

ORIGINAL ACRST-1995

OFFICIAL TRANSCRIPT OF PROCEEDINGS

**Agency:** Nuclear Regulatory Commission  
Advisory Committee on Reactor Safeguards

**Title:** 475th General Meeting

**Docket No.**

**LOCATION:** Bethesda, Maryland

**DATE:** Friday, January 7, 1994

**PAGES:** 238 - 281

ACRS Office Copy - Retain  
for the Life of the Commission

120083

ANN RILEY & ASSOCIATES, LTD.

1612 K St., N.W., Suite 300

Washington, D.C. 20006

(202) 293-3950

9401130002 940107  
PDR ACRS  
T-1995

PDR

ORIGINAL **ACRST-1995**

**OFFICIAL TRANSCRIPT OF PROCEEDINGS**

**Agency:** Nuclear Regulatory Commission  
Advisory Committee on Reactor Safeguards

**Title:** 405th General Meeting

**Docket No.**

**LOCATION:** Bethesda, Maryland

**DATE:** Friday, January 7, 1994

**PAGES:** 238 - 281

ACRS Office Copy - Retain  
for the Life of the Document

120033

**ANN RILEY & ASSOCIATES, LTD.**

1612 K St., N.W., Suite 300

Washington, D.C. 20006

(202) 293-3950

9401130002 940107

PDR ACRS

T-1995

PDR

PUBLIC NOTICE BY THE  
UNITED STATES NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS

DATE: January 7, 1994

The contents of this transcript of the proceedings of the United States Nuclear Regulatory Commission's Advisory Committee on Reactor Safeguards, (date) January 7, 1994, as Reported herein, are a record of the discussions recorded at the meeting held on the above date.

This transcript has not been reviewed, corrected or edited, and it may contain inaccuracies.

**ANN RILEY & ASSOCIATES, Ltd.**  
Court Reporters  
1612 K. Street, N.W., Suite 300  
Washington, D. C. 20006  
(202) 293-3950

1 UNITED STATES OF AMERICA  
2 NUCLEAR REGULATORY COMMISSION

3  
4 ADVISORY COMMITTEE ON REACTOR SAFEGUARDS

5  
6 405th GENERAL MEETING

7  
8 Nuclear Regulatory Commission

9 Conference Room P-110

10 7920 Norfolk Avenue

11 Bethesda, Maryland

12 Friday, January 7, 1994  
13

14 The meeting convened, pursuant to notice, at 8:30  
15 a.m., J. Ernest Wilkins, Chairman of the Committee,  
16 presiding.  
17  
18  
19  
20  
21  
22  
23  
24  
25

ANN RILEY & ASSOCIATES, LTD.  
Court Reporters  
1612 K Street, N.W., Suite 300  
Washington, D.C. 20006  
(202) 293-3950

## 1 PARTICIPANTS:

- 2 E. WILKINS, Chairman of the ACRS  
3 J. CARROLL, Vice-Chairman of the ACRS  
4 C. WYLIE, Member of the ACRS  
5 H. LEWIS, Member of the ACRS  
6 I. CATTON, Member of the ACRS  
7 T. KRESS, Member of the ACRS  
8 W. LINDBLAD, Member of the ACRS  
9 P. DAVIS, Member of the ACRS  
10 R. SEALE, Member of the ACRS  
11 W. SHACK, Member of the ACRS  
12 J. LARKINS, Executive Director of the ACRS  
13 S. DURAISWAMY, Designated Federal Official  
14 J. SNIEZEK, NRC/EDO  
15 J. MILHOAN, NRC/EDO
- 16  
17  
18  
19  
20  
21  
22  
23  
24  
25

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

[8:30 a.m.]

1  
2  
3 MR. WILKINS: The meeting will now come to order.  
4 This is the second day of the 405th meeting of the Advisory  
5 Committee on Reactor Safeguards. During today's meeting,  
6 the committee will discuss and/or hear reports on the  
7 following: one, preparation of ACRS reports; two, future  
8 activities; three, report of the planning and procedures  
9 subcommittee and four, reconciliation of ACRS comments and  
10 recommendations.

11 In addition, the Committee will meet with Mr.  
12 Sniezek, Deputy Executive Director for Nuclear Reactor  
13 Regulation and Regional Operations and Research and Mr.  
14 Milhoan, who will succeed Mr. Sniezek in February, to  
15 discuss items of mutual interest.

16 A portion of today's meeting will be closed to  
17 discuss organizational and personnel matters that relate  
18 solely to the internal personnel rules and practices of this  
19 advisory committee and matters the release of which would  
20 represent a clearly unwarranted invasion of personal  
21 privacy.

22 This meeting is being conducted in accordance with  
23 the provisions of the Federal Advisory Committee Act.

24 Mr. Sam Duraiswamy is the designated federal  
25 official for the initial portion of the meeting.



1 have some things they would like to talk about that are not  
2 on your agenda but that is okay, too.

3 MR. SNIEZEK: Great. I appreciate the opportunity  
4 to come down here as a farewell meeting with the Committee.  
5 In the future you may see me sitting back there someplace  
6 occasionally. Who can tell? But I am very satisfied to be  
7 leaving the Commission at this time after I have been here  
8 about 25 years with the Commission.

9 There are two topics I really want to chat with  
10 you about that were on my mind. One of them is the  
11 direction the staff is heading and some of my personal views  
12 on it and the second one is the ACRS interaction with the  
13 staff.

14 I am going to be very candid in everything I say.  
15 I usually am and I will just get started. I was reflecting  
16 on my career with the agency and I started in 1969 in the  
17 Atomic Energy Commission as an inspector in our Region III  
18 office so I have come through all the different layers and  
19 the different offices in my career and I have seen many  
20 changes in the way we do things during that time frame, some  
21 of the good things we do and some of the stuff that we do  
22 that isn't too good during that time frame.

23 I was reflecting on my first inspection where I  
24 was going out with a seasoned inspector when I was in  
25 training and we went out to Big Rock Point in 1969, October,



1 and it was the first time I had been in a commercial nuclear  
2 power plant control room.

3 I walked in there and the operators were sitting  
4 there, feet up on the desk, reading the newspaper and taking  
5 life fairly easily and I said to myself, "That is not the  
6 way we operated in the Navy or at least that wasn't the way  
7 we were supposed to operate in the Navy" and I asked the  
8 inspector I was with, "Is this acceptable?" He said, "Yes."

