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RETURN TO SECRETARIAT RECORDS  
**Transcript of Proceedings**  
**NUCLEAR REGULATORY COMMISSION**

JOINT MEETING OF  
NUCLEAR REGULATORY COMMISSION  
AND  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS

Friday, December 11, 1981

Washington, D.C.

Pages 1-50

Prepared by  
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Office of the Secretary

RETURN TO SECRETARIAT RECORDS

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

ADVISORY COMMITTEE ON REACTOR SAFEGUARDS

ACRS MEETING WITH THE COMMISSIONERS

Nuclear Regulatory Commission  
Room 1130  
1717 H Street, N. W.  
Washington, D. C.

Friday, December 11, 1981

The ACRS meeting with the Commissioners convened,  
pursuant to notice, at 9:40 a.m.

COMMISSIONERS PRESENT:

- NUNZIO PALLADINO, Chairman of the Commission
- VICTOR GILINSKY, Commissioner
- PETER BRADFORD, Commissioner
- JOHN AHEARNE, Commissioner
- THOMAS ROBERTS, Commissioner

ACRS MEMBERS PRESENT:

- J. CARSON MARK, Chairman of the ACRS
- MILTON PLESSET
- MYER BENDER
- MAX CARBON
- JESSE EBERSOLE
- HAROLD LEWIS
- WILLIAM KERR
- WILLIAM MATHIS
- DADE MOELLER
- DAVID OKRENT
- JEREMIAH RAY
- PAUL SHEWMON

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ACRS MEMBERS PRESENT: (Continued)

CHESTER SIESS  
DAVID WARD  
HAROLD ETHERINGTON  
ROBERT AXTMAN

DESIGNATED FEDERAL EMPLOYEE:

RAY FRALEY

\* \* \*



1 in our reports relating to our reviews of the NRC research  
2 program, specifically the report to Congress that is  
3 required by law, the report to the Commission in July at the  
4 time you formulated the budget and at least one attempt at a  
5 report on the long-range research plan.

6 We have had a reply from Chairman Palladino dated  
7 December 10th agreeing in part and making some additional  
8 suggestions and I would like to address that.

9 First, regarding the advice that we provide to the  
10 Commission when you are considering the budget in July, the  
11 so-called report to the Commission.

12 You may recall that NUREG 0795, that is the report  
13 we did last July, had two parts. Part one was General  
14 Comments. This was really advice to the Commission on the  
15 budget, some general statements and directions and it  
16 mentioned priorities that included a table of what we  
17 thought constituted comments on the dollars. Part two was  
18 called Specific Comments. If you read them, they were more  
19 addressed to the staff.

20 Now we use the same sort of format in our report  
21 to Congress, a Part One that we think the Congress may read  
22 and a Part Two that is the more detailed that is advice to  
23 the staff.

24 It was not our thought that we did not want to  
25 give you advice in July on the budget, but that we would

1 prefer to keep that advice at the level of the Part One of  
2 that report. Clearly, if you ask for advice you are going  
3 to get it. That is our job and is part of our name even,  
4 not our middle name but our first name.

5           So we would still expect in July to prepare  
6 something in the form of advice to you, but it would be more  
7 like the Part One of that report rather than a NUREG report.

8           Now, does that seem reasonable to you?

9           COMMISSIONER AHEARNE: That is excellent, because,  
10 as you may have noticed by my paragraph toward the end, I  
11 found that advice very valuable at the times you have done  
12 it. It is the only place that I find some critical advice  
13 on the research budget which is the hardest part of the  
14 Commission's budget for me to come to grips with because of  
15 both the size of the dollars and the wide number of programs.

16           That report has always been invaluable to me and  
17 it is that Part One type that I find most useful. As far as  
18 I am concerned, and I think I share with you, that that is  
19 the part that you were writing to the Commission. I am  
20 delighted and had intended to ask you for it anyway.

21           MR. SIESS: There was no disagreement on the  
22 report to Congress. The other question had to do with the  
23 long-range research plan. We in effect said in our letter  
24 that we didn't think that reviewing a long-range plan like  
25 the last one we looked at was worth our effort. I guess

1 there is an implication there that if it is better that we  
2 might find it is worth our effort.

3           We certainly agree that a long-range research plan  
4 is desirable and even necessary. We weren't very  
5 complimentary about the first one and we made some  
6 suggestions for its improvement and the staff has indicated  
7 they took some of those suggestions. Right now I would say  
8 we are looking forward to seeing the next one.

9           I don't think there is any question about our  
10 commenting on it, especially since you have asked us to. If  
11 it is a very good one, you will get some comments. If it is  
12 a very bad one I am sure you will get some comments there  
13 and maybe more.

14           It is not clear right now just how our review and  
15 comments on the long-range research plan can or should be  
16 coordinated with the preparation of report to Congress.  
17 There are questions of timing and questions of scope. The  
18 Congressional report is for a particular budget. The  
19 long-range plan, if it is a good one, will be a long-range  
20 plan. It may help us. I don't think it will hurt us unless  
21 we get into a time problem.

22           All we can say right now is that we will work with  
23 Bob Minogue and the research staff on this to see if we can  
24 work out some procedures and schedules to coordinate that.

25           Right now our work on the report to Congress on

1 the FY-83 budget is well underway and we haven't yet gotten  
2 the long-research plans. So I can't really tell you. We  
3 haven't seen it and don't know what its nature is.

4           Once we see it we will have a better idea of how  
5 we can do our jobs more efficiently next year and we will  
6 certainly try to work something out that gets comments back  
7 to you on the plan and utilizes it in our reviews as much as  
8 possible. I don't think we can go much farther than that.

9           CHAIRMAN PALLADINO: All right. Well, I do  
10 remember quite vividly your comments on the last long-range  
11 plan and I can't say that they were unjustified. We still  
12 feel that your comments on the long-range plan, whether the  
13 plan is good or bad, are very important to us and we would  
14 like to still receive them.

15           We are interested in helping to reduce your  
16 workload, but apparently you have developed contacts so that  
17 perhaps you can work more efficiently on some of these items.

18           MR. SIESS: We will work on it.

19           CHAIRMAN PALLADINO: All right.

20           COMMISSIONER AHEARNE: Could I make a comment?

21           CHAIRMAN PALLADINO: Yes, sure.

22           COMMISSIONER AHEARNE: Were you still on the  
23 long-range plan or were you going to something else, Carson?

24           MR. MARK: I was going to say on the long-range  
25 plan that my only anxiety is that nobody should for a moment

1 take it seriously no matter how well it is done. It is  
2 capable of including things which ought to be carried across  
3 a long time but it is not capable of describing the next  
4 five years. As long as one has that firmly and clearly in  
5 mind, and the Congress, too, well and good, it may not do  
6 much harm.

7 But to read this plan and then argue about  
8 deviations from it six months from now is of course a very  
9 questionable thing. I don't hope we have an accident to  
10 bring that to attention. We don't need another one to do  
11 that. The last one ought to do that.

