

NUCLEAR REGULATORY COMMISSION

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In the Matter of:

PUBLIC MEETING

DISCUSSION OF SECY 80-20D - POLICY ON PROCEEDING WITH  
PENDING CP AND ML APPLICATIONS

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

Telephone: (202) 554-2345

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

PUBLIC MEETING

DISCUSSION OF SECY 80-20D - POLICY ON PROCEEDING  
WITH PENDING CP AND ML APPLICATIONS

Room 1130,  
1717 H Street Northwest,  
Washington, D.C.

Wednesday, May 27, 1981

The Commissioners met at 2:50 p.m., pursuant to  
notice, Joseph Hendrie, Chairman of the Commission, presiding.

PRESENT:

JOSEPH HENDRIE, Chairman.  
JOHN AHEARNE, Commissioner.  
PETER BRADFORD, Commissioner.  
VICTOR GILINSKY, Commissioner.

PRESENT FOR THE OFFICE OF GENERAL COUNSEL:

LEONARD BICKWIT, Esq.  
MARTIN MALSCH, Esq.

PRESENT FOR THE OFFICE OF THE SECRETARIAT:

SAMUEL CHILK, Secretary.

## PRESENT FOR THE NRC STAFF:

R. PURPLE  
H. DENTON  
H. SHAPAR  
D. EISENHUT  
W. DIRCKS  
R. BERNERO  
R. MATTSON  
C. THOMAS

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DISCLAIMER

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P R O C E E D I N G S

CHAIRMAN HENDRIE: Why don't we go ahead and get started

The Commission meets this afternoon to be briefed by the Staff on comments on a proposed rule for construction permits and manufacturing license applications.

We have had the proposed rule out for comment, I think it went out for, what, 30 days?

MR. SHAPAR: 20 days.

CHAIRMAN HENDRIE: And this is the first opportunity to hear a Staff summary of the comments, and also any changes that the Staff might recommend in the rule, a chance for Commissioners to ask some questions about the proposition.

I will warn those who came all prepared for a final action, so that if they wish, they may leave and go immediately to their swimming pools --

(Laughter.)

-- that I will not be asking the Commission for a vote on this rule this afternoon.

Having thus disappointed some, delighted others, and generally antagonized the rest --

(Laughter.)

-- I will ask Mr. Dircks to start the discussion on the Staff side.

COMMISSIONER AHEARNE: I half expected Bill to get up and say, "Well, if that's the case, I'm going to the pool."

(Laughter.)

MR. DIRCKS: Well, we'll press on. I have a very short discussion. Bob Purple will review the comments that have come in, and also outline where the suggestions have been made for adding or subtracting from the rule discussed several weeks ago.

(Commissioner Bradford entered the room at 2:52 p.m.)

MR. PURPLE: All right. Put on the first viewgraph, please.

(Slide.)

You should have had a handout of these very brief slides, and this will be a representation covering three topics as shown:

One, the question of whether or not to include the ML application. I'll review the comments that were received on that point.

Then the bulk of all the other comments and responses, how we handled those, and then to apprise you of some late comments that we received after we closed the document that we sent down to SECY, 80-20D.

Next slide, please.

(Slide.)

Of the 33 comments that we did receive in time to put in 80-20D, 20 of those 33 have something to say about the ML application.

1           Of the three late comments that I'll talk about in a  
2 little while, two of those three had something to say. So of the  
3 22 that had something to say about the ML application, 18 were  
4 in favor of its inclusion in this rule without qualification;  
5 three were in favor of inclusion, but not at the expense of  
6 delaying the CP rule; one was opposed, Mr. Marvin Lewis.

7           As explained briefly in the Staff paper, SECY 80-20D,  
8 the Staff has found no compelling technical basis that would  
9 justify excluding the ML.

10           All of those comments are in Enclosure 2 to the  
11 Staff paper that came up.

12           Next slide, please.

13           (Slide.)

14           Now the bulk of the comments and responses are  
15 found in about, I guess, 36 pages worth of Enclosure 3 of the  
16 SECY paper, and for convenience we have included them in  
17 Enclosure 5 to this package which is a tabular presentation  
18 of those changes that were more or less just purely editorial or  
19 typographical. We call them more significant changes. And of  
20 that set, the three that are probably the most significant --  
21 and I want to mention on this slide -- were the three that were  
22 deleted as either a direct result of Staff consideration or  
23 comments with which we agreed, and those three are listed on the  
24 slide.

25           The II." .44 item is one for which we agreed that

1 we would get no new data from any of the BWRs that are applicants  
2 for CPs now. We have generic studies in hand and are reviewing it,  
3 and it would serve no useful purpose to require these CPs to  
4 re-do that same study.

5 Item II.E.5.2, B&W sensitivity to transients. This  
6 is a study undertaken which resulted in the issuance of NUREG  
7 0667, which itself had a long string of recommendations in it  
8 that as we now reach the wire and realized as we were putting  
9 this into the regulation, we don't really have all the subtasks  
10 of that NUREG well defined, and decided on in terms of how  
11 soon things need to be done, or whether they are already covered  
12 under other items on the action plan.

13 It appeared out of all the items that were recommenda-  
14 tions in the NUREG 0667, probably are in fact already covered  
15 by the items in the action plan. The rest are of low priority,  
16 and we haven't exactly decided yet how soon they need to be  
17 applied.

18 The most prudent thing, we thought, in this case, was  
19 to pull that item out. It would have been hard to meet as it  
20 was stated.