9  
10 I went back and asked my boss, I said, "Is that  
11 acceptable?" He said, "Well, yes, if anything goes wrong  
12 the annunciators will go off and then they can go and  
13 respond to them." That is was in 1969.

14 In the 1971 time frame, I met and had interfaces  
15 with Glen Reed who you all know quite well, a man I have a  
16 lot of respect for as a plant manager and the good work he  
17 did up there, and at that time we were starting to push more  
18 in the line of procedures.

19 I remember hammer clawing with Glen, "You have to  
20 get procedures, Glen," and he said,, "Our people are  
21 trained, I have a stable staff, they know what they are  
22 doing, et cetera." Well, after a lot of haggling over a  
23 year or year and a half we got to the annunciator response  
24 procedures and Glen said, "Well, you will be happy to know I  
25 have annunciator response procedures." I said, "Great, I am

1 going to go take a look at them."

2 He did have annunciator response procedures for  
3 each annunciator. It said, "acknowledge the alarm and  
4 inform your supervisor."

5 [Laughter.]

6 MR. SNIEZEK: That was it. Then we got into more  
7 debate after that. Just to show you where we have come, I  
8 don't think what was in existence then was good enough but I  
9 look at where we are now and in the late 1980's and early  
10 1990's, I saw plant procedures and I started to hear a term  
11 creep into our vocabulary called "verbatim compliance."

12 I started getting concerned with that term because  
13 if you look the words up in the dictionary it says, "word-  
14 by-word, you do exactly what it says." Well, I think you  
15 can get into a lot of situations in a nuclear power plant  
16 where you can't do things exactly the way it says and if the  
17 operators and the people who run the plant think that if  
18 they just have verbatim compliance they are home free and  
19 they are not going to be challenged, I think that could be a  
20 safety problem.

21 So it made me think, have we gone too far and in  
22 the NRC management we started saying, "should we start  
23 striking that word from our vocabulary, the 'verbatim  
24 compliance.'" Sometimes a senior nuclear executive in a  
25 utility would come to us and say, "We insist on verbatim

1 compliance" and I would challenge him on it. What does it  
2 mean and then we would have a discussion on it because I  
3 think you can push too far with the literal meaning of the  
4 word.

5 I think we in the agency ought to sit back and  
6 take a look at everything we are doing and say where is the  
7 right balance? Where should we really be? Have we gone too  
8 far in some areas?

9 MR. WILKINS: Jim, do you ever worry about whether  
10 verbatim compliance slides into malicious compliance?

11 MR. SNIEZEK: That could happen, yes.

12 MR. CATTON: I had a guy working for me like that.

13 MR. WILKINS: Yes.

14 MR. SNIEZEK: I have just caused a big problem  
15 because I followed your procedures that you want me to do.

16 MR. WILKINS: It is your procedure.

17 MR. SNIEZEK: And you can't criticize me now,  
18 right.

19 MR. CARROLL: In fact, exactly that happened at  
20 Palo Verde recently with a steam generator problem. As we  
21 understand it, the operators all knew they had a steam  
22 generator tube leak but followed the procedures. It didn't  
23 get them into any particular trouble.

24 MR. SNIEZEK: The one that we get into with a lot  
25 of discussion among NRC staff is the one, you know, we worry

1 about making sure we get enough water in that core and when  
2 you turn off your high-head safety injection pumps, do you  
3 wait until after you lift your PORVs and when do you turn  
4 them off. That is the thing, I think, that we in the NRC  
5 have to wrestle with and the utilities really have to  
6 wrestle with to make sure we are really doing the right  
7 thing and we are setting the line at the right level. It is  
8 a very tough issue in my mind.

9 MR. LEWIS: It was an issue at Three Mile Island,  
10 a major issue there.

11 MR. SNIEZEK: Yes. I see some other serious  
12 management challenges ahead of us. Two of them that I see,  
13 we have them today, they are not just ahead of us. One of  
14 them is maintaining the technical competency of the staff.  
15 It is a serious issue. We are concerned about it and the  
16 Commission is concerned about it. I know the ACRS has  
17 raised that as an issue.

18 I believe that today our staff is better as far as  
19 understanding operations of the facility, integrated  
20 operations, and their system knowledge than they have ever  
21 been. Part of the reason is we have gotten a lot of  
22 resident inspectors into more senior positions, people who  
23 have lived in the plants more that really understand what is  
24 happening plus our training program down in Chattanooga.

25 Around the TMI time frame we couldn't find duty

1 officers to man the phones that understood what the  
2 operators were telling them on the phones as far as what was  
3 happening. That is not the situation today. We have  
4 improved a lot in that area. So I think from that  
5 standpoint we are in pretty good shape.

6           There are other specialist areas where we have to  
7 keep working and getting more talent, the I&C area, the  
8 Thermal Hydraulics area, things that we haven't paid as much  
9 attention to in the last seven or eight years. There are  
10 probably some other specialist areas where we have to really  
11 get on top of it and that is something that the management  
12 is committed to do.

13           It used to be the way to get ahead in this agency  
14 was through the management ranks. I believe you know that  
15 we have established a new career path for the technical  
16 people, people who aren't interested in being managers, the  
17 Senior Level Service, where the pay level is comparable to  
18 the SES pay level. It goes above the standard GS pay scale.

19           We have now have the Senior Fellowship Program and  
20 the Fellowship Program which we have underway and we haven't  
21 gotten a lot of takers yet on that but there are other areas  
22 that we have to explore to get top talent into this agency.

23           The other challenge is making sure that our  
24 regulatory programs are implemented in the manner that the  
25 senior management of the agency wishes them to be

1 implemented or at least believes they are being implemented.  
2 Our wishes are not always coming true. We find that many  
3 times when we have senior NRC management interfaces with  
4 senior utility executives we are talking on the same plane.  
5 We reach agreement on things that make sense.

6 But somehow on the translation on the utility side  
7 down into the staff and the NRC side down into the staff it  
8 is a different playing field that is worked out and  
9 different things are being done. They are not being done  
10 the way we think they were being done. So it is an area  
11 that we really have to be on top of.

12 One of the things we are undertaking right now is  
13 trying to flatten the supervisory chain within the NRC. We  
14 are looking to change our supervisory to staff ratio  
15 considerably. It is about a one to 4.5 right now. Over the  
16 next three years, we hope to get it to a one to eight ratio.

17 That will be tough to do. Right now the regions  
18 are looking at a reorganization of the regions trying to cut  
19 out a whole layer of management or supervision in the  
20 regions. NRR and Research are looking to do the same thing.  
21 You will probably see fewer section chiefs and fewer branch  
22 chiefs and fewer divisions, a better integration of our  
23 functions.