12 CHAIRMAN PALLADINO: John, do you have a comment?

13 COMMISSIONER AHEARNE: My comments were more in  
14 the line of agreeing with Chet as the brief sentence I put  
15 in the letter indicated.

16 MR. SIESS: I interpreted it that way.

17 (Laughter.)

18 CHAIRMAN PALLADINO: Well, we appreciate your  
19 comments on long-range plans, Carson. I guess we have all  
20 been through many phases of long-range plans.

21 MR. MARK: Well, there may be people who can see  
22 further into the future than I can, but I think about three  
23 months is my limit.

24 CHAIRMAN PALLADINO: Well, all long-range plans  
25 should be rolling long-range plans where you drop off one

1 one year and pick up another one and you revise your focus  
2 on the forthcoming year each year.

3 MR. MARK: That is perhaps far enough on that  
4 general point.

5 CHAIRMAN PALLADINO: Do any other Commissioners  
6 have comments on the long-range plan or any of the research  
7 reports?

8 COMMISSIONER AHEARNE: One other point. You  
9 mentioned that you are well on your way in the review of the  
10 '83 budget. I guess I would just point out that it is not  
11 obvious that we have the '83 budget fixed.

12 MR. SIESS: We are well on our way of reviewing  
13 the proposed '83 program and the tentative '83 budget. Next  
14 month will be our main focus and I hope you will have it by  
15 then.

16 MR. MARK: A point which is very evident is that  
17 in discussions of the sort that we are involved in, plant  
18 licensing and plant arrangements, there is in the last  
19 couple of years an enormously large increase in discussion  
20 of the quality of the human staff. It is all the way from  
21 the top to the bottom, the operators, the management and  
22 everything else. Human factors, and these are very correct  
23 things, but which is difficult to be sure exactly what  
24 should be said.

25 I think, Charlie, you had some points you wanted

1 to bring to our attention.

2 MR. MATHIS: I think David will cover that.

3 MR. MARK: Excuse me. The two of you have been on  
4 this, but it is David. I am sorry. David Ward has spent  
5 some time in the last couple of months having his nose  
6 rubbed in these questions and I think he has raised more  
7 questions than he has found solved and he wants to say a bit  
8 about it.

9 MR. WARD: Thank you, Carson, and I will certainly  
10 invite comment from Charlie and everybody else on the  
11 committee as we go along.

12 Last May the committee addressed a letter to Mr.  
13 Dircks in which it expressed the continued interest in  
14 seeing the staff develop some criteria for the  
15 infrastructure or for support personnel at nuclear power  
16 plants. In many ways maintenance and testing and such  
17 functions as that have as many implications on reactor  
18 safety as more direct operating work.

19 We didn't want to and we don't want to imply by  
20 that letter that we necessarily expect that the staff will  
21 develop some sort of very detailed or organizational or  
22 personnel qualification requirements because in fact in  
23 several recent operating license letters we have expressed  
24 concern about the overall quality of the applicant's  
25 organization and management even though the organization on

1 paper was okayed. The staff indicated that the organization  
2 filled in all the blanks and all the people in those blanks  
3 met the minimum requirements.

4           Still, we felt, and to a certain extent the staff  
5 indicated it felt there was something missing. Now I think  
6 a lot of our members are less comfortable in forming  
7 opinions and giving you recommendations in areas such as  
8 this than we are in response to more traditional technical  
9 questions.

10           So I think one thing we would like to hear from  
11 you is how you see our responsibility and how you will value  
12 our advice in this kind of soft but perhaps very, very  
13 important area.

14           I guess our concern is that the evaluation of what  
15 we might call management competence is quite soft. It is  
16 very highly subjective. We can't make any numbers on it and  
17 we have difficulty even listing the criteria by which we  
18 made judgments.

19           I think your staff has to make the same sort of  
20 evaluations and it has difficulty. It acknowledges the  
21 evaluations are subjective. In fact, we have heard remarks  
22 to the point that what they look for is a warm feeling, and  
23 that certainly is not a highly objective way to look at it,  
24 but still it is something that has to be dealt with.

25           We think that we and your staff ought to be able

1 to do better in this area. We think that routinely business  
2 and industry makes judgments about the quality of management  
3 other than just filling in the blanks in the management  
4 organization.

5           There may be other regulatory agencies that have  
6 to make such judgments. The FAA comes to mind. I am not  
7 clear to what extent the FAA makes judgments about the  
8 quality of operating airline management organizations. We  
9 have asked that of your staff and they are not clear about  
10 it either.

11           I think that there can be and there is maybe a  
12 need for research to develop more objective criteria for  
13 judging the quality of management other than seeing that an  
14 organization chart is filled in.

15           We have talked a little bit about that in  
16 connection with the review of the 1983 research program with  
17 some people on the staff and they express some doubt about  
18 their ability to do or to manage such research. I think are  
19 not particularly happy with that response. I suspect that  
20 Harvard Business School people would tell you that there  
21 certainly can be some fairly objective and semi-scientific  
22 evaluations and procedures requirements for such things. So  
23 we would like to see research efforts proceed along that  
24 line.

25           As far as that is concerned, in the whole area of

1 human factors we certainly applaud the increased effort that  
2 the Commission and their staff is giving to research and  
3 other work in human factors and we want to see that  
4 continue.

5           We note that in the '83 budget plan, at least the  
6 research dollars allocated for the general area of human  
7 factors only, only four percent is going to, as I interpret  
8 the writeup, that only four percent is going to this area of  
9 management qualification. As I said, it is an area in which  
10 we are all groping for some hard bases and some criteria.  
11 The research might be tough and there might be some false  
12 starts with it, but I think that is exactly what research is  
13 needed.

14           I would like to bring up one other problem, and  
15 this certainly doesn't necessarily represent a consensus of  
16 the committee and maybe it is just my own, but I will bring  
17 it up. I am concerned that in the staffing of new plants  
18 experience is both desired and demanded but there is kind of  
19 a Catch-22 there of course. It is like being critical of a  
20 recent college graduate for not having work experience.

21           There are some rather explicit requirements which  
22 the staff has placed on applicants. So the applicants have  
23 no choice but to draw from other operating power plants for  
24 experienced personnel. That is good in some ways, but I  
25 think it has some negative aspects. It depletes the

1 operating organizations.

2           Also, and I think more importantly, I think  
3 perhaps in an effort to fit these kind of semi-legal  
4 requirements it has maybe a negative impact on the  
5 applicant's organization in terms of organizational  
6 cohesiveness I think that it is an organization that has  
7 to operate a plant and not a collection of individually  
8 qualified people.

9           I think it is probably just as important or more  
10 important that the employees of the applicant have a sense  
11 of corporate loyalty and a tradition of working together as  
12 a team. I don't mean just the two operators on a shift have  
13 practiced together on a simulator, but rather that the whole  
14 organization has a sense of cohesiveness as a team.

