

NUCLEAR REGULATORY COMMISSION

ORIGINAL

COMMISSIONERS/ACRS JOINT MEETING

In the Matter of: Joint Meeting.

DATE: July 11, 1980

PAGES: 1 - 28

AT: Washington, D. C.

ALDERSON  REPORTING

400 Virginia Ave., S.W. Washington, D. C. 20024

Telephone: (202) 554-2345

8007240 425

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
JOINT COMMISSIONERS/ACRS MEETING

- - - -

Nuclear Regulatory Commission
1717 H Street, N.W.
Room 1046
Washington, D. C.
Friday, July 11, 1980

The Committee met, pursuant to notice, at 1:30 p.m.

BEFORE:

- MILTON S. PLESSETT, Chairman,
- J. CARSON MARK, Vice-Chairman
- CHESTER P. SIESS
- STEPHEN LAWROSKI
- MYER BENDER
- DADE W. MOELLER
- WILLIAM KERR
- MAX W. CARBON
- WILLIAM M. MATHIS
- JESSE C. EBERSOLE
- HAROLD W. LEWIS
- DAVID OKRENT
- JEREMIAH J. RAY

Staff Present:

R. SAVIO

ALSO PRESENT:

- COMMISSIONER HENDRIE
- CHAIRMAN AHEARNE
- COMMISSIONER Gilinsky
- COMMISSIONER Bradford

Parker
NRC
Tape 11
7-11
Connelly

1-A

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

1
2 MR. PLESSET: I think we can start, so why don't we
3 proceed. We do not necessarily need to stick to the list.
4 Dave, you are here, so why don't you take advantage of
5 it.

6 (Laughter.)

7 I know you had a comment you wanted to make, or have
8 you decided against it?

9 MR. OKRENT: Well, I think it would be of interest to
10 learn or maybe talk about to what extent the Commissioners and
11 you yourself have developed ideas on how to approach the various
12 rulemakings that are in the wind, whether there has been consider-
13 ation of what information exists; if these has been identified,
14 are the necessary resources being allocated to them. So you will
15 have the information you will need for your decisionmaking at
16 the time, other kinds of policy guidance that would be useful at
17 the beginning, whether these kinds of things are available.

18 It seems like there are some important, complicated,
19 difficult topics before the Commission, and it might be interesting
20 to have a little discussion.

21 (Laughter.)

22 COMMISSIONER HENDRIE: I can hardly wait to see what
23 you are going to say. I may take notes.

24 (Laughter.)

25 CHAIRMAN AHEARNE: With those general statements I

1 certainly agree.

2 (Laughter.)

3 To try to be at least a little more specific, I would
4 guess that some of the major rules we have embarked on are the
5 emergency planning, the site rule, the degraded core. Some have
6 and some will take substantial resources. We have given a lot of
7 guidance in the development of the emergency planning rule, and it
8 is in the very last stages, I believe. It probably will be put
9 out in the next couple of weeks, I would guess, as a final rule,
10 particularly now that we have gone through the last set of
11 listening to the spectrum of people who had objected to various
12 provisions of the rule and also who now -- now that we have
13 Congress speaking to it in the FY authorization bill, what they
14 view is a minimum set of requirements on the siting.

15 I think it will be published today in the Federal
16 Register, the advance notice, which will lay out a bunch of ques-
17 tions. You are probably familiar with the Siting Task Force that
18 has produced a report last year. We modified that to some extent
19 by adding additional options we thought ought to be examined,
20 and that will lead to about a year and a half of major work. That
21 focuses to a large extent on population density as well as the
22 relationship of engineered features and demography and environ-
23 mental characteristics of the site.

24 The degraded core cooling rule is one that the gentleman
25 on my right has been prodding the staff -- where are they, what

1 are they doing? I think he is probably more familiar with the
2 status of that.

3 Have we given the staff guidance? Do we have enough
4 resources? Is there enough work being done? I would guess we
5 have given them a reasonable amount of guidance. We don't have
6 enough resources, and everybody is stretched thin. Most of the
7 schedules laid out are optimistic.

8 Joe.

9 COMMISSIONER HENDRIE: I have talked to the staff some
10 about the degraded core rulemaking and other related efforts.
11 Quite apart from the resource and scheduling difficulties that
12 are apparent, it seems to me there is a more profound one which
13 has to do with how all of these assorted rulemaking initiatives
14 fit together, and on the basis of what general principle that we
15 all understand -- are they coordinated and lined up in a way that
16 accomplishes that general principle? And we are not, I would
17 say, making very much headway at all in that kind of a general
18 coordination in these rulemaking events.