24 That is just in the starting points right now but  
25 that is one of the things we are going to try to get a

1 closer communication chain within the agency itself.

2 As you recall back in the early eighties we did a  
3 regulatory impact survey led by Jim O'Reilly who was a  
4 regional administrator at the time and then in the late  
5 eighties we did another one led by Bert Davis who was our  
6 Region III administrator at the time.

7 We got a lot of good feedback during those reg  
8 impact surveys. It resulted in some relatively significant  
9 changes to the way we did business but most of it was in the  
10 field area, the area of our field operations and we really  
11 didn't go far enough in what we were doing.

12 It addressed primarily the way we did inspections,  
13 the training of our inspectors, a marked decrease in the  
14 number of bulletins and generic letters that were going out.  
15 It brought about the backfit rule and we started giving more  
16 credit for licensee self-assessment. That was a good  
17 starting point but it really didn't go far enough.

18 I believe what we have just done recently and the  
19 Committee has been briefed by Frank Gillespie on the  
20 regulatory review group efforts is a much broader step that  
21 we did back in those days and it is the starting point. It  
22 is the jumping off point for more look-see on how we really  
23 do our business in this agency.

24 The reg review group came out with very good  
25 recommendations as far as it went as far as how we can

1 better balance our programs, give more latitude to utilities  
2 to make decisions without our upfront overview, give them  
3 the flexibility to do things.

4 We can always look at things to make sure they are  
5 okay from a safety standpoint and a regulatory standpoint  
6 but we have to recognize and give more leadership to the  
7 industry, let them take charge.

8 I have had a lot of discussions with NUMARC on  
9 that issue and I think it is a role that they relish from  
10 the utilities standpoint that they get more flexibility. I  
11 think the agency has to sit back. We were very doubtful  
12 whether some programs would work years ago like the training  
13 and accreditation program that INPO kicked off many years  
14 ago.

15 I think that is a success story. I think it was  
16 through their efforts that the industry really improved its  
17 training and its qualifications of its people, much better  
18 than we could ever have done by rulemaking in that area.  
19 They took the leadership role. It was their program and  
20 they did it.

21 Our staff has sat back now over the years and  
22 said, "Yes, that is right. They are the ones that got it  
23 done." The same way with the ALARA program, it was the  
24 industry efforts that really set the stage for that with  
25 dose reduction and cleaning up contamination and really



1 reducing that problem out in industry.

2 I think the working together efforts on the  
3 maintenance regulatory guide is also very important.  
4 Industry didn't want a rule. We didn't want a rule. The  
5 staff didn't. We got a rule.

6 MR. CARROLL: ACRS didn't want one.

7 MR. SNIEZEK: We are going to develop a reg guide.  
8 We have a draft reg guide and the industry said, "Let us  
9 take a shot." We worked with them. It worked. We endorsed  
10 their document as far as doing maintenance. They did a V  
11 and V program out there. The feedback I get at least  
12 through NUMARC is that the utilities are pretty satisfied  
13 with it. They think it will work and it won't cost them a  
14 lot of money. In fact some of said that it has improved our  
15 programs, just those that went through the V and V program.

16 I think those are examples of where we can work  
17 with the industry, let them take the leadership role, judge  
18 what they do and then step back and watch them do the job.

19 A big area that we want to build off of what we  
20 did with the maintenance reg guide area is the QA program,  
21 the graded QA. We have all heard the stories, the \$300.00  
22 set screw and the \$500.00 lock washer, and they are true,  
23 but how did we get there?

24 Appendix B doesn't require that. Appendix B talks  
25 a graded approach. What happened in the 15 years of

1 implementation that got us to where we have these \$300.00  
2 set screws and the lock washers, et cetera? Something is  
3 wrong.

4 I sent a letter to Joe Colvin yesterday saying  
5 that we set up a senior NRC steering group on this issue  
6 similar to what we did in the maintenance arena and asked  
7 Joe, I said, "Let's work together and have industry take the  
8 lead. How should we address this issue? How should we get  
9 back to where the industry is really implementing a graded  
10 QA program, not a full-on or full-off type program which is  
11 very expensive in driving up a lot of the O&M costs." So  
12 that is underway and the staff is very receptive to that.

13 I think in the area of rulemaking we can  
14 streamline the rulemaking process. It is ridiculous what it  
15 takes as long as it takes to get rules out where we really  
16 believe and justify the need for a rule.

17 One of the things that we are going to be doing is  
18 before a rulemaking is initiated in any shape or form, it  
19 would be the senior management of this agency that says,  
20 "Yes, we need a rule. We want to look at the initial  
21 structure, the principles that should be in the rule,  
22 whether it is a performance based rule or a prescriptive  
23 rule or something in between and will pass the backfit rule  
24 test when it is done."

25 Let's not wait until we are done and work for two

1 years and then look at backfit. Let's look at the front  
2 side to see if it is going to pass it or not and make our  
3 best judgment and then if it is not going to pass it, let's  
4 drop the effort, that it isn't worthwhile. But if it is  
5 going to pass it, then let's go forward.

6 One of the things Research is supposed to be  
7 working on right now, the Office of Research, is to get a  
8 rulemaking and I am going to use an in-vogue term, "re-  
9 engineer the rulemaking process," but get it down to 12 to  
10 18 months instead of two years or two and a half years or  
11 even three years. If it is worthwhile doing, let's get on  
12 with it and do it and not drag it out.

13 Now in doing that I think they may come forward to  
14 ACRS and meet with the Committee and say, "What is a better  
15 way to interact with ACRS?" Normally we interact with ACRS  
16 after the staff's ideas all gel, our feet are set in cement,  
17 it is probably not completely hard yet, but then we come  
18 down.

19 MR. CATTON: But damn close.

20 MR. SNIEZEK: Damn close.

21 [Laughter.]

22 MR. SNIEZEK: You give us suggestions and we  
23 react, "Oh, no." Is there a better way of doing business?  
24 I would hope that John and his staff and Mat and the offices  
25 can start working out processes by is there a better way of

1 doing in our interaction on some of these very important  
2 issues on the front side so we get your views on the front  
3 side.

4 I don't know if that compromises your role of  
5 independence or not. It is something that you are going to  
6 have to wrestle with and look at but we have to look at a  
7 better, more efficient and effective ways of doing our  
8 business, I think, from the staff's side. So that is  
9 something that we may be interfacing with you on, is there a  
10 better way that we can interface with you.

