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NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF:

PUBLIC MEETING

DISCUSSION OF UCS PETITION ON QUALIFICATION OF ELECTRICAL EQUIPMENT AND RESPONSES TO IE BULLETIN 79-01

Place - Washington, D. C.

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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

PUBLIC MEETING

DISCUSSION OF UCS PETITION ON QUALIFICATION OF ELECTRICAL EQUIPMENT AND RESPONSES TO IE BULLETIN 79-01

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

Wednesday, 11 July 1979

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

PRESENT:

DR. JOSEPH M. HENDRIE, Chairman

VICTOR GILINSKY, Commissioner

RICHARD T. KENNEDY, Commissioner

PETER A. BRADFORD, Commissioner

JOHN F. AHEARNE, Commissioners

ALSO PRESENT:

Messrs. Jordan, Butcher, Hoyle, Stello, Lieberman, Snyder, Moseley, Gossick, Denton, Eisenhut, and Moore.

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PROCEEDINGS

COMMISSIONER GILINSKY: The Chairman has asked me to proceed. He is unavailable. He should come in in the course of the meeting.

Mr. Kennedy, I understand, also asked that we proceed and he expects also to be coming in soon.

So, why don't you go on with the briefing that you have prepared.

MR. GOSSICK: Fine.

I have asked Victor to introduce the speakers.

MR. STELLO: Okay.

The purpose of the briefing this afternoon is to provide the Commission with the status of the review of the qualification of electrical equipment, specifically with respect to the responses to I&E Bulletin 79-01.

Review is still ongoing. Therefore, the nature of the presentation today will be status report. It will be concentrating on the two aspects of the bulletin; one which required a 24-hour report of any deviations, where there was not -- unqualified equipment identified, as well as a comprehensive review of all electrical equipment.

Ed Jordan and Ed Butcher will be doing the briefing.

Ed?

MR. JORDAN: Okay.

May I have the first slide, please.

(Slide)

The purpose of the bulletin, 79-01, which was issued in February 1979, was to cause Licensees to identify all electrical equipment which may be subjected to the accident environment, and then review the qualification of each associated component and to verify that the required safety related equipment will function if called upon.

The Licensees were requested by this bulletin to review the documentation against the FSAR accion environment, and against the FSAR commitment for qualification.

WHere documentation was not available, Licensees were to perform analyses or tests to verify that qualification was indeed existent.

The Bulletin was issued subsequent to Regional Office followup on the Circular 78-08, which was issued in May of 1978. The Circular required essentially the same thing but did not require responses from the Licensees and didn't give the timeframe.

COMMISSIONER GILINSKY: Is that the difference between a Circular and a Bulletin?

MR. JORDAN: Primarily, yes.

The Bulletin notifies the Licensees --

MR. JORDAN: Yes.

It requests the Licensees to perhaps perform a review, but doesn't require the Licensees to advise the

Commission of the results of that review, and it doesn't normally specify timeframe.

COMMISSIONER AHEARNE: Is it fair to say then that it is a distinction of how important you think it is?

MR. JORDAN: True. That's right.

COMMISSIONER AHEARNE: Then what led to the conclusion that what happened between May and February -- to reach the conclusion --

MR. JORDAN: Okay. The inspectors were following up on the Licensees' action with regard to the Circular, and they found unqualified limit switches on the safety systems inside containment existed in addition to those that had been previously identified in another Bulletin.

They also found that in some cases Licensees were unable to provide documentation to indicate that certain components were qualified such as transmitters, electrical cables, motor insulation, cable splices and whatnot, so that thing were not progressing as rapidly as we thought they should.

Well, that was the basis --

COMMISSIONER GILINSKY: Could you tell me why we went out with a Circular in the first place, because this followed our learning that in fact there had been unqualified equipment on reactors, didn't it?

MR. JORDAN: I believe that the thinking was that we had several bulletins that had hit specif. issues, like limit switches or components, and that a Circular which described -- requested the Licensees to examine the whole system, would suffice, and then our inspection program would followup on the Circular.

So I think it is simply that we have matured somewhat in the way we approach this.

COMMISSIONER BRADFORD: Well, wasn't the maturity helped by the fact that the response rate to the Circular wasn't all that good?

MR. JORDAN: That's correct.

COMMISSIONER AHEARNE: But I thought that you didn't have to have a response to a Circular.

MR. JORDAN: Response meaning what the Licensees did, not a written response.

COMMISSIONER BRADFORD: Let's see. So that not only did they not give you written responses, but they also didn't do enough?

MR. JORDAN: That's correct. And they were doing it at different rates. Since we didn't specify the rate, then Licensee X was taking it to heart and doing it fast, and Licensee Y was taking his time.

Okay. The objectives of the Bulletin.

Next slide.

(Slide)

We discussed it. They were to expedite the

Licensee review of the electrical equipment qualification. And now they require reporting on the part of the Licensee.

First of all, it caused them to promptly evaluate and report identification of unqualified equipment within 24 hours of that identification, followed by written --

COMMISSIONER GILINSKY: Let me ask -- how do these Bulletins differ from previous Bulletins?

Were the previous ones specific with regard to certain kinds of equipment?

MR. JORDAN: Yes, we had two previous qualification-type Bulletins that were specific to like limit switches, a particular type of limit switch, a particular component.

And now this Bulletin we are saying, look at all of your components that are required to function in an accident environment and establish that they do have qualifications.

So it was much, much broader.

MR. SNYDER: Is it fair to say, Ed, that the timing on the circular now of May 31st -- in fact it does quote very strongly from the Commission's decision of April 13th, you know a couple of weeks before, a month before in which it reflected that there was still an unsatisfactory pattern ongoing.

MR. JORDAN: Yes.

MR. SNYDER: A broader kind of thing rather than specific and you quoted very heavily from the Commission's order in the Circular and the Bulletin which followed up on, just basically repeating the Circular, I think.

MR. JORDAN: That's correct.

Okay. So the Licensees were then required to include in this 24-hour, 14-day report, an evaluation of their basis for continued operation if they chose to continue operating with components they identified as unqualified.

Ed Butcher will describe in a little more detail later on the results of those reviews. Some 31 plants identified and reported on unqualified equipment as a result of that particular phase of the Bulletin. And this was distributed in time over the time from issuance of the Bulletin in February, until the recent past.

COMMISSIONER AHEARNE: The qualifications that you are holding them to are what?

MR. JORDAN: The qualifications are the FSAR requirements, the discussion in the FSAR about the accident environment.

COMMISSIONER AHEARNE: They don't refer specifically then to any IEEE standard?

MR. JORDAN: The later plants would, but the older plants would not.

COMMISSIONER AHEARNE: And the later plants would end up referring to which then?

MR. JORDAN: To the 1974 --

MR. STELLO: '71. The later operating plants in '71.

MR.JORDAN: Okay.