21 II.K.2.11, this is the one that's been in the action  
22 plan all along. It's the one where a very specific component  
23 was identified as having failed the test, and the action plan  
24 item will say, "If you have this particular PORV, justify its  
25 use."

1           There have been a lot of complaints that that was  
2 way too specific and too pointed a thing to put into the  
3 regulations, and considering the fact that if anyone used such a  
4 valve, the PORV test program would cover it, and either demonstrate  
5 that the valve was all right or not, so we didn't see a need  
6 to keep that item in.

7           The remainder of the type of changes that we talked  
8 about in Enclosure 5 are really mostly clarifications, making  
9 things more in line with what was in the action plan, making it  
10 more clear and direct response to public comments.

11           Next slide, please.

12           (Slide.)

13           I hope you received yesterday -- if not yesterday,  
14 early this morning -- a four-page summary of these late  
15 comments from these three commentators. A more complete description  
16 is found in that handout.

17           Department of Interior is concerned that we didn't  
18 seem to speak in this rule about the new siting policy. They  
19 have words that talk about the siting regulation, the public  
20 laws, and so forth, which we think would respond to that comment.

21           The Department of Energy, generally speaking -- it  
22 was a long letter, but I think we captured it on there with the  
23 five bullets. We ought to defer things to the pending rule-  
24 making; we are much too prescriptive in this rule; we shouldn't  
25 apply this to advanced reactors, such as the CRBR.



1 Incidentally, that's one that we did respond to in  
2 time to have it in this paper.

3 You will notice that in the statement of applicability  
4 in this rule, instead of just saying pending CPs, we now have  
5 defined who the pending CPs are by listing the six CPs and the  
6 ML, and that provides a very thick set which excludes the CRBR,  
7 and the final DOE substance of comments was that the ML and CP  
8 requirements should be the same.

9 Seminole Electric Cooperative, as shown, their only  
10 comment was include the ML application in the rule.

11 The only final comment I would make is I don't think  
12 we mentioned it in the Commission paper, but it is in the  
13 supplementary information of the rule. You may recall we issued  
14 a NUREG document 0718 which set the foundation for this require-  
15 ment that led to this rule. Now that we have revised the rule  
16 in a number of places and deleted some items, it makes sense to  
17 go back and bring 0718 administratively up to date to conform  
18 with whatever the final rule looks like. And we have that  
19 underway as an administrative conformance type of thing.

20 Any further changes to the rule, we would have to  
21 revise those, so they would both go out at the same time.  
22 That's under the concept the NUREG document sort of takes the  
23 place of a reg guide in the sense of providing further  
24 clarification to the items that are in the rules here. So that  
25 is underway and would be a necessary, we think, thing to do, if



1 and when the rule is issued.

2 MR. DENTON: I'd like to add just one comment. At  
3 the last meeting it was suggested that some Applicants may wish  
4 to submit amendments to their application, assuming the proposed  
5 rule was about right. Two Applicants have done that. We  
6 have essentially completed our review of one application against  
7 the proposed rule and are a third to a half of the way along  
8 on the second application.

9 COMMISSIONER GILINSKY: Which are those?

10 MR. PURPLE: Pilgrim 2 is the one that's essentially  
11 through, and Allens Creek is about a third or half the way  
12 through.

13 CHAIRMAN HENDRIE: As a matter of fact, you're  
14 conforming 0718 to what we currently think the rule ought to be,  
15 so I can regard those as sort of alternate versions of the same  
16 guiding propositions for CPs and MLs.

17 I see no reason if you find it useful and timely to  
18 do so, I see no reason why the Staff could not go ahead on the  
19 basis that you think is what CPs and MLs ought to do about  
20 Three Mile Island, and go ahead with the reviews, and in fact,  
21 go on into hearing with a position.

22 MR. PURPLE: We had planned to issue the revision  
23 whether or not there's a vote on the rule, because it does  
24 represent our best technical position of what the requirements  
25 are, and it's the best document available with all the

1 references for guidance.

2 COMMISSIONER GILINSKY: Are they otherwise on hold?

3 CHAIRMAN HENDRIE: Well, I thought I would start  
4 that line of discussion just so that we either decide whether  
5 they're on hold.

6 My impression is that they are not on hold, but in  
7 case there was an impression that they were, why, good, let us  
8 be clear that the Staff is not on hold. If they want to go ahead  
9 like this, my own view is it's a reasonable thing to do. After  
10 all, the Commission might very well have decided a couple of  
11 months ago to go for construction permit applications the same  
12 direction that we started out going for operating license  
13 applications.

14 That is, to publish a policy statement which said,  
15 "Look, here is Staff digest of requirements," in that case 0737,  
16 in this case it would be 0718, "which the Staff thinks adequately  
17 meet the needs revealed by Three Mile Island. The Commission  
18 in general agrees, and we urge people to go forward." They  
19 might very well have done a construction permit policy statement  
20 of a very similar framework to the one for operating license  
21 matters, simply referencing a report on 718 as appropriate,  
22 and I haven't sensed any position among the Commissioners that  
23 they disagree with the fundamentals of the technical positions  
24 involved.

25 We do clearly have some differences of opinion:

1 (a) whether this proposition should be a rule, or should be  
2 handled as the OLs were, by policy statements; and we say, "Good,  
3 Staff has a position, we think it's a reasonable one, go forward,"  
4 whether we should have a rule for that.