11 Cost beneficial licensing actions. That was one  
12 of the big things that came out of the reg review group's  
13 study. They picked four licenses. They looked at them and  
14 they said, "Hey, there are reporting requirements in here.  
15 There is stuff in here that shouldn't be in these licenses.  
16 They shouldn't be in the tech specs."

17 All the utilities, they should be looking at their  
18 tech specs and licenses for those issues. Tom Murley has  
19 committed to devote resources for cost beneficial licensing  
20 actions. It used to be if it wasn't improving safety or  
21 affecting safety it was at the bottom of the heap as far as  
22 staff priorities and resources. Not the case.

23 There are going to be people devoting time to that  
24 and it is a very important issue and it is something that  
25 the senior management of the staff has to keep an eye on to

1 make sure that it keeps getting done and it is something  
2 that the utilities, the ball is in the utilities' court to  
3 come out and identify them, bring their cases forward and  
4 let's get on with it and get rid of some of the stuff that  
5 doesn't have to be in there.

6 I think we look in our rule area and in our plan  
7 area and you take a look at QA plans, security plans,  
8 emergency plans, fire protection plans, we have rules on all  
9 of those areas.

10 Meanwhile, the way we are implementing the utility  
11 developed a plan and came in. Then our rules said that you  
12 can make changes as long as it doesn't reduce the  
13 effectiveness but we never defined what effectiveness was in  
14 those areas. We have to define that.

15 What I envision is something similar to the 50.59  
16 process which has to be out there where the utility makes a  
17 judgment and if it is within those criteria, they go make  
18 the changes and they tell us as part of their periodic  
19 report or whatever.

20 We have inspectors. We can always look at it if  
21 we want to see if we are concerned about what they did but  
22 we have to give them more flexibility to run their own  
23 operation because there is a hesitancy for the utility to  
24 come in here with an amendment because they don't know when  
25 it is going to get acted on and we just have to change the

1 way we do business in that area. So that is one of the big  
2 things in my mind that has come out of the reg review group  
3 report.

4 Also, I think we have to look at doing things  
5 differently in our inspection program. I know NRR is  
6 looking at that right now. Through the assessment that Tom  
7 Murley's people did of the implementation of the inspection  
8 program in the regions, we found that a lot of what we  
9 classify as good performers by whatever measures we use  
10 which I know is in debate in some corridors, whether they  
11 are the right measures or not, but they are getting too much  
12 inspection effort.

13 The reason why they are is because we expect to  
14 get a certain percentage of on-site inspection time from all  
15 our inspectors. Well, the industry is getting better and we  
16 are insisting on a certain amount of inspection time from  
17 our inspectors and the poor performers are getting enough  
18 inspection effort. In order for the inspectors to get their  
19 on-site time, guess where they go? The good performers.

20 So it is being looked at and maybe we should be  
21 reducing our inspection forces and applying those resources  
22 someplace else. A very careful look is being taken at that.  
23 I think we have to give and we are giving more leeway to  
24 licensees who have good self-assessment programs. I think  
25 that is a very important concept and we should give them

1 credit for it.

2 In how we do our team inspections, we are using  
3 that today and we have to look at even our broader  
4 application. Something as radical as we have no individual  
5 inspectors that go out and maybe that is a concept.

6 You have the resident inspectors and maybe once a  
7 year or twice a year you do an integrated team inspection  
8 where you take an integrated look at a station instead of a  
9 piecemeal look where you have a good qualified team leader  
10 out there that can integrate and decide what is important  
11 and what isn't important and not have a lot of individuals  
12 go out.

13 We might have a bigger safety pay-off and would  
14 probably be less burdensome on the industry. We have to  
15 examine those different ways of doing business.

16 As far as the implementation of the reg review  
17 group report, the implementation plan is on the EDO's desk  
18 right now for signature. I would hope that it would go to  
19 the Commission today. We met with the office directors and  
20 regional administrators. We have very good senior  
21 management support for the recommendations.

22 The recommendations in the reg review group  
23 report, I would say about 95 percent are going to be  
24 implemented virtually the way they were in there. There are  
25 some minor changes and on a pretty tight schedule. I fought

1 for and won on putting very tight schedules in there on a  
2 lot of things.

3 A lot of things you can just go out and do. You  
4 don't have to study it any further, just go out and do it.

5 MR. WILKINS: And you don't have to modify any  
6 regulations.

7 MR. SNIEZEK: You don't have to modify  
8 regulations. Do it. You can do it by a letter telling the  
9 utility saying, "You don't have to do this any more" or "Our  
10 policy has changed." Other things, it might take a little  
11 more work to get the right twist on things.

12 MR. CARROLL: I am a little surprised, Jim, that  
13 the 95 percent are going to be implemented as recommended.  
14 I guess I got the impression from some correspondence from  
15 some of the offices that I saw several months ago that there  
16 was a lot of opposition to many of the recommendations.

17 MR. SNIEZEK: There was at one time.

18 MR. CARROLL: That has all been worked out?

19 MR. SNIEZEK: We had a senior management meeting  
20 and the final plan was worked out. There were some very  
21 minor tweaks that I had to make to it and the regional  
22 administrators to a person said, "Agree, support." But now,  
23 it is like utilities give us plans to do something. Now it  
24 is implementation time. Let's get on with it and that is  
25 his job.



1 [Laughter.]

2 MR. CARROLL: Lucky you!

3 MR. SNIEZEK: But make sure they get on with it.

4 I am getting out just in time.

5 MR. LEWIS: We will have to see how they do the  
6 counting. This could be 95 rabbits and five elephants.

7 [Laughter.]

8 MR. SNIEZEK: No. What we did in this plan, each  
9 item is referenced back to the reg review group  
10 recommendation and there is a schedule. There is a  
11 priority. There is an office assignment and it is his job  
12 to hold their feet to the fire so when he comes down to talk  
13 to you next time if it is slipping, you will know who to  
14 lean on.

15 That is an area where the ACRS and I don't recall  
16 the details but as I remember in reading your letter of  
17 about three months ago it said that it is okay as far as it  
18 goes but you thought we should probably be going further as  
19 I recall the letter. I think that is an area, if you as a  
20 Committee think there are some areas where we need to put  
21 more attention on what we are doing, it would be very  
22 helpful.

23 MR. WILKINS: Hal, you ought to check my memory  
24 but I think we said something like the devil is in the  
25 details.

1 MR. SNIEZEK: That was in there, too, and I agree  
2 with that.

3 MR. LEWIS: We wrote a very favorable letter  
4 probably to everyone's surprise but we pointed out that you  
5 have to implement it and we will see if you really do.

