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REPORT ON NUCLEAR DATA LINK

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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

PUBLIC MEETING

REPORT ON NUCLEAR DATA LINK

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

Friday, July 11, 1980

The Commission met, pursuant to notice, at 11:05 a.m.

BEFORE:

JOHN F. AHEARNE, Chairman of the Commission

VICTOR GILINSKY, Commissioner

JOSEPH HENDRIE, Commissioner

PETER A. BRADFORD, Commissioner

NRC STAFF PRESENT:

MARTIN MALSCH, Deputy General Counsel

WILLIAM J. DIRCKS, Exec. Director for Operations

R. MATTSON

B. WEISS

V. STELLO

E. HANRAHAN

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P R O C E E D I N G S

CHAIRMAN AHEARNE: The meeting will come to order. Mr. Gilinsky will join us later and also Mr. Bradford. We have come to discuss a Nuclear Data Link. Some six weeks ago, the Commission received a briefing on this subject, and at that time a memo was sent to the staff asking them to report back to us in four to six weeks, and we are now approximately six weeks or seven weeks since that time and we now are prepared to hear some more on it.

I have a few points from Commissioner Gilinsky which I will interject at the appropriate stages. I'm sure Mr. Hendrie will interject at the appropriate stages. Mr. Dircks?

MR. DIRCKS: We're back here in response to your letter to talk about the Data Link and its relationship, I think, to the issues that the Commission is particularly interested in. That is, the requirements that we were placing on the various licensees to accumulate data for the emergency offsite center and the interim center and so on.

The Data Link is a part of that problem. I don't think, in my own mind at least, we've solved all the kinks in the Data Link. We've got more work to do, not only in the concepts, but we have some work to do in the area of what is a system that will serve our needs at an appropriate cost.

I think the main thrust that I'd like to see the meeting take today is for us to deal with that question of the

requirements that we would be placing on the licensees with the various console data that we want to accumulate at the emergency offsite center.

Roger Mattson will pick up on that point. What we'd like to see today is for the Commission to allow that part of the program to go forward, and we'll fall back and concentrate on working on our problems on the Data Link itself.

CHAIRMAN AHEARNE: I assume, then, that you're prepared, since that's what you'd like a decision on out of us, that you're prepared to be able to clearly identify what kind of commitment that ends up having us make with respect to details of the Data Link.

MR. DIRCKS: We'll give it a try and see how we come out on it.

Vic, do you have anything you might want to say? Otherwise, we'll get into the details.

MR. STELLO: I hope what I say is fairly consistent with what you've said, I'm not sure. The paper suggested we would like the Commission to also approve the NDL concept, and to move forward with the next stage in that process which would be to prepare specifications to go out for proposal to start to implement such a system.

I believe we need to move to the point where we have a set of specifications that can go forward so that at some reasonably future date we can look forward to having a form of data

link operation. It's getting to be a year and a half since the accident, and my experience in dealing with emergencies continues to remind me of the value and the need for a data link. I am convinced and have no doubt that the agency needs to have this capability. And I feel a sense of urgency about trying to move forward with it and get a decision and move on.

I do recognize that there are some things that still need to be worked out before you can actually issue the specifications, but I believe that they can be worked out as the process for developing those specifications is developed by the staff. And if need be, the Commission can be kept well informed of the development of those specifications and the RFP itself before it's issued. I think that would not be the problem, but I think at some point it would be appropriate for the Commission to decide itself if the concept of a data link is appropriate. I think it would be useful to do that today.

MR. DIRCKS: I agree with that point. I think we've conceptualized on this thing quite a bit now, and I think we can't make any real progress until we see what the specifications look like, and that's the part we have to work on.

CHAIRMAN AHEARNE: I'm not sure. Where do you each come out on this question of -- Bill, do you recommend that we reach a decision on whether or not to authorize the development of the specifications?

MR. DIRCKS: Yes, I think we have to move towards the

specifications. We've talked about concepts for so long and needs. Now we have to see what the specifications turn out.

CHAIRMAN AHEARNE: All right.

MR. STELLO: With that, if we could have the first slide which I promised myself that we'd start each of these meetings with, and that's the role of the NRC in emergencies to assure both myself and you that in no way have we changed it. I don't intend to discuss it, but from that point on --

(Laughter.)

I have nothing more to add to this subject.

CHAIRMAN AHEARNE: Gee, I would have thought you'd follow it with a slide stating what -- on June 2nd, the memo that I sent to Mr. Dircks saying what the Commission interpretation is that's placed on that.

MR. STELLO: I could do that very simply. Above the line is 98%, below the line is 2%, I choose not to argue it.

(Laughter.)

But it's the basic role that we're proceeding with. I might parenthetically note that we had a Mitre study looking at this question and I'll be sending the results of that down to the Commission shortly. They've tried to make an independent assessment of roles.

CHAIRMAN AHEARNE: Fine. And I would just like to point out that there was a Commission decision and we reached a conclusion that we would want the vast amount of the weight given

to above the line.

MR. STELLO: And I wanted to have the slide to serve to remind us all that we've done that.

CHAIRMAN AHEARNE: Well, the slide doesn't quite do that. That's why I'm inclined to bring it to your attention.

MR. STELLO: Yes, I should have thought to put that in. Ninety-eight percent above and two percent below.

MR. DIRCKS: And what was the bottom line on the Mitre study, Vic?

MR. STELLO: The bottom line conclusion is that their view is that the NRC really doesn't have any choice but to include all of those elements that are on that slide in its role.

MR. WEISS: But their job was not to make a recommendation to us as much as it was to say what the implications of each one of those roles would be to us.

MR. STELLO: Bernie, with that, why don't you continue?

MR. WEISS: I think Roger was going to start now.

MR. MATTSON: The first package of slides which you have, abandon them, and switch to the second batch of slides.

I'd like to just quickly summarize where we're at with the document that's come to be known as NUREG-0696, a draft set of functional specifications for the Safety Parameter Display System, the Technical Support Center and the Emergency Operations Facility, the Nuclear Data Link and REG GUIDE 1.97 all rolled into one set of specs.

This first slide summarizes the four facilities, if you will, the SPDS being part of the control room. I won't read it except to say that it shows a hierarchy of responsibilities starting with operations responsibility in the control room, a sort of tactical planning and support responsibility in the Tech Support Center, a more strategic responsibility associated with the EOF and coordination of governmental actions at a plant, and finally, an oversight function, a character that you were just discussing.

I would call your attention to the column headed "Minimum Data Requirements" near the middle of the page. We have made a decision in the last few weeks in working with these functional specs that they will have total compatibility with REG GUIDE 1.97. One way of saying what we mean by total compatibility is that if you integrate the minimum data requirements of the SPDS, the Technical Support Center, the EOF and the NDL, and as you add up the minimum safety parameters required for each of those places, you will have by definition the parameters contained in Regulatory Guide 1.97.

At this juncture, we can't swear and declare that that's the case; 1.97 isn't final and we are testing it against that definition. It may mean that we add or subtract a few parameters from the set that's in there now.

MR. STELLO: Roger, it would be helpful to clarify that there is a Reg Guide 1.97 that's published, and what we're speaking

of is the revised version of that Guide.

MR. MATTSON: Yes, and the revised version has just gone to the ACRS from the Office of Standards Development with the qualifier in the transmittal letter that it is still subject to that sort of modification. We'll be discussing it with the ACRS in August; we anticipate that a number of people will probably want to come to that ACRS meeting and offer comments on the quality of the data list now that they are being informed how it's going to be used.

Another opportunity, and Vic has already alluded to this as well as Bill, is we hope to put these draft functional criteria out for public comment after today's meeting. I want to spend a little time talking about them in a little more detail, but that's one of the things we hope to walk away from here with today, is a general understanding that they're going out within the next week or so for public comment.

CHAIRMAN AHEARNE: Roger, this chart that you have up here differs slightly from the similar chart embedded in the document that was sent up in this paper, which is off of NUREG-CR1579. In particular, the previous one had some additional requirements on the minimum data requirements for the TSC and the EOF. Now, the fact that that doesn't show up now, does that mean you've backed off of those?

MR. MATTSON: No, it means that those data requirements will be folded into 1.97. And, in fact, the meteorology and

radiation parameters were just recently sent out to Standards for their review for inclusion in the revised Reg Guide. The problem with 0696 is that it's changing, and I, in fact, want to list a few things that we're going to consider changing before we put it out for public comment, beyond the version that you see here. I think the date of this one is the 8th or something, there were two editions of the thing that day even. We're narrowing the uncertainty, but there's still a lot of flux on 0696.

CHAIRMAN AHEARNE: Commissioner Gilinsky and I both want to raise the issue of location of the EOF. Is this the right time to do it or should we defer it until later?

MR. MATTSON: This is a good time to do it. You could let me finish sort of a general summary and then I was going to list some of the controversial things from my point of view in 0696 and then that would be a good time to bring it up.

CHAIRMAN AHEARNE: Okay. Fine.

MR. MATTSON: The next slide just quickly summarizes for all of us so that we know we're talking about the same thing, the kinds of communication and data links that we envision, and that these draft specifications envision between and among these various facilities. I won't dwell on it unless it raises particular questions. I might note that the SPDS is assumed to be a set of parameters located in all of those places, which primarily are relied upon in the control room, which are primarily designed

for use by the operators, but the same information that's in front of them will also be in front of the Tech Support Center, the EOF and the NRC Operations Center.

CHAIRMAN AHEARNE: Except that the SPDS doesn't show up in the NRC Operations Center.

MR. MATTSON: I'm sorry, it should. I think it will, by definition, be a subset of the Nuclear Data Link.