COMMISSIONER AHEARNE: And none of them really referred to '74, for example.

MR. STELLO: No.

COMMISSIONER BRADFORD: What would typical language be in the FSAR of a plant that was not committing itself to 1971 standards, but was just making a more general commitment?

MR. JORDAN: Well there would be a statement in the FSAR as to the accident environment itself, the temperature in the containment. For instance we go to general radiation levels.

COMMISSIONER BRADFORD: So that might actually be more specific than would be involved simply in a commitment to meet the '71 standard?

MR. JORDAN: That would be plant specific and have less detail than the IEEE standard.

COMMISSIONER BRADFORD: What kind of detail does the IEEE standard have?

MR. JORDAN: I will let Ed answer that.

MR. BUTCHER: I think the question is, what would be in the FSAR for a plant that was not committed to the '71 version of the standard.

And what would be there would be a specification

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of the environment inside containment, and the design basis of that temperature, pressure, radiation --

COMMISSIONER BRADFORD: That sounds more specific in fact than just the IEEE standard as of 1971.

MR. BUTCHER: In those plants that did reference the standard as a basis for licensing, that information would also be there. The LOCA environment would have to be specified in either case.

In the case of those plants that reference the standard, there would be a further statement that would say the equipment would be qualified to function in this environment in accordance with the provisions of the '71 version IEEE standard 323.

In the case of plants previous to the standards, what it would say would be qualified to function in this environment, without specifically specifying a standard.

MR. JORDAN: The next thing that the Bulletin required was a report in 120 days of the Bulletin on the documentation of the determination of qualifications of the components, all of the components that are subjected to an accident environment. And these responses were due June 15th.

The final objective of the Bulletin was to feed back generic issues of unqualified equipment to all Licensees, and we issued a revision to this Bulletin on June 4, which fed back to Licensees the specific problems with ASCO solenoid valves in which internal components had been found not to be

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environmentally qualified for radiation or temperature resistance at certain plants.

And so, because these valves were rather widely used, we provided this additional information to Licensees that perhaps somehow had not become aware of this.

I just happen to have a couple of the components in my pocket.

Vince, if you would switch to the backup slide --

(Slide)

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This is the back-up side on the ASCO valves.

MR. JORDAN: Okay, the circle components, the disc holder and pins are what I have. And, for instance, for that particular valve, they have an acetal component that's in many of the valves and are not qualified, and those were replaced with a metal component that then causes that valve to be environmentally qualified.

So those are the two components that when exchanged makes the difference for the valve being environmental or not environmentally qualified.

COMMISSIONER AHEARNE: When you went on the 6-4 supplemental, did you adjust the reporting date of 6-15?

MR. JORDAN: Yes. We did not change the reporting date, so we are bringing this material to the licensee's attention.

We also identified in it a problem -- possibly a problem with preventive maintenance with regard to aging the components.

The coil that's up in the box to the right, if energized according to the manufacturer, has a life of some four years, so we're going to bring it to the licensee's attention that these should be replaced periodically.

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So I think one could say that that might constitute a success story for that component in that we have had no failures traced to that particular maintenance or to that environmental situation, and we were able, through the bulletin, to identify by the licensee identifying to us, and then we transmitted to all the licensees.

May I have the next slide. Slide 3, please.

[Slide.]

The responsibility for action on the bulletin responses agreed upon within the NRC Staff, so that I&E performs the tasks on the left, and NRR on the right, and we have, of course, a number of interfaces going through this thing.

I&E performs the screening of the 120-day reports. NRR reviews the 24-hour, 14-day --

COMMISSIONER GILINSKY: What are the conditions for the 24-hour report?

MR. JORDAN: That the licensee identifies unqualified components and that he is then reporting in accordance with tech spec.

We brought this particular reporting requirement to his attention --

COMMISSIONER GILINSKY: And NRR decides on the level of seriousness, the safety significance --

MR. JORDAN: That's right.

COMMISSIONER GILINSKY: -- of that report.

MR. JORDAN: Yes.

COMMISSIONER GILINSKY: And that is reported on the

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120-day basis?

MR. JORDAN: 120-day basis, the licensee is reporting the sum total of his review, that is all of the components required to be qualified, the level they qualify, and on what basis they qualified.

COMMISSIONER AHEARNE: Are you going to discuss what kind of 24-hour reports were received?

MR. JORDAN: Yes. Ed will discuss those. So I&E screens the 120-day reports. We are in the process of doing that now. We will initiate action on the deficient reports. That is those that are incomplete, have other problems with them. On that basis we would consider enforcement action, if we find enforcement problems with the licensee, then we would subsequently conduct what we are calling an interim review.

This will be comparing the qualifications to the criteria that exist in the FSAR at this particular time. Then we would be conducting a final review based on guidelines that NRR will develop.

COMMISSIONER AHEARNE: The NUREG that you mentioned there, you mean it would be mentioned in the NUREG?

MR. JORDAN: Yes, this is what we anticipate as being the publishing of the results of the interim review. So, in addition to feeding back to the licensees, we would publish a NUREG stating what the results were.

MR. SNYDER: Is that for each licensee?

MR. JORDAN: No.

MR. SNYDER: It's across the board on the subject?

MR. JORDAN: Yes.

COMMISSIONER GILINSKY: Now is the failure to have qualified equipment a violation of the license of regulation or commitment?

MR. JORDAN: Generally it's a failure to meet a commitment, to meet the FSAR requirement.

COMMISSIONER GILINSKY: And how do we regard that?

MR. JORDAN: If you recall, in the Cook instance, that was a material fault statement that was identified, and so that was the enforcement action taken on that particular issue.

There may be instances where the failure to have a qualified component is somewhat innocent -- maybe that's the wrong term to use, but it was inadvertent in the process, and we become smarter over a period of time.

COMMISSIONER BRADFORD: I gather that there's a much more specific than I thought commitment in the FSAR for all these plants that you have equipment qualified to a clearly specified environment; is that right?

MR. JORDAN: I think it's perhaps more implied than specific, because the criteria require that the plant be able to sustain an accident, and the FSAR describes the accident requirement, so you just have to put those two together and assume all of the components required to function should meet that criteria.

COMMISSIONER AHEARNE: Are there explicit statements that lay that on as a requirement? I follow the implication --

MR. JORDAN: In some FSARS, there are. I wouldn't say that's the case of all. Let me just refer to Ed.

MR. BUTCHER: I think the types of equipment you find in the FSARs run the full spectrum. The sense of the commitment would be the component -- a component will be supplied that's capable of functioning in an accident requirement. That commitment could be implied or implicitly stated.

One way to imply it would be for the licensee to say that the plant is designed in conformance with general design criteria called a specific one, and certainly that would be an implied commitment to provide a qualified component.