5 There are also some differences -- there may be some  
6 differences between us on whether we include the MLs in or  
7 don't include them in, and maybe even there could be a couple of  
8 other items. But basically I think we are not in any fundamental  
9 disagreement on the technical safety provisions. It seems to me  
10 we've had a long and fruitful discussion, in fact, on those  
11 matters.

12 Commissioners, please tell me if I don't read the  
13 situation correctly.

14 COMMISSIONER BRADFORD: Well, I think that's right.  
15 I have a query or two, but it doesn't certainly rise to the level --  
16 of taking issue with the technical safety judgments.

17 CHAIRMAN HENDRIE: Okay. With that understanding,  
18 then, why don't -- John has some questions he wants to ask. You're  
19 leaning forward to your mike. Why don't you go ahead, Peter?

20 COMMISSIONER BRADFORD: On page 63, in the item  
21 labeled 1, it indicates that the application has to describe a  
22 set of studies and the way they are to be conducted, and then  
23 there's a list of items underneath it.

24 Do you construe that as requiring that the studies  
25 be done?

1 MR. PURPLE: It was certainly our intent. I think  
2 our legal advice told us that was the case.

3 COMMISSIONER GILINSKY: Starting when?

4 COMMISSIONER BRADFORD: That was the next question.

5 MR. PURPLE: It was done on an agreed-to submittal  
6 date. In other words --

7 COMMISSIONER AHEARNE: From the way that you have  
8 it written up in the supplementary, and some of the comments, I  
9 gather you do not intend to require that be done prior to the CP?

10 MR. PURPLE: That's correct. If they're in this  
11 section.

12 COMMISSIONER GILINSKY: I thought the whole point of  
13 it was to have some influence on the design of the plant, so  
14 it's got to come --

15 MR. PURPLE: Which is why we want to --

16 MR. DENTON: I didn't see it quite that way.

17 CHAIRMAN HENDRIE: It's got to come before the OL.

18 COMMISSIONER GILINSKY: But it was hard to put some  
19 boundaries on it.

20 MR. DENTON: The key was that it be used to guide  
21 the design and not be an after-the-fact reliability assessment  
22 of what we originally proposed, but to be a tool in the design;  
23 if there are unique features, that these be looked at as a guide  
24 in design.

25 So we saw it being a phase process, and that's why we

1 were going to get, before issuance of the CP, a description of  
2 the program in sufficient detail to be sure that it would mesh  
3 chronologically, to provide that sort of assurance.

4 COMMISSIONER GILINSKY: Whether you require it or not,  
5 I think you'd be encouraging them to get going on it as rapidly  
6 as we can.

7 MR. DENTON: Yes.

8 COMMISSIONER BRADFORD: But what is it that requires  
9 the study actually be done? Maybe I am splitting hairs here,  
10 but what the language requires is a description of the study.

11 CHAIRMAN HENDRIE: A study to be done.

12 COMMISSIONER BRADFORD: Yeah, but where does it say  
13 that?

14 MR. PURPLE: It's in the opening phrase. It says  
15 "to satisfy the following requirements," and then each requirement  
16 is listed for study and so forth.

17 COMMISSIONER AHEARNE: I guess the distinction would  
18 be on -- on page 66, you have other requirements which say the  
19 required actions must be completed by the OL stage. Couldn't  
20 you pick up something in some similar phrase to say that after  
21 you have finished this --

22 MR. SHAPAR: If you look at the statements on page 61,  
23 you will find --

24 MR. DENTON: I think, knowing what your concern is,  
25 that OELD can make it clear.



1 CHAIRMAN HENDRIE: Sufficient information to  
2 describe the nature of the studies and then just add "to be  
3 done" or to be done --

4 COMMISSIONER AHEARNE: To be completed prior to  
5 operating license.

6 MR. PURPLE: It's our intent, and I thought it was  
7 in the package -- I'm having trouble finding it now -- that  
8 in fact these requirements would be listed with dates.

9 COMMISSIONER AHEARNE: Yes, back up in the supple-  
10 mentary, I think Peter and I were just addressing what the  
11 rule says. There is another, later on, explicit statement  
12 that something will be required to be done by a given date.

13 COMMISSIONER BRADFORD: There is a problem here, I  
14 guess, in the way you phrased it, it doesn't require it to be  
15 done by a given date. That is with the OL you can either say  
16 it's got to be done by OL issuance. Here what they are after  
17 is to be sure it's done by a date such that the results of  
18 the studies are factored into the --

19 MR. EISENHUT: It was our intention in the discus-  
20 sions when we discussed this all along of when can you have  
21 these requirements -- first, make it clear they are requirements,  
22 and then have the results submitted, and we think on the order  
23 of two years after the CP. You want to be sure the studies  
24 get done in time to influence that piece of the design of the  
25 plant that they are really evaluating. You don't want to wait



1 necessarily until the FSAR is submitted. So we tried to break  
2 the middle ground, and we looked at something like a couple of  
3 years in the process.

4 COMMISSIONER AHEARNE: You intend to put them in  
5 the tech specs or license conditions?

6 MR. EISENHUT: In the license conditions. We would  
7 specifically put in all these things as CP license conditions  
8 which is, of course, a new way of putting it.

9 COMMISSIONER BRADFORD: Let's see. That, of course,  
10 would cover it as long as you get some -- why would you not  
11 just say here "to be done within two years of the date"?