Similarly, I'll skip over the next slide. It's an interesting slide but it's more interesting, I think, in what Bernie wants to talk about in terms of some options for the Nuclear Data Link than it is for how these things integrate. I will point out one question that will be discussed with respect to the Nuclear Data Link; where the processing of the data for the link is to occur. That will have an important feedback on the costs.

We have been proposing for several months now that the processing would occur in Bethesda with the data being supplied in some unique format by each of the operating facilities. Now, it turns out that it probably costs less, although we can't say how much and precisely whether it costs less, to have the processing done uniquely and in some standardized way at each site, and then just sent to us and we would read what they read when they read it. That you can discuss in a few minutes with Vic and Bernie about the Nuclear Data Link. I'll point out that when we send the functional specs out for comment, we'll have to choose one or the other of those approaches or say that that's still an

open issue, because the person who would be out buying a computer to perform the Tech Support Center, EOF and SPDS functions would want to know whether he has to save space and weight to do the processing for the NDL at his site. Now, I don't think that's a reason to hold up the functional specs; we need to draw down some of the uncertainty in some of the other areas as quickly as we can. It would be nice if we could draw down that uncertainty today, but if we can't we can send the functional specs out with that as an open issue and just note that it is an open issue. In fact, we could solicit comments on it if we want to.

Well, I'm going to go to the document itself, but first let me go to the next slide and say that the document is missing a schedule, and we would propose to put one in so that we can solicit public comments on its veracity and its goodness. These are indicative of our most current thinking on what's likely to be possible for procuring hardware and accomplishing the backfits associated with these rather thoroughgoing, far-reaching information requirements.

We still think it's possible to have the SPDS; that is, the control room backfit, using existing information and existing instrumentation and transmitters and cabling and what have you, in place by early 1982. And we can probably still meet that date and have the SPDS be available in the Tech Support Center, the EOF and, as we can discuss later, the NDL.

In all likelihood, it will not be possible to have the

full complement of Regulatory Guide 1.97 instruments installed and integrated with these systems by that time. Another reason besides the difficulty of putting some of these instruments in and qualifying some of these instruments is procurement of computers in some plants to support these data requirements in some of these facilities. I'll talk about that a little bit more.

In any event, we need some input from the regulated industry about the practicality of even these dates; how long does it take to procure computers, how generally available are they, how long does it take to install these instruments. That's one of the reasons we need to get the functional specs out for comment so we can start to converge on realizable implementation dates.

CHAIRMAN AHEARNE: And underlying this is an assumption that the revisions to 1.97 will be completed when?

MR. MATTSON: The way the Guide reads now, it says that any plant going into operation after June 1982 has to meet it. Any plant in operation now or to be licensed before June 1982 will be given an additional year because of it being more difficult to backfit than it is to change a plant that's already --

CHAIRMAN AHEARNE: My question, Roger, is when do you assume that the revisions to Reg Guide 1.97 will be final?

MR. MATTSON: Oh. Simultaneously with the final version of the functional specs; within the next three months or so. In fact, if you'll turn to the next slide, it gives some more

detail about the steps required. I see here it says October, that's a little longer than three months.

This and the following slide are really backup information that show some laying out of how the steps go; some of them sequentially, some in parallel, to yield these early 1982 and early 1983 principal milestones.

I don't propose to say anything else about the general picture of the schedule. I would propose at this time to switch to 0696 itself and talk about some of the things that are still troublesome in our minds and still needing of some work before we put it out for comment.

The first of those is the question of whether or not to require that there be a dedicated computer for managing and supplying these information needs. The way the document currently reads, it calls for a dedicated computer. And the reason we did that is not because we think it's impossible that there are process computers out there today that can perform the function. It is possible that there are good process computers, and by good I'll tell you in a minute the criteria I'm thinking of, that could meet the requirements for these functional specs. But it is our generally held belief that most of the process computers currently in operation are not good enough. And we are unable alone to write specifications for what constitutes a good enough process computer, so we are attempting, through requiring a dedicated computer, to try to shift the burden to the industry to tell us

what would constitute an acceptable process computer; that is, to propose for our review.

CHAIRMAN AHEARNE: I guess you've lost me. I don't follow why that leads you to the conclusion that requiring a dedicated --

MR. MATTSON: Well, that's the controversy. It has been my judgment that one way to make sure that the issue receives the attention it deserves is to take the more prudent approach of requiring a dedicated computer. It's clear you can write conditions on a dedicated computer to keep it free of other service, to keep it secure and untamperable under administrative procedures and what have you to protect against the kind of problems that we know exist today with current process computers.

It's a little more difficult for us to see our way to writing the criteria for better process computers. For example, the ones that people are purchasing today for new plants yet to go into operation who have these kinds of problems in mind, to assure that those process computers have enough capability, enough capacity, that they have the right kind of security provisions, that they have the right kind of buffering of other service of the computer from this particular service of the computer, that they have the right kind of availability, reliability, testability, those kinds of things.

CHAIRMAN AHEARNE: But you have to be able to describe to some extent the parameter of the computer that you would

require, whether it's dedicated or not. Because just having a dedicated computer doesn't solve your problem; you're going to have to lay out a certain amount of requirements. And I guess I don't understand why you can't say here are the requirements that must be met, and they may be met by use of a portion of a computer that is used for other uses, or it may require a dedicated computer.

MR. MATTSON: I don't disagree with you. That's what we're trying to do. At the stage of the draft that you have now, we hadn't reached that point. What we need to do is write specs on unavailability, specs on outage times and testing and general reliability specs to the extent we can, specs on the security of the computer, that kind of thing, and say we think those specs are generally applicable, useful whether it's the process computer being used or a dedicated computer. We simply haven't reached a stage where we're able to articulate those well enough. We will be making some attempt at that in the course of the next week or so before it goes out for public comment. The uncertainty is to how successful we will be with the staff capability we have in this area.

You reach a point where you know that the computer technology capability outside the agency is better and can get you there faster;if you put out a document soliciting comments on it, you get back useful information that you can then test and assimilate and pull together into a meaningful standard.

If you're forced to do that in a hurry, you can do it by taking the most conservative approach and getting back the best response. We're reaching a point where we're ready to send it out and see what kind of proposals we get for controlling existing or future process computers.

The second point, the document as written calls for a .001 unavailability of single parameters in the Tech Support Center. What we are intending to require is the best availability we can get, the state-of-the-art availability, using one computer. We do not envision redundant computers. And we're being told, in talking to computer experts, that .003 is really the state of the art, not .001. Nuance like that we need to work on a little harder in the course of the next few days and then specifically solicit comment in that area.

There are also some troubles in the SPDS as to exactly the function --

CHAIRMAN AHEARNE: Before you leave that last point, I would suppose, then, that you could incorporate in what you're putting out for comment the point that you don't intend to rely on or require redundant computers.

MR. MATTSON: That's right. And that we believe that that means an unavailability of .003, and that's the kind of specification that we intend to have; a sort of double specification. One computer but with an unavailability of individual parameters of less than .003. And an unavailability of the total system of less

than .01.

The SPDS has had some controversy on several issues that need to be drawn down a little bit better. My personal feeling is that we're a little bit too interactive at the moment in the way we allow or imply we would allow the operator and the SPDS to relate to one another; the calling up of parameters, the number of parameters, the difference of parameters depending upon the mode you're in, regular operation, upset conditions, accident conditions.

The original concept of a year ago was not quite as interactive as the document we have now, and we're still talking about that.

CHAIRMAN AHEARNE: Obviously, if you push it too far, you're back just to --

MR. MATTSON: Back where you were, right.

The number of variables is stated as 8; I think it implies 8 per mode in here. I think that's too few and too restrictive or too prescriptive at this point. I don't think we're smart enough at this stage to say 8 or 20 or 33 or any number like that. We need to broaden it a little at this stage.

There's also been a tension in this process between those who want to jump to the diagnostic capability and those who say let's not jump too quickly, let's get the most we can out of the monitoring capability and do some further development in the diagnosis area. There are problems in these control roomsthat can be cured quicker than we can supply diagnostic capability in

the control room. There's a little too heavy implication of diagnostics in the writeup of the current SPDS I think.

I think that's sufficient to give you a flavor for the kinds of things that we'll be doing with this 0696 in the course of the next week or so. We, the sort of steering group that was formed by Harold Denton and Vic Stello and others six weeks or so ago to start to pull together these functional specs. We think we've made significant progress. The amount of uncertainty has significantly diminished; our own comfort that we're all talking about roughly the same thing, the fact that we're concentrating on what I think are important issues today shows me we're making progress. And we need now to involve other people in that same process because the overwhelming interest on everybody's part is to get the SPDS in place. I think you folks have received a couple letters from people in the industry saying let's not let the Nuclear Data Link be the tail that wags the dog and that sort of thing. We concur in that, we need to move on with the SPDS. That's not to detract from the Nuclear Data Link, we need to move on with that, also. But the SPDS is clearly our first priority, and by moving these functional specs on and giving some firmness to how the SPDS relates to the rest of the information will help a lot, I think, in drawing down uncertainty.

Youwanted to talk about the EOF.

CHAIRMAN AHEARNE: You're going to put 0696 -- you plan on putting 0696 out for comment, right? There are two things I

want to talk about, then. One, location of the EOF, and second, the chart that you didn't show, because that's embedded within 0696. And if you're going to go out for comment on that, I would like to --

MR. MATTSON: It's not at this point, is it? I'm sorry. I haven't looked at the last version closely enough.

CHAIRMAN AHEARNE: Yes, I want to talk about those two issues.

MR. MATTSON: Let me add one thing before we turn to those two questions. We have been saying that the formality that we will attach to 0696 is comparable to the formality that the staff attaches to a Regulatory Guide. That is, it is our preferred and acceptable way of meeting the requirements, but it is flexible to the extent that we are amenable to considering alternatives that people propose. So that gives a little bit of flexibility to the questions you're about to address, especially the EOF, which has been of some controversy, we're aware.