COMMISSIONER AHEARNE: But you are saying that there is no standard commitment required that all components in the plant shall be qualified to function in the environment as specified in such-and-such?

MR. BUTCHER: I'll let Vic address that. He certainly has had more experience with FSARs than I have, but ar6

I would say in many cases I have seen such implicit -- or specific commitments and others I have not, depending upon the age of the plant, the time of licensing, and the licensing process that existed at that time.

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MR. STELLO: I think it's very difficult to try to describe in a sentence, or a paragraph, something that will cover all of the applications. Some cases have application because of the questions and answers, you are dealing with a very specific component -- (Inaudible.)

COMMISSIONER AHEARNE: Would you use your microphone, please.

MR. STELLO: A very specific component, where that particular component, test conditions for it are identified in quite a bit of detail. In some cases even the test procedures are part of the operation, and in some cases test reports.

So it covers a large spectrum of conditions. When they try to get it all inclusive, all components for all conditions, I think there it has described it as best as it can be. It covers a fairly complete spectrum. Up until the time you get into the standard. Well, the standard was available 3-23, 1971, for the equipment that was necessary for equipment there to meet that particular standard. And there the equipment, I think fairly -- you had a blanket statement to cover all safety equipment with one standard, but prior to the standard it really is a large variety of ways that it's described.

COMMISSIONER AHEARNE: But after the standard --

MR. STELLO: After the standard it's comprehensive and inclusive.

COMMISSIONER BRADFORD: Except any vagaries in the standard itself would then be reflected in commitments to meet it.

MR. STELLO: That's true, to the extent they exist they clearly are there, yes.

COMMISSIONER BRADFORD: And the standard itself had enough problems with it that it was replaced within three years.

MR. STELLO: It clearly was replaced in three years. I'm not going to sit here and argue how much of an improvement at the matter, but there clearly are some new things that were added. Some of the largest issues that we're faced with in the reviews was the concept of aging, and that was a new concept introduced for the first time in the '74 standards.

COMMISSIONER BRADFORD: The '71 standard came into being and fairly quickly became referenced in Licensee commitments from '71 on. The '74 standard was in place for five years, which was longer than the '71 standard was ever in place, yet we still don't have any operating plants that reference the '74 standard; is that right?

MR. STELLO: The '74 standard was adopted for reviews that were in the construction permit process.

MR. DENTON: I think it might be useful to have a member of that standards committee, who is here today, Mr. Ross Moore describe what led to the development of the '74 standard and some of the reasons, perhaps, why it has not found full adoption to date.

MR. MOORE: I'm not sure I can remember with great specificity what happened in those days, but certainly the 1971 standard was -- the IEEE undertook that at the old AEC regulatory group's request because we found just such a variety of qualification methods. Right after the '71 came out, there was several issues that it didn't very well address, and one was aging, and that is being able to run a qualification test on a piece of equipment, but simulates a 40-year old piece of equipment.

Well, '74 went into that. That is still a very difficult problem.

COMMISSIONER AHEARNE: Went into it to the extent of requiring it -- not saying how it was going to be done?

MR. MOORE: That's correct. And there was a lot of opposition to including that in this standard when nobody really knew how to do accelerated aging tests on everything. But our feeling was that the best way to get progress made was to put it in the standards so that people would have to start working on it, and I think that the results have shown that to be true.

As I remember one of the other differences between '71 and '74, I believe it clarified a little bit more the extent to which you could rely on analysis -- or a stronger requirement for testing versus analysis.

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Those are, I believe, the typical areas between the two, '74 still -- certainly we would like to see more specificity than is in there now, and I know that what's we're working on in Staff to get more specific, and margins to account for a variation of the units off the assembly line, conditions -- the adequacy of the simulation of the accident environment, so that there was a requirement for margin.

COMMISSIONER AHEARNE: I don't understand what you mean by margins.

MR. MOORE: Oh, I'm sorry. It's a requirement that you test out a temperature higher than you expect in the accident environment pressure or for a longer period than you expect the device to have to operate.

MR. SNYDER: Does that include, Ross, the question of double LOCA peak testing in the '74 standard versus the single peak in the -- is that typical of the kind of margin you're talking about?

MR. MOORE: Right. The envelop --

MR. SNYDER: But you hit it twice, when in fact if there was an accident of that sort, you'd never see the second one; is that correct?

MR. MOORE: Right. It covers a possible error in predicting the accident environment of simulating it in the test, of variations between units off assembly lines. That's what it's aimed for.

It's not very rigorously derived, but the idea is to go well beyond what you think it will have to meet.

COMMISSIONER GILINSKY: Thank you.

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COMMISSIONER AHEARNE: I'm not sure if this question is for Ross, but do we then now require the '74 standard to be met for plants that are now under construction?

MR. MOORE: We have a date for CPs. What is the cutoff date for '74, somebody who is closer to it than I am?

There is a date established for CPs: beyond that date, required to meet the '74 standards; prior to that, the 1971 --

COMMISSIONER AHEARNE: Aren't we already in that date? Are there any plants left that are now being held to '74 standards?

MR. MOORE: No, not in the operating license.

COMMISSIONER AHEARNE: For construction?

MR. MOORE: Aren't they required to -- the new CPs should -- construction permits are making commitments to meet it.

COMMISSIONER AHEARNE: To meet it.

MR. MOORE: Right.

COMMISSIONER AHEARNE: Okay.

MR. DENTON: I think I can help on that a bit. We put Comanche Peak as somehow the plant that would meet the '74 standard. I think within the staff there are serious doubts as to whether the '74 standard can be met literally.

COMMISSIONER AHEARNE: That was my next question.

MR. DENTON: A lot depends on how you interpret the standard, what you think the standard means, and I think that's why the staff has had so much difficulty with this issue, is taking those words in the standard and how do you translate those into tests. I see the standard as intended to envelop all pieces of equipment regardless of the time it had to operate.

In order to simplify the process, we have ended up going back and looking piece by piece at equipment, how long it had to actually operate and what it's environment was. We have not really achieved any efficiency from the standard in that sense yet.

MR. JORDAN: The status of the responses from the licensees, the 120-day responses, I guess, are that the 57 plants that are covered by this bulletin have responded. The 11 SEP plants are excepted. They are further along in the review of environmental qualification than the bulletin requires. Also, Indian Point 1 and Humboldt Bay were excepted since they are operational at this time.

The adequacy of the responses are being screened, and the responses from our viewpoint, in a preliminary fashion, range from what we feel is very thorough to poor. And we will be contacting licensees. We have contacted some licensees already, requesting additional information necessary for us to perform our review.

COMMISSIONER BRADFORD: What would a poor response --

what would the characteristics be that would make it poor?

MR. JORDAN: In not providing the information that was requested. We requested a very extensive listing of components and the environment to which they are subjected and the manner of their qualification. And some licensees have made what I would say are blanket statements that don't give us the information we need in order to evaluate adequacy.