15           What I am concerned about is that the very  
16 specific and detailed requirements on experience and  
17 education and other things may sometimes run counter to an  
18 applicant's ability to develop that type of organization.

19           I think as more and more plants apply for licenses  
20 the present practices are going to tend to keep moving  
21 people around. I don't know if we are going to have a  
22 tendency toward seeing sort of gypsy SROs and free-agent OPs  
23 managers, but if there is too much of that I think it is not  
24 a healthy thing.

25           I think the last thing I would like to say is that

1 I think we would like to hear your comments on what you are  
2 looking for from us as far as opinions or recommendations on  
3 the quality of management that an applicant has. If you are  
4 looking for something from us on that, I think we need to  
5 address the problem of the timing of our operating license  
6 reviews.

7 We are sometimes reviewing plants for operating  
8 licenses two years in advance of when they plan to start up  
9 and the staff that is going to operate the plant isn't there  
10 yet. They are in skeleton form and it is forming. The  
11 principals may be there, but I think there is some problem  
12 in us giving these sort of reasonable assessments of the  
13 people that are going to be operating the plant two years in  
14 advance of their start-up date.

15 CHAIRMAN PALLADINO: Go ahead, Mike.

16 MR. BENDER: Dave has been very articulate and I  
17 just wanted to add a couple of points to what he said.  
18 Generally I agree with everything he said, and I just wanted  
19 to amplify two areas.

20 First, when we talk about this concept of  
21 infrastructure there is the matter of supporting resources,  
22 but it is not just in-plant resources that we are talking  
23 about.

24 When you start with a plant that is coming on line  
25 for the first time there is always a group of people that

1 has to help in getting the plant started. That usually  
2 comes from some combination of the architect/engineer, the  
3 nuclear steam supplier and the constructor. That cadre of  
4 people is not well defined at all and it is not really clear  
5 as to what is needed. Generally they show up in some way,  
6 but it would be nice to note just what it is.

7           That may be the place where the hand-holders ought  
8 to be if you are going to have some rather than saying go  
9 out and hire somebody from off the street because he has ten  
10 years of experience in operating a plant. He needs to have  
11 a loyalty to something, too, in some place where you can  
12 hold him responsible.

13           The other aspect that I have been conscious of  
14 nowadays is that even when you decide that you have an  
15 operating organization there are a lot of things that have  
16 to be done by some other organization and we hardly see how  
17 they are integrated into the plant. For example, if you  
18 have to shut down for refurbishment of the equipment, you  
19 always have to bring in other kinds of people to do that  
20 work. Some thought needs to be given to where those  
21 resources are.

22           We only have a few plants on line right now by  
23 comparison with what we are going to have. So the growth of  
24 the whole industry has to deal not just with what is in the  
25 operating organizations but what else is out there that has

1 to come along with it.

2 That is the extent that I want to amplify Dave's  
3 remarks.

4 MR. MARK: I guess I would like to amplify them  
5 and I fear it doesn't help very much. There is a tendency  
6 of course to look at the management, the real controllers,  
7 if you like, and the people whom the agency licenses and not  
8 necessarily give the attention that probably is needed to  
9 the people at lower levels than that, the ones who in fact  
10 make sure that the switches are where they need to be and do  
11 the maintenance and are called in for fixing something.

12 Now it is not that I am suggesting they should be  
13 licensed, that would probably be a mistake, but they need to  
14 be capable, they need to be responsible, they need to be  
15 loyal and devoted and they need to be there.

16 CHAIRMAN PALLADINO: I think Max had a comment.

17 MR. CARBON: Yes, I too, agree with most of what  
18 Dave has said. But, as he indicated, there is a different  
19 of opinion on the matter of the staff's requirements for  
20 experience within the plant.

21 I disagree quite strongly actually with Dave's  
22 thought that perhaps the most important thing is loyalty. I  
23 support quite strongly the staff requirement in the  
24 direction of experience and past experience. In fact, I  
25 think it is so important that I think perhaps the staff

1 requirements are not adequate in that area. I think this is  
2 very important.

3 CHAIRMAN PALLADINO: Bill.

4 MR. KERR: I want to express what is perhaps a  
5 minority opinion. I am considerably skeptical of research  
6 or any other method that is going to give us a good way of  
7 judging management before one has seen the products of their  
8 management.

9 I am afraid that I think one can't judge  
10 management very well without seeing an example of what they  
11 do. I wouldn't want to spend a lot of effort trying to help  
12 the Harvard Business School or anybody else come up with a  
13 recipe that would permit me to choose good management before  
14 I have seen the results of they have managed.

15 MR. SIESS: We haven't seen any success in judging  
16 the results of their management. The first step would be to  
17 decide which plants are well operated or well managed and  
18 which ones aren't. There have been four attempts I believe  
19 to do that, none of which I would consider successful, the  
20 SALP and its four.

21 CHAIRMAN PALLADINO: Well, it is obvious we are in  
22 an area where there are many different opinions. As a  
23 matter in trying to prepare for the meeting I find that  
24 there are varying points of view within the staff on, for  
25 example, this infrastructure question.

1           Nevertheless, I do think that there are  
2 improvements that can be made with regard to the  
3 qualifications of people in the maintenance area, for  
4 example, as opposed to the strict reactor operating or plant  
5 operating area.

6           I do believe that there would be some value for  
7 any specific recommendations that the committee might have.  
8 For example, should they be certified in some way or some  
9 other means to demonstrate their qualifications. I don't  
10 know if that is something that you have in mind or not, but  
11 I think recommendations on that point would be very helpful  
12 to us.

13           I wanted to go to your second point.

14           COMMISSIONER AHEARNE: No, go ahead.

15           CHAIRMAN PALLADINO: With regard to the whole  
16 question of staffing of reactor plants, I do think we have  
17 an industry-wide problem. This question I don't believe is  
18 being addressed early enough by the management people in  
19 these utilities. They are usually so busy trying to get the  
20 plant built and licensed and put off until perhaps a little  
21 too late the question of developing the staff and getting  
22 them trained and getting them to work as much as possible as  
23 a team.

24           There is I think a generic kind of question that  
25 deserves some attention. I will defer to some of my

1 colleagues, but my own opinion would be that the committee  
2 could benefit us greatly by addressing this question of  
3 development and training of reactor staff treating it as a  
4 generic item and perhaps using examples as a vehicle for  
5 exploring the issue and see if there is some advice that you  
6 would want to give us that would be helpful.

7           John.

8           COMMISSIONER AHEARNE: Yes, I would like to  
9 comment on a couple of points.

10           Chet, you mentioned that there is some difficulty  
11 with previous attempts we have made at trying to decide what  
12 is good management and which plants are well managed and  
13 that is certainly true.