19 On one or another individual proceedings the progress
20 has been pretty good. We charged ahead with an emergency planning
21 rule which, as John says, is on the final track, and I would hope
22 it would be out pretty soon. I signed off on it. But in making
23 that rule, in forming it, we have not paid very much attention
24 to what -- how it might fit, for instance, with the present
25 initiative that we have just started on new siting criteria, nor

1 is it very clear to us in any organized way at least how we
2 would regard emergency planning versus requirements that we might
3 find it appropriate to institute as a result of proceeding on
4 events that lead to severe core damage.

5 So individual things have gone ahead, some of them
6 tolerably well, I think; but we still have the major task before
7 us, and that is to try to get enunciated some general principle
8 and then to see that the subsequent rulemaking -- notably the
9 degraded core proceeding and whatever interim rule might be
10 instituted on those matters -- how those things fit against that
11 principle or that standard.

12 MR. KERR: May I ask a related question? In considering
13 the treatment of the class 9 accident, it seems to me if you have
14 not already provided it that the staff needs some rather specific
15 guidance of the following kind: the treatment of LOCA with an
16 emergency core cooling system and the decisionmaking process takes
17 a deterministic approach in which you describe with suitable
18 conservatism the course of various accidents.

19 There has been a lot of discussion of the need to use
20 probabilistic approaches to accidents, and now we have the degraded
21 core. My perception, in spite of protests to the contrary, up
22 to now at least the staff seems to be taking a mechanistic approach
23 toward treating the degraded core; that is, there will be made
24 an effort to describe on a step-by-step basis the progression of
25 an accident. That is in principle a possible approach.

1 It strikes me, however, it is going to be more diffi-
2 cult than the mechanistic description of the course of a LOCA,
3 especially if the ECCS operates. At this stage maybe one cannot
4 make a decision about the appropriate approach, but at least it
5 seems to me one might want to try to lay out one or two alternatives
6 and look at them in some detail.

7 Does one go about this probabilistically? Does one try
8 to say we are not going to prevent core meltthrough, something or
9 other, but we are going to prevent it with a confidence level of
10 something or other, or does one say we are going to design subject
11 to a single failure criterion a mitigation system that will take
12 care of this accident?

13 Do you understand the question I am raising?

14 COMMISSIONER HENDRIE: Very well. I have been thinking
15 for some months about how one ought to structure these things
16 and where reasonable -- where a reasonable place to go is. Go,
17 that is, from the present array of regulations and requirements.
18 And what I have concluded is the present design basis concept,
19 not necessarily the details of it but the concept of it ought to
20 be retained as a licensing standard in the process, and that the
21 design basis ought to be aimed at -- severe core accident events,
22 core melting events should be reduced to some prescribed level,
23 prescribed in as quantitative a set of terms as we can agree on.
24 And that beyond those events you then look at what are reasonable
25 and practicable measures to limit the consequences, taking some

1 account of probability and expending less effort perhaps on
2 extremely unlikely events than on more likely ones.

3 But they are coming away from the proposition that
4 we have operated out of the past, that events on a design basis
5 were of low enough likelihood so they could fall in the act of
6 God category, and we did not do much of anything.

7 Now, the sorts of measures and standards for those
8 measures to be used out beyond the design basis I would think
9 could usefully be more flexible than those for the design basis
10 prescriptions.

11 There are sort of two general sets of measures. One
12 of them is obviously emergency planning. If things go to hell in
13 a handbasket, you see what you can do to get people out of the way
14 or get them to take shelter and thereby reduce the consequences
15 offsite.

16 And I think that the emergency planning rule that we
17 are about to lay on the table is pretty good in that regard. The
18 other things you can do have to do with plant design features or
19 operating procedures that would tend to limit releases of radio-
20 activity.

21 It seems to me for those measures -- for accidents going
22 beyond design basis, one is going to have to work on pretty much
23 a best engineered design calculation. I have concluded for myself
24 that it is impractical to try to draw the design basis itself
25 for all of these events, since I can always enunciate one whole

1 category of such events that you cannot cover.

2 I will say that in the event of any size of loss of
3 coolant accident, for instance, all the safety systems provided
4 to mitigate it fail, you will say oh, you mean all of the presently
5 required safety systems. Well, good. I will now supply a
6 redundant additional set of safety measures, the Z-system.

