDY RECOMMENDATION 3

Examiner Standards Enhancements

- **Provide Additional Guidance or Examples on Appropriate Level of Difficulty**

STUDY RECOMMENDATION 4

Promote Greater Regional Interaction and Communication

- **Produce a Quarterly Examiner Newsletter**
- **Increase Regional Rotations and Interaction**