CHAIRMAN AHEARNE: I think it's a fairly broad question, but I know that when I read through this, the general sense I get is that the EOF should preferably be about one mile; it might be up to 3 miles, depending on the kind of site it's located at, and that there ought to be perhaps an alternate available farther out in case there has to be an evacuation from the EOF. And the issues, to me, at least were really raised more sharply when we were addressing the emergency planning rule, and a number of

state people raised the question why should not you have this EOF at the fringe of your 10-mile zone, because if you are going to have to be directing a number of emergency actions, their argument was it seemed to be more logical to have the location of that direction in a place where it itself didn't have to be in the process of taking all of those emergency actions. Commissioner Gilinsky raised that same issue to the staff earlier based upon questions that came up in England, and I'm sure he'll also want to pursue that.

But I found embedded throughout here this concept that it really is very close. I've tried to see if I couldn't interpret from this and then went back to the Action Plan information to get a better picture of why it had to be that close, and I've reached the conclusion that I don't understand it.

MR. MATTSON: I'll give you the reason that I support the 1 to 3 that's in here, although I agree the reason you've given for 10 is not a bad reason. It's going to end up, the decision, finally on adding up the pros and cons for the rest of them and probably taking a vote. But let me state the reasons why I like 1 to 3.

I think it's important to keep the strategical planners, the Harold Denton's and the Victor Stello's of the NRC operation and their counterparts in the state governments or the regional directors, close enough to the site that they feel comfortable that they can get the information they need, that they can call

people out of the Tech Support Center or they themselves can go on to the plant to verify anything that's uncertain to them. So that they will feel comfortable staying in the Emergency Operations Facility.

If we get it so far away that those people aren't comfortable with conducting their strategical responsibilities from the EOF that they must converge upon the Tech Support Center, I think they'll interrupt and disrupt the activities, the more tactical activities, of the Tech Support Center. That's the primary reason in my mind for being 1 t. 3 miles. But really all I've said is, have access to the people. Now, if there are special transportation arrangements, then 3 miles might be too restrictive. A time element is really what you're talking about, not miles but time. So the business of being able to fall back to a facility outside of the immediate vicinity in the event of habitability problems is sort of a backup argument to this prinicipal argument of being close so that you can get there in a hurry if you want, to really talk to the people who are calling the shots in the Tech Support Center.

CHAIRMAN AHEARNE: I think the distinction, at least that's beginning to gel in my mind, is what is the primary purpose, what kind of an accident does one have in mind, or accidents, and looking at why do you have this facility. And I would argue that if you have in mind a Three Mile Island or something like Three Mile Island, where the accident is really

happening within the site and there's very little action required offsite, then what you've described is correct. But if the purpose of it is to have a location for the kind of emergency response control that envisions a much larger release offsite, and protective action being required within that 10-mile zone, that the farther out one is the more appropriate. So I think, at least in my mind, it seems to be what are the series of accidents, types of accidents, you have in mind for which you have that center.

MR. MATTSON: That's a good point.

COMMISSIONER GILINSKY: Could I ask also who do you envisage being at that center, as opposed to the Technical Support Center at the plant itself?

MR. MATTSON: I can answer it two ways, by naming the kind of people from NRC if that would help you understand who we think is where.

COMMISSIONER GILINSKY: And the company and what state people.

MR. MATTSON: In the EOF, where we think the strategical planning over longer periods of time and the coordination of a grander scale; that is, things involving state government and federal government, you would have people like the regional director, or if the regional director had been augmented by the Director of NRR or the Director of I&E, that level of NRC people in the Emergency Operations Facility. Whether the head state

person would be there, or whether it would be a delegation from the state people would depend upon the state I think. I've heard some states say they'd like to command their operations from a far away location where their normal offices are and where their people are usually housed so they don't have to have the transportation facilities and what have you; they would only send a delegation.

So it would be state representatives would be there, not in the Tech Support Center. The Tech Support Center, on the other hand, would have the principal operations decisionmaker for the utility.

CHAIRMAN AHEARNE: Tech Support Center or -- ?

MR. MATTSON: The Tech Support Center. Not the senior reactor operator and the shift supervisor, but the station superintendent, for example, or the deputy station superintendent, as I've heard proposed in some places. The person in charge of the plant who knows the plant, who knows reactor operations, who's calling the tactical shots.

CHAIRMAN AHEARNE: That's in the Technical Support Center, not the Emergency.

MR. MATTSON: I've switched to the Technical Support Center.

From the NRC side, the way we talk about it in the staff is that's where we put the people who are revising the procedures at Three Mile Island, rather than in the control room.

The engineers that we would have in close-in support and assistance and monitoring would be in the Tech Support Center. They'd have access to the control room in limited numbers, but they would be residing in the Tech Support Center.

On the other hand, the control room, as we've now required it, is restricted to the command and control function for hands-on operation of the facility. The shift technical advisor, the shift supervisor, the reactor operators, augmented by intermediate level managers or senior managers to the extent that the utility wants. Does that answer your question?

COMMISSIONER GILINSKY: In part. The way you describe it, it sounds as if an NRC decision to recommend some sort of protective measures for the population would come out of the Emergency Center, the more distant one.

MR. MATTSON: Yes.

COMMISSIONER GILINSKY: Now, what would happen if you then recommended an evacuation? At what point would that include the personnel in the Center itself?

MR. MATTSON: The Center is required either to be habitable; that is, to be protected against radiation, or to have a fallback center at a more remote location that could be activated as the people from the EOF were evacuated.

COMMISSIONER GILINSKY: It seems to me that's just the time when you wouldn't want to be switching centers. You've recommended an evacuation, an evacuation may be taking place,

you'd want to be keeping track of things pretty closely, and I wouldn't think you'd want the people at the Center jumping in cars.

MR. MATTSON: The deficiency in having a fallback position instead of a well-protected EOF.

CHAIRMAN AHEARNE: I would have argued that's a deficiency for having the EOF so close in.

MR. MATTSON: Equally good response. Although even if you're 10 miles, you still want it protected to some extent, I would think.

CHAIRMAN AHEARNE: Yes.

COMMISSIONER GILINSKY: I recognize your motivation which is that one may want to be going back and forth, you may want people from the plant coming back and talking with people at the Center, at the Emergency more distant facility. But it seems to me that if it is 1 mile away, almost any evacuation that you recommend in the course of an accident would include that distance. You can say that people at the Center don't necessarily have to move -- you wouldn't necessarily have the same threshold for Center evacuation as for evacuating the population. But nevertheless, it seems pretty close in.

MR. MATTSON: We can ask if the emergency preparedness people from NRR want to add anything that I'm leaving out.

MR. PERKINS: I'm Ken Perkins out at EDO's office. The only thing I would add is that the NRC staff and the FEMA

staff are both going through the considerable number of comments that we had received on the proximity of the EOF to the site that we put in NUREG-0654, the joint criteria. We're going through a process of revising that document. We haven't reached a conclusion at this point yet. I would suggest that any reference in 0696 to proximity rather defer to 0654 and let that be the guiding document on proximity.

It appears that one option that has been suggested for us to look at is that there are certain functions that we had put under the umbrella of the EOF that may be isolatable and should be kept near, and others that could be allowed to be more remote. But we have not reached any kind of conclusion at this stage. We are in the process of re-examining that proximity in light of the comments that we had received.

COMMISSIONER GILINSKY: I must say, if I were going to have one basic center and one, sort of alternate center, I would put the basic center at a place that wouldn't be evacuated, at least in the scenarios that we're taking into account, and have the alternate center closer in and allow senior people an opportunity to be closer in if they want to. But it seems to me that you don't want to be moving centers just at the time when things are happening.

MR. MATTSON: I think Ken's suggestionis a good one. One thing we could do in noticing this thing for comment is to say that this is a question of controversy but that we have a

number of comments already in the context of the other document, and if people have commented there they need not go through the whole argument again here; those comments are still being considered And if there are others who haven't commented in that context but want to in this context, go ahead and do it.

COMMISSIONER HENDRIE: You will recall when we discussed the emergency planning rule after the various parties had commented and it was clear that there was concern about this proposed close-in location for the Emergency Center, the rule language that's proposed now simply says in the vicinity of the site, or something like that. And my understanding is that on the emergency planning site staff, they're willing to regard that as anywhere out to maybe even 15 miles.

My comments parallel a number of Vic's. We are setting up a series of locations from which an emergency is directed. A control room is obviously necessary, the operators have to stay there so they can push and pull switches and so on., We found that there is a tendency for people in the plant and NRC folk and state representatives to gather. We had 80 or 100-odd in the Three Mile Unit 2 control room at one point, I guess, and it got to the point where you could hardly stumble through the crowd. That's clearly inappropriate. So we said look, find some other place on the plant site where you can have a technical support center and those other people can gather. Then there needs to be a communication link and so on. Fair enough.

Now we want to back off to yet a third control center, and what I'm afraid is that the proposal as it now is frame in the draft report on the 1 to 3 mile basis leads not to one more center but to two more, and that seems to me to be getting at least one too many points of concentration of people in the sequence.

The Emergency Operations Facility, remember, is going to be a place where not only the senior onsite NRC managers are going to congregate, but also senior utility management people will be there. I would really expect that it would also be the place which will have state and local emergency organization representatives. And beyond that, it's going to have a great hovering pack of folk from the media.

I have some doubt that you want to establish that congregation close enough in so that in the event of protective action being ordered for the population you're going to have to start moving out a hundred cameramen and reporters. And there are also the problems that Vic has mentioned of having, if that occurs, to make the transition at precisely the time when you don't want these people to be moving away from their communication points, their data points and so on. If we go this way, it seems to me that what, in effect, we're requiring are two installations, one in the 1 to 3 mile range and one in, say, the 8 to 15 mile range. And I must say I don't see a need to do that.