7 Aha, I say. I just proclaimed that a Z failed. What
8 are you going to do? You are going to propose the X-set of
9 measures. So in a sort of logical basis you cannot get everything
10 under the design basis, and I think it is neither necessary nor
11 wise to try.

12 Now, if we could gather our intellectual forces and
13 our courage all up together and come to the enunciation, a safety
14 objective for the design basis which I think I would like to see
15 couched in terms of a fairly low risk level -- fairly low
16 probability level for accidents that will cause severe core damage
17 or worse, that will cover the design basis, then it seems to me
18 you need at least one further enunciated level of safety objective,
19 and that will deal with -- that will go beyond the design basis
20 and probably ought to be expressed in terms of the likelihood
21 of exposure to the general public of any serious radiation exposure.
22 And that would take account of the efficacy of evacuation measures
23 and the whole realm of likelihood of courses and events beyond
24 the design basis.

25 It appears to me if we could settle down on a framework

1 like that as a guiding principle, we then have a framework within
2 which to fit things like what do we do with hydrogen evolution
3 in severe core damage accidents, and what do we do in general with
4 degraded core measures, if any, for degraded core accidents.

5 It also provides a helpful framework to think about the
6 implementation of the emergency planning role and would provide,
7 I would think, some helpful background to eventual enunciation
8 of a new set of siting criteria and a whole variety of other
9 things.

10 Without the enunciation of that sort of safety principle
11 or safety objective, we are going to continue to carry on these
12 individual efforts, and they are going to continue to not have
13 any consistency among them. I am afraid we will beat ourselves
14 into a regulatory patchwork in short order from which we will not
15 be able to extricate ourselves.

16 You're speechless.

17 MR. OKRENT: I am rarely speechless, Joe.

18 COMMISSIONER HENDRIE: I was looking at Bill when I
19 said that.

20 MR. OKRENT: One of the reasons -- not the only reason --
21 that I thought it would be useful to talk about this, and I found
22 it very interesting, I for one have not seen identified, even in
23 the FY 82 budget, let alone the FY 81 budget, which is near what
24 I would have assumed was the research work -- I will use that term
25 loosely -- that would be appropriate to try to help arrive at a

1 decision.

2 CHAIRMAN AHEARNE: You have the advantage over us. You
3 have seen part of the FY 82 budget program. We have not yet.

4 (Laughter.)

5 What kind of work specifically are you saying that you
6 do not see present?

7 MR. KERR: While he is thinking, I have a slightly
8 different point in that I have not seen -- perhaps it is my lack
9 of communication or perception -- very much evidence that even
10 these preliminary ideas have penetrated to the working level.

11 It seems to me some kinds --

12 COMMISSIONER HENDRIE: I think that is quite right. I
13 went out and had a rump meeting with some of the staff a couple
14 of weeks ago, several meetings, and the first one was does anybody
15 here have clearly in mind all of the rulemaking and other require-
16 ments and other initiatives that we have underway that relate
17 to this general area of severe accidents and all of the things you
18 might want to think about, and the answer was no. Nobody even
19 had the list in mind.

20 It took several days to compile what seemed to be a
21 fairly inclusive list, as a matter of fact. And then we had
22 another meeting and said good, now we have the list; what pattern
23 do we see among these.

24 MR. KERR: I am not going to disagree with what I think
25 Dave is going to say, but my emphasis would be on some initial

1 planning toward an approach in order to have a framework in which
 2 to plan research. You can go ahead and plan research without
 3 knowing what you are going to do with it, and if it takes a long
 4 lead, that is perhaps necessary.

5 COMMISSIONER HENDRIE: I thought from the size of the
 6 budget our guiding principle was to do everything, and then we
 7 would select the useful parts.

8 CHAIRMAN AHEARNE: Let me say just one more point on
 9 that. Clearly, there are a number of changes and approaches. A
 10 lot of the effort on the planning rule, the issues on alternate
 11 site, it is not surprising that they are reflected in the FY 81
 12 budget. Those philosophies or approaches were not really gelled
 13 into anything -- at least the office directors or Commissioners
 14 when the FY 81 budget was put together, getting the emergency
 15 planning rule together was not a breeze because there have been
 16 a lot of sticky issues, so I am not too distressed yet that the
 17 working level, the staff, has not got a clear picture that here
 18 is the direction we ought to be going, because it has been a
 19 direction that is being worked on and formulated by a number of
 20 specific actions.