12 MR. EISENHUT: I think we certainly could.

13 MR. PURPLE: But you have different plants in final  
14 design of the set of plans we are considering, some are well  
15 along, some that are -- some we may want it sooner, based on  
16 what they tell us, so it's hard to pick one date that will fit  
17 everybody.

18 COMMISSIONER GILINSKY: What sort of an effort do you  
19 envision that a study like this would involve?

20 MR. DENTON: I think it would involve a similar effort  
21 to the Limerick type study which is drawing event trees, fault  
22 trees, and determining which system failure as compared to the  
23 rest, and then some reiteration process, to try to lower those  
24 that we found to be outlined.

25 MR. EISENHUT: You recall, of course, that the Indian

1 Point-Zion studies are being done, the Limerick studies. They  
2 are turning out to be multi-million dollar studies, and dealing  
3 with multi-manyyears of effort, tens of manyyears of effort, so  
4 that they are quite major studies. They are not the kind of  
5 thing -- and they take a long period of time drawing up the  
6 event trees, the fault trees. They are not the kinds of things  
7 that can be turned around overnight.

8 You remember, we issued some requirements on  
9 Limerick and asked them to do it in a short period of time,  
10 something on the order, I believe, of six months, and they  
11 came back and just said it couldn't be done in that short a  
12 period of time.

13 We have been having progress meetings with them.

14 Similarly, Indian Point and Zion, we are doing  
15 probabilistic studies. It's a major program.

16 MR. DENTON: It's a system-by-system analysis.  
17 Does that answer the --

18 COMMISSIONER GILINSKY: Yes.

19 MR. DENTON: It's sort of comparable to WASH 1400 in  
20 scope.

21 MR. BERNIERO: I'd like to volunteer an opinion.  
22 This is a point of some controversy as to how much is really  
23 necessary. If you go at the major risk assessment studies  
24 being done right now in industry, like Zion and Indian Point,  
25 you are dealing with something in the range of 30 or 40 or 50

1 manyears, quite expensive. In the IREP, NREP, we are trying to  
2 keep it down below 10 manyears and still have an effective  
3 reliability study.

4 I consciously used the word "reliability" as  
5 against "risk," because you put the emphasis on system analysis,  
6 system failure modes, the things that can be factored into a  
7 design, that can change the design and improve it, rather  
8 than the thanatology of drawing risk curves.

9 So I think, you know, in an ideal world where we  
10 get some experience with and some judgment on procedures, and  
11 quality assurance on what we are doing here, I think something  
12 in the realm of 10 manyears or even less can cover the plant.

13 COMMISSIONER BRADFORD: Was that word "thanatology,"  
14 study of death?

15 (Laughter.)

16 MR. BERNERO: Yes.

17 MR. MATTSON: Can the other half of the mutter talk  
18 a minute? We were arguing.

19 (Laughter.)

20 These are CPs and these plants are still on paper,  
21 NREP and IREP are plants that are built predominantly, and maybe  
22 it won't be 50 manyears like Zion and Indian Point, but I doubt  
23 it will be as efficient as NREP and IREP for plants that are  
24 already built. These are paper plants. We do intend the study  
25 to be before the final design is frozen, while there still are

1 options to do things. We thought that's what was intended, to  
2 take advantage of some flexibility for these CPs as a condition  
3 of giving them CPs.

4 COMMISSIONER GILINSKY: So in some sense there may be  
5 some advantage in a less ambitious study that comes to some  
6 conclusions earlier?

7 MR. MATTSON: We are balancing the two.

8 CHAIRMAN HENDRIE: Peter, are you thumbing your pages  
9 or --

10 COMMISSIONER BRADFORD: No, I'm exhausted.

11 CHAIRMAN HENDRIE: John?

12 COMMISSIONER AHEARNE: First I'd like to start  
13 the question by asking Bob Bernero a question.

14 This relates to the provision you have in the rule,  
15 I think it's on page 73, or we have in the proposed rule, on the  
16 three-foot diameter opening, and I guess the question is, Bob,  
17 with respect to as far as to the extent that we or contractors  
18 have looked at filtered vented containment, my understanding was  
19 that its potential as a real advantage, if there is a potential  
20 for real advantage, is for small containments, rather than the  
21 large containments.

22 Is that not correct? Or is that incorrect?

23 MR. BERNERO: In a comparative sense, yes. It is a  
24 device to enhance the containment capability, and therefore  
25 the less resilient or the less capable the containment, the more

1 the devices work. It's sort of a diminishing return as you go  
2 to the large dry containment. And some three months ago, or  
3 whatever it was, we took a short term look at the information  
4 available to date, and we just looked at the Mark III containment  
5 and the ice condenser. We didn't look at the large dry, really.  
6 And we identified something like a three-foot hole that could be  
7 a genuinely effective thing.

8 That doesn't mean it's not effective in the large  
9 dry. It just is found to be less effective, all else being  
10 what it is.

11 COMMISSIONER AHEARNE: Right. Now given that it may  
12 be less effective, and I switch over to Harold or Darrel or Bob,  
13 in a large prestressed concrete configuration, putting in a  
14 three-foot hole is a nontrivial -- plugging up a three-foot hole,  
15 if you decide you don't need it, is substantially more non-  
16 trivial, and I just wondered, have you thought about not having  
17 that requirement for the large containment?