6 MR. SNIEZEK: I agree with you and like I said, it  
7 is a start. It is a good start. I think it is much better  
8 than the reg impact surveys in that it has senior management  
9 support. Half-way through the study Dr. Murley started the  
10 cost beneficial licensing actions stuff. We started the  
11 ball moving in that area.

12 Roy Zimmerman who was a division director out in  
13 Region V is now back in headquarters and he is leading that  
14 effort for Murley and he is a good man.

15 MR. CARROLL: Yes.

16 MR. SNIEZEK: He is dedicated to it. He has some  
17 very top-notch staff working for him, some of our better  
18 people working for him. But it has to be kept up there on  
19 the forefront.

20 MR. LEWIS: This is the wrong place to get hung up  
21 on this particular thing because we obviously will be  
22 talking about it but the central recommendation in our  
23 letter as I recall was that the regulatory review group  
24 recommendation that the entire philosophy of what the  
25 Commission expects from the licensees ought to change from

1 if you like, perfect compliance to compliance with spirit.  
2 It was something like that and that can't be done by edict.

3 MR. SNIEZEK: No. I agree with that. It can't be  
4 done, there is nothing that can be done by edict.

5 MR. WILKINS: On the other hand, it is certainly  
6 true that the philosophy that Jim has been talking about  
7 today is along those lines.

8 MR. LEWIS: No. I am listening to his philosophy  
9 with great interest. I will match it against reality.

10 MR. SNIEZEK: Exactly.

11 MR. LEWIS: John Ahearne who was once Chairman of  
12 this Commission likes to tell the Charlie Brown story in  
13 which something bad happens to Charlie Brown and I have  
14 forgotten what it was and Lucy says to him, "Well, Charlie  
15 Brown, that is life. You win some. You lose some." and he  
16 says, "Yeah, wouldn't that be nice."

17 [Laughter.]

18 MR. SNIEZEK: There is one other area that I want  
19 to touch on in the regulatory review group and I know it is  
20 an area that is near to your hearts and it is the use of  
21 risk assessment in the process. That is an area we have  
22 been talking about for ten years at least and we have done  
23 some things but we really haven't grabbed a hold of that  
24 area.

25 Back about four or five months ago Tom Murley,

1 Eric Beckjord, Bob Bernero and Ed Jordan wrote a memo to the  
2 EDO that says, "We are going to do it. We are going to get  
3 on top of it. We are developing the plan" Well, the plan  
4 is here, not down here but the time is now. The plan is  
5 here.

6 It is going to be briefed at our senior management  
7 meeting in Dallas next week and I understand that the staff  
8 is going to be down to brief the ACRS at your next meeting  
9 if that ends up on the agenda. I know we proposed a  
10 briefing in February for ACRS on that.

11 I think it is an area where you can look with a  
12 jaundiced eye on does it go far enough, does it really cover  
13 issues that you may have in our regulatory process that  
14 aren't addressed by it.

15 I know I am going to be looking at the plan. It  
16 is not finalized yet but I have a draft to make sure that we  
17 cover all the areas that should be covered where risk  
18 assessment could really be used and that should be a very  
19 interesting discussion for the ACRS when that comes down  
20 here and I think you can give some very valuable feedback to  
21 the staff on that and I know you will.

22 The second area I wanted to just touch on just a  
23 little bit is the interaction with the ACRS. If I go back  
24 to the 1990-1991 time frame I think we had a very strange  
25 relationship between the staff and the ACRS, around that

1 time frame.

2 As a result in about a year and half or so ago or  
3 a little bit more in the spring of 1992, Tom Murley, Ed  
4 Joraan, Eric Beckjord and myself came down here and we  
5 chatted about a lot of technical issues, where we are going  
6 and why we are going. I think there were a lot of  
7 misunderstandings that existed and I thought that was a good  
8 meeting and went a long way to correct some of the  
9 misunderstandings.

10 I met with Chairman Warf and Chairman Shewmon and  
11 Dr. Wilkins informally to hopefully improve our behind-the-  
12 scenes processes on schedules and agendas and getting  
13 materials down here and things of that nature. I thought  
14 they were very beneficial and the feedback I have gotten  
15 rightly or wrongly and if it wrong I am going to lean on Mat  
16 is that things have improved and are going fairly good.

17 I think it is beneficial when the individual  
18 office directors come down here and share their views with  
19 you on where the staff is going and their program areas. I  
20 think that is very helpful.

21 I expect and I know that Jim will expect that Mat  
22 and John Larkins and the staff keep that good working  
23 relationship to get things done, to know where the hard  
24 points are and to work them out, to sand off the edges and  
25 keep things working smoothly.

1 MR. WILKINS: Let me interpret you and say that  
2 from our perspective we find those meetings with the office  
3 directors very helpful and our policy or our plan at least  
4 is to do it on a relatively frequent basis so that during a  
5 given year, we will meet probably with Murley two or three  
6 times because he is NRR and we meet with Beckjord almost as  
7 often; with Jordan, somewhat less frequently and with  
8 Bernero, occasionally. That is because of the way our  
9 responsibilities are. Bernero probably meets with the ACNW  
10 more frequently than he does with the ACRS.

11 MR. SNIEZEK: Right.

12 MR. WILKINS: But in general those are very  
13 helpful from our point of view and I am glad to hear you say  
14 that you think they are useful also from the staff's point  
15 of view.

16 MR. SNIEZEK: I thought it was very useful sitting  
17 down with the ACRS chairman and talk about improving the  
18 informal process as well. It is very beneficial.

19 Sometimes the staff thinks we are doing things  
20 that are supportive of ACRS when actually they are not and  
21 we have to get that feedback and work it out. I think that  
22 is where John and h. staff and Mat play a very, very  
23 valuable role in our interfaces.

24 MR. WILKINS: Let me just say this also for the  
25 record that we are delighted to have Mat Taylor attend these

1 meetings. He has been just of superb assistance to us and I  
2 don't know how often something like this will happen, "I  
3 wonder what is going on? Let's ask Mat." And Mat will  
4 know. He will know the answer to the question almost  
5 immediately most of the time and within a half hour or an  
6 hour all the rest of the time. It is very helpful to us to  
7 have him here and I want to say that to you in his presence.