21 There have been many debates on the action plan in
 22 which you people participated heavily, and a lot of modifications
 23 resulted from that. Clearly that could not have been automatically
 24 reflected in December or February. There is a lead time when
 25 direction is trying to be imposed rather than circulating up.

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

end tp 11,

It takes longer to get back down.

2 So I am certainly looking with great interest at the
3 budget as it comes up to see what it does reflect. Whether we
4 can tell is a different question.

5 I presume from the comments you guys will be making on
6 the research budget will reflect where you see work not being
7 done that ought to be done. And I also assume that where you see
8 work that you do not see as relating to the direction that you
9 think we are going or ought to be going that you will comment on
10 that, too.

11 MR. PLESSET: It will be a question of scrutability.
12 I think we have heard that word.

13 (Laughter.)

14 Let me increase my popularity with my colleagues and
15 turn us to another subject. Hal Lewis has a very short question.

16 (Laughter.)

17 COMMISSIONER HENDRIE: It is a contradiction in terms,
18 isn't it?

19 MR. LEWIS: I take it that is an assignment to ask a
20 question but to keep it short.

21 MR. PLESSET: That is correct.

22 MR. LEWIS: It has to do with reactor safety. There
23 are enough reactors out there now so that it is becoming quite
24 clear we would be having a regular run of accidents, and we have
25 been having them over the last six or eight months. We have had

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554 2345

1 some pretty good ones, some zingers.

2 One of the things that has been conspicuously absent in
3 the analysis, and a study of these accidents is the Office for
4 the Evaluation of Operational Data, Carl Michaelson's office.
5 What is the Commission's position or intent with regard to the
6 participation of that office with regard to accidents as they
7 are beginning to come along?

8 CHAIRMAN AHEARNE: I think it is true. Let us take
9 two of the more significant ones in the last six months, Crystal
10 River and Browns Ferry.

11 Crystal River, Carl was almost entirely absent. In
12 Browns Ferry, not so. He was much more heavily involved. Certain-
13 ly he participated rather extensively in reviewing it for us.

14 As far as anything written coming out, I am not sure.
15 We don't have anything that has come out of that yet. I think
16 getting Carl's operation started there was a balance between
17 trying to get it started rapidly and populated with people that
18 Carl had faith in.

19 We opted for the second. It took longer than we had
20 hoped. There is also the problem of trying to get agreements
21 between the offices and Carl's office on what his role is going
22 to be, and that has cycled several times; and my understanding of
23 it is it has caused -- his office has been strengthened as a
24 result of that.

25 Now, I will just speak for myself. The other guys can

1 speak for themselves. My view when the office was set up was
2 that it had two problems, one of which was giving some evaluation
3 to a pattern of accidents and trying to at least identify what
4 trends were there, what kind of information was getting lost,
5 because everybody was only looking at isolated events, if at all.
6 And then the second was on any major event, trying to bring to
7 bear that sort of expert knowledge that they are generating.

8 The difficulty is they have been having a problem develop-
9 ing that expert knowledge, and it is easy to get completely en-
10 meshed in details and never provide a base for expert advice. I
11 think it is -- the effort has grown more slowly than any of us
12 would have liked, including Carl; but I do not think there is
13 any lack of commitment on the part of any people in the agency.

14 I know the offices had problems getting access to some
15 data, and we have taken steps to make sure that that does not
16 happen.

17 MR. LEWIS: I'm not worried about recriminations about
18 the past, because the past is over.

19 CHAIRMAN AHEARNE: But the past --

20 MR. LEWIS: I like to say deep things.

21 CHAIRMAN AHEARNE: The past is prologue.

22 MR. LEWIS: That is a good line. It ought to be used
23 by somebody.

24 Do you envisage that in the future the office will play
25 a more prominent role in the analysis of accidents with real

1 implications? Crystal River, for example, did have real implica-
2 tions.

3 COMMISSIONER GILINSKY: I expected it to be.

4 MR. LEWIS: So did I, but it ain't.

5 CHAIRMAN AHEARNE: He is heavily involved in Browns
6 Ferry. He could not have been in Crystal River.

7 MR. LEWIS: Okay. So you are telling me to have hope
8 and sit back.

9 CHAIRMAN AHEARNE: I really believe that the office
10 ought to be able to do both those things. The hard part comes
11 when you have to make a choice that you can only do one or the
12 other. There are finite resources. There is a lot of stuff to
13 look at.