The difference between the 1 to 3 mile range and, say,

10 is another 7 to 9 miles which is another 14 to 18 minutes by automobile on the road. Realize that even if it's one mile away, nobody is going to walk back and forth to the plant site, you're going to drive, so the times of getting up and getting in your automobile are there in each case and you've just got an additional 7 to 9 miles or whatever at an average 30 miles an hour for going back and forth between the Tech Support Center and the Emergency Operations Facility and I doubt that circumstances will be such that that time increment is disabling. I just don't see it that way.

I think you did need a center where the NRC senior onsite manager and his staff can be, the public information people, a point where state people can come, utility senior managers can come. And it provides a place where the principals concerned can gather and talk directly together about the actions that need to be taken, and as an information center. The need for it to be a public information center ought not to be taken lightly. We may have a tendency to think that in an emergency, the utility has certain things to do in controlling the plant and we have certain things to do in understanding it and making sure they're controlling it right and all that, and the state people, their protective action roles, the local emergency supervisors. And it would be also nice to make information available but that, after all, is sort of secondary. I am convinced that it is, in fact, not secondary but one of the really essential and primary roles of the

emergency organization because on the accuracy, on how carefully considered that public information is and how immediately it is made available on a broad basis will depend precisely the kind of public reaction you'll have in the area, and that will have a great deal to do with the efficacy of any protective actions that are taken. So I think it is a primary role, and I think it would be a mistake to have the center in so close, that if you do take protective actions then you've got the problems described of information gatherers and transmitters who are going to have to be moved back out. Joe?

MR. FOUCHARD: The thought on the offsite Emergency Center, Dr. Hendrie, was that there would be a small number of media representatives there. That's easier said than done, I understand.

COMMISSIONER HENDRIE: Yes. I understand the advantages of pooling and now how you're going to control that.

MR. FOUCHARD: I don't disagree with you for a moment.

COMMISSIONER HENDRIE: Everybody including people who think they might someday write a book on Four Mile Island are going to insist on rushing to the scene.

MR. FOUCHARD: I don't disagree with you, but the other concept is that there would be a facility for the media, similar to the Burl Hall at Middletown where the media would congregate. A small group would be at the offsite Emergency Center, but the basic announcements would be made at the press center.

Now, as I say, that works, as you draw the lines it's fine in theory; in practice, I'm not so sure how it will work.

MR. BUDNITZ: Mr. Chairman, in listening to this I'm puzzled about something. It may have been addressed but I'm not sure it has been. That is, what accidents are we talking about? In the old days there used to be this maximum credible accident, you know, which was very, very improbable.

COMMISSIONER HENDRIE: We're talking about accidents that have the possibility of any significant offsite release. And what that means is that it includes some accidents that are within the design basis which, after all, goes up to 25 rem whole body in the Part 100 siting guidelines for exposure, and on beyond to however far you want to reach beyond the design basis.

MR. BUDNITZ: If you plow into the Rasmussen report in detail and you look at sort of -- I don't know what the worst possible accident is. I'm not sure what that means. If you look at the worst accidents that are in there, they're of the following character. They're a very large release and it comes pretty fast. What I mean by fast is you can either have a bad steam explosion or a prompt rupture of a whole lot of things, and things that are more benign are either there's less release or it's slower. Sort of a combination of those. And if you really want to run those accidents, and if it's really going to be that fast, then the people who are within the first few miles are in fatal danger. And it's exactly those who I suppose I would be wanting to protect.

And the control room operators are going to be in danger. But if you want the people in the Center to protect their own lives, then I guess it's got to be far enough away to protect them from that.

Now, if you really think those sorts of accidents are so improbable,and by the way, if you read the Rasmussen report, they are. You know, most core melts don't even release practically anything, and most of the releases that do occur aren't hazardous, and most of the hazards are in some other direction. So when you put it all in you may decide that you don't want to protect against those really bad ones. And if you do, then you can make this other choice. But I think you have to focus first on whether you really are protecting against those real awful ones that we believe are so remote as to be just very, very improbable. Otherwise, you have to make other decisions.

CHAIRMAN AHEARNE: Bob, I agree with you. The problem that I mentioned earlier that I'm having with putting it in close is that we have said that emergency planning we've got this 10-mile zone and the plans have to take into account a certain ability to take a number of protective action measures in that zone, including evacuation. And it just seems sensible to me to therefore have this control center, whose purpose is to coordinate that kind of action to be outside the bound.

COMMISSIONER BRADFORD: I'm in general agreement with the concern that you've all voiced about locating it in close. As nearly as I can see, the drawbacks of requiring people to go

perhaps another 7 miles, and presumably they'll have helicopters available to them anyway for the worst possible situations. Am I wrong about that?

I would think somebody would want to think in those terms if you're going to have people all over the roads moving away from the plant, even whether you're talking about 3 miles or 7. And anybody who is thinking seriously, people are going to want to go from there to the plant site itself, they'd better not be confined to doing it on the ground.

CHAIRMAN AHEARNE: Vic, I think the general mood here obviously I would say is that it represents more an interest in having it out farther. Do you have a counterpoint? Roger gave some arguments for in close. Do you have anything?

MR. STELLO: When the thought of having a center of any kind first came out in the earliest discussions I can recall that I had with Harold, there was clearly a need for being able to do an awful lot of things from one place; for us to be in the same place with the licensee, with the industry that was there, the state people, to have a place convenient to brief the press and have that thought out in advance.

The need to have the data in a place different than the control room to avoid the very problem that Commissioner Hendrie was talking about is very real. We can't tolerate that. That in itself is a hazard. So you have to have someplace where people can get together to think of what they ought to do. That suggested

to me the need for a center, of one, where this planning and analyzing data, to try to understand whether or not the very severe accident might occur; having those data are important for the purpose of making the judgment if something bad could happen.

If your concern is that I'm going to evacuate, that something really bad has happened, you would have to have available, and we did at Three Mile Island, an area that we'd fall back to if, in fact, something very bad happened. But that fallback position is one where you are now dealing with controlling the evacuation and trying to follow the release of the radioactive material to understand what more needs to be done. So the need for the fallback center, in terms of detailed technical information that we're talking about here, in my view doesn't really exist. You aren't trying to decide whether or not something bad is going to happen in the reactor. It has happened. You have lost control and radioactive material has gotten out in a gross way.

CHAIRMAN AHEARNE: Hopefully, you would be in a situation where you might be able to have reached a conclusion in advance that you are losing control and that it may get out in a gross way, so you can provide the adequate warnings to provide protection.

MR. STELLO: Yes, but then what do you need in terms of that fallback center. What should the requirements in that center be, and should that facility have the same capability as

the one we're talking about.

CHAIRMAN AHEARNE: Don't misunderstand. I'm not proposing a fallback center. I am proposing that -- at least for me, I'm proposing that this Emergency Operations Facility be located out at that roughly 10-mile region. So it's not a fallback. It is it.

MR. STELLO: Instead of at 1 to 3 miles. If you had it there, I guess I wouldn't get overly concerned with it being there, it wouldn't bother me. But then I think I might want to get that Tech Support Center that's now onsite and move that one offsite.

(General laughter.)

MR. MATTSON: You now see my problem. Where are you planning to be?

MR. STELLO: I want to be at the Tech Support Center that's fairly close to the site, because the need to understand --

COMMISSIONER GILINSKY: Well, let's see, why does that have to be offsite?

CHAIRMAN AHEARNE: The Tech Support Center is outside.

MR. STELLO: The number of people that you're trying to have come in to do these evaluations and make these technical judgments grows very, very large, and although you had Three Mile Island, you didn't have any major offsite problem. The level of contamination in and around the building and getting around things was a real problem. Even on the site itself. And

being where we were, we didn't have that contamination to deal with, we didn't have that kind of problem, and the access of people getting to it was very easy. But getting on and off the site was a real problem. When you needed to do it, it could be done but it's not easy. And the number of people that have to be involved in trying to make these judgments, some of the groups must have grown from 20 people that we were dealing with on almost a continuous basis and drawing on a couple hundred more people had to have information.

So you need to have then a centralized place to deal with the technical information being close enough to the facility so you can get in there and do some things when there's a need to. I think it's the more significant center

COMMISSIONER HENDRIE: But, Vic, if the Med Ed (?) Visitors Center and Tent City that grew up around it, or Trailer City that grew up around it very rapidly had been 3 or 4 miles further away, it wouldn't have made a tinker's bit of difference in getting back and forth. Anybody who had to go to the plant got in his automobile and went over to the plant gate and got rigged up for entry into the contaminated area and so on. And if you're drive, instead of being a mile down the road had been 5 miles down the road, it wouldn't have made any difference.

MR. STELLO: But if you get me out to 10 miles, around that area, it could have made a very, very significant -- or it could have taken you a half hour or 45 minutes.

COMMISSIONER HENDRIE: It's a little longer, but by the time you get to the plant and boot up and suit up, you've shot -- and gotten through the security provisions, you've shot 20 minutes anyway.

CHAIRMAN AHEARNE: In military plants, one thing that one always has to keep in mind is that you try to learn the lessons from the last war but don't plan to fight it.

MR. STELLO: Oh no, I agree, and I've tried to. I said I don't -- you know, if there's a need which I don't debate for the center to be far enough away so that if you're dealing with an evacuation, you can deal with it where you don't have to be in transit while you're having to do with the evacuation. I have no problem with there being one there, but Ithink the access to the site at 10 miles -- I think it can get to where that could get to be pretty difficult, to have access to the plant.