8 MR. SNIEZEK: I can mention here, too. Sometimes  
9 he comes back and beats up on some of the rest of the staff.

10 MR. WILKINS: That is okay, too.

11 MR. SNIEZEK: When things aren't going right.

12 MR. SEALE: Whatever it takes.

13 MR. WILKINS: Yes.

14 MR. SNIEZEK: Let me mention something. I believe  
15 there will always be a natural tension between the ACRS and  
16 the staff by its nature. I was reflecting on that a little  
17 bit and let me draw an analogy of our relationship. You are  
18 to us as we are to the licensees. The licensees are doing  
19 their thing and we come in and we say, "I don't like what  
20 you are doing" or we criticize them and there is that  
21 natural tension there.

22 MR. CARROLL: Maybe that is why I have enjoyed  
23 being on the ACRS.

24 [Laughter.]

25 MR. SNIEZEK: And ACRS is the same way. The staff

1 is doing something that hopefully we think is the right  
2 thing to do and you say, "What are you doing?" So naturally  
3 we are going to get little tensions flare up once in a while  
4 but I think the important thing is that even though we don't  
5 always agree with each other, we deal with each other on a  
6 professional basis, we lay it on the table and we hash it  
7 out and we may end up disagreeing when we are all done and  
8 that is fine. I have no problem with that.

9 You advise the Commission. The staff should  
10 listen to you and take it into account and hopefully we do  
11 take into account seriously what you tell us. Sometimes you  
12 disagree. Sometimes you don't think we do but we really do.

13 MR. LEWIS: Only occasionally do you attack our  
14 motivations.

15 MR. SNIEZEK: Right.

16 MR. WILKINS: And the "you" is usually a singular  
17 rather than a "you" plural, only occasionally.

18 MR. SNIEZEK: And when we do, it is improper. We  
19 should not do that. I want us to work diligently. I know  
20 Jim will work diligently and I think we will keep a good,  
21 relatively smooth working relationship but I am not too  
22 surprised that there are tensions. Those are a couple of  
23 things that I just wanted to mention while I was done here.  
24 Jim, do you want to mention anything?

25 MR. MILHOAN: No. I guess the only thing that I



1 wanted to mention is that obviously I am very pleased to  
2 succeed Jim Sniezek in his present job. In my earlier days  
3 with the NRC on the NRC staff, I met very frequently with  
4 the ACRS when I was in the Office of Standards Development.  
5 Almost on a monthly basis I was down here as a staff member.  
6 So I got to know the ACRS members very well and respected  
7 the members.

8 Mr. Wylie, I can still remember working with him  
9 on different regulatory guides and Hal was part of that  
10 effort. Since 1987 I have been in the regions in different  
11 capacities going out to the regions in 1987 in Region IV as  
12 a division director, reactor safety and then reactor  
13 projects and moving to Atlanta, being the deputy regional  
14 administrator in the Region II office and then having the  
15 opportunity to move back to Arlington, Texas and be regional  
16 administrator in July of 1992.

17 So I have had both the headquarters experience and  
18 the region experience and I certainly am looking forward to  
19 working with the ACRS on a variety of issues that will be  
20 challenging to all of us in the future.

21 MR. SNIEZEK: Is there anything that the Committee  
22 would like to bring up or discuss while we are down here and  
23 I will defer everything to Milhoan to fix if it is broken.

24 [Laughter.]

25 MR. WILKINS: Oh, gee.

1 MR. LEWIS: I won't bring up the question of  
2 personal motivations right now because we will get back to  
3 that but it would be nice to have your advice on the  
4 following kind of question in terms of relations between the  
5 staff and the ACRS.

6 Admittedly we advise the Commission and that makes  
7 us a little bit different from your relation to the  
8 licensees because there is an extra level in there but  
9 nonetheless we have a lot of interest in the staff  
10 competence.

11 I am particularly pleased to hear you acknowledge  
12 that there may be a problem maintaining the staff technical  
13 competence. I would like to see that translated into  
14 recruiting programs in the areas where there are weaknesses.  
15 It is better than denying that there are weaknesses.

16 But on some technical things, for example, we will  
17 be discussing later today a letter from the EDO to the  
18 Commission on a subject and I don't want to go into it in  
19 great detail but it is one on which we have been fighting  
20 with the staff from time immemorial in which we have written  
21 a number of Committee letters that says that the staff is  
22 simply technically wrong in what they are doing.

23 I have sat in meetings with the relevant staff  
24 members yelling at each other as we dragged them kicking and  
25 screaming. Now we have a letter from EDO to the Commission

1 saying, "I don't know what the ACRS was worried about. We  
2 came to this conclusion years ago." It isn't true. It  
3 simply isn't true.

4 How should we deal with that? Forget it? Swallow  
5 it? Go on fighting? Attack his motivations? How should we  
6 deal with a thing like that?

7 MR. SNIEZEK: I don't think you should ever attack  
8 the motivations of the EDO because I think they are strictly  
9 honorable.

10 MR. LEWIS: I threw that in as something you could  
11 reject.

12 MR. SNIEZEK: He may be wrong at times but not  
13 because his motivations are wrong.

14 MR. LEWIS: Sure.

15 MR. WILKINS: Jim, do you know what letter Hal is  
16 talking about?

17 MR. SNIEZEK: Sure. The trigger values.

18 MR. LEWIS: Right.

19 [Laughter.]

20 MR. LEWIS: Let the record show that I didn't put  
21 that on the record.

22 [Laughter.]

23 MR. LEWIS: I knew you knew what I was talking  
24 about. How the hell can we handle a thing like that? We  
25 dragged the staff kicking and screaming.

1 MR. SNIEZEK: You see, it depends on how far we go  
2 back in history. There was a time and I won't disagree with  
3 you that a time the staff may have been kicking and  
4 screaming. The staff studied very hard how to do it.

5 Now the staff arrived at some time in their work  
6 with the conclusion that it won't work. You can't check the  
7 reliability on an individual diesel with any level of  
8 confidence at all with the number of starts that you get.

9 It is my understanding that an ACRS consultant  
10 worked that and arrived at the same conclusion. So at some  
11 time I think the staff and the ACRS has agreed but maybe we  
12 never said we agreed.

13 MR. LEWIS: In fact, you said quite the opposite  
14 and actually what you heard about the ACRS consultant isn't  
15 exactly accurate. I don't know where you got it from but it  
16 doesn't even matter.

17 MR. SNIEZEK: But I think we are in agreement and  
18 I think that is the intent of the EDO to say, "We agree and  
19 we are going to strike it."

20 MR. LEWIS: He doesn't say we are going to strike  
21 it because we agree. He says that we are going to strike it  
22 to forestall further combat.