14 If you had to just look at current accidents and not
15 look at the longterm, then I would say we need a standard or
16 another office because both tasks have to be done.

17 MR. LEWIS: At the level of you individuals is it your
18 intent to solve those institutional problems which exist and have
19 existed in such a way that it can perform both of these functions?

20 CHAIRMAN AHEARNE: Just speaking for myself.

21 MR. LEWIS: I understand.

22 MR. PLESSET: Yes, Chet.

23 MR. SIESS: If you did think that that office should
24 serve as a mini-NTSB, or a maxi-NTSB for that matter, it would
25 seem that that would require that office to be the lead office

1 in investigations of accidents or lessons learned from accidents,
2 not the implications in terms of licensing, whether it should be
3 shut down, whether they should be fined, etcetera.

4 I don't think it is a lead now, is it?

5 CHAIRMAN AHEARNE: Not in investigation in the sense of
6 as you know, when we have a lead office for investigation, it
7 really carries with it the potential threat of --

8 MR. SIESS: I was trying to separate those two.

9 CHAIRMAN AHEARNE: In the past they were inseparable,
10 and that is a distinction that I think one has to keep in mind
11 because the large bulk of the agency when an accident occurs turns
12 to them. So at least in my mind I never thought it would supplant
13 I&E in that role.

14 In its examination of an accident it would try to figure
15 out what lessons -- why it happened, how did it happen.

16 MR. SIESS: That is what I had in mind, though.

17 COMMISSIONER GILINSKY: John made the point about the
18 various line offices having specific responsibilities of their
19 own, and so they need to perform investigations for that purpose.
20 The way I envisage this office operating is it would perform an
21 independent investigation, and that is really what I had in mind.
22 The NTSB is independent.

23 MR. SIESS: By "lead" I meant the lead in the non-
24 licensing function, in the safety-related lessons learned.

25 COMMISSIONER GILINSKY: It may be a small fraction of

1 the effort of the agency, but it is a very important one. It is
2 important to be taken -- that the investigation be performed by
3 the persons who do not have direct licensing responsibility.

4 MR. SIESS: Something like Browns Ferry, do you expect
5 to get a separate and independent report from that office on the
6 accident and its implications and its possible precursors, that
7 is, independent from the other licensing-related investigations?

8 CHAIRMAN AHEARNE: Not necessarily on Browns Ferry. If
9 Browns Ferry happened six months from now the answer would be yes.

10 MR. LEWIS: May I ask a factual question along those
11 lines for clarification? I heard a rumor, which is like all
12 rumors, clearly false -- to put it differently, may that office
13 send an investigator to the site of an accident after the accident
14 is over and there is no question of accident management, without
15 being chaperoned by a member of I&E or NRR?

16 CHAIRMAN AHEARNE: You say you have heard a rumor.

17 MR. LEWIS: That he cannot. The rumor is that he cannot.

18 CHAIRMAN AHEARNE: All I can say is my understanding is
19 that he now cannot.

20 MR. LEWIS: Thank you, sir.

21 (Laughter.)

22 COMMISSIONER HENDRIE: You have to define what you
23 mean by "chaperoned." I think it would be inappropriate to have
24 NRC people including, I must say, Commissioners, arrive at a
25 licensed facility unbeknownst to make a visit independent of the

1 assigned NRC officer who is the resident inspector there, for
2 instance.

3 MR. LEWIS: I understand that.

4 COMMISSIONER HENDRIE: That does not mean the resident
5 inspector is privileged to say don't come, nor does it say the
6 resident inspector or his chiefs are privileged to say look only
7 in building A but stay out of building B. But you know we are
8 one agency, and where we have people who have assigned responsi-
9 bility to be the primary NRC representatives, why, you want other
10 NRC people who are coming in to talk to that licensee -- you
11 want your local man to know they are coming.

12 MR. LEWIS: You certainly want them to know they are
13 coming if this office is to be a lead agency. Clearly these are
14 questions that can be resolved with goodwill, with notification.
15 You are right. It depends on the definition of "chaperoned."

16 The rumor that I will not divulge to you that I heard
17 was rather more restrictive than what you said.

18 MR. PLESSET: Steve? Peter?

19 MR. LAWROSKI: I wanted to know whether you set up a
20 mechanism so that you get from this office the type of NTSB
21 performance that I perceive occurs with respect to air line
22 transportation compared with the NTSB performance as I see it
23 in the case of the railroad transportation.