14           But the experience I have had in discussing with a  
15 lot of the staff, particularly those that have spent much of  
16 their time out in the field looking at plants, leads me to  
17 conclude, and a not very surprising result, that the plants  
18 that are known to be well managed, and in general there  
19 seems to be a reasonably consistent interpretation among the  
20 senior staff which plants those are, is that there are two  
21 main characteristics, and the second is a lot more important  
22 than the first.

23           The first is that they do have enough resources to  
24 work with. They are not skimping at providing resources but  
25 it isn't a torrent of money that comes to them.

1           The second, and the most important, has to do with  
2 specific individuals. The characteristics of the well-run  
3 plants seem to always end up being the characteristics of  
4 specific individuals and that is very hard to then match a  
5 template. It is hard to match a template, first, because  
6 trying to pin down what makes the person that type of person  
7 seems to be very difficult. Second, there is a great  
8 reluctance on the part, and it is not unique in our staff in  
9 most places, of identifying and ending up saying well, these  
10 individuals are really the things that make this work.

11           MR. SIESS: Can you measure those individuals in  
12 terms of years of experience in the nuclear business to  
13 which the yardstick is being applied?

14           COMMISSIONER AHEARNE: The management  
15 unfortunately can't. It is hard.

16           Dave, you asked how would we look at comments from  
17 the ACPS in this matter. For myself I would look at it a  
18 little more skeptically.

19           (Laughter.)

20           CHAIRMAN PALLADINO: You mean the management?

21           COMMISSIONER AHEARNE: Yes, and just for some of  
22 the reasons that you have been mentioning, because your  
23 group is not unlike the rest of the people who have been  
24 trying to grapple with this subject. Although in general  
25 all of you have been chosen because of outstanding

1 performance in various areas, management hasn't been one of  
2 them.

3 NR. BENDER: I am saying we are not managers.

4 (Laughter.)

5 COMMISSIONER AHEARNE: No, I didn't want to say  
6 that because some are or have been. The point is it is not  
7 that therefore I would disregard that. All I am saying is  
8 that I think that would be for myself that you would have to  
9 do a little bit more showing that this is soundly based  
10 advice than normally. Normally, at least for myself, when I  
11 get advice from the ACRS I tend to assume that it is coming  
12 from experts. In this particular case I think the ACRS  
13 would have to, perhaps using its staff, build up some larger  
14 amount of evidence or a case for this particular conclusion.

15 MR. MARK: Just right.

16 (Laughter.)

17 COMMISSIONER AHEARNE: I am not saying they  
18 shouldn't do it.

19 CHAIRMAN PALLADINO: No, but I think there are  
20 specific areas, such as addressing the question of  
21 development of staff power for operating plants which I  
22 think is an item in which some real contribution could be  
23 made.

24 I think Dave Okrent wanted a chance to comment.

25 MR. OKRENT: I will try to enter where angels fear

1 to tread, but I will be very narrow in my suggestions and  
2 maybe thereby stay within the background of competence.

3 (Laughter.)

4 MR. OKRENT: In the area of maintenance one thing  
5 that has been called to my attention is that there is a  
6 variation in its practice from plant to plant. It is not at  
7 all clear to me that this is in any way regulated or  
8 controlled or examined. In other words, whether one  
9 schedules it in a quarterly way or brings in a thousand  
10 people sort of milling around, as it were, may be a topic  
11 that can be looked at as a narrow one.

12 With regard to what I will call the technical  
13 capability of the off-site personnel for a plant it seems to  
14 me from my probing questions that I rarely find among the  
15 people who come in to meet with us more than one who has  
16 even gone beyond the executive summary in WASH-1400. I  
17 think that is really a deficiency.

18 At this stage of the game I think that the bulk of  
19 the people in the company who have anything to do with  
20 advising or instructing the people on site should have some  
21 reasonable knowledge, not all all of WASH-1400.

22 (Laughter.)

23 MR. OKRENT: In other words, they should know what  
24 are the kinds of failures and what are dominant sequences,  
25 et cetera, and what are consequences in a general way. You

1 don't find that.

2 I think one could look at this kind of  
3 organization in the same way as when we try to think about  
4 membership on the ACRS and think about what kinds of skills  
5 should we have and what kind of background.

6 If they don't have somebody who knows something  
7 about systems analysis for whatever kind of a plant they  
8 have, they should have one. If necessary, they will have to  
9 have a skilled person, not just meeting on the review  
10 committee once or twice or three times a year, but there to  
11 give the necessary input.

12 You can go through I think a list, and I don't  
13 think you need research in my opinion. My guess is a few  
14 knowledgeable people meeting for one or two days could come  
15 up with a list of the kinds of skills and backgrounds that  
16 either they have in-house or they have really there enough  
17 of the time during their first year of operation which is  
18 the one experience tell us is an important one. In other  
19 words, not something they have built up by the 40th year.

20 I don't think that is available from the staff's  
21 chart and I don't think it exists among any of the groups  
22 that we have heard. They may have in one or two areas what  
23 I would consider the prerequisite knowledge and background,  
24 but in general what we hear maybe are good words of, you  
25 know, we are going to look in this area and build up a

1 capability and so forth. Those are things that I think are  
2 doable and you don't need to go to the Harvard Business  
3 School.

4           COMMISSIONER AHEARNE: Can I make one comment on  
5 the first part, and not meaning to disagree with the second,  
6 but on the first part on maintenance which was the third  
7 item on my list which I hadn't gotten to. I would agree  
8 with Dave that that is an area where we could use some  
9 additional review, particularly across the operating  
10 practices.

11           Frankly, I had read the May 12th letter as focused  
12 primarily upon that side of the plant operations, and I felt  
13 that the point that the May 12th letter was making is that  
14 in your reviews of several of the plants you had reached a  
15 level of concern that the maintenance activities in the  
16 plants weren't being staffed adequately. Is that an  
17 incorrect reading of that letter?

18           MR. MARK: Perhaps it is a little overdone. The  
19 maintenance level concern is in part because so many  
20 unfortunate evidences have come from inadequacies there.  
21 How to go about it I don't think we had any idea except that  
22 it should be given more thought than we feel it has received.

23           COMMISSIONER AHEARNE: Yes.

24           MR. BENDER: The matter of organizational balance  
25 is one that Dave touched on. I think that in our review,

1 and I am less modest than some members about this matter and  
2 I have seen enough of these licenses to know generally what  
3 ought to be in them, but usually in looking at them you find  
4 that there only are a couple of knowledgeable people in a  
5 plant that is costing a couple of billion dollars or  
6 thereabouts.

7           I think it is necessary to press the point of  
8 having more knowledgeable people in them and not necessarily  
9 people that have operating experience but have have an  
10 appreciation of the technology. While they do not need to  
11 be research people and should not be research people, they  
12 need to be people that know how to interpret the research  
13 programs that are going on and the technology programs that  
14 are going on and there seems to be a major deficiency there.