18 MR. PURPLE: May I answer a different question?

19 COMMISSIONER AHEARNE: Sure.

20 MR. PURPLE: First of all, we don't require a  
21 three-foot diameter hole or some equivalent. It could be a  
22 number of smaller holes, like three at one foot or something.  
23 We do --

24 CHAIRMAN HENDRIE: I'm not sure the area scaling  
25 goes --



1 (Laughter.)

2 -- or whatever.

3 (Laughter.)

4 COMMISSIONER AHEARNE: Yes, I'm going to -- you're  
5 not going to introduce any other engineering calculations, are  
6 you?

7 MR. PURPLE: No.

8 CHAIRMAN HENDRIE: It's a pity to go away from this  
9 when it's the first one we've had in a long time that the  
10 Commission is fully competent to deal with.

11 COMMISSIONER BRADFORD: That went right by me.

12 (Laughter.)

13 CHAIRMAN HENDRIE: I take back my remark. Go ahead.

14 MR. DENTON: Bob, let me answer first. The origin of  
15 this was we didn't want to foreclose that this might turn out  
16 to be the greatest way of improving risk that had been identified  
17 It was recommended by the ACRS at one time that we require  
18 design studies of such plants be done. So we sort of thought  
19 we were going halfway there by providing capability for it,  
20 and then when the question did arise in the course about  
21 the penalty for putting this in, Bob does have some statistics  
22 on the present size of holes in large containment, and there  
23 are quite a few of much larger size. Maybe you can cite some  
24 of those.

25 MR. PURPLE: We took a look at the design



1 containment which is prestressed concrete, looking for how  
2 many penetrations there were above 12 inches, or 12 inches and  
3 above. The total number was on the order of 200 such penetra-  
4 tions exist in that plant.

5 The numbers run between 12 and 16 inches, 114;  
6 penetrations between 16 and 24, 52; between 24 and 48 inches,  
7 23; and there are six that are 48 inches and above. So one  
8 more didn't seem like it was a major change to the design.

9 CHAIRMAN HENDRIE: Is that design typical?

10 MR. PURPLE: As best I can tell, yes, it's typical  
11 of the prestressed concrete.

12 CHAIRMAN HENDRIE: John, I don't think it's a trivial  
13 cost because you've got to -- for this purpose you've got to get  
14 yourself a big fabrication made, steel fabrication, you know,  
15 with a flange cover and the whole thing and work it into the  
16 wall, and run the rebar and stuff out, but three feet isn't  
17 that bad.

18 I'd love to have, for instance, for personal use  
19 the dollars it will cost, but as an engineering matter and on  
20 the scale of these plants, why, I don't think it's an excessive  
21 sort of burden.

22 COMMISSIONER AHEARNE: Going back to the DOE comment  
23 on the CRBR, I realize that in the statement for consideration,  
24 that you have said here are the six. However, the rule itself  
25 says that each applicant for a construction permit whose

1 application was pending as of the effective date of the rule  
2 shall meet the requirements.

3 MR. DENTON: Well, let's first discuss whether you  
4 think it should or shouldn't apply. We thought that we should  
5 apply.

6 COMMISSIONER AHEARNE: It seemed to me that the way  
7 the rule itself was written, independent of the fact you have  
8 listed six some place else, the way the rule was written, my  
9 understanding is there still has been application pending.

10 MR. DENTON: We meant to exclude it because the  
11 requirements are really for light water reactor designs.

12 COMMISSIONER AHEARNE: I understand that.

13 MR. DENTON: And so if it's not clear, we attempted  
14 to make it clear in the change.

15 MR. SHAPAR: We can make it clearer.

16 COMMISSIONER AHEARNE: Well, I would have thought  
17 that would have been in the rule.

18 (Laughter.)

19 I should have a list somewhere of things that you  
20 would agree to.

21 (Laughter.)

22 Let's see, could you just briefly remind, because I  
23 have forgotten, on page 67, in the rule, in the limits to  
24 radiation exposures to individuals taking the samples we use  
25 of 5 rem whole body or 75 rem to the extremities, and I have

1 forgotten where those numbers came from. I would appreciate it  
2 if you would just remind me.

3 MR. DENTON: I believe they are out of the annual  
4 exposure limits, Part 20.

5 MR. THOMAS: GDC 19, I think, specifies it for the  
6 control room. Cecil Thomas, Division of Systems Integration.  
7 I believe GDC 19 addresses these limits, either directly or by  
8 reference to Part 1. They are consistent with the regulations.

9 COMMISSIONER AHEARNE: So they are Part 20 regulations,  
10 you say.

11 MR. THOMAS: Definitely GDC 19, and I believe Part  
12 20, also.

13 COMMISSIONER AHEARNE: Could you check that, and  
14 if it isn't, would you give me a call? Otherwise. . .

15 On page 39, there is a discussion of control room  
16 design, and you pick up some comments made by commentators, and so  
17 you have changed basically two words. One, previously where  
18 applying, and now they reflect the state of the art.

19 And, second, instead of giving it to us for approval,  
20 it is now for Commission review. I didn't really follow the  
21 argument that you made in the comments as to why those changes  
22 were made.

23 MR. DENTON: I think what we had in mind is that  
24 we haven't developed yet a standard review plan for control  
25 rooms, and therefore approval meant that it might have to be

1 approved prior to issuance of the CP.

2 What we wanted to have required there is that some-  
3 time as this plant is under construction, or before they  
4 actually make their mock-ups and commit to a design, that they  
5 submit for a review, if they -- at that time we don't think it  
6 reflects state-of-the-art requirements, we would deal with it  
7 case by case.