COMMISSIONER BRADFORD: So if a licensee listed a particular component and then decides what's qualified by analysis, is that sufficient?

MR. JORDAN: That's going to be the basis of our review, so that we can correlate across the 57 plants. For instance, if we have a specific component that another licensee has qualified that particular component by test, then perhaps we can determine adequacy and be able to feed that information back to the licensee.

So we're going to have a very large matrix of information.

COMMISSIONER BRADFORD: But will you ever actually check either the analytical methods of the tests that lie behind the assertions that they qualify?

MR. JORDAN: We may. We're not far enough into it to say at this point.

The inspection process intent is to determine the validity of the licensee's assertions in his bulletin response.

COMMISSIONER BRADFORD: How long would a typical bulletin response be? How many items are covered? How many pages?

MR. JORDAN: Hundreds of items, and the responses are ranging to a half an inch thick. So a proper response is a quite lengthy document.

May I have the next slide, please.

(Slide.)

After the screening that we were just discussing, we are going to conduct the interim review, and this is being performed by a task group consisting of IE headquarters, IE regional and NRR personnel. And the object there is to provide the widest possible perspective and to ensure consistent review of all licensees.

This process will facilitate verification in questionable areas by inspection. And I believe if we encounter, for instance, problems with a component that was stated by the licensee to be qualified by analysis, through our experience that we didn't feel was correct, then certainly we would review that in more detail.

So there is going to be judgment involved in these.

The final reviews, once the final acceptance criteria and guidelines are generated, will be performed by the same task group. So that this will be a relatively long-life task group. This is a very large effort. We anticipate several man-years of work will be required to complete the reviews. And as far as the schedule, projection is that the final review will be completed by March of next year. The interim review will be completed by September. And we plan to try to resolve the open issues by June 1980, by one year from now.

At this point Ed Butcher will discuss the results of the review of the licensees' 24-hour notifications and development of guidelines for our final review.

MR. BUTCHER: Could I have the next slide, please?

(Slide.)

To date, in connection with the 24-hour reporting requirement on bulletins, we have received reports of five different types of components. These reports are significant in that they are different from those components where the question is one of adequately documenting its qualification. In the case of these components, the licensee has declared that he has reason to believe that these components are not suitable for function that they are to perform in the LOCA environment.

Specifically, the components are NAMCO stem-mounted limits, which are the limits we have identified in the bulletins, and the licensees in turn reported them where they have them, in accordance with the 24-hour requirement. There have been some containment isolation valve operators reported, three plants at one station.

COMMISSIONER GILINSKY: What is a valve operator?

MR. BUTCHER: Excuse me, I didn't hear you.

COMMISSIONER GILINSKY: What is that component? What is a valve operator?

MR. BUTCHER: In this case, I believe it was an electric valve, a motor to drive the actual valve disk.

There has been two plants at one station that reported an insulated instrument control cable terminal lugs where they had some insulation on the --

COMMISSIONER GILINSKY: What kind of isolation valves are these? Are these the large purge valves?

MR. BUTCHER: These particular valves, my recollection is that they were drain valves. They weren't large purge valves. They were process type valves.

In two plants at one three-unit station, aluminum limit switch housings on containment isolation valves were found which were subject to degradation in the chemical sprays. And the ASCO pilot solenoid valves which we spoke about earlier were also discovered, at ten plants and seven stations.

May I have the next slide, please?

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(Slide.)

In summary, there have been 31 plants at 19 stations, operated by 13 different utilities, that have reported unqualified equipment.

COMMISSIONER BRADFORD: In how many cases is that unqualified equipment equipment that was called to their attention by NRC as being unqualified?

MR. BUTCHER: The only one -- I believe the limit switches were the only ones that were called to their attention by the NRC. Now, after the first ASCO solenoid valve problem was reported to us by one utility, it would be immediately turned around and reported to others, and it was disseminated throughout the industry by word of mouth and by the manufacturer, and they began to come in.

So I guess you might consider that one kind of -- oh, yes, the 14 and 10 plants. In all cases, the licensees have agreed to replace the equipment where a safety-related function was involved.

COMMISSIONER AHEARNE: Now, I notice that you have your 31 plants, you add up all these 31. So I conclude that no one plant had two of these things?

MR. BUTCHER: No. In some cases there were plants that had more than one of these items.

COMMISSIONER AHEARNE: Well, is it then that there are more plants than are listed on this slide, or is it the 31 that's the wrong number?

MR. BUTCHER: There are 31 plants that have reported unqualified equipment. In some cases, they have reported more than one type of unqualified equipment.

MR. EISENHUT: Steve, the numbers don't add up correctly.

COMMISSIONER GILINSKY: What you're saying is, it's less than 31 plants.

COMMISSIONER AHEARNE: It's either less than 31 plants or there are more numbers here.

MR. EISENHUT: We'll get you the actual numbers. I assume the slide before was more accurate. It certainly delineates the right numbers.

COMMISSIONER GILINSKY: Let me ask you how you would handle a situation where there is unqualified equipment. Say the licensees have agreed to replace equipment. What happens? Do you order them to do that or what?

MR. BUTCHER: So far, it hasn't been necessary to do that. With the 24-hour report, the licensee is also required to report his proposed action to correct the problem and his basis for continued operation, if in fact he doesn't elect to shut down immediately and replace it.

COMMISSIONER GILINSKY: So he tells you how fast he's going to replace that piece of equipment?

MR. BUTCHER: That's correct, and he tells us why that doesn't represent a hazard to the health and safety of the public if he proposes to continue to operate that plant during that period.

COMMISIONER AHEARNE: And this is what NRR is reviewing?

MR. BUTCHER: That's correct.

COMMISSIONER AHEARNE: Now, in each of those cases he has to respond in 24 hours. Does NRR have a similar window in which they reach a judgment as to whether or not to accept that?

MR. BUTCHER: I would say that our response -- we are aware of it, we immediately examine it and make a judgment as to the significance, and that's done immediately, say within the hour of one receiving or one or the other individuals working on it. At that point we may make a judgment that there is not enough here to determine how significant it is, so we immediately contact the licensee. I would say within 24 hours we make a pretty firm judgment in our own minds as to how significant it is.

Again, all we're doing is auditing his process, because he has already made this judgment.

COMMISSIONER AHEARNE: But it's not his responsibility to determine whether it's adequate to protect the health and safety.

MR. BUTCHER: [illegible] ultimate judgment, I suspect it's up to us to verify his judgment. But he has the first responsibility.

COMMISSIONER AHEARNE: Now how many times did you agree with -- I guess what I'm trying to get at is, were there any cases in which he identified a piece of equipment, you guys thought that's really serious and you disagreed with his --

MR. BUTCHER: In some cases we -- we have yet to disagree with his judgment that the plant can be operated safely. In some cases we disagreed with the extent of his actions to be taken in the interim. Then we suggested he should take some other actions, and we furthermore strongly suggested if he didn't then we would have to take some appropriate action to see that he did.