24 In my opinion there is a very big difference in results.
25 In the latter case it seems one way or another the NTSB or that

1 part of it gets so submerged with a lot of detail that I do not
2 see much good coming out of it compared to what I think comes out
3 of that part of NTSB whose mission it is to deal with air line
4 accidents. Do I make myself clear?

5 It is easy for that group, even if it is to get submerged
6 with a lot of paperwork --

7 CHAIRMAN AHEARNE: My comment would have to be my
8 knowledge of the reports is primarily the aircraft side from
9 reading Aviation Week, and I do not follow an equivalent trans-
10 portation journal, so as a result I do not know what kind of
11 reports they produce.

12 MR. LAWROSKI: They have not had much impact.

13 CHAIRMAN AHEARNE: I do not know that either.

14 MR. LAWROSKI: They don't seem to have.

15 CHAIRMAN AHEARNE: I guess from my view I think what
16 you ought to do is when the charter for Michaelson's group was
17 agreed to -- it ought to come up to the Commission in the next
18 couple of weeks -- you ought to look at it and see what kind of
19 comments you have, see whether or not you agree with it. Then
20 you can give us your comments.

21 COMMISSIONER GILINSKY: At the risk of belaboring a
22 point, you said lead office. I am not sure whether you really
23 mean that. What I envisaged was this office would perform an
24 independent investigation.

25 MR. LEWIS: That was certainly my original understanding.

1 COMMISSIONER GILINSKY: I would not put it as the lead
2 office for the overall agency --

3 MR. LEWIS: I understand. It would make an independent
4 investigation. When Joe made the comment about notifying the
5 resident responsible person, it is in the same sense, as I under-
6 stand it, that if I were to work for the CIA and go into a
7 country, I notify the Ambassador. You just do that. But it doesn't
8 mean he follows me around while I do my job. There are chaperones
9 and chaperones.

10 COMMISSIONER HENDRIE: I am unwilling and unable to
11 comment on that, whether or not the Ambassador is notified.

12 (Laughter.)

13 MR. LEWIS: Perhaps I picked a bad example.

14 (Laughter.)

15 MR. PLESSET: We have an agenda, but that is something
16 we will deviate from. I am going to ask Mike Bender to make a
17 comment on this.

18 MR. BENDER: Now I have discovered this is a meeting
19 to determine first whether we should create an arsenal and
20 if we do, what to do with it, I think this may be an appropriate
21 question.

22 (Laughter.)

23 I know that resident inspectors exist now, and I have
24 always been somewhat curious about their functions. Recently when
25 we asked the Admiral what the duties of his resident inspector

1 were, he sent us a one-page summary of it. While I might not
2 agree with what the Admiral suggested his inspector should do,
3 I was impressed by the fact that it was a fairly concise statement.

4 When I asked a similar question about what the resident
5 inspector does for the NRC, I got a volume about three-quarters of
6 an inch thick which led me to believe that the definition of the
7 inspector's role is not all that well defined.

8 Now, I do not have any objection to inspectors. I think
9 they are very necessary. And I think for most purposes it is
10 unwise to define the duties of an inspector. But I think we have
11 made such a point of having resident inspectors at nuclear power
12 plants that the public probably by now expects something special
13 about them. And it seems to me it would be wise if the Commission
14 took a step to define their role in a way in which the public
15 would understand.

16 My own inclination would be to have the committee find
17 out what they are doing just because I think the committee ought
18 to know, too. But if the Commissioners could define that role,
19 and we could take a look at what is being done, I think it might
20 enable us at least to provide some better understanding to us
21 and to the public as to whether the inspectors are really providing
22 some public safety purpose or whether they are just some PR
23 provision that is out there.

24 CHAIRMAN AHEARNE: Let me ask one question before I
25 answer. How clear are you on what the role of -- what the role is

1 of an inspector, an I&E inspector, non-resident?

2 MR. BENDER: Not very, to be honest about it.

3 CHAIRMAN AHEARNE: Because I think in our case as
4 opposed to the Naval Reactors case, the resident inspector really
5 started from the sense of what an inspector does, and from examin-
6 ing the utility of -- the advantages of having an individual
7 assigned fulltime to a specific plant as opposed to periodically
8 along with a team coming to the plants, and the advantages arising
9 from being able them to become so much more familiar with one
10 specific plant -- at least I would preface it with that point.