CHAIRMAN AHEARNE: I think we ought to move on to some other things, but I guess where I would come out and I think the general sense here is, I would suggest that your document that goes out indicates that that really is a point at issue. And not only a point of issue, but at least there's some substantial argument for putting it out at the 10-mile region.

MR. MATTSON: One point I should say, and Ed was going to stand up and say it, but I think Harold is more where the sense of the Commission is than where the 1 to 3 mile position that I was stating.

MR. ED (?) : I talked to Denton before I came down and he'd be prepared to take up the 10-miles for the Emergency Operations Center.

MR. MATTSON: Given that, I would think what we'd want to do -- you try to write these things where you think you're going. We'd probably be better off to rewrite this, taking that position and soliciting comments, and if there are things we haven't thought of that people comment on or things we think of, we'll bring it back and argue it again.

COMMISSIONER GILINSKY: Let me take it one step further and in talking with the TVA people I'm sure they've made this point to you. They felt that they wanted to have one center for all their plants or some number of their plants, and the reason they gave was that they didn't think it was efficient to fragment their forces, in effect, and create a whole bunch of centers around each of the plants or in stations. What's your reaction to that?

MR. MATTSON: I haven't been involved in reviewing the TVA proposal, I've only observed it from a distance. I think it's unacceptable. There are people in NRR who are listening to the argument and still considering it. I said it was unacceptable when I first heard it. You have to have the people at the site, and it would be tantamount to thinking that TVA could have run Three Mile Island from Washington, is about how far they are from some of those sites or further, and I don't think it can be done.

It's too far. That doesn't mean they shouldn't have a center at Chattanooga, but to say that they're going to conduct the engineering operations that we envision for the Tech Support Center from Chattannooga or for the EOF from there I don't think it can be done. There may be others who want to state the other side.

MR. ED (?) : Harold and I agree with Roger's position.

CHAIRMAN AHEARNE: I think we may also get a similar request from at least a couple of -- at least one state where there's a cluster of plants. They may make a similar suggestion.

MR. STELLO: As I recall there was at least one other proposal, too, Pacific Gas and Electric.

MR. MATTSON: The number I remember there is 12 miles and that must be almost equal to 10, from what I've heard today.

CHAIRMAN AHEARNE: Yes.

COMMISSIONER HENDRIE: Can I get in a last comment since this subject is hard dying, John? Trying to make a sort of personal and intuitive integration over the distribution of all possible circumstances when you would use an Emergency Operations Facility, I conclude for myself that I'd just as soon see it not right next to the plant, but I think for me anyplace beyond about 5 miles would be fine. The reason is that although we've talked about 10 as the protective action zone for emergency planning for the public, the fact of the matter is that there's very little of the distribution of all possible events which would cause you to

have excessive exposures beyond about 5 miles for a group which is professionally and by nature of their jobs, in effect, occupationally concerned with the plant and with the emergency. There is a difference in the standards which are appropriate for exposure to people in that category and for the general public on the other hand, and I think for occupational sorts of emergency exposures that you've really covered 99.99% of the distribution of possible events by something like 5 miles. And if there were some sort of a more convenient place that was a little further than that away, why that would be fine with me, too.

But I think it would be useful to have the Emergency Operations Facility at a place where you really didn't expect to get chased out.

CHAIRMAN AHEARNE: I guess I would feel that I'd still be a lot more comfortable around 10 miles, and if they had a good reason for finding it relatively convenient to be in closer, that would probably be all right.

COMMISSIONER GILINSKY: I just have one final comment. I agree with you, Joe, about the people who work there, but I was impressed with your comments about the press which I hadn't thought about earlier.

COMMISSIONER HENDRIE: I regard the members of the press who would gather at this facility as being occupationally engaged and not -- you know, really. If you want to be a reporter and come close in to the site and do firsthand reporting on a

nuclear accident, it seems to me that it's not necessary that you have extended to you all of the provisions of protection which we would like to take for the general population. First because it's a very limited group of people, which is the essential reason for having different occupational exposures anyway, and secondly because their professional and occupational engagement with what's going on.

MR. MATTSON: Mr. Chairman, since we've laid such a good record here today, value impact of the location of the EOF, there is one counterargument to putting it a long distance away that probably ought to be on the record here.

That's the fact that most of the events for which you would activate an EOF would probably not result in an evacuation.

CHAIRMAN AHEARNE: I understand that.

MR. MATTSON: And if putting it a long distance away led to -- that is, further and further away makes communication more and more difficult. If that significantly increases the probability of a necessary evacuation, then that would be a counter-argument for putting it away. I put it here not to argue the point, but it is a point you have not discussed in your conversations.

CHAIRMAN AHEARNE: I don't think that you're planning a Pony Express back and forth.

COMMISSIONER HENDRIE: Yes, that's right. If the communications depend on the ability of people to go from one

place to the other, we're in a lot of trouble.

MR. MATTSON: I think what you just said is that you accept that there has to be a Nuclear Data Link, because that's the thing that has to go the EOF.

(Laughter.)

COMMISSIONER HENDRIE: Of course.

CHAIRMAN AHEARNE: I would like to move on.

MR. BUDNITZ: Yes, but it seems to me that a point was just touched on too rapidly that is of the most profound sort, and that is the question about whether members of the press are to be treated as members of the public or members of the occupationally exposed group. Because it's understood that the utility, its contractors, we in the NRC, the state radiation officials and so on treat ourselves in the group of occupationally exposed sorts for whom protection is taken at a different level. And it occurs to me that the thinking about that ought to be based on some carefully thought out things that perhaps ought to take a little while and ought to incorporate what thinking goes on in the press about other accidents and the way to respond to large refinery fires or who knows what else.

I really think you really ought to do that one thoroughly.

COMMISSIONER GILINSKY: My point is not the health of the reporters, but your earlier point about the importance to get information just at a time when public protection measures

might have to be taken. And one doesn't want that information coming from people who are in the process of evacuating rapidly themselves. And I think that's something that needs to be taken into account.

MR. MATTSON: I'm through, except I think you had one other question about the picture.

CHAIRMAN AHEARNE: My concern is that your picture has clearly a separate system for transmitting the data for the Data Link as it does for, say, transmitting the information to the offsite facility. It's a separate system.

MR. MATTSON: Yes, that's the way it's drawn here. I don't think that's actually what's envisioned.

CHAIRMAN AHEARNE: I hope not. But that's the way it is drawn here. That's probably the most expensive way one could go, and I don't tend to like to go the most expensive way.

MR. MATTSON: You would say draw the line if I can from the --

CHAIRMAN AHEARNE: I would have drawn the line from the line that comes out to the EOF. I'm willing to listen to the argument about where the processor is, but at least a transmission line ought to be from here out.

MR. MATTSON: There's another possibility, too, if I can do the same thing you did. That's to draw the line through the Technical Support Center to the EOF to the NRC.

CHAIRMAN AHEARNE: Fine, fine.

MR. MATTSON: That's another possibility, and those are the kinds of possibilities that are in active discussion at the moment.

CHAIRMAN AHEARNE: Fine. It's just that this whole separate set which is embedded in this document which supposedly you're throwing out for comment I would disagree with.

MR. MATTSON: Okay. I wonder if we could try, to keep the thing separate here and see if I sense what we're doing and then move to the NDL. I think that the draft specifications, if carefully qualified as being subject to modification, are at an ideal place for public comment. That is, we haven't firmly set our feet on everything.

CHAIRMAN AHEARNE: Well yes, with the modification we just finished talking about.

MR. MATTSON: Yes. And with some of the modifications possibly coming from the things I talked about, being different than what you've seen, along the lines I talked about. I would like to see it go out for public comment in the next week to two weeks with like a 30-day public comment period, to start to bring in the thoughts of others to solidify our thinking in some of these areas.

COMMISSIONER HENDRIE: Subject to the sorts of comments we've made and what seemed to be some tentative direct agreements on language direction, yes.

MR. MATTSON: The people who will be doing the writing

are sitting in the room.

COMMISSIONER HENDRIE: Fine.

COMMISSIONER GILINSKY: Is there a listing, Roger, of precisely what functions will be carried out in the Technical Support Center and those of the Emergency Operations Facility?

MR. MATTSON: Yes, that's what we just talked about putting out for public comment, the functional specs and Enclosure 2.

COMMISSIONER GILINSKY: On page 22 there's some description of what would be done at the Emergency Operations Facility but it's pretty general.

MR. MATTSON: If you go back to the first slide of the package that I started with, look at the far righthand column under the second row there, Tech Support Center, plant management and tech support for the control room. Remember we went into some detail. We created the Tech Support Center in the short-term Lessons Learned a year ago this month, and described the functions that we would want performed in a technical support center that was equipped with a good documentation of the "as-built" condition of the plant. It's a place where the engineering competence of the utility could congregate in the early minutes after the accident, like 30 minutes, where they would have available to them the capability to trend information and ask the kind "what if" questions, or how did we get to this point questions that the people in the operation of the controls didn't have time or space

or background to do themselves. We didn't want those people all congregating in the control room like they had at Three Mile Island where we had 80 people in there so people couldn't even get to the control console at times. We want them separate yet in close-in support, providing the management and engineering support functions that the people in the control room require for these complex situations.

It's also the point, then, from which the information on the status of the plant is, by and large, communicated offsite. That keeps the NRC people at headquarters from meddling in the individual movements of the operators in order to get data and that kind of thing.

COMMISSIONER GILINSKY: But it sounded to me from some of the other discussions that a lot of the engineering work would be done at the more distant center.

MR. MATTSON: No. Most of the engineering work is done at the Tech Support Center.

COMMISSIONER GILINSKY: I see somebody smiling over here.

MR. MATTSON: Well, the manager who is at a high level who is a graduate engineer, in fact he's still doing engineering at the EOF.