And in all cases we were able to very shortly implement what we felt was necessary.

MR. EISENHUT: I think another reason for these is most of these -- it turns out most of the items we saw in the previous chart were rather insignificant. That is, there was something pretty straightforward to do. If a valve has a problem where you're not sure that the valves are closed during an accident environment, you can close it ahead of time and lock it shut.

There were, of course, a number of events over the last year or so on environmental qualification issues where we have taken action where we have had a difference of opinion, starting, I believe with the Cook situation. So there has been a number, both in connecters -- there's been some on terminal blocks. So those, I think, are the examples where there were ones where there's been a difference of agreement between us and the licensee on these. They've been rather straightforward.

So in all of these cases I think we agreed eventually, after some discussion with the licensee.

MR. BUTCHER: On this slide is summarized the general factors that went into the licensee's determination and our subsequent evaluations. And in all cases, it was some combination of these factors, more than one, that led to the determination that there was a basis for continued operation.

BU-s2

If there are no further questions, I will go to the next slide.

(Slide.)

The other major activity that NRR has in connection with response to the bulletins has been to develop the guidelines which IE will use in the final reviews of the 120-day responses.. These guidelines will be developed by the Division of Operating Reactors in NRR. In conjunction with our preliminary review, we will undertake a review in parallel and in concert with I&E of a few selected 120-day responses, and we will continue with the reviews of the SEP information, which is very similar in nature to that which we requested in the 79-01 bulletin.

And from these reviews we will develop a set of guidelines which will identify acceptable methods of qualification for plants of this particular vintage, with these particular applications. These general guidelines will be established with particular emphasis on the following -- the aspects that we have listed here of IEEE 323 1974. It is not our intent to attempt to backfit per se the standard. It is our intent to look at the standard as kind of a benchmark in establishing the criteria, and where we feel it is not necessary to come to the letter of the standard, the 1974 version, we will establish a basis for not having to come to the letter of that standard.

In many cases, it may be impractical or not desirable to implement the letter of that standard on an operating reactor.

COMMISSIONER AHEARNE: Such as in aging we don't run --

MR. BUTCHER: Aging is probably a fairly good example, because in our reviews what we will be able to do with aging is we'll probably be able to identify some particular components that we will require aging. In fact, we have already identified one, the ASCO solenoid valve. We have already established a qualified life for that. And components of materials of a nature similar to that, where we have identified those materials as subject to aging degradation, we can establish that as a requirement.

COMMISSIONER BRADFORD: When you say "a qualified life," am I right in understanding that means it's qualified for a period of time, but then it will have to be tested again before it can be used any longer than that?

MR. BUTCHER: It's qualified such that if a LOCA were to occur at the end of its qualified life, the component would still perform in its LOCA environment.

COMMISSIONER BRADFORD: If that period were five years, what would the licensee have to do at the end of five years?

MR. BUTCHER: He'd have to perform maintenance to replace the component. In this case, it would be to replace that particular internal, if that were the thing; or some other mitigating action, place it in an enclosure so it won't see the LOCA environment, something to mitigate the aging problem.

I think that's about all we have.

COMMISSIONER AHEARNE: On this list of 24 items, are there any that NRR viewed as being serious?

MR. BUTCHER: I think we view the ASCO solenoid problem as being probably the most significant, in that its failure mode was a bit tricky. It was difficult to establish a fail-safe mode. It was difficult to predict which way it would fail, and therefore that was significant to us. In the case of the ASCO solenoid valve, there was a whole spectrum of things that we made the licensees do in order to satisfy us that they were acceptable.

The factors that I have listed here that would form a basis for continued operation of all those components.

we looked at. The ASCO solenoid valves -- I see here in front of me, it looks like four of those valves played a role in that decision. So we piled layer upon layer.

COMMISSIONER AHEARNE: As far as equipment, those are the ones on that list that you viewed as being most serious?

MR. BUTCHER: Yes, that's correct. It took us the longest to resolve that one. I won't say that decision was hard and firm made as easily as the others.

COMMISSIONER GILINSKY: I wonder if you can give us some indication or at least your impression of why there was equipment out there that isn't -- wasn't qualified? Is it a failure of quality assurance? Is it lack of attention, or a failure to understand the requirements, or our not having stated the requirements precisely?

MR. BUTCHER: I think I probably could give you an example of each one of those, and I suspect all the other members of the staff here could also cite examples that would be -- would say that each one of those is a factor. I don't think I could point to one specific thing that occurred in every case.

Certainly a heightened awareness of the qualification problem brings these things to our attention in recent years. I would have to say that perhaps there could have been a QA -- I don't want to use the word "breakdown," but let's just say at the small individual component level, in the early days of the industry, I think perhaps it was easy to forget those kinds of things. There are hundreds of them in the plant and it's quite possible that one could have been left out in the design specification.

COMMISSIONER BRADFORD: Is there a pattern in the answers you actually got that in fact indicates the problems tend to be greater in the earlier plants, the 11 earliest, because they would have responded in this context?

MR. BUTCHER: I couldn't answer that question. I haven't analyzed the data.

There is one aspect that we probably ought not to overlook, and that is in the case of the limit switches. It's only been in recent years that we have come to recognize the importance of post-accident monitoring and things like that, at least in the level of detail that we have gone into in recent years. And therefore it is not surprising that you would find a thing like a limit switch, that provides position indication, not having been given a great deal of consideration when they were qualifying equipment in the earliest plants. I think that accounts for 14 of these different cases, whatever is wrong with my arithmetic.

(At 2:20 p.m., Chairman Hendrie entered the room.)

COMMISSIONER BRADFORD: Did you get responses from all the plants?

MR. BUTCHER: Yes, there have been responses, at least 120-day responses. They have at least responded to the bulletin. The question of adequacy, I think I can't speak to that.

COMMISSIONER BRADFORD: Well, in cases where the responses were inadequate, have they been notified that they have more to do and been given a schedule to do it?

MR. JORDAN: That is what we are doing now with the screening. Some of the licensees have been notified, that where there was an obvious problem. And we are continuing to notify the rest of them. We have a task group meeting tomorrow to continue screening. We do it on a regional basis.

COMMISSIONER BRADFORD: Is there an overall staff view on the feasibility and wisdom of taking enforcement action against a licensee who has unqualified equipment? Can it be done, and if so, should it be done?

MR. JORDAN: This is on the general case where, let's say, the 31 licensees that reported having unqualified equipment? Is that the example you are proposing?

COMMISSIONER BRADFORD: Well, that's a good starting place.

First of all, does the current regulatory structure give a basis for action of that sort? Are the FSAR commitments clear enough? Is the '71 standard clear enough to enforce anything against anyone? And following that, if the answer is yes, should we be taking actions of that sort?