15           In fact, most of the people are not even aware of  
16 what programs are going on. They just say we are on the  
17 EPRI distribution list. Now I think that needs to be looked  
18 at very carefully.

19           CHAIRMAN PALLADINO: Do you think there would be  
20 value to the industry in developing what I will call  
21 orientation programs, and I don't mean to demean this  
22 program by using that word, but a program for top officials  
23 of utilities that are either getting into the business or  
24 are about to get into the business to let them know what the  
25 power plant is all about and what sort of transient problems

1 they are going to face and what sort of risks they are going  
2 to face so that we make sure that at least the initiating  
3 group has some background in the field? Do you think that  
4 would be something worthwhile?

5 I only use the word "orientation program" because  
6 no other better word comes to mind. Unfortunately, too many  
7 people think of orientation programs as something casual and  
8 trivial and I am thinking of an in-depth program.

9 MR. SHEWMAN: Joe, this would be done by EPRI and  
10 not the NRC.

11 CHAIRMAN PALLADINO: I don't think it is our job  
12 to try to train them, but it might be a suggestion that is  
13 developed for industry.

14 MR. BENDER: I wouldn't want to discourage that.  
15 I think it is going on, as a matter of fact. I think there  
16 are such orientation programs but there is the problem of  
17 having a receptive ear.

18 COMMISSIONER BRADFORD: Who is the target of them,  
19 Mike? If you are talking about orienting, are you talking  
20 about the top management in the utility, the people who are  
21 actually going to be running the plant?

22 MR. BENDER: It is hard to know who top management  
23 is, but I think you will find if you sample the industry  
24 that there are meetings at which the senior executives of  
25 the company that are supposed to know about the problems are

1 getting together to try to mutually determine how they  
2 should respond to things. That is how INPO came about, for  
3 example, and INPO is a very good idea and nobody should try  
4 to downgrade that thing.

5           It is just that until there are a few people that  
6 are a part of the company, that are recognized parts of the  
7 management that understand the technology just telling them  
8 doesn't help all that much. You have got to insist that  
9 there be training of various sorts.

10           If all the organization has is a history of having  
11 people that have operated and have never done engineering  
12 the chances are they are going to have engineering  
13 problems. If there are people that have a history of never  
14 having operated anything but only building things you will  
15 have the reverse problem. I think it is very important to  
16 recognize that balance is needed and to show the balancing  
17 of this.

18           The other aspect is to be sure there is a  
19 communication arrangement that enables them to get the  
20 people with the money to discuss the problems with the  
21 people that are running the plant so they spend the money at  
22 the right times in the right places.

23           MR. MARK: Without trying to be dogmatic, and it  
24 is only an impression that I have and may not be enough to  
25 be taken seriously, but it is my impression nevertheless.

1 There was never a nuclear commercial enterprise so well  
2 staffed with absolutely brilliant comprehending people as  
3 General Atomic. It brought in the most fantastic crew of  
4 people who knew absolutely everything about nuclear physics  
5 and their engineering was lousy.

6 (Laughter.)

7 MR. BENDER: As an engineer who has seen some of  
8 that I really disagree fiercely.

9 (Laughter.)

10 MR. BENDER: There was some bad engineering but  
11 there was a hell of a lot of good engineering.

12 MR. MARK: Well, it was relatively unfortunate  
13 then. Let's not call it lousy.

14 MR. BENDER: There were bad decisions made.

15 (Laughter.)

16 MR. MARK: But you see they had met that  
17 absolutely top billing in anything you could have written  
18 down about knowledge, understanding and experience, but to  
19 some degree that group of people collected there was  
20 completely unmatched.

21 MR. BENDER: Since this is a meeting with the  
22 Commissioners, I just want to say that Dave Ward made a  
23 point that is really pretty important, and that is  
24 developing a team capability is part of the trick and they  
25 have to be there soon enough to be a team.

1 I think you are seeing right now that three months  
2 before the plant is to operate suddenly all the people show  
3 up on the scene and that absolutely is not going to make a  
4 workable system.

5 MR. EBERSOLE: May I make a comment on that line  
6 and also on Dave's comment. I think you will find if you  
7 examine it carefully there is an intrinsic opposition to  
8 what is called systems analysis because these people are  
9 troubleshooters and they are trouble-finders. Toward the  
10 end of a project to invite them into the project itself they  
11 begin to look at the project critically and it invites large  
12 troubles in the design organization which has been put  
13 together along functional channelized lines.

14 These people are not welcomed generally by  
15 management. They have insecure futures and they are not  
16 wanted intrinsically by management because they cause and  
17 find a great deal of trouble. Until we can find some way to  
18 convince management that in the long run these people are  
19 going to help them we are going to get in trouble. We are  
20 falling short in doing what we ought to do.

21 COMMISSIONER BRADFORD: I am sorry, Jesse, who do  
22 you mean by these people?

23 MR. EBERSOLE: The systems analysts who come in  
24 and find a patchwork job done in situ and make such findings  
25 known and become extremely unpopular with the management of

1 the organizations that put that type of design together.

2 MR. SHEWMAN: If I might get personal, I think he  
3 means people like Jesse Ebersole and Carlisle Michaelson  
4 interacting with TVA.

5 (Laughter.)

6 MR. EBERSOLE: One reason Carlisle Michaelson is  
7 here is that he was extremely unpopular because of his  
8 finding of deadly defects in design.

9 CHAIRMAN PALLADINO: Perhaps we need to bring them  
10 in earlier.

11 MR. MARK: With your permission, sir, we have made  
12 it clear to you that we have very little solid advice to  
13 offer in this field.

14 CHAIRMAN PALLADINO: I am serious with regard to  
15 seeing if you can offer some generic advice on development  
16 of staffing personnel.

17 MR. MARK: I am sure we will continue to try to  
18 get ideas to the extent that we can.

19 COMMISSIONER BRADFORD: Well, it sounds to me as  
20 though at least on a generic basis you actually have quite a  
21 lot of solid advice to offer, Carson. I mean, it may not be  
22 quite ready for the offering yet in the sense that the  
23 committee hasn't brought it together, but there is quite a  
24 lot that is interesting.

25 COMMISSIONER AHEARNE: I would say they have a lot

1 of advice.

2 (Laughter.)

3 MR. MARK: I would like to before we have to break  
4 up, as we may have to do shortly ---

5 COMMISSIONER BRADFORD: I don't quite want to  
6 leave this one yet. I am sorry. You made one other point  
7 that I think is worth paying some attention. You had said  
8 that your reviews came too early on the individual plants  
9 for the advice to have all that much meaning in terms of the  
10 structure that would actually be in place at the time the  
11 plant was to be operated.

12 Does that suggest that what you really should be  
13 doing is working on this matter generically or are you  
14 looking for some change in the timing of your review?

15 COMMISSIONER AHEARNE: It is two step. There is a  
16 second revisit as far as the management structure is  
17 concerned.