11 I certainly agree there ought to be a way of explaining
12 it, and you are right. There is a certain amount of public rela-
13 tions aspect related to it in the sense that whereas the normal
14 inspector or inspector team that comes in and maybe spends a
15 week or two weeks or less at a plant hardly ever has much in the
16 way of interaction with the local public, that a resident inspector
17 becomes a visible member of the community and ordinarily is spot-
18 lighted or highlighted as that is the NRC representative, or
19 in many cases the federal government representative with respect
20 to that facility, and does end up playing a much more prominent
21 role, and is therefore viewed as an individual with a lot greater
22 responsibility, certainly from the standpoint of the public.

23 And we have tended in the agency gradually to recognize
24 that and attempt to send more senior people and people to whom we
25 are gradually giving more responsibility. It has been a long

1 process, at least over the last year and a half, of trying to
2 define what are the roles of resident inspectors with respect to
3 the other inspectors, what are the differences other than there
4 is so much more -- being more readily accessible. And we certainly
5 do not have any crystal clear set, as the one from the Naval
6 Reactors certainly is.

7 It is a good point. We ought to force that issue and
8 get it more clearly defined.

9 MR. MARK: The larger the responsibility he has might
10 go inversely proportional to the thickness of the instruction he
11 gets. Is that a fair characterization?

12 (Laughter.)

13 CHAIRMAN AHEARNE: It probably is a reasonable rule of
14 thumb in general. The difficulty is that a lot of the instructions
15 still relate to the amount -- to the set of inspections that an
16 inspector is required to do each year, and the resident inspector
17 to the extent that it begins -- he or she begins to pick up inspec-
18 tions that would normally have been done by the inspection team
19 from headquarters still has got that set to go through. So that
20 is a proviso, but still generally --

21 MR. PLESSET: Any other comments? I will go back to t
22 agenda.

23 CHAIRMAN AHEARNE: That was on the agenda.

24 MR. PLESSET: Yes, it was.

25 MR. BENDER: Maybe he took it off and the Chairman put

1 it back on.

2 (Laughter.)

3 I thought you would appreciate that.

4 MR. PLESSET: Now, something --

5 CHAIRMAN AHEARNE: Do you have a reorganization chart?

6 MR. PLESSET: They may after this meeting. There is
7 some interest in the question of standardization of nuclear
8 plants, and actually this review of the regulatory process that
9 we wrote had a lot of words on that for which mostly Mike Bender
10 was responsible.

11 CHAIRMAN AHEARNE: He already got his question.

12 (Laughter.)

13 MR. PLESSET: We will let him have another one.

14 MR. BENDER: I did not put this on the agenda, but I
15 will comment on it if you like.

16 CHAIRMAN AHEARNE: Yes.

17 MR. BENDER: For a long time the Commission had a very
18 active program in standardization, and I think when we took a
19 look at what had happened at the time we were making our review,
20 we sort of came to the conclusion that maybe the thrust of the
21 effort, which was mainly to streamline the licensing process,
22 had not accomplished that. And further, it was not obvious to
23 us that we could see something that was very standard about
24 standardized plants.

25 Now, the real question is is the standardization business

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

1 a real idea any more, and if so, what is the thrust of it?

2 We have heard the GE people arguing fairly persuasively
3 that maybe the FAA approach is a better way to go with
4 standardization. I am not sure that it fits nuclear power plants,
5 but some elements of it do. And I think it would be useful to
6 know what the Commission's current view is about the matter of
7 standardization, whether it plans to proceed along the path that
8 it had before TMI, or whether it has some other view.

9 CHAIRMAN AHEARNE: As a Commission we really have not
10 addressed standardization since TMI really to any large extent.
11 For myself it did not seem to be one of the most pressing issues
12 that we were faced with.

13 (Laughter.)

14 COMMISSIONER GILINSKY: I do not have much to add to that.
15 As John points out, given the paucity of orders, it is not as hot
16 a question as it might be. I think if orders do pick up at some
17 point, people will be ordering plants that are in some sense
18 standardized plants. They were beginning to do that to a fairly
19 considerable extent in the last crop of orders, and the Commission
20 made some efforts to accommodate that.

21 Are you talking about something more radical?

22 MR. BENDER: I am talking about the fact that the
23 standardized plants were not very standard.

24 COMMISSIONER GILINSKY: There are two aspects to
25 standardization. One is the idea of having designs which are

1 approved beforehand and employing those when you are actually
2 going forward and building a plant. The other is getting economy
3 to scale which is using that design for many, many plants. It
4 seems to me these two --

5 MR. BENDER: I am not talking about the latter at all.
6 I am talking about the former which is preapproving a plant that
7 really has been preapproved.