MR. JORDAN: Well, the later plants that do indeed have the equivalent of the '71 standard, the answer is yes. And as far as our plans for some action, that's part of the review process. We will look at that aspect of it. That's not foremost in our review process.

Foremost is verifying that the components are qualified.

COMMISSIONER BRADFORD: But the issue isn't really a new one at this point. It's been what, 18 months since the D.C. Cook connecters --

MR. JORDAN: That's right, and that one was a relatively clear case.

MR. SNYDER: You found there that you had no grounds for strong enforcement action, right, as I recall, at Cook?

MR. MOSELEY: In that case we did take the enforcement action.

MR. SNYDER: I'm sorry, excuse me.

MR. MOSELEY: The response that we have to give is that it varies by licensee, and we will have to look at them almost on a case by case basis.

COMMISSIONER BRADFORD: Let's see. Can I ask that one of the things that you do be to try to bring that situation to an end. Obviously, it is not acceptable to be able to take enforcement action against a licensee in one place for a set of events that you couldn't enforce against another licensee in another place.

MR. MOSELEY: But we can't retroactively place requirements that did not exist, either.

COMMISSIONER BRADFORD: I understand that, but I think we would want to have the regulatory framework be such that regulations, at least as to the future, can be enforced formally in this area.

MR. MOSELEY: Yes, sir. I think we have that. I think the early answer is certainly true, but for the newer plants these things are much more uniform and standard, and we would have a better basis --

COMMISSIONER BRADFORD: My point is that if a LOCA occurred, it isn't going to worry about whether it's occurring in an older plant or a newer plant, and we've got to have a way of making sure the equipment is qualified in the oldest plant as well as the newest.

MR. MOSELEY: Yes, sir.

COMMISSIONER BRADFORD: It just doesn't make sense to me to say that we have no way to enforce the requirement for qualified equipment in an old plant --

MR. MOSELEY: I think we are not communicating. I was talking about enforcement in terms of saying, what are you going to do, why did you let this happen, and so on. The bulletin itself is going to result in having qualified equipment, no question about it.

COMMISSIONER BRADFORD: Okay.

MR. STELLO: Let there be no question, we are going to establish that all plants have qualified equipment. Given that that purpose is accomplished, in the process of accomplishing it you can ask the question whether or not there needs to be an enforcement action against a particular licensee for something that's flagrantly omitted, not done. And I think that has to be done based on the license conditions that were issued with the plant when it was licensed, and it will have to be in that context to decide.

I don't believe it's appropriate to try to take an enforcement action for a plant that is very old that doesn't have clear language as to what was required using today's views. But I think it is appropriate to make them all meet the safety requirements, irrespective of time of licensing.

COMMISSIONER BRADFORD: Yes, I think I would agree with that. But what I understand you to have said is that the bulletin will, in effect, sweep aside the situation as it exists now, which is that the different commitments in different FSARs, depending on the time, depending on whether or not they reference the '71 standards, makes uniform enforcement difficult, if not impossible, as of today.

MR. STELLO: Uniform enforcement to me is a concept where you enforce the license requirements that were imposed on the particular licensee and do that uniformly, recognizing that the license requirements do indeed vary.

COMMISSIONER AHEARNE: I thought I understood it. Now I don't.

(Laughter.)

COMMISSIONER BRADFORD: I think I understand it, but don't like it.

(Laughter.)

COMMISSIONER AHEARNE: Let me see. I would like to separate -- I am not asking about penalties against someone, so if that is what you mean by enforcement action, that's not the question I am asking. So, you might ask a question: Can you take enforcement action? And the question really would be: Can you exact a penalty against someone? That's not my issue.

The question, though, is: Can you require all of the plants, independent of what level of commitment they might have, whether it is pre-71 standard or '71 standard, can you recall all the plants to meet some uniform level of qualification of equipment?

MR. STELLO: Yes. Now, enforcement, though, covers a different spectrum of things, up to and including civil penalties. The way in which you apply that obviously needs to depend --

COMMISSIONER AHEARNE: Right. That wasn't my question. So that you will be requiring the equipment in all of the plants to meet some minimum standard of operability in the environment that the plant might be expected to be in in an accident?

MR. STELLO: Yes. I thought that was the purpose of

Ed's last slide. You might want to put that up again.

COMMISSIONER AHEARNE: That's what I thought I understood.

(Slide.)

MR. STELLO: That's the purpose, as I understood it, of your last slide, Ed.

MR. BUTCHER: The second statement there is: "We attempted to find the criteria upon which they would be measured."

COMMISSIONER AHEARNE: That would be independent of which plant and when.

MR. BUTCHER: Right. And there may in some cases be some enforcement necessary tc bring them up to that level.

COMMISSIONER AHEARNE: That's what I thought I understood.

MR. JORDAN: That's why we have the interim review and then the final review, because in a short time frame --

COMMISSIONER AHEARNE: Okay.

MR. STELLO: Everybody understand it?

COMMISSIONER BRADFORD: That's what I understood, as well. But that looks entirely to the future. We still are in the situation at present in which it is basically the one that Vic has described: Consistent enforcement consists of enforcing inconsistent conditions or inconsistent amendments by different licensess.

COMMISSIONER AHEARNE: Is your point, Peter, as to when will the equipment in the older plants be qualified?

COMMISSIONER BRADFORD: That's the next question.

I was talking earlier about enforcement action, including civil penalties or whatever, in the context of the regulatory framework that we have now. And it sounded -- I was thinking it would be very difficult to be doing uniformly, and that hasn't changed. What

What about that next question, as to that last slide? When do you see that program being completed?

MR. BUTCHER: We have set a goal of September for completing the guidelines, and that's not to be a simple task, it's not to be taken lightly, because we do anticipate there could be some backfitting involved in that.

COMMISSIONER AHEARNE: That's quite likely.

MR. BUTCHER: I would say it's quite likely.

COMMISSIONER AHEARNE: If there would be backfitting required, wouldn't that sort of make it more important to get it done as soon as possible?

MR. BUTCHER: We regard September as as early as possible to do the kind of adequate job we believe is necessary.

COMMISSIONER AHEARNE: But you wouldn't want to let it slip beyond that.

MR. BUTCHER: I would say next September; the following September would probably be too long. I agree with you. That's the conclusion we have come to also.

COMMISSIONER BRADFORD: And then there's a period beyond September which would be required actually to bring the plants into compliance with whatever you've done?

MR. BUTCHER: That's correct.

COMMISSIONER BRADFORD: You propose to be specifying that time, whatever it was, after September?

MR. JORDAN: I estimate that time as being March of 1980 that we would complete the final review process against this criteria for all those 57 plants, and then by June of next year we would have resolved the issues that were developed by imposing that review.

