

# ORIGINAL

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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In the matter of:

COMMONWEALTH EDISON COMPANY

(Byron Nuclear Power Station,  
Units 1 & 2)

Docket No. 50-454 OL  
50-455 OL

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<u>I N D E X</u>					
<u>WITNESS</u>	<u>DIRECT</u>	<u>CROSS</u>	<u>BOARD</u>	<u>CROSS ON BOARD</u>	<u>REDIRECT</u>
1 D.W. HAYES and					
2 K.A. CONNAUGHTON					
3					
4					
5	By Mr. Lewis	9961			
6	By Mr. Gallo			9995	
7	By Mr. Cassel			9969	
8	By Judge Cole			10,004	
9	By Judge Callihan			10,005	
10	By Judge Smith			10,006	
11	By Judge Callihan			10,008	
12	By Judge Cole			10,010	
13	By Mr. Cassel				
14	(Further)			10,016	
15	By Mr. Cassel				10,130
16	By Mr. Miller				10,133
17 WILLIAM LITTLE, WILLIAM A. FORNEY					
18 and D.W. HAYES					
19	By Mr. Lewis	10,038			
20	By Mr. Cassel			10,058	
21	By Mr. Miller			10,074	
22	By Judge Cole			10,122	
23	By Judge Callihan			10,124	
24	By Judge Smith			10,129	
25	By Mr. Cassel				
	(Further)			10,126	
17 JAMES G. KEPPLER					
18	By Mr. Lewis	10,134			
19	By Mr. Miller	10,136			
20	By Mr. Lewis				10,139
21 <u>LAY-IN</u>					
22	Testimony of D.W. Hayes & K.A. Connaughton			9,964	
23	Affidavit of William L. Forney regarding The Reinspection Program, 7/12/84			10,040	
24	Memo from D.W. Hayes to R.L. Spessard dated 2/13/84, re: Byron Station			10,050	
25	Morning Recess			9,959	
	Lunch			10,019	
	Afternoon			10,100	

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P R O C E E D I N G S

1 JUDGE SMITH: Are we ready to proceed?

2 Is there any preliminary business?

3 MR. CASSEL: I don't know whether you are counting  
4 the motion regarding Mr. Podworny as preliminary, or --

5 JUDGE SMITH: I am not referring to that.

6 Did you want to raise your matter now, Mr. Lewis?

7 MR. LEWIS: I thought I would do it at the time,  
8 after we finish the ANI motion.

9 JUDGE SMITH: Any other preliminary business?

10 (No response)

11 All right, then we will hear from you, Mr. Cassel  
12 on the ANI motion.

13 MR. CASSEL: Judge, in addition to the arguments  
14 which I made previously concerning the relevance of  
15 Mr. Podworny's allegations to any finding that there is  
16 reasonable assurance that Byron can be operated safely, I  
17 have some additional comments based on the July 16, 1984  
18 memo from the National Board of Boiler and Pressure Vessel  
19 Inspectors which was distributed yesterday by Mr. Miller.

20 That memorandum in brief demonstrates that the  
21 Boiler Board is in the process of conducting an audit of  
22 ASME procedures at Byron with respect to Hunter Corporation,  
23 its subcontractor Hartford Insurance Company and several  
24 other contractors.  
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1                   Second, it demonstrates that the portion of the  
2 audit relating to Hunter and Hartford is either completed or  
3 largely completed as of early July in terms of the onsite  
4 activities, and there are a number of findings in this  
5 preliminary report which relate directly to Hunter and  
6 Hartford.

7                   Thirdly, those findings as we represented in our  
8 motions when we originally filed them with our expectation,  
9 confirmed the allegations of Mr. Podworny on a number of  
10 significant respects, although they do not expressly refer  
11 to Mr. Podworny because the procedure by which this audit  
12 was conducted was apparently one in which the Boiler Board  
13 had an agreement with the NRC not to disclose to Edison  
14 officials Mr. Podworny's identity or his allegations  
15 except insofar as those allegations were disclosed to Edison's  
16 counsel and any other Edison officials covered by the  
17 protective order in the licensing proceeding.