18 MR. WARD: Well, if our recommendations or advice  
19 in this area are going to be looked at with complete  
20 skepticism it probably doesn't matter.

21 (Laughter.)

22 MR. WARD: I think you are right in that we should  
23 work a little more and we really need the staff to work  
24 toward a more generic solution by developing some criteria  
25 for a judgment. If we are going to be in a position of, you

1 know, forming opinions and giving recommendations about the  
2 quality of the staff for an operating reactor, somehow our  
3 review of that has to come closer to the start-up date,  
4 unless somehow, as Mike suggests, the applicants would be  
5 required to put their staff together two years in advance.

6           COMMISSIONER BRADFORD: What are you looking at  
7 now? In an individual plant what is there there for you to  
8 get your teeth into in terms of who the actual individuals  
9 are going to be and what their qualifications are?

10           MR. WARD: You mean who is available? Well,  
11 typically, as I said, the principals of the applicant are in  
12 place. We see something of them in the presentations they  
13 give us on the technical subjects. In some cases, for  
14 example, an applicant didn't have its training manager. We  
15 heard talks and heard a description of their training  
16 program but not from their training manager.

17           MR. CARBON: They should have had him and we knew  
18 it at the time and they knew it.

19           CHAIRMAN PALLADINO: You are touching on a very  
20 fundamental point. You don't want a snap-shot picture of  
21 what the organization is at that date or the date just  
22 before they are going to operate, but do they have an  
23 attitude and an approach that is going to serve over the  
24 long haul? Do they have in place the various kinds of  
25 people they need?

1 I think if they don't have them in place, that is  
2 evidence that perhaps they are not quite ready to start  
3 taking over this plant. I think on those kinds of things we  
4 should act accordingly. If they are not ready, they are not  
5 ready.

6 MR. BENDER: Joe, it would be presumptuous of  
7 anybody to say he knows how one of these organizations ought  
8 to be organized. There are a hundred ways to do it.

9 CHAIRMAN PALLADINO: I was getting at specifically  
10 training. One of the problems is they don't hire the  
11 training person soon enough and that is why they are in  
12 trouble at the end when they come to operate.

13 MR. BENDER: It seems to me that if the regulatory  
14 function can do anything it can determine the rate of  
15 build-up of a staff. It is hard to see now that that has  
16 been taken into account. It seems to me if you are going to  
17 start anywhere I would start with that and never mind about  
18 whether we have the right criteria.

19 When should they be in place and how much of it  
20 ought to be there in order to have some time to get  
21 organized is something anybody could start with and I think  
22 you could do that without any advice from us.

23 COMMISSIONER AHEARNE: I want to answer something  
24 that Dave just said. Because I am skeptical doesn't mean  
25 that I won't listen to what you have to say. It just means

1 that I would hope you would work a little harder at ---

2 MR. WARD: --- building the case.

3 COMMISSIONER AHEARNE: Yes.

4 COMMISSIONER AHEARNE: If you think it is  
5 important you ought to persevere.

6 MR. MARK: Shall we go on.

7 MR. SIESS: One problem I have is we seem to be  
8 very concerned about the plants that are starting up. What  
9 is our concern or what should be our concern about the  
10 60-some-off plants that are operating from which many of the  
11 senior people to run these new plants are coming?

12 I mean, we know some of the existing plants are  
13 not well operated. They are below average at least.

14 MR. SHEWMAN: Half of them.

15 COMMISSIONER AHEARNE: Right.

16 (Laughter.)

17 MR. SIESS: I didn't define average as medium.

18 CHAIRMAN PALLADINO: You can have people below  
19 average without having any ---

20 MR. SIESS: You can have them all at average but  
21 that is unlikely. We are seeing companies staffing new  
22 plants at higher levels with very experienced people from  
23 old plants. Maybe we don't need to go back and look at the  
24 old plants, but my point is we are giving a great deal of  
25 attention to the management of the new plants without giving

1 the comparable attention to existing plants where the  
2 management by the standards we are applying to the new ones  
3 may be getting worse because the experienced people are  
4 leaving the staff the new ones. I am not saying those  
5 standards are correct, but if they are correct for one they  
6 should be correct for the other. I am not sure whether we  
7 are not lowering the average.

8           COMMISSIONER AHEARNE: By and large the standards  
9 are the same and the operating plants are held to those  
10 standards.

11           CHAIRMAN PALLADINO: That is something I want to  
12 look into a little more. Somehow I get the impression that  
13 we do have teams that are looking at management performance  
14 at operating plants.

15           COMMISSIONER AHEARNE: That is right.

16           CHAIRMAN PALLADINO: But whether or not they are  
17 looking at all of the aspects that you are aiming at here, I  
18 don't know.

19           COMMISSIONER AHEARNE: As far as the specific  
20 standards of qualifications of the people on whom we lay  
21 qualifications for new plants they are also laid on the  
22 applicant.

23           MR. SIESS: We had an applicant in and they have  
24 got two men up at the top with 25 or 30 years experience  
25 which were hired away from some other operating utility

1 which now no longer has some man with 25 years experience.  
2 Maybe it has two others with 25 years of experience.

3           COMMISSIONER AHEARNE: It is obvious, Chet, that  
4 they don't have that person, but whether they couldn't  
5 replace him is not obvious.

6           MR. SIESS: I am not sure whether the man-years  
7 are accumulating faster enough to staff the new plants or  
8 not.

9           CHAIRMAN PALLADINO: We have another comment.

10          MR. MATHIS: Yes. Well, in that connection there  
11 is I think an emphasis on this point, that there is a lot  
12 pirating going on at the moment. This is because of the  
13 sudden influx of plants coming in for operating licenses.  
14 They have been kind of sitting back waiting for something to  
15 happen and it is all happening at once.

16          There isn't enough supply, if you will, to go  
17 along with the market demand at the present time. So  
18 somebody has to go up and somebody goes down.

19          MR. MARK: As John said, the total man-years that  
20 are experienced in the country is nevertheless increasing at  
21 this moment.

22          CHAIRMAN PALLADINO: I do think you touch on the  
23 basic problem of developing staffs for all of these plants  
24 and I think it is something that deserves more attention  
25 than we have given to it.

1           MR. MARK: A thing on which I think we would like  
2 to spend a few minutes, since you probably don't have all  
3 day here, we do ---

4           (Laughter.)

5           MR. MARK: --- but some of us have become  
6 impressed with the essential impossibility of reading  
7 comprehendingly the mass of paper that is likely to descend  
8 on one about two or three days before one is supposed to sit  
9 back and think through the thing being presented to you. I  
10 think it is commendable of the staff to put the amount of  
11 work that must be required to assemble that amount of  
12 paper. It takes a lot of doing. Nobody can write more than  
13 about four or five pages in the course of a day, and  
14 evidently there have been 40 or 50 people working on this  
15 for quite a few days.

16          (Laughter.)