CHAIRMAN AHEARNE: I guess perhaps some sort of a statement somewhere about the fact that the NRC's role is monitoring and advising as opposed to directing or managing.

COMMISSIONER GILINSKY: I guess I'm really concerned

whether we've really gotten clear on just whose going to be doing what where.

MR. MATTSON: Well, we think we're clear.

CHAIRMAN AHEARNE: I share somewhat Commissioner Gilinsky's view, and I read through trying to get clear in my mind what is done where. What you say is consistent with what is here, but what is here could be read -- a different interpretation could be put on it. It would be reaching a little bit, but it's not --

MR. MATTSON: I guess what you're saying to me is if, to the extent we can in the next few days make that point more clear, consistent with the kind of thing that's on this slide and the kind of thing I'm trying to say comes from 0578, we'll give it a shot.

CHAIRMAN AHEARNE: Yes. Bernie?

MR. DIRCKS: What Bernie will try to do is to be very brief and concentrate on the compatibility of the two subjects today and discuss how we would like to go to specify in greater detail the system. We just want to develop the technical specifications.

CHAIRMAN AHEARNE: Right.

MR. WEISS: Just to tell you some of the concerns that were raised when we went with an early draft of 0696 to AIF. They had certain concerns which we've heard from other people at other times and we just wanted to bring them to your attention.

First of all, it was a question of need. They kept

asking us for a better definition of what the role of the NRC was in the use of the NDL. We tried to rewrite 0696 to try to help them along in that respect. The major effort there will be the NRC report to the Congress on the NRC's response plan, which is now underway and should be ready by the end of September. I think everybody is anxious to see exactly how we're going to specify what our role is and how we're going to carry it out.

The other thing was the quantity of data required for the NDL was in excess of what they felt was needed by NRC. There was some discussion that they felt maybe 50 points; our original estimate was 100. At the present time we think that's not that important because we will discuss with the industry and with other people exactly what that is and we don't think, from a sensitivity standpoint, it really doesn't impact upon the cost of an NDL. So that's something we can hold off. Although basically, it will be a subset of 1.97.

The other point which was one that has come up before was a prototype to be installed on one or a few plants. That has always been considered in our implementation. Our emphasis has been a little different, whereas we're not going to have prototypes to show that the concept is feasible; rather, we would like to have prototypes or what we've been calling lead plants to show that you can get around some of the interface problems that we think exist, to confirm some of our cost estimates, and generally check that the equipment specifications are

reasonable.

COMMISSIONER GILINSKY: What was the distinction you were drawing there between feasibility and --

MR. WEISS: They were saying we ought to put in one or two prototypes and run them for three or four years and see whether they work. What we're saying is the idea of transmitting data is not something that we think we have to go out and find out whether it works. We would like to put out prototypes to make sure that when we put the rest of the 70 or 100 units in that we've got the interface problems settled, not that it's reasonable to get data at the Operations Center.

COMMISSIONER GILINSKY: Isn't that what whether it works means? I don't anybody would disagree that you can transmit data.

MR. WEISS: I think we would get the data and we would know how to utilize it in the Operations Center. It wasn't quite what we had in mind. It was just a slightly different emphasis.

MR. DIRCKS: I think the point is you're going to be some work --

MR. WEISS: We're going to be doing some work on that.

CHAIRMAN AHEARNE: The ACRS had a similar point, I thought, and one of our directions in that May 21st memo was to clarify the ACRS views.

MR. WEISS: Our point is that we will be doing

prototypes.

CHAIRMAN AHEARNE: The ACRS said that they suggest an early installation, considerably less elaborate that the one described. It should be installed initially in order to gain experience needed to specify final system.

COMMISSIONER GILINSKY: Have you discussed with them what they meant by that?

MR. WEISS: No, not indetail.

MR. STELLO: No. We haven't had a meeting on the subject.

CHAIRMAN AHEARNE: Keep in mind that the memo to the EDO said clarify the ACRS views expressed in their letter of May 6th.

MR. DIRCKS: But we agreed basically we're going to have a prototype. We can go down and talk to them about it.

MR. STELLO: But there's nothing that we can go back down and tell them what the system is, if that's the system they had in mind, until we know and develop specs for the system. So until then, and we tell the ACRS what we're doing, I don't know how we can have that exchange. So the next step is to actually come up with what are going to be the specs of the system.

MR. DIRCKS: I think that's the point. We're talking not about going ahead with the system; we're talking about developing the specifications that we would talk to them about,

and they could take a look a t the specifications.

MR. WEISS: It's still very much in the concept stage.

COMMISSIONER GILINSKY: I guess I'm just surprised that you didn't just ask them what they meant.

MR. DIRCKS: That's the point of today's discussion. We will talk to them about what they mean, but all we talked about thus far is this vague idea of a Nuclear Data System. I think when I started this off, I said we've talked in concepts long enough; can we now proceed to move and develop some specifications. Once we develop those specifications, that gives us something pretty concrete to talk to people about. They say make it simpler; we said it's kind of complex and we made it simpler. But now let's stop talking in comparative terms, let's show them something and see how they come back to us. We've just talked in these very sort of loose terms. I think it's time now to put something down on paper in considerable detail what we're talking about.

COMMISSIONER GILINSKY: That sounds reasonable, except that after some conversation with them you might put something different down on paper than you would otherwise. I mean, I'm just surprised --

MR. DIRCKS: It's easier to talk to people after we have something down on a piece of paper.

COMMISSIONER GILINSKY: Okay.

MR. WEISS: Last time we talked about those four

alternatives which was basically the Sandia concept, a modified Sandia concept which the Commission told us to look a little more closely at, a concept in which there was a line printer and a minimal display capability, and the fourth alternative which was a line printer only. We have looked at some of those.

Essentially, it's alternatives 3 and 4 which involve the line printer and that minimal display. We feel that that is quite efficient from what we feel, from a technical standpoint, we need right now, because of a limited number of operations center displays over which we would have no control, the ability to have data recall under that, store the data so that we can look at it some other point, the speed with which we would get that data, and the ability to be able to acquire transient data.

With regard to alternative 2, which is basically a modification of alternative 1, which is no longer actively being considered and that's because alternative 1 was originally designed on the basis that there would be no TSC, and as Roger has indicated we've integrated our thinking on that. So that alternative drops out. But we think now there's a very strong relationship with the SPDS, the TSC and the EOF, and Sandia has gone back and looked at that and doesn't really feel that there's a problem in that integration.

CHAIRMAN AHEARNE: The chart doesn't make it clear that it's very integrated.

MR. WEISS: I'd like to talk from that chart in a

second because I think that's where we're going to have some problems.

Also, with this system that we've designed and are considering, there can be concurrent implementation of all of these systems, so it's not a serial kind of implementation. There is a feeling that it's desirable to have some kind of an NRC data receiving terminal at the site which would transmit the data to the NRC Operations Center to insure viable and verifiable data, and do all the good things to make sure that that data is coming correct. There may be some other alternatives, and --

CHAIRMAN AHEARNE: When you say a data receiving terminal, what do you meant?

MR. WEISS: It's a terminal that can do some processing at the site in order to probably consolidate the data and make the transmission easier. It would format the data and send it to the Operations Center.

CHAIRMAN AHEARNE: Why should it not just take off from the information that's being sent to the Technical Support Center, or to the Emergency Operations Facility?

MR. WEISS: May I have the next slide? Basically what we're talking about is taking off before the process computer, the inputs to go into some kind of a data acquisition system. Now, that data acquisition system would basically get 1.97 digits.

CHAIRMAN AHEARNE: I understand what you're talking about, and my question is why can't you just take it off, do away

with that part, just take off data that is either being provided to the Technical Support Center or, as Roger said, a line from Technical Support Center to EOF to NRC? I don't understand why it's necessary to have --

MR. WEISS: Roger was saying that whether we have an NDL or not, we would have some kind of a separate data acquisition system which would then supply the data to the TSC. It would not go through the processing computer.

MR. STELLO: You're talking about plugging into that EOF.

CHAIRMAN AHEARNE: Yes, right.

MR. STELLO: Let me see if I understand the question. Why don't we just have a terminal or a connection to make to either one of the computers that are in the Technical Support Center or in the Emergency Operations Facility.

CHAIRMAN AHEARNE: Right.

MR. STELLO: If you did that, and to the best of my knowledge there's no reason that physically you can't do it technically, you would then have access to whatever information that computer was being asked to provide by the people there.

CHAIRMAN AHEARNE: And that we've asked them to provide to us.

MR. MATTSON: No, no. This is a key point. It would be then just like we have now, except that when we ask a question the answer would come back on the computer instead of back on the

telephone. The difference is whether you're able with your processor in Washington to manipulate data that's common to both you and the Tech Support Center, or whether in Washington you can only receive data processed by their Tech Support Center. And let's say that their Tech Support Center is processing at a given point in time for three hours, 5 of the 120 variables. You can't see anything but the 5 variables in Washington. But what if they've got tunnel vision? What if nobody is backstopping them, doing an independent analysis? The only way you can find out is to ask them to go look at something else, call it up on their computer so you can see it on your display system. If they say no, I'm too busy, I'm convinced this is where the trouble is, then you won't see the information. That's the difference between having the processor here with the raw data coming in some format specified by us, or having the processor only there.

COMMISSIONER HENDRIE: Don't you have the same problem with the Tech Support Center in the Emergency Operations Center? They only see what the control room wants them to see?

MR. MATTSON: No, not the way it's drawn here.

MR. WEISS: This is just a stream of data that comes through a processor, and then they can manipulate that data. It's a stream of raw data, so everybody is getting essentially the same data and they can then manipulate it.

MR. MATTSON: Same minimum set of data.