8 COMMISSIONER AHEARNE: But earlier in discussing  
9 these analyses, I think we all agreed that there are some things  
10 that don't have to be done by CP.

11 MR. DENTON: Yes.

12 COMMISSIONER AHEARNE: That isn't the issue. The  
13 issue, I think, is that when they have gone through their  
14 design and they send it to us, do we approve it or do we review  
15 it? And there is a subtlety here. We have changed from  
16 approving it to reviewing it, and the argument seemed to be  
17 made that says the approval has specific legal connotations  
18 in the engineering area.

19 MR. PURPLE: Well, I didn't see that we were restrained  
20 I didn't think we were restrained. Then that would have to be  
21 found acceptable to us.

22 COMMISSIONER AHEARNE: It would have to be  
23 acceptable to us. We would have to approve it.

24 MR. PURPLE: I don't believe we approve designs.  
25 In that sense the concern here is that you approve it, what was

1 pointed out to us, you have bought certain legal responsibilities  
2 for its behavior.

3 CHAIRMAN HENDRIE: Well, John, you're running into a  
4 certain amount of trade practice in the language. Approval of  
5 a design, in fact, is what I do when I get out my professional  
6 engineer's stamp and emboss the drawing and initial the stamp.

7 Now in the commonplace of the language, we regulate  
8 or approve an application, or the Staff approves it. I guess  
9 they are just trying to avoid the implications of the formal  
10 engineering approval under state laws.

11 COMMISSIONER AHEARNE: Do you mind if I get a second  
12 opinion?

13 CHAIRMAN HENDRIE: I wasn't attempting to stop you  
14 from getting a second opinion.

15 MR. SHAPAR: I agree.

16 (Laughter.)

17 COMMISSIONER AHEARNE: So when you say the connotations  
18 in the engineering area, that's what you mean?

19 CHAIRMAN HENDRIE: We've got to stop having these  
20 meetings where Harold has gone to lunch.

21 (Laughter.)

22 COMMISSIONER AHEARNE: Howard, is that correct?

23 MR. SHAPAR: Yeah.

24 (Laughter.)

25 COMMISSIONER AHEARNE: So that if we were to put



1 "approve" in there, it would mean that the Staff would have  
2 to officially agree?

3 MR. SHAPAR: Yes.

4 COMMISSIONER AHEARNE: And if we put "review," they  
5 do not have to officially agree?

6 MR. SHAPAR: Correct.

7 COMMISSIONER AHEARNE: So we have, by the change,  
8 decided that the Staff does not have to officially agree?

9 MR. SHAPAR: Because the Staff has all the leverage  
10 during the review at the operating license stage.

11 COMMISSIONER AHEARNE: I understand that.

12 MR. SHAPAR: So I don't think that's the same thing  
13 as a private matter. And I think clearly so.

14 COMMISSIONER AHEARNE: All of that makes me a little  
15 uneasy about why we are no longer approving it.

16 What is the distinction between "reflecting" and  
17 "applying"?

18 MR. PURPLE: Well, the argument was that the use of  
19 the word "apply" meant that every single conceivable state-of-the-  
20 art human factors thing, even if they might be contradictory  
21 somehow, had to be applied to this thing, and the argument of a  
22 possible conflict or contradiction led us to back off and say  
23 okay, we reflect rather than apply.

24 COMMISSIONER AHEARNE: I'm not much more comfortable  
25 with that than the other.



1 All right. On page 33, if we get the rule out, I  
2 would give you three options:

3 Option A is to keep the first sentence under  
4 discussion as it is, and I'll take a dissenting footnote.

5 Option B could be that the Commission Staff notes;  
6 or Option C could be the Commission notes that the methodology  
7 may be available in several years.

8 CHAIRMAN HENDRIE: The clear solution of that is  
9 that the Commission, except for Mr. Ahearne.

10 COMMISSIONER BRADFORD: Or the Commission notes that  
11 its staff.

12 (Laughter.)

13 COMMISSIONER AHEARNE: I just don't think that  
14 you're going to get that methodology available in a year.  
15 That's, I think, fairly optimistic.

16 (Laughter.)

17 CHAIRMAN HENDRIE: How about not inconceivable that  
18 it will be?

19 (Laughter.)

20 Could be.

21 COMMISSIONER AHEARNE: Page 45.

22 COMMISSIONER BRADFORD: That depends on how you define  
23 year.

24 (Laughter.)

25 COMMISSIONER AHEARNE: We could do as they do in

1 the legislature, we can hold the calendar.

2 CHAIRMAN HENDRIE: Study may be available at some  
3 time.

4 COMMISSIONER GILINSKY: It's like graduate school,  
5 where the year isn't --

6 COMMISSIONER AHEARNE: Right.

7 Okay, on page 45, this is more just for my information,  
8 the way that you have now modified it -- and I'm probably not  
9 interested in the way it was originally -- what do you intend  
10 with respect to the licensee in answer to do you expect them to  
11 put in a device to directly measure the coolant level in the  
12 reactor vessel?

13 MR. DENTON: I think when we first originated  
14 this requirement, we did intend level -- and level is a common  
15 measurement -- to in a sense have these other schemes imposed  
16 which they incurred, unambiguous indication of core cooling,  
17 and there are several schemes. I think one is being put in a  
18 reactor and tested. So we left a bit of an out as to exactly how  
19 do you show unambiguous core cooling, and I'll let Bob or Roger  
20 amplify where that stands. It's gotten more complicated as more  
21 people have come up with schemes.