17          MR. MARK: Mike wants to say something about the  
18 nature of communications.

19          MR. PENDER: Thank you, Carson. That is a fairly  
20 good preamble. It used to be that when the Commission went  
21 to the Congress they took photographs of a row of books like  
22 that which said this is how we know that the plant has been  
23 designed and will be operated safely because we have got  
24 this big documented PSAR which is converted into an FSAR.

25           I used to be fairly impressed by that, but now

1 that I have looked at a few of them and decided if you have  
2 room for one in your working space it is some kind of a  
3 miracle. If you multiple it by the number of plants we  
4 have, it is obvious that now even a good library could store  
5 them where they were accessible.

6 I have concluded from looking at a lot of them  
7 that most of what is in there is the wrong kind of stuff for  
8 people at our level and probably at your level to find in a  
9 form that is useable and it ought to be condensed. One of  
10 the things that I was successful in getting some people to  
11 work on was how to compress it some way.

12 Ray has been nice enough to prepare some hardbound  
13 copies of what is a condensed version of CESSAR and Palo  
14 Verde. I wouldn't have put it in a hardbound book because  
15 that takes up too much space and I have to carry around a  
16 notebook. This is the Palo Verde report and it was just  
17 selected out of the FSAR by some of our fellows. It is far  
18 from being perfect.

19 What it suggests is that one could have ---

20 MR. MARK: That is a condensed version.

21 MR. BENDER: That is a condensed version. There  
22 are certain kinds of information in the FSAR that could  
23 easily be put in what is sometimes called the Executive  
24 Summary. I don't think that is quite the right term, but a  
25 selected set of information that the people that are working

1 on the plant could have accessible to them when they need  
2 it. This sized document is the sort which you can have a  
3 number of.

4           It has the kind of information in it that might  
5 even avoid things like Diablo Canyon because it does in fact  
6 have a few arrangement drawings that the people that are  
7 doing the analysis of the plant could look at to see whether  
8 their analysis applies.

9           That kind of thing could be done when the PSAR is  
10 written. It could be updated effectively at the FSAR stage  
11 and it might be better than all the massive documentation  
12 that you require for the FSAR because it really should have  
13 the fundamentals in it.

14           I would add that this things which are the things  
15 that the staff makes are a lot thicker than this. They are  
16 written on a tape typewriter. It is a job to find out what  
17 is different in these things from plant to plant. I would  
18 be much happier if they had some tables with checks on them  
19 that said this has been checked and that has been checked  
20 and it was tabular form and they only called out  
21 exceptions. It wouldn't make it so hard to find out what  
22 was in the plant and it was in a predictable location.

23           I don't know whether this is necessary for legal  
24 purposes. Some people say it is. I think it only puts you  
25 in a position of having to interpret a lot of English

1 jargon. Maybe that is not the right combination of words,  
2 but anyhow words that people are putting together in a form  
3 where they are subject to many interpretations.

4           Engineering people would do much better in reading  
5 these things if they used tabular kinds of information and  
6 had numbers and answered questions in the form of yes or no,  
7 we have checked this or we didn't check that, and that those  
8 questions were generall pre-established.

9           I believe we could have better information. It  
10 would be easier to review. People could know more of what  
11 is quantitative and what is non-quantitative and the  
12 management of it would be a lot easier to deal with.  
13 Whether you can change it not, I don't know.

14           Some of our staff was much more perceptive than I  
15 was and they concluded that you could condense them a lot  
16 more. The Xerox machine is much smarter than we are.

17           (Laughter.)

18           COMMISSIONER AHEARNE: That table that in the  
19 other version was very hard to read, what does it look like  
20 in this one?

21           MR. BENDER: It is still readable to some degree.

22           (Laughter.)

23           MR. BENDER: I promise you that if I really wanted  
24 to make it readable I could.

25           (Laughter.)

1 MR. BENDER: The Xerox machine has to start with  
2 something better than this.

3 MR. WARD: The probability that it would have  
4 prevented the Diablo Canyon problem is very small.

5 COMMISSIONER BRADFORD: I think it was pretty  
6 small to begin with, wasn't it?

7 (Laughter.)

8 MR. SIESS: I am not sure I agree completely with  
9 Mike. I believe that you could put everything that Mike  
10 Bender is interested in into about 1/15th of the space we  
11 now have. I suspect you could put everything I am  
12 interested in into about 1/15th of the space. But I think  
13 if you went around the committee you might end up to satisfy  
14 everybody having an SER just about as long as it is now. We  
15 are not of one mind about what is important which is very  
16 nice. All of us are not reviewing everything.

17 I would sort of like to go back to the good old  
18 days when the staff's report to the ACRS was about 50 pages  
19 long and only addressed those things that they thought the  
20 ACRS should be interested in or that they thought we were  
21 interested in and in those days they were pretty good at  
22 it. If they knew we weren't interested in so many things  
23 maybe they were smarter.

24 I suspect now that what would satisfy Mr. Bender  
25 might be too much for somebody and not nearly enough for

1 somebody else.

2 MR. BENDER: Well, I think that is possibly the  
3 case. But if you don't try you will never know. I have to  
4 say that no effort is being made yet and I think that is  
5 inexcusable.

6 CHAIRMAN PALLADINO: Well, having lived with many  
7 of these documents and having carried many of them and wated  
8 the SERs grow, I am quite sympathetic with the point of  
9 view. However, I believe we have got to recognize that  
10 these documents have a number of functions and not all  
11 functions are going to be served by particular extracts.

12 I have also got to make another point on SARs.  
13 There are changes coming about constantly, although there is  
14 basic boilerplate. I think that there may be considerable  
15 value in trying to get a basic summary of the plant and some  
16 of the features highlighted in a digest form because I had  
17 found it necessary when I was on the ACRS to have a student  
18 who just told me what was different about this report as  
19 compared to last report. Oftentimes he would say, oh, this  
20 is all boilerplate and you don't really have to read that  
21 and here is what is new. I certainly see some value to that.

22 MR. SIESS: There are two things. One is a  
23 description of the plant. Another is a definition of the  
24 statement of the issues that we are trying to review and  
25 resolve or issues that we have raised and how they have been

1 resolved. Those are quite different things.

2 The first I think is pretty much factual  
3 information. The second is what lawyers get in as to what  
4 is written about issues.

5 CHAIRMAN PALLADINO: There are germs of some good  
6 ideas here and maybe there are some specific suggestions you  
7 would like to make.

8 (Laughter.)

9 CHAIRMAN PALLADINO: Incidentally, on this copy I  
10 haven't seen anything I can read yet and I am a little  
11 younger than you are.

12 (Laughter.)

13 MR. SIESS: This is the one, Joe.

14 (Laughter.)

15 CHAIRMAN PALLADINO: I was going to say if there  
16 are some specific points that you have developed it might be  
17 valuable for us to get them.