(Commissioner Kennedy arrived at 2:32 p.m.)

COMMISSIONER BRADFORD: In reviewing responses now, does the '74 standards play any role in your method of review to be used informally?

MR. BUTCHER: In reviewing the responses to date?

COMMISSIONER BRADFORD: Yes.

MR. BUTCHER: To date, we didn't make judgments as to the likelihood of the component failing in its environment. We concluded that it -- the probability was that it would fail. Now, what is the consequence of its failing. So, really, there was no need to apply a standard to determine whether it would fail or not fail.

Maybe I didn't understand the question. In reviewing the 24-hour responses, we weren't making a judgment as to whether the qualification of the equipment reported in the 24 hours was adequate or not. The licensee declared that he believed it was not qualified.

COMMISSIONER BRADFORD: The question I had in mind: When you get a response, you have different people working, meeting different responses. They have the licensee's commitments in front of them; they have the 1971 standards.

COMMISSIONER AHEARNE: Are you talking about the 24-hour or 120 days?

COMMISSIONER BRADFORD: 120 days. And they have to make some kind of a judgment as to whether or not these responses are adequate or not and the equipment is qualified.

Now, there isn't necessarily a lot of the '71 standards to go by, and, in some cases, at least, there isn't very much in the FSAR. What are they using, then, in the situation in which different reviewers come to different conclusions on similar information?

MR. JORDAN: I think I can answer that. The review is being done by a task group so that they're going to be holding hands essentially and doing the review, and the interim portion of the review is where there will be differences because they will be using as criteria the licensee's commitments and the accident environment for that particular plant. And it will be the final review that this is, you know, all brought together and the influence of hte 1974 standards will be in the criteria for that review. So, there are two parts.

COMMISSIONER AHEARNE: Peter, may I?

COMMISSIONER BRADFORD: Certainly.

COMMISSIONER AHEARNE: More in the sense of clarification, in the process you will end up, I guess, finding that there -- or you have already found -- the 24 hours were those where the licensee felt the equipment wasn't qualified.

MR. BUTCHER: The licensee or his supplier.

(Commissioner Gilinsky leaves room at 2:35 p.m.)

COMMISSIONER AHEARNE: And the 120 days, possibly you might find some other components which you conclude where the licensee didn't, but NRC may conclude, that they aren't qualified.

Now, to some extent, that means the plants are, and I don't know what the right term is -- out of compliance with the tech specs or whatever requirements are laid on. Now, does that require a formal waiver from the director of NRR or the director of I&E in order for the plant to continue to operate?

MR. STELLO: Let me try to answer your question. I think, if it follows classically, as most reviews do, you look at something and the licensee thinks it's okay. You argue that you don't think it's okay. Then the natural thing is to try to find out a way to resolve it, which means you may have to run a test which, hopefully, both parties agree to, this is the test to run. And if it does indeed turn out okay, we both accept it.

If it doesn't turn out okay, something needs to be done depending on the components, such as the examples before you. Then you decide what the right course of action might be. If it can be something where you can lock a valve closed or whatever, it may allow the time to go in and replace the compoent. If not, then you may have to go ahead and replace the compoent reasonably quickly.

As far as whether or not you need to cover at that point you might have to order them to change it if there's disagreement. If he says "No," then you're faced with the need to order them.

COMMISSIONER AHEARNE: But the situation -- I think what I am at least concluding you are saying is that this doesn't fall into the category of items which flip a switch and that switch being either the plant has to automatically because of the legal requirements shut down, or that some one of the directors has to have a waiver to stay up.

MR. STELLO: You could give it a waiver, if that were appropriate. I think where I would see most of the issues come, they come to the point where a licensee thinks it's okay, he has done something he thinks justifies the qualification of the component, and there is going to be a difference in view.

If we feel strongly enough, then we have the tools to take the action we need to require him to do something.

COMMISSIONER AHEARNE: I was wondering more of a different situation: You both agree this is something that must be changed, and the licensee wants to have it continue to operate. Is there a situation where, in order for that to happen, there has to be a formal waiver given?

MR. STELLO: You could give an exemption to it, if that's what's appropriate.

CHAIRMAN HENDRIE: I think the answer must be, John, that it certainly is within the realm of possibility that those circumstances could arise. It may not occur in a great many cases, or it might not even occur in any. But I think it would be very hard to say, "No, no, that's just not a configuration which can possibly arise."

COMMISSIONER BRADFORD: When you described this earlier as an audit typ e of review, which it clearly is, but let me get a feel for the scope of the audit, you will have 57 half-inch thick responses to deal with. A lot of things can be qualified by analysis and some qualified by testing.

Have you any feel for what percentage, if any, of those analyses and tests you are going to be able to verify yourselves?

MR. JORDAN: What we were asking for was the for the licensee to provide the documentation for his position of the qualification so that we have through the Circular 78-08 the inspection program verified some of those documents already.

COMMISSIONER BRADFORD: It's not so much the documents. What I am curious about is actually do we need somewhere in the research program we have asked for before a testing program of our so that we indicate we could do some of these tests ourselves?

MR. JORDAN: Yes. And, of course, on connectors, we did some tests ourselves.

COMMISSIONER AHEARNE: We have been attempting -- (INAUDIBLE) --

(Laughter.)

MR. JORDAN: We'd be in a better position, I think, to identify additional tests that we ought to be doing independently after reviewing these packages. I don't know at this point.

MR. SNYDER: That's still an open item, I think, on the list for the April Commission decision.

MR. STELLO: Yes.

MR. EISENHUT: That's still an open item. I think the response will be coming up shortly. It may entail sort of a combination; it may entail, after we go through these reviews, we may come down and say certain of the items should be tested, and we may go out to an existing lab and suggest that we independently test certain typical components in addition to the Sandia approach that Research is doing.

We may also, you will see in this proposal coming forth, we certainly have several alternatives or options in it.

One of the options would be having our own testing facility where we test a large number of them.

I think these reviews will help give us an input into where we really want to go for that kind of testing program.

COMMISSIONER BRADFORD: At the moment, what you get would be something that's qualified by testing, you would learn the data of the test and where it had been done?

MR. STELLO: Typically, there would be a test report documenting the results

COMMISSIONER BRADFORD: And might the tests have also been done by the licensee?

MR. STELLO: I know, in some cases they have been, and in other cases they have been in labs.

COMMISSIONER BRADFORD: It sounds like a situation that cries out for some mechanism for independent verification.

MR. STELLO: The whole question of independent verification is a very difficult one of how much of that you do do, talk about environmental qualification --

COMMISSIOENR BRADFORD: The first step we have to get over is the decision to do some.

COMMISSIONER KENNEDY: Is it not true we are doing some?