23 MR. SNIEZEK: Because we agree and there are words  
24 in there that we don't need and we will take them out. We  
25 will take them out. We will get rid of them. It is not

1 important to safety. Those words aren't important to  
2 safety. Let me go back and maybe not everybody knows this.  
3 Individual commissioners like to see certain things done.

4 MR. LEWIS: No!

5 [Laughter.]

6 MR. SNIEZEK: There was an individual Commission  
7 that said, "We want a rule on diesel generator reliability,  
8 statistical." The staff said, "We don't want to do that."  
9 Now how do we get around it? So the staff said to the  
10 Commission, "Let's in the maintenance reg guide" and diesels  
11 are covered by the maintenance reg guide, we didn't have to  
12 single them out, but we didn't see the need for a separate  
13 rule. I am paraphrasing. It may not be exactly right but I  
14 am telling you a very general understanding of the issue.

15 So we said, "Let's put language in the reg guide  
16 that shows diesel generators are adequately covered under  
17 maintenance but since we don't believe anymore even though  
18 we may have at one time believed you could do it with any  
19 statistical rigor, let's put a footnote in there that says,  
20 'No, it is not used as a measure of reliability of the  
21 diesels'" and that is what we tried to do.

22 It is as simple as that, no more. There are no  
23 other motives and nothing else but we don't believe that we  
24 need to say anything separate about the diesels because they  
25 are already covered by the maintenance reg guide and the

1 maintenance rule.

2 They are getting more attention by the industry  
3 than any other component out there. There isn't a lot more  
4 that we have to do from a regulatory standpoint. So instead  
5 of us keep saying that we are right and everybody  
6 understands what it is and exchange of correspondence, we  
7 are just saying, "Let's get rid of it. We don't need it.  
8 We are creating an argument, the staff is creating an  
9 argument that we don't have to be in so let's walk away from  
10 it." It is as simple as that and as honest as that. I  
11 can't say it any differently.

12 MR. LEWIS: We have a different reading of the  
13 history but we will go through that in some detail at some  
14 other time.

15 MR. WILKINS: I have that particular letter in my  
16 hand right now and I don't know how much of Dr. Lewis'  
17 concerns are influenced by the exact language of the letter  
18 and how much by the substance of the letter. There is a  
19 problem with language. There is also an additional problem  
20 which is that this letter went from the EDO to the  
21 Commission. Normally when we write a letter to the EDO or  
22 to the Commission itself or the Chairman, I should say, the  
23 Chairman directs the EDO to respond to the ACRS.

24 Now we have not received as a Committee, we have  
25 not received the EDO's response to our letter and I don't

1 know whether he is planning to write one to us, whether he  
2 considers that this is sufficient.

3 MR. SNIEZEK: Let me tell you why it was done that  
4 way. That is an aberration. The reason why it was done  
5 that way is because at least one member of the Commission  
6 that got the ACRS letter wrote a memo to the Commission with  
7 a copy to EDO that said, "Let us direct the staff to remove  
8 this from the reg guide." So the EDO went to the Commission  
9 and said, "I am removing it from the reg guide." That is  
10 what happened.

11 MR. LEWIS: Isn't this misleading because this  
12 says that he is doing it out of the goodness of his heart.  
13 He is doing it under direction from the Commission?

14 MR. SNIEZEK: No. He hasn't gotten Commission  
15 direction. He doesn't need the Commission direction. He  
16 can do without it.

17 MR. WILKINS: He just had a comment, an off-hand  
18 comment. But the memorandum starts out by saying that this  
19 memorandum responds to the letter dated December 14th from  
20 Wilkins to Selin concerning these things and I don't believe  
21 that it is a response to that letter. It may cover the same  
22 topic. It may be that all he has to do to make a response  
23 is to put my name up there instead of the Commissioner's  
24 name.

25 MR. SNIEZEK: I understand what you are saying.

1 MR. WILKINS: Perhaps we will get in due course  
2 because it is fairly early, we don't frequently get  
3 responses on this rapid a turnaround time and that is not a  
4 compliant. That is simply an observation.

5 MR. SNIEZEK: The Commission was dealing with it  
6 so the EDO gave the Commission information that he was going  
7 to take it out.

8 MR. WILKINS: We don't need to get into a debate  
9 about the mathematics here.

10 MR. LEWIS: No. I think we will have an  
11 opportunity to do that.

12 MR. LINDBLAD: But let me make an observation that  
13 everyone is attracted by the concept of performance based  
14 regulation and it sounds so good and yet we say when a good  
15 performer comes along we will know it.

16 In the past Commissioners have looked for  
17 performance indicators and there have been proposed some and  
18 they will end up being very subjective and it is awfully  
19 tough for quantitative people like those of us in this room  
20 to be satisfied forever with subjective measures but I think  
21 we are going to have to be.

22 I like performance based regulation but I doubt  
23 that we are going to be able to have mathematically correct  
24 measures of them and that is going to pursue us beyond just  
25 diesel generators but in many other areas as we talk about



1 risk-based regulation and performance based regulation and  
2 the like.

3 MR. LEWIS: I have to disagree with you, Bill. I  
4 think that one doesn't have to throw the baby out with the  
5 bath water. People sometimes use the word "mathematical" as  
6 if it were a dirty word by saying that you can't reduce  
7 everything to the seventh decimal place and, of course, that  
8 is true.

9 On the other hand, I have spent most of my life  
10 being a professor and I give students grades. I give them  
11 "A," "B," "C" or "D." I know perfectly well that a high "B"  
12 student is just as good as a low "A" student more or less  
13 but you can still draw categories. You can draw lines. You  
14 can measure things if you are serious about measuring them.

15 Of course, in the last analysis for some things  
16 like beauty, you really do judge it subjectively. It is a  
17 mixture of things. But one should never abandon the intent  
18 of performance based regulation which is to measure as best  
19 you can and use the numbers as best you can just because you  
20 can't do it perfectly.

21 The fight to the extent that it is a fight with  
22 the NRC staff is one of doing it in a reasonable way instead  
23 of throwing it out because it isn't perfect. We have the  
24 same problem in a number of other areas.

25 But on this particular issue, the ACRS letter on

1 it as I recall made the point that the real problem is in  
2 the blackout rule where these numbers, the implementation of  
3 the blackout rule, where these 0.95 and 0.975 first appear.  
4 It is that that needs to be fixed and we said that in our  
5 letter. That has gotten no attention whatsoever from the  
6 staff or the Commission as I recall.