MR. WEISS: Minimum set. And then they can look at it

in any way they want. So the Tech Support Center and NRC Operations Center may very well be looking at the same kind of time train, but they're produced by separate processors.

MR. HANRAHAN: That data acquisition system box up there is for all three external locations?

MR. WEISS: Right.

MR. MATTSON: That's the computer. The processor just takes things from the computer and puts it on cathode ray tubes or on strip charts or something. The processor is a simple device. The data acquisition system is the computing device, the thing that takes millivolts from sensors and transmitters and stores them on tape and sends them as bits of information.

COMMISSIONER HENDRIE: Do you mean the intersection of the line falling vertically from the data acquisition center and the horizontal line that feeds everything else, do you mean that to be a round ball, I'd say, a transmitting intersection, not a skipped --

MR. MATTSON: That's right,yes.

MR. WEISS: It would probably be just separate ports on this, and the NDL would be another port.

COMMISSIONER HENDRIE: And the so-called data acquisition system processor is something that you'll require the licensee to install in his plant.

MR. MATTSON: Right. It's important, though, when you --

COMMISSIONER HENDRIE: And it serves a variety of

functions, safety parameter display, its own emergency centers, us, and you can send it to the vendor if you like.

MR. MATTSON: As long as you understand that we're talking minimums on this sheet. It may be that the processor in the Technical Support Center would call as many as 1000 or 2000 variables in some of the proposals we've seen out of the data acquisition system. The EOF might call for the same amount or some lesser amount, depending on how the utility wants to put the weight of his people and his managers -- EOF versus Tech Support Center.

The NRC terminal, on the other hand, will only call the 1.97 parameters out of the data acquisition system, and we will require that their EOF and the Tech Support Center also call as a minimum the 1.97 with the proviso that EOF is still a little bit controversial as to whether they need all that.

CHAIRMAN AHEARNE: You're saying ours calls all of the 1.97?

MR. MATTSON: I'm sorry. A subset of 1.97. Let us explain what the difference is. It's a simple answer. If you do the 1.97 list of parameters, it's a number listed. But there are 50 thermocouples at the top of the core. Do we want all 50? There are 4 hotlegs and 4 coldlegs in a 4-loop Westinghouse plant. Do we want all 8 of those temperature indications? The 1.97 says they have to be supplied. Do we want all of them? Probably not. We have to derive that subset of the 1.97 parameters

yet and we're at work at that, but they haven't been listed with any finality. It is a subset, though, I misspoke.

MR. WEISS: But for an estimate I think we're still talking somewhere around the 100 we talked about before. But that's going to be changing as we go through this.

CHAIRMAN AHEARNE: What is Modem?

MR. WEISS: That's a transmission reader. That's the thing that transmits or formats the data.

Now, there is some consideration. We now have the interface at this point and we're saying it would be very helpful if we had our own terminal here so that we have some control of the site and be sure that we get the data correctly, or reasonably sure. The thing is there is some consideration of maybe moving the interface to this point, putting some more of the costs in this proposal of the terminal back onto the licensee, and reducing our costs for implementation. That's something where there are tradeoffs from the standpoint of technical and cost and we'll have to look at that. We really aren't prepared to state exactly where that interface will be. But that's one of the things that we'd like to go on now and look at writing the specifications really at this point and that point and figuring out where the best way to do that is.

Do we want the licensee to process some of the data and send it in here or do we want to do it all ourselves.

CHAIRMAN AHEARNE: What would be the argument against

having the licensee process the data?

MR. WEISS: There is some concern, from the technical standpoint, that if we have the licensee -- we put that interface over here, that we are then dependent on the licensee, and any time he makes a change in the system, we may not get those changes here and we may have problems over a long period of time in maintaining the system and being sure that we have correct data.

MR. MATTSON: It's still something we have to think about further. The counter-argument to that argument is that if you don't rely on him to do it you've got to rely on yourself to do it. And it works both ways and then we don't know enough details to answer that question, I don't think. We do know enough, however, I think to know, I think, to not rely on only his callup of data. I don't think we can put ourselves in that position.

MR. WEISS: And I guess the other alternative is the question of us going and asking his computer in the TSC to supply us with the information. That one becomes an even more expensive one, because then we have to know how to talk to every-one of these computers and that gets quite --

MR. MATTSON: I think for the same reasons we don't want him controlling our access to this limited set of data, he doesn't want us accessing his computer and running the risk of fouling him up.

MR. FEIT: I'm Ron Feit, I work with Sam Bassett and I also have the contract man here from Sandia, Glen Otey. I'd like for Glen to talk a little about the interface. We wouldn't want to leave any misapprehensions about the considerations that we're giving to an interface.

MR. OTEY: I think there are two technical points that I'd like to make. We looked at this a good bit and you've asked questions concerning this box and this box, and let me just make a couple of comments.

The independence comes by having your sensor inputs come before the process computer. We know that there have been difficulties with process computer overload in the past, and it's almost inevitable if you have a large machine here and it has multi-functions and a machine that's interactive, that under the pressure of an unknown emergency of some sort which is making new demands on this machine, and this machine is supporting the people in the control room, that you don't know just how the load is going to work here. So you don't want to run it through the process computer for that very reason. You want the process computer's first priority to support the people in the control room, and you don't want to get mixed up in the priorities in that, and it's very difficult to design the architecture of the machine to avoid that.

So bringing it here to an independent data acquisition system is a very good idea. What you'd like this data acquisition

system to do, and it's a small mini-computer or a large microprocessor, but it sits here day after day and reads this data out in a repeatable way and transmits it, so that when an emergency occurs and you really need this data back at NRC headquarters and these other points on the loop, there is no change in operation. It's still sitting there reading the same signals at the same rate and pumping out the same data. There's no change in the reliability or the availability, and you're putting no load on the user or no special burden on this computer.

Now, this thing is transmitting data over here to the Tech Support Center which is close, and to the SPDS which is also close, and for that you don't need any special provision. How you go from here to here depends, to some extent, on the distance. If it's at 10 miles you probably need one of these Modem's, a modulator-demodulater, that translates the digital data from here into an analog signal that you can send over the wire and then you have the same thing here to decode it.

But the point I want to make about the NRC need -- this is a one-to-one, this is a plant-specific sort of thing. The point I want to make about the NRC is that now you're sitting back here looking at a net of 100 or 150 or some large number of these, and this is the machine that allows you to control here at the Operations Center the protocol, the transmission of data over that net. It's the thing that polls and says -- the computer here says hey, are you ready to send me some data.

I'm ready to send it, and here's your data package. This is put in a standard protocol. So your question might be, why can't you just tell the utility the standard protocol and allow them to make that interaction.

We've thought about their own experience and we've talked a lot with other people, people from Bell Labs, the AT&T system about that. We're absolutely convinced that if you want to have a reliable system, that you need this NRC box. It's a microprocessor, the whole thing including the storage and the motor costs on the order of $25,000. But without this, you're not controlling your network; you're dependent on implementation by 40-x utilities at 100 sites or so, and the standardization becomes exceedingly difficult.

The interface between these two -- this is the utility, the licensee, and this is the NRC -- is across a room. You don't have to go through the procedures for long distance transmission. The standards are easy to check here; the guys over there, the institutional barriers, are minimized. So those are the two points I wanted to make. I really strongly belive that this needs to be an NRC machine, this needs to be a stand-alone dedicated, non-interactive data acquisition system .

CHAIRMAN AHEARNE: Thank you.

MR. WEISS: The next slide. We're just presenting these in terms of some idea of what the costs are from a scoping standpoint, and again as I indicated, certainly we're

going to give consideration to Sandia's proposal, but we are going to look at other proposals for other ways of possibly reducing the costs and still having an effective system. That gives you some idea of what we're talking about, and this is strung out a little bit from what we had talked about before, because we're now talking about not completing the system until FY84, which is more consonant with the rest of the emergency systems that are going to be put in. As Roger said, we certainly don't want the NDL to lead those other systems.

MR. MATTSON: If we could lead together systems and not detract from them, we'd probably do it.

MR. WEISS: Okay, next.

CHAIRMAN AHEARNE: Now, the fact that we don't say hey, wait a minute, you're not interpreting that as approval of that project.

MR. WEISS: No. As I indicated, this is just some idea of the inevitable cost, the question of how much does it cost. That's it.

And this really is to give you some idea of the kind of activities that are going to have to go on and how they're spaced out over the period of time.

CHAIRMAN AHEARNE: Where is the mockup being done?

MR. WEISS: I believe that will be done at Sandia.

MR. DIRCKS: No. I think that would depend, as we go out and develop specifications and go through a contractor

selection, it may be that the mockup would depend on which contractor is picked.

MR. HANRAHAN: I think this chart suggests that you want to look back at the ACRS letter again, which suggested that an early implementation of a simple system be considered. We're talking here of four years from now before it's completed. I don't think I could argue with that schedule. In fact, schedules like that tend to extend, if anything, as procurements and what have you are involved. So we're talking about a Nuclear Data Link, which everyone agrees in some form or other is useful, that's still four years or better away.

MR. WEISS: With regard to the ACRS, where it says lead plant installation, that's the prototype and that would be considered for next year.

MR. MATTSON: One point of clarification. We feel pretty strongly that it's not necessary to have prototypes to prove the technology. We're not breaking any technology barriers with this thing we're doing. This is pretty standard stuff. The prototypes are more for institutional learning than for technology learning.

COMMISSIONER GILINSKY: Why do you think you don't need that?

MR. MATTSON: I didn't say we didn't. I wanted to make sure we understood we were talking about the same thing.

MR. HANRAHAN: I would agree with you. That's

probably far more important than the technical.

MR. DIRCKS: But I think early FY81 is probably the earliest realistically.

MR. MATTSON: So there may be some people with some data systems in place in 1981 that would be natural people to choose from.