MR. STELLO: We have done the first -- or attempting, as Commissioner Ahearne says; I don't know what the status is -- to test connectors ourselves, and where some consideration has been given to testing additional components beyond that, which components are selected and how much of that to do, I think, is something that is owed to the Commission. I think that will have to be considered. The Commission will have to decide how much of that it does want to do. And I guess the appropriate time to discuss it would be when this paper backup --

COMMISSIONER BRADFORD: Could you give me a background on what the drawbacks are? What are the arguments against some testing?

MR. STELLO: I don't have any against doing some testing. I think, to me, it's a decision of how much of the resources you want to put into that particular activity. If it turns out to be a tenth of a percent, it might be well worthwhile. But I think it needs more thought than I want to be able to say I have given it sitting here.

And there is a paper. It is a particular issue that I have been giving a great deal of thought to, the whole question of independent testing and verification, from an inspection point of view. And philosophically, I clearly believe more of it is needed.

COMMISSIONER BRADFORD: Lee, do you know offhand when that paper is scheduled to come up?

MR. GOSSICK: That standards paper on qualification testing?

MR. STELLO: I thought Research had the lead on that.

MR. EISENHUT: I am not sure exactly what the detailed schedule is, but I know I read the draft report about a week ago. So it's getting close, I think.

COMMISSIONER AHEARNE: Let me ask a related question. Is there any money being proposed in the next year's budget for it?

MR. GOSSICK: I can't answer you.

MR. STELLO: Inspection and Enforcement has some money for additional independent verification testing. But it covers, again, a broader picture. Radiographs of piping systems. So, we have some staff in that area and have the start of a program. I think it is one htat deserves more thought and deliberation than we can give here.

COMMISSIOENR KENNEDY: Could you sort of outline the general components of such a program? Wouldn't one have to determine which items you want to cover, and that would be a function of their significance to various safety systems, I suppose?

Secondly, I suppose, you would also take into account -- and I am just thinking out loud at this point -- it would take into account the likelihood of failure and the consequences of that failure of that system. If it's not of any consequence, you could spend a lot of resources on that for not too much benefit.

And thirdly, wouldn't you want to take account of how much testing you would have to do in a statistical sense to give you any kind of assurance of the quality of a whole batch? I mean, are those some of the things you would have to -- there must be others.

MR. STELLO: Oh, yes, but it's even broader. I include, for example, independent radiography, and the whole concept of independent verification testing. It's again, how big is the sample size, or how big does it need to be? How much of it do you want to do? Do you want to take concrete samples and bring them to a laboratory independently, measure concrete strength?

COMMISSIONER KENNEDY: Is that what this paper is addressing?

MR. STELLO: This is strictly on the environmental testing of components. That's a big order.

COMMISSIONER AHEARNE: Are you thinking about time tests?

MR. STELLO: Yes.

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COMMISSIONER AHEARNE: Which is different in the sense that some of the testing program is more generic, at least to research.

MR. STELLO: I think the question of environmental testing has generic implications.

There are a large number of plants that use similar components as indicated on one of those slides. So it does have the capability to go across many lines.

COMMISSIONER BRADFORD: One other question.

What will the legal basis for uniform enforcement ultimately turn out to be? That is, as a result of the Bulletin process, you will have come up with a requirement and apply it across the board,backfitting if necessary.

But then if a year from now you find unqualified equipment is still in place, what will you be enforcing against at that point?

Will it be a Bulletin, a Regulation, revisions to the FSARs?

MR. STELLO: Again it goes back to the earlier question Commissioner Ahearne asked. If we make a formal backfit requirement proposed as a licensing requirement, the array of things the Licensee has to do, then they become part of the license and you enforce them in that context.

If he adopts them as part of his license, then they are again enforceable.

If he just agrees to adopt them in some informal way, then you have covered the whole spectrum of problems I am sure the attorneys will see in terms of the degree of enforceability.

And I think we are probably going to wind up with that spectrum of plants.

COMMISSIONER BRADFORD: But in the case of someone who simply agrees to put the equipment in place, what happens then if that didn't get done, if it hasn't formally been made part of the licensing?

MR. STELLO: I have a feeling that is a legal question.

CHAIRMAN HENDRIE: I presume we can get an order saying we consider it appropriate to the health and safety requirements of each plant to do it.

COMMISSIONER BRADFORD: You can get it done, but is that also a situation where penalties can be invoked?

MR. LIEBERMAN: No, the Chairman is correct.

Obviously you can issue an order, but if it is only a commitment to do something a civil penalty couldn't be imposed. A material false statement could not be found unless the statement is clear in a license application that a Licensee will, in fact, have a specific component qualified to some standard.

COMMISSIONER BRADFORD: Well, let me just leave it, for my own part then I feel that whatever comes out of your effort in September, it ought to include an enforceable regimen, including the possibility across the board of penalyzing those who, after the time they were supposed to have qualified equipment, still don't.

MR. STELLO: I must tell you I also have the thought in mind of whether or not you ought to raise that question of need for a change in Regulations to enhance or elevate the status of Bulletins and their response.

(Commissioner Gilinsky arrived at 2:50.)

COMMISSIONER BRADFORD: The final thing, I guess, as a result of TMI I gather there is some talk of equipment that didn't used to be considered safety related may now be.

Would that process conceivably have an impact on the work you are doing here as well?

MR. BUTCHER: In the initial planning for the development of these criteria, we proposed a systems approach. And that certainly would involve things like that.

The first thing in the systems approach would be to make a determination of what ought to be qualified in the plant, notwithstanding what the license originally required. That's our thinking at this point. As the criteria develop we may determine it is not practical to do that. That is quite a job. So, at least we are thinking in that direction.

COMMISSIONER AHEA[illegible]: I want to make sure I understood that last answer.

YOu are saying, your conclusion is it would be a very big job to decide what equipment ought to be qualified at the plant?

MR. BUTCHER: No, I don't think I meant that.

What I meant to say was the first step in determining whether equipment is adequately qualified or not is to determine what you need to be qualified.

In order to do that, you go about it in a systems approach. One shortcut has been determined. Everything in the containment ought to be qualified. That would certainly be a shortcut to eliminate the need to do that kind of review.

MR. STELLO: I think what comes out of the Three Mile Island Lessons Learned, the identification of equipment that will have to be elevated in a safety status, will be specifically identified. And that equipment would just add to the list of equipment.

And I suspect since it has not now been qualified, documents would have to be supplied showing how it would be, or modified so that it would become qualified.

But I would think that would be a specific list of equipment.

CHAIRMAN HENDRIE: Anything further?

(No response)

Let me seize then on the pause and say, thank you very much, even though I wasn't able to be present at the front end of this discussion.

mm5

COMMISSIONER AHEARNE: Well, having been here throughoutall, thank you very much.

CHAIRMAN HENDRIE: I assume the front end was useful.

(Whereupon, at 2:53 p.m., the hearing in the above-entitled matter was adjourned.)

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