7 MR. SNIEZEK: You may be right.

8 MR. LEWIS: That is the crux of the problem.

9 MR. LINDBLAD: I agree with you, Hal, and that is  
10 trying to quantify performance based and yes, that is where  
11 the problem is.

12 MR. LEWIS: Right, and we said that but it has  
13 gotten no attention.

14 MR. LINDBLAD: Yes.

15 MR. WILKINS: What has gotten attention is a  
16 symptom.

17 MR. LEWIS: Yes, that is exactly right, because  
18 there aren't any trained statisticians among the staff.

19 MR. WILKINS: I didn't propose that we sit here  
20 and beat up on Jim as he goes out the door.

21 MR. LEWIS: But it is fun.

22 MR. WILKINS: Admittedly, it is fun.

23 MR. CATTON: It is going to make him appreciate  
24 more retirement.

25 [Laughter.]

1 MR. SNIEZEK: No. You are re-calibrating him is  
2 what you are doing.

3 [Laughter.]

4 MR. WILKINS: I would share Jim's comments about  
5 tension. There is an inevitable tension. I would like to  
6 think of it as a constructive tension. It should not be  
7 destructive. To the staff, it should not be destructive, to  
8 us or to the Commission or for that matter to the country as  
9 a whole.

10 All of us are part-time as you know and we could  
11 do lots of other things with our time. Why do we spend it  
12 here? Because we feel somehow and this is not measurable  
13 quantitatively, I think, that we are doing something that is  
14 useful to the agency and to the country.

15 So occasionally when we feel very strongly about  
16 something, we get frustrated because there is a lot of  
17 inertia in any system and I would say that government  
18 systems are perhaps more subject to inertia than perhaps  
19 corporate management is accustomed to.

20 So we occasionally get frustrated and maybe even  
21 irritated. I have urged and I think my colleagues agree  
22 with me that that frustration and irritation should not get  
23 in the way of professional discussions, courteous and above-  
24 board discussions, of the issues and should not get into  
25 discussions about motives or hidden agendas and that sort of

1 thing.

2 My colleagues agree with me on these points so  
3 this is not an issue really for us to discuss. But there  
4 will be times when we will say to the staff, "we think you  
5 are mistaken for these reasons" and there will be some of  
6 those times the staff will agree with us, upon reflection  
7 they will agree with us or upon reflection, they may come  
8 back and say, "Yes, you are right but we are not going to do  
9 it anyway for some other reasons" which perhaps may, in  
10 fact, take precedence or they may come back and say, "We  
11 don't agree with you" and that is the end of it.

12 I don't know how we resolve the third class and  
13 perhaps we as a Committee will have to decide which of those  
14 battles we choose to fight further, whether if we perceive  
15 we are tilting at windmills, then perhaps we ought to back  
16 off and forget it. On the other hand, there have been  
17 certain situations in which we have made recommendations to  
18 the Commission and the Commission has chosen to adopt the  
19 staff position and we have continued to press the issue and  
20 ultimately the Commission has come around to our way of  
21 thinking.

22 I am real pleased when we are successful in doing  
23 that. A very recent example of that is the Computer  
24 Workshop which the Commission has now authorized Research to  
25 go ahead and set up with the National Academies, a

1 recommendation that we had made a year or so ago or  
2 certainly many months ago.

3 So we will push particularly in those areas which  
4 we feel very strongly about. I think that Murley and  
5 Beckjord and Jordan understand that and I would like Mr.  
6 Milhoan to understand it as well.

7 We are not being unnecessarily irritable or  
8 annoyed or acerbic or whatever word, pejorative words, you  
9 want to apply to this but it is an area where we as a  
10 Committee feel very strongly that the Agency position needs  
11 to change and we will do what we can to get it to change  
12 recognizing as all of us do that the Agency is run by the  
13 Commission and the country holds the Commission responsible,  
14 or the President holds the Commission responsible and the  
15 country holds the President responsible for the successful  
16 performance of the mission of the agency.

17 That is enough philosophizing from me. Do any of  
18 my colleagues have anything further they would care to  
19 address to Mr. Milhoan or Mr. Sniezek?

20 MR. KRESS: Yes. I have only been on the  
21 Committee for three years but during that time I would like  
22 to say to Mr. Sniezek that I think our interactions with him  
23 have always been on a high plane, straightforward and very  
24 useful and I would like to express my appreciation.

25 MR. SNIEZEK: I appreciate that. Thank you very

1 much.

2 MR. WILKINS: I certainly second that.

3 MR. CARROLL: Indeed.

4 MR. SNIEZEK: I know Jim Milhoan's interactions  
5 with you will speak very plainly, tell it the best he  
6 understands it, may not understand it, like me, sometimes, I  
7 don't always understand the whole issue, but I will try to  
8 explain it the way I understand it and sometimes I don't  
9 have all the facts. It is hard sometimes to ferret out  
10 truth.

11 MR. WILKINS: Oh yes.

12 MR. SNIEZEK: And get the whole story and that is  
13 what we all have to work for, I think.

14 MR. WILKINS: Well, Mr. Milhoan, we welcome you.

15 MR. MILHOAN: Thank you very much.

16 MR. WILKINS: We look forward to working with you  
17 and Jim, we wish you the best for your future. We hope you  
18 enjoy yourself.

19 MR. SNIEZEK: I appreciate it. Thank you.

20 MR. WILKINS: We know you will. Thank you very  
21 much. We have a few minutes before we need to adjourn for  
22 lunch and I would propose that we start reviewing the future  
23 activities agenda item which is number twelve. I think we  
24 are finished with the record and we can now conclude the  
25 reported portion of today's meeting.

1                   [Whereupon, the reported portion of the meeting  
2 was concluded at 11:15 a.m.]

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

ANN RILEY & ASSOCIATES, LTD.  
Court Reporters  
1612 K Street, N.W., Suite 300  
Washington, D.C. 20006  
(202) 293-3950

REPORTER'S CERTIFICATE

This is to certify that the attached proceedings  
before the United States Nuclear Regulatory  
Commission  
in the matter of:

NAME OF PROCEEDING: 405th ACRS Meeting

DOCKET NUMBER:

PLACE OF PROCEEDING: Bethesda, MD

were held as herein appears, and that this is the  
original transcript thereof for the file of the  
United States Nuclear Regulatory Commission taken  
by me and thereafter reduced to typewriting by me  
or under the direction of the court reporting  
company, and that the transcript is a true and  
accurate record of the foregoing proceedings.

*Ann Riley*  
\_\_\_\_\_  
Official Reporter  
Ann Riley & Associates, Ltd.