22 COMMISSIONER AHEARNE: Roger? Bob?

23 MR. EISENHUT: I think in fact Roger -- while you're  
24 thinking, I'll return the favor. A lot of the level schemes  
25 that are being proposed are not a direct indication of level.

1 They are either by pressure sensors or whatever, and I think it  
2 would be our intention that those kinds of approaches will be  
3 acceptable, as opposed to a direct indication in the reactor  
4 vessel.

5 COMMISSIONER AHEARNE: But that scheme is still a  
6 measurement of the level --

7 MR. EISENHUT: That's right.

8 COMMISSIONER AHEARNE: --- although it may not be a  
9 direct measurement.

10 MR. EISENHUT: I was just following your direct sense.

11 MR. MATTSON: I was working on your last question.  
12 Do we mean them to have a level indicator? Yes, sir.

13 COMMISSIONER AHEARNE: Okay. Thank you.

14 CHAIRMAN HENDRIE: But it neednot be a sight glass?

15 MR. MATTSON: That's right.

16 (Pause.)

17 CHAIRMAN HENDRIE: It could be hung up outside the  
18 containment.

19 (Laughter.)

20 COMMISSIONER AHEARNE: A dipstick.

21 The last question I have, we are, as I'm sure you know,  
22 going through some reviews of a recent rule, and there are some  
23 questions that have been raised about the technical justification  
24 that we have imbedded in that rule, and it seemed to me that  
25 there are similar questions raised here. So just for my own

1 future possible use, could you give me your short description of  
2 our technical justification for 100 percent?

3 MR. DENTON: Let me start, and I'll ask Roger, who  
4 was at the last meeting, to amplify. The 100 percent was to  
5 foreclose arguments for CP plants where you had the flexibility,  
6 you designed for a given number, over whether the right number  
7 was 90, 75, 60 or 50, and I thought back when we started the  
8 CP process that it was simpler to go to 100 and we didn't have  
9 the analytical results to justify any number lower than that at  
10 the time; whereas in the interim rule, trying to zero in on more  
11 technical --

12 COMMISSIONER AHEARNE: So it's a regulatory  
13 conservatism?

14 MR. DENTON: Yes.

15 COMMISSIONER AHEARNE: In the absence of more  
16 detailed knowledge?

17 MR. DENTON: That's correct.

18 COMMISSIONER AHEARNE: All right. Thank you, gentlemen.  
19 Yes, that's for Roger. Go ahead.

20 CHAIRMAN <sup>HENDRIE</sup>~~AHEARNE~~: I don't think it's in Part 20,  
21 because Part 20 deals with normal operation, normal releases to  
22 people in unrestricted areas.

23 Vic, you had some questions of one kind or another.  
24 Why don't you ---

25 COMMISSIONER GILINSKY: Well, actually, I'd like to

1 study the comments more carefully before pursuing it further,  
2 and I'll just deal directly with Harold and his people.

3 CHAIRMAN HENDRIE: Did you get a chance the other  
4 day to excise the point of what a rule would mean in terms of  
5 construction permit proceedings?

6 COMMISSIONER GILINSKY: With the General Counsel, yes.

7 CHAIRMAN HENDRIE: Is there any of that that --

8 COMMISSIONER GILINSKY: No, I don't think so.

9 CHAIRMAN HENDRIE: Other questions?

10 Peter, did you have any residual items that we could  
11 usefully --

12 COMMISSIONER AHEARNE: I have one minor question.

13 CHAIRMAN HENDRIE: We'll see if Peter has any.

14 COMMISSIONER BRADFORD: I don't, no. I just had that  
15 one.

16 COMMISSIONER AHEARNE: The one minor question really  
17 is -- I'm not sure to whom it should be addressed, probably Sam.

18 (Laughter.)

19 I am, I guess, somewhat -- I found it interesting --  
20 I've read all the comments, and I was a little puzzled by how  
21 we decide to which proposal a commentor is providing comments,  
22 when they don't specifically reference the Federal Register  
23 notice, because I would almost bet -- in fact, I would bet that  
24 some of these commentors were commenting on something different  
25 than this rule.



1 COMMISSIONER BRADFORD: That's a fair question.

2 COMMISSIONER AHEARNE: What do you say to that, Sam?

3 (Laughter.)

4 MR. CHILK: I'd have to look at the comment.

5 (Laughter.)

6 COMMISSIONER AHEARNE: The only reason I raised it is  
7 that Sam -- it's a question of information. But it appeared to me  
8 that at some point when -- we take notice of that in our analysis  
9 and the comments, we say that comments 1, et cetera, et cetera,  
10 didn't really refer to this rule, so we don't pay attention to  
11 them.

12 Well, that means that there probably are some other  
13 requests we had out to which they did refer. That would be  
14 nice if they could get folded in.

15 COMMISSIONER GILINSKY: Whatever reservation I have  
16 concerned the provisions that deal with containment design.  
17 I don't have any further questions about the rest of the rule.  
18 And that's something I want to pursue a little further.

19 COMMISSIONER BRADFORD: Sorry, I wasn't laughing at  
20 you.

21 CHAIRMAN HENDRIE: But not at the moment?

22 COMMISSIONER GILINSKY: Not at the moment, no.

23 COMMISSIONER BRADFORD: Comment No. 9 had just come  
24 to my attention.

25 COMMISSIONER GILINSKY: I thought you were laughing at

1 me.