18 MR. BENDER: Well, there are some copies here and  
19 you are welcome to have that one if you would like.

20 CHAIRMAN PALLADINO: I was think if you have a  
21 specific point, for example, that the description might be  
22 summarized in a more concise way. You have a point that the  
23 issues might be described in a more concise way by the SERs.

24 MR. MARK: The SER, which is in one case this, it  
25 serves a purpose I expect and I am not sure what ---

1 (Laughter.)

2 MR. MARK: --- but it tells you, well now, the  
3 emergency core cooling system is intended to do the follow  
4 thing and it has these things and those things and those  
5 things and somebody has been asked to write that section and  
6 he has written down what is necessary. If you saw it for  
7 the first time, there it is. But by the time you or some of  
8 us have perhaps seen previous plants the pure pagination of  
9 a redescription of the function and nature of an ECCS or of  
10 a pump or something which is different in this plant than it  
11 is in a BWR, and it is explained why it is different, it is  
12 repeated plant after plant.

13 Now that is not serving a purpose for us. It may  
14 be serving a purpose for the people who live out in the  
15 desert near Phoenix who have never seen one of these before.

16 MR. BENDER: I don't want to belabor this point,  
17 but everything that is in that is taken out of the SAR.

18 MR. SIESS: That is what is wrong with it.

19 MR. BENDER: Well, that is not what is wrong with  
20 it.

21 MR. SIESS: It came out of the SAR and it is not  
22 all correct.

23 MR. BENDER: I didn't say that it was necessarily  
24 correct. If the SAR were correct it would have the  
25 information that is needed. It is better to have that

1 correct than to depend on this being correct because this  
2 one isn't necessarily correct either. It is just one guy's  
3 interpretation.

4           COMMISSIONER AHEARNE: Now, Mike and Carson, would  
5 what you are proposing be reached if there was a standard  
6 document and then for each changed plant there was a  
7 separate small set of tables that then referred to the  
8 specific plant?

9           MR. BENDER: Well, I think that would do most of  
10 what needs to be done and it would enable you to eliminate a  
11 lot of descriptive material in here that could be just be  
12 selected from the SAR and say here is the plant and here is  
13 the commentary on the plant.

14           COMMISSIONER AHEARNE: That might then meet both  
15 the need for those ---

16           MR. MARK: This is probably needed in some  
17 context. It is not needed, however, if it is going to cost  
18 you, as it will, or cost somebody, five or six dollars to  
19 mail that to me first class mail to Los Alamos. This other  
20 thing could go for 40 cents.

21           CHAIRMAN PALLADINO: There are a lot of things  
22 that we could do and I am really not clear yet on what you  
23 think we ought to be doing to this extent. There are some  
24 things that perhaps the resources of the ACRS could be put  
25 to use and developed for your use. Perhaps you are

1 suggesting that we should have the staff prepare some  
2 different version of the SER or the committee's use.

3 I think jotting down specifically what you have in  
4 mind would be helpful.

5 MR. MARK: It is not only for the committee's use,  
6 although that is where it strikes us, but I believe for your  
7 own use.

8 MR. KERR: Mr. Chairman, it occurs to me that the  
9 Readers Digest has a great deal of experience in this field.

10 (Laughter.)

11 MR. BENDER: Well, Joe, what I was going to  
12 suggest was that you get somebody, one of the contacting  
13 organizations to try to put some format together. We could  
14 of course suggest what needs to be done. This was just done  
15 with our fellows.

16 COMMISSIONER AHEARNE: Did you give guidance on  
17 what ought to be extracted?

18 MR. BENDER: Well, I sat down with a couple of our  
19 fellows and we talked over how to do it.

20 COMMISSIONER AHEARNE: I gather there was some  
21 disagreement on it.

22 (Laughter.)

23 MR. SIESS: He sat down with the fellows and there  
24 has been no input from the other members of the committee on  
25 what should be in it I think. I have got a feeling that

1 some members want more than is in there.

2 MR. EBERSOLE: Mr. Chairman, I would like to  
3 comment on the SER in the following respects. The ultimate  
4 SER would be just a batch of descriptive material and the  
5 statement that there were no outstanding issues. Then it  
6 seems to be practice of the ACRS to say, well, that are  
7 great, there is no outstanding issues.

8 The real issue is this. There were at one time a  
9 number of outstanding issues a fraction of which were  
10 settled with extreme difficulty through compromises. We  
11 never know which ones of those were so settled. We need to  
12 know that. We don't need to know outstanding common issues  
13 which will be resolved in the usual way. We need to know  
14 those issues which have been put to sleep but with  
15 difficulty and I don't see any mechanism at present which  
16 let's us see that.

17 MR. OKRENT: I would like to back that up. It  
18 seems that that is the biggest deficiency in my opinion in  
19 the SER. I don't know where the problems were in the review  
20 and where somebody just made a judgment and on what basis he  
21 made a judgment, you know, but without really a solid,  
22 clearly well-defined answer that there was only one way to  
23 go and so forth. It is just not there. I consider them  
24 very obscure in that regard.

25 MR. MARK: I think it is suggested that we can't

1 solve the problem just within our own staff of saying what  
2 are the tables we would like. It is going to require some  
3 collaboration.

4 CHAIRMAN PALLADINO: We will glad to get our  
5 appropriate staff to work with you.

6 MR. MARK: I believe there would be a point to  
7 trying to get a condensed or at least internal version which  
8 would serve the sort of purpose that you fellows must have  
9 as well as people like ourselves.

10 CHAIRMAN PALLADINO: Well, suppose I try to get  
11 some staff attention to it. It would be helpful if you  
12 would put on paper some of your thoughts. It doesn't have  
13 to be a formal letter.

14 MR. MARK: I think that was all we had to trouble  
15 you with.

16 CHAIRMAN PALLADINO: I was going to say with  
17 regard to getting experts, we at the university in the  
18 college of engineering hired some experts to simplify our  
19 paperwork and we ended up with having to make more copies as  
20 a result of that simplification than we ever did before.

21 (Laughter.)

22 CHAIRMAN PALLADINO: Any other questions or  
23 comments that either the Commissioners have or the members  
24 of the committee?

25 (No response.)

1 CHAIRMAN PALLADINO: Well, again we appreciate  
2 very much the opportunity to meet with you and we will look  
3 forward to meeting with you again.

4 MR. MARK: Thank you very much.

5 CHAIRMAN PALLADINO: Thank you.

6 The meeting is adjourned.

7 (Whereupon, 10:50 a.m., the meeting adjourned.)

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NUCLEAR REGULATORY COMMISSION

This is to certify that the attached proceedings before the

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in the matter of: ACRS MEETING WITH THE COMMISSIONERS

Date of Proceeding: December 11, 1981

Docket Number: \_\_\_\_\_

Place of Proceeding: Washington, D. C.

were held as herein appears, and that this is the original transcript thereof for the file of the Commission.

Mary C. Simons

Official Reporter (Typed)

Mary C Simons

Official Reporter (Signature)