MR. WEISS: This is just some idea of the kinds of costs which would be involved, recurring costs which include these line charges, Operations Center personnel, maintenance of the system.

CHAIRMAN AHEARNE: In other words, that's --

MR. WEISS: That would be the ongoing costs.

CHAIRMAN AHEARNE: Yes, but these aren't really recurring costs of an operating system because you don't have an operating system until 1984.

MR. WEISS: Right. I think the figure for 1984 is more representative of what it would be on a continuous basis.

CHAIRMAN AHEARNE: I'm a little uncertain as to what relationship those costs have to the ones you just showed us two slides ago.

MR. WEISS: Those were additional costs. We separated them out. They're not part of the initial implementation; they're part of the ongoing costs in running a system.

CHAIRMAN AHEARNE: And then 1983 looks very high, based upon your previous schedule.

MR. DIRCKS: I think these cost numbers are here just for a frame of reference. They certainly don't represent any hard data. That's why we're suggesting we put something down on paper in terms of definite specifications.

MR. WEISS: Okay, the next slide. We're back to what we're here for, which is the second part. The first part is what we're really asking for is permission --

CHAIRMAN AHEARNE: To develop the RFP.

MR. WEISS: To develop an RFP and to approve the concept, that we're going to move ahead towards some implementation.

MR. DIRCKS: I think on that point what we're seeking more is to allow us to develop these specifications and go talk with the ACRS, that based on the general feeling of the concept you'll get a better idea when you see how the thing might work.

CHAIRMAN AHEARNE: Okay. Would you plan to come back to us before you put the RFP out?

MR. DIRCKS: Oh, yes.

COMMISSIONER GILINSKY: The more I sit and listen and the more I look into this document and between the conversations, the more I'd like to see a clearer statement of who does what where. It just strikes me as the fundamental starting point of everything. As you said, you think you're clear on it but I'm not sure there's agreement on your side of the table on it.

MR. MATTSON: There certainly is a diversity of view out there in licenseeland as to exactly how prescriptive they'd

like us to be here. Some licensees want some people in one place and others want people in another place and they ought to be given a chance to state their views.

The trouble, if you get down to listing the job titles of the people you want in each of these places, you've made a mistake. We can certainly do better than we have in describing the kinds of functions we see to be described, and we'll take a shot at that. But you have to leave some flexibility because management systems, management people, engineering staffs are going to vary from utility to utility.

CHAIRMAN AHEARNE: How would you feel about having them try to develop the specifications?

COMMISSIONER GILINSKY: I'd like to see that other part first and then I think everything flows from that. It presumably will be done pretty soon.

COMMISSIONER HENDRIE: I'd certainly approve in principle the NDL concept. You've convinced me on this diagram that it ought to go that way rather than some of the other ways we've talked about. I'd like to see the draft report going out for comment to loosen up some on that EOF distance question, and in turn, what that means is you're going to have to look at those sections in the draft, then, that talk about habitability and shielding and so on, because obviously if you move it out a few more miles I don't see much point in factors of 5 gamma dose reduction inside and outside necessarily. I would think just

good standard commercial construction sort of thing would do.

So if you'll loosen up on that EOF distance language and the associated provisions for shielding, habitability and so on, I guess it could go out. I had hoped we would be able to talk some, but the time runs flat out on us I'm afraid, about the Safety Parameter Display System specification in here. And I'll just make a short comment on it.

I noticed that it covers reactivity control which is fine, except that if there is one thing that is tolerably well instrumented on every control board I've ever been close to, it's reactivity control. The rod position displays are among the better things. You may not like exactly where they're located but they sure as hell show where the rods are with backup, because of the requirements on that system and the neutron channels are reported there, and I would think if there was one set of information that I would not feel a need to have an additional board over here for the operator to look at it would be neutron level and rod position.

MR. MATTSON: Maybe you misunderstand it. There's not to be a board for each of those. A board is too big.

COMMISSIONER HENDRIE: Yes, but we've talked about gathering into one place and in a human engineered display, some essential things for the safety state vector in the plant. I would think that if you want to have something in there relating to rods, you've got some kind of a display that indicates most of

the rods are either in or out, one thing for neutron level but it's ranked here as one of five apparently co-equal sets of data to be in the display, and I wonder if that's necessary. Then we've got two items above radioactivity containment and containment integrity. Okay, but as I remember, the safety state vector in its early development at least it was pointed for water reactors and gathering into one place a tight and coherent display for the operators of what is essential primary and maybe a couple of secondary pressures and temperatures were and water levels. So we had an idea whether he was adhering to the great principle that we have finally derived -- keep water on the core. And all the rest of this stuff is great, but the more it spreads out and becomes all-inclusive of things that might be of interest but are not primary to keeping water on the core, the less interest it will have for operators down the line.

I would have liked to have had an extended discussion back and forth and we could have argued these various points and I could have understood better, but I give up on it at this point.

CHAIRMAN AHEARNE: I suggest that you do that.

COMMISSIONER HENDRIE: Well, if we're going to publish the report for comment, there's not going to be much time for that. But I'm willing to go ahead because I think in this case, as in every other, the best is the enemy of the good. And if we perfect this damn draft forever we'll never get it out.

CHAIRMAN AHEARNE: After having quoted that aphorism, where do you stand on having them start trying to develop the specifications?

COMMISSIONER HENDRIE: Go to it. We'll never get further down the line until we try to grind the details and find out what they mean and what all the little "uglies" are and get comments on it and so on.

CHAIRMAN AHEARNE: You prefer them to hold until you get a chance to see --

COMMISSIONER GILINSKY: I assume that Roger was talkin about a week or so.

MR. MATTSON: I'm not sure what you're suggesting. Do you want us to bring something up for the full Commission and --

CHAIRMAN AHEARNE: Vic is pointing out that his problem is that he doesn't think you've really spelled out clearly enough in the document what the functions are of those three sites. And I think you're pointing out that that's a necessary item before you address -- having people turn on to write the specifications. Is that correct?

COMMISSIONER GILINSKY: That's how I feel.

MR. MATTSON: I don't understand why you're relating the two at all.

CHAIRMAN AHEARNE: I differ only because we were talking here about the Data Link development, which comes back here.

MR. STELLO: We're only talking about the specifications for our center, and we've discussed ad nauseum I think what we do in there, so I hope that's pretty clear. That's all we're talking about.

CHAIRMAN AHEARNE: I would go ahead and let them start on the specifications.

COMMISSIONER GILINSKY: Let me raise one more question for you, Roger, and perhaps you can have an answer when you develop a more specific listing of who does what where.

Victor says that if we're going to move the Emergency Operations Facility out to 10 miles he wants the Technical Support Center moved out one mile. He even says that it ought to be in the same building.

MR. STELLO: Maybe I ought to explain what was behind my thoughts. They speak to part of the original concern that you had of who's going to do what in the Center. I think I commented earlier when we talked about this way back in the Task Action Plan. Then you have the concern of how many people are going to try to give directions and instructions and what have you to the control room and operators.

My view is that when the principal managers come, they're the people who should be developing the long-term strategies for what direction the plant ought to go, in a general way. The implementation of writing the procedures to do this is the kind of activity that I have in mind for the Tech Support

Center. That's where the plant people can gather and decide exactly how they're going to implement this philosophy now that was developed by this management team, the company, into specific procedures. That's the reason I felt that the manager team, the onsite team, and I'd like to remark that O'Reilly's last two experiences, and he was right in the equivalent of the Tech Support Center, but he had to get right there to quickly get briefed and understand where it was. So the need to be very close when you get there originally in the first few hours --

CHAIRMAN AHEARNE: And there is a Tech Support Center onsite.

MR. STELLO: Yes, there is. For a longer term, clearly if evacuation is a concern and the Center being 10 miles away --

COMMISSIONER GILINSKY: But that's the other center. We're talking about the Tech Support Center.

MR. STELLO: Right now that's all we have. We have a Tech Support Center equivalent someplace in the facility where they can meet, as a temporary basis. We have these things today.

COMMISSIONER GILINSKY: Was that the equivalent to Tent City or Trailer City, or is that what was going on --

MR. STELLO: In my view, that was the equivalent to a little room over in the turbine building that we finally got reserved where we could pull out all our people out of the control room, all of the utilities people that had to do with writing

the procedures and doing the things for operating the plant, in a special room near the control room. That's my view of a Tech Support Center.

MR. MATTSON: And that's what it says.

MR. STELLO: So I don't know how to help you to understand how I see the different roles, but I think they are really different. The understanding of the management team when it hits there in deciding where this plant ought to go is the kind of activity that I view that should occur from the EOF. I guess what I'm telling you is that I also see the further away you get with that, the more difficult that's going to be. So going too far away --

CHAIRMAN AHEARNE: Well, the judgment ends up being on what are the scenarios you're thinking they're established for.

I think where we have ended up is that Roger, you are to develop some clarifying words on that -- the role of those three facilities before you go out. You said that you could add some -- more like the words you were using earlier.

MR. MATTSON: We're going to do that, and we will put those in what we send out.

CHAIRMAN AHEARNE: Right. You might talk to Mr. Gilinsky on that, and try to get it out in a week or so. We've agreed to go ahead -- for you to go ahead and develop the specifications for RFP type development.

Fine, the meeting is adjourned.

(Thereupon, at 1:07 p.m., the meeting in the above-entitled matter was adjourned.)

NUCLEAR REGULATORY COMMISSION

This is to certify that the attached proceedings before the

in the matter of: PUBLIC MEETING - REPORT ON NUCLEAR DATA LINK

Date of Proceeding: July 11, 1980

Docket Number:

Place of Proceeding: Washington, D.C.

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

Suzanne Babineau

Official Reporter (Typed)

Suzanne Babineau

Official Reporter (Signature)