8 MR. SIESS: The powerworthiness certificate that GE
9 presented, I believe they made a presentation to the Commission.

10 COMMISSIONER GILINSKY: For that you need a plant that
11 is designed in detail. An airplane is designed down to the last
12 bolt.

13 MR. SIESS: The most successful standardization has
14 been of that type, including replication.

15 COMMISSIONER GILINSKY: What we are finding is a very
16 different set of practices in the industry. In the past plants
17 were designed as you went along. The agency worked at the construc-
18 tion permit stage with preliminary designs, sketches.

19 To move in the direction you are talking about one has
20 to be prepared to design plants in detail well before you are
21 ready to start building.

22 You made another comment about the degree to which the
23 FAA process is applicable here. I always thought nuclear plants
24 were in some ways more like airports than airplanes. At least
25 there are certain aspects.

1 MR. BENDER: I always thought that the power plant
2 itself was something like the airplane, that the site was not
3 unlike -- the containment was not unlike an airport.

4 COMMISSIONER GILINSKY: One has to obviously --

5 MR. KERR: I am not sure it is possible to standardize
6 something that costs several million dollars and takes tens of
7 years to build.

8 COMMISSIONER GILINSKY: That is right. It is a differ-
9 ent sort of animal.

10 MR. PLESSET: Yes, Dave.

11 MR. OKRENT: Whether future LWRs are standard or not,
12 it seems to me that it would be not only useful but in a sense
13 appropriate for somewhere in the Commission, a group, perhaps a
14 small group, a good group to try to develop what should be the
15 modified general design criteria, plus whatever other supplemental
16 information is appropriate for future reactors, and this would
17 be somewhat in this coordinated context that Dr. Hendrie was
18 talking about.

19 I myself as a citizen would hope that the Commission
20 would wait until orders are being placed to provide that kind of --
21 I guess you would call it guidance or whatever it is you want it
22 to be.

23 CHAIRMAN AHEARNE: David, let me ask you a question,
24 because I can recall almost two years ago when I was involved with
25 the Commission on this debate on standardization, the issue ended

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

up being can you conclude that if you enforced a standard, not allowed but enforced a standardization approach, would you have any greater confidence in the safety of plants.

And if the answer to that is no, you cannot reach that conclusion, then it falls back on where I think Vic's answer was: would we allow it? Would we believe there was anything less safe about it. The answer seems to be clearly we would allow it. I do not think anyone has been able to come up with anything than more or less intuitive arguments that it would be significantly an improvement to safety.

MR. OKRENT: I guess I have about reached the conclusion that a standard plant approach properly done would lead to more safety. I think, for example, the effort that the architect engineer now puts into each plant would go into a few plants and in fact be better directed. And certainly the operation and the understanding of the operation would be --

CHAIRMAN AHEARNE: That is what I meant by intuitive arguments. The difficulty comes -- the difference is do we allow versus requirement. The intuitive arguments are fine for allow or encourage, but when you turn to the other side and say we will go in the direction of requiring, then I think you need a little bit more firm ground.

COMMISSIONER GILINSKY: I am also persuaded that there are important advantages. In looking at the difficulties we had fixing up plants, once we realized the tremendous variety of

300 7TH STREET, S.W., REPORTERS BUILDING WASHINGTON, D.C. 20024 (202) 554-2345

1 systems we had to deal with -- this was a point made in your
 2 report, the variability and reliability of these systems, I think
 3 that your ability to actually understand the system when it is
 4 standardized is very much greater when you are dealing with a
 5 smaller number of reactor types than if you have to deal with
 6 systems that are much different -- a great number of architect
 7 engineers, an enormous number of utilities and so forth.

8 Anyway, this brings me to the conclusion we would be
 9 better off if we had standardization.

10 MR. PLESSET: It is nice to end on a conclusion, Victor.
 11 I will take my prerogative as Chairman to recess the meeting.

12 Let's have a recess.

13 (Recess.)

er
tp 12

14
15
16
17
18
19
20
21
22
23
24
25

NUCLEAR REGULATORY COMMISSION

This is to certify that the attached proceedings before the

in the matter of: Joint Commisiners/ACRS Meeting

Date of Proceeding: July 11, 1980


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.

David S. Parker

Official Reporter (Typed)


Official Reporter (Signature)