2 COMMISSIONER BRADFORD: No. Comment 9. That's the  
3 first time I noticed it.

4 CHAIRMAN HENDRIE: Okay, Len, are you ready?

5 MR. BICKWIT: I just had two points:

6 One, if the rule goes through, I recommend that  
7 some conforming changes be made to Appendix B, because it appears  
8 to me that the appendix in its present form as revised is to  
9 some degree inconsistent with what's being done in this rule.  
10 That appendix states, with respect to construction permits, that  
11 the Commission may, on a case-to-case basis, supplement the  
12 requirements of the rules that are applicable to an application  
13 for a construction permit, and that is not, as I understand it,  
14 what is contemplated by this rule.

15 In essence, Appendix B, as it relates to construction  
16 permits, repeals the Maine Yankee decision or announces that  
17 the Maine Yankee decision will not be followed in the future,  
18 and what I understand the Commission is doing here is to provide  
19 that in effect it is to be restored, with the new set of  
20 requirements.

21 CHAIRMAN HENDRIE: What I would suggest -- and I guess  
22 I would hope that for whatever views we may have among us, for or  
23 against the rule in one form or another of the rule, I think we  
24 could probably all agree, or at least have no objection, would  
25 we not, asking the Counsel to go ahead and prepare appropriate

1 conforming -- appropriate confirmation of Appendix B of Part 2 to  
2 this rule, and then if this rule gains votes in one form or  
3 another in due time, why, that would be in hand; and if not, why,  
4 no harm will have been done.

5 Fair enough?

6 Please do that.

7 MR. BICKWIT: I will.

8 The other point I wanted to make is one I made before,  
9 and it relates to the siting policy problem. The rationale that  
10 is given for rejecting USDI's comments is a legal rationale, and  
11 it takes the position, as I read it, that we are precluded from  
12 applying these regulations -- the regulations on siting -- to  
13 these applications.

14 I'll admit that is a possible reading of Section 108  
15 of the Authorization Act, but I do not think it's the only  
16 reading and, in fact, I think it's the less preferred reading,  
17 and I would urge that since what I think was moving the Staff in  
18 opposing that comment was the policy position, I would urge the  
19 Staff to see if it could remove the legal language which might  
20 be read back to us at some stage.

21 MR. SHAPAR: Or modify it.

22 MR. BICKWIT: Or modify it.

23 CHAIRMAN HENDRIE: Well, I think it seems to me that  
24 if there are Commissioners' votes for a CP rule which will apply  
25 simply to those applications that have been on file with us for

1 some time, that we probably also agree that it makes little  
2 sense to talk about applying the siting requirements.

3 MR. BICKWIT: That's right. I would simply say that  
4 it makes little sense, rather than to say that the Commission is  
5 legally precluded from doing this.

6 MR. DENTON: As a matter of fact, we have provided  
7 the Commission a detailed site description for each of these  
8 applications.

9 CHAIRMAN HENDRIE: Okay. If perhaps ELD could  
10 supplement the information in that section. Okay. The  
11 Commission will take the matter under advisement. If when you have  
12 prepared some alternate wording, or some additional wording on  
13 this siting matter, why, send it along, and you have prepared  
14 some proposed conforming changes to Appendix B that would go  
15 with this, why, send it along, duly marked so we can get it in  
16 the right folders, and so on, and there were some other clarifying  
17 pieces, the Commission will think on the matter.

18 In the meantime, as we agreed at the beginning of  
19 this meeting, it seems to me that the Staff has a perfectly  
20 reasonable position to take on these construction permit  
21 applications, and if you find yourself in a position where it  
22 seems usual to go ahead and put those forward in a hearing, why,  
23 do so. If the rule follows, why, it will only supplement and  
24 overtake your effort.

25 MR. SHAPAR: Well, the Staff can go forward with the

1 Staff position, and whether or not the Commission eventually  
2 buys that Staff position and reflects it in a rule remains to be  
3 seen.

4 CHAIRMAN HENDRIE: Just so. Very good.

5 COMMISSIONER BRADFORD: Are those proceedings in fact  
6 proceeding?

7 MR. PURPLE: Some are, and some aren't.

8 COMMISSIONER BRADFORD: But it's not us that are holding  
9 up the ones that aren't?

10 MR. EISENHUT: Some of the hearings are actually  
11 waiting on this piece of the process. There are other hearings,  
12 however, that some of these plants are actively in hearings now  
13 on other pieces of the CP.

14 MR. SHAPAR: But based on what we've heard today, we  
15 would not refrain from going forward with a Staff position.

16 COMMISSIONER BRADFORD: Right.

17 CHAIRMAN HENDRIE: And in any case, the Applicants  
18 are scratching their heads and saying, well, you know, is 0718  
19 the current version or whatever we should be working toward, or  
20 not, and it seems to me that it is the Staff position -- it  
21 seems perfectly reasonable to me for the Applicants to work in that  
22 direction.

23 I would think that even -- whatever rule we pass  
24 is not going to go in radically different directions, I think  
25 that's quite clear. We haven't differed substantially on the



1 technical issues.

2 Okay. Very good. Thank you very much.

3 (Whereupon, at 3:45 p.m., the meeting was  
4 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: DISCUSSION OF SECY 80-20D - POLICY ON PROCEEDING  
WITH PENDING CP AND ML APPLICATIONS

Date of Proceeding: May 27, 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.

ANN RILEY

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Official Reporter (Typed)

  
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