18                   But, it is my understanding that the line  
19 officials of Edison who were dealing with this audit were  
20 not supposed to be aware of Mr. Podworny's identify or  
21 specific allegations. And thus, they are not expressly  
22 mentioned in the report.

23                   Nonetheless, a number of his allegations without  
24 attribution to him are repeated in the form of findings  
25 made by the Board in its audit at Byron.

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1 Next, the question that Judge Smith raised  
2 yesterday, which really goes to the heart of this thing is,  
3 suppose we agree with everything that Mr. Podworny alleges,  
4 what bearing does that have on anything, and, we have  
5 just spun our wheels on a tangential issue.

6 I think there is additional evidence in the  
7 Interim Report of the National Board that that would not be  
8 the case.

9 First of all, on the first page of their Interim  
10 Report they state, and I quote:

11 "The purpose of this audit was to determine  
12 the confidence in the quality of work at the Byron  
13 Station."

14 So, right in the first paragraph they make clear  
15 that they are talking about quality of work.

16 Now, Hartford did not do any work out there.  
17 All it did was act under contract to do ANI inspections and  
18 signoff for Hunter. So, clearly what they are talking about  
19 in that sentence at a minimum is the quality of work by  
20 Hunter, which I think no one would dispute is an issue in  
21 this proceeding.

22 In addition, among the reports' various findings  
23 on page 8 in the third paragraph from the bottom the Board  
24 states, and I quote -- third paragraph from the bottom:

25 "It is the opinion of the National Board



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1           audit team that to date, with the exception of  
2           findings 3.2 and 3.3, there appears to be no  
3           findings which will impact on the hardware."

4           Now, obviously what they are saying there is  
5           that 3.2 and 3.3 are not findings which this Board can say  
6           do not impact on hardware.

7           Now, if you flip back to 3.2 and 3.3 -- let's  
8           start with 3.3, because that is the closest to the issues  
9           we have been dealing with. On page 6, if I understand 3.3  
10          correctly -- and I am not certain that I do -- it appears to  
11          be binding as a noncompliance with the ASME Code. A number  
12          of instances in which Commonwealth Edison's Level III  
13          examiner reversed interpretations done by PTL, again for  
14          Hunter, I guess -- or I gathered from the context here --  
15          changing those PTL findings from reject to accept. And  
16          those changes from reject to accept were done without the  
17          concurrence of either PTL's or Hunter's Level III examiners.

18          And, that was considered to be a finding by the  
19          Board, and that clearly relates to an issue which has been  
20          discussed in this proceeding at some length in the context  
21          of the Reinspection Program. But here again we are talking  
22          about ASME hardware installed by Hunter and a finding by the  
23          National Board which, in his opinion is not within the  
24          category of findings that do not relate to hardware.

25          And, in addition, on page 5, paragraph 3.2, the

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1 Boiler Board audit team further expresses the opinion that  
2 the particular method used by Hunter to accept NDE personal  
3 certifications is not in compliance with ASME, and that that,  
4 too, is a finding.

5 Now I must confess, Judge, I don't really  
6 understand what this 3.2 is all about. But, on its surface  
7 it appears to be very similar to the issue under the ANSI  
8 Code, which gave rise to the whole Reinspection Program.

9 In other words, a question of the certification  
10 of inspectors, which gave rise to the necessity to reinspect  
11 hardware as one way of approaching the question of whether  
12 improperly certified inspectors did their jobs properly.

end T1

13 So, those two are expressly found by the Board  
14 not to fall within the category that do not relate to hard-  
15 ware deficiencies.

16 To the extent they do relate to hardware  
17 deficiencies, they are clearly talking about Hunter.

18 The ultimate structure of the Boiler Board's  
19 Audit Report is not predicted with great clarity in this  
20 report. That is, we don't know from this exactly what they  
21 intend to put in their next interim report, and in their  
22 final report.

23 For example, will they have further discussion of  
24 these issues; will they take into account Edison's response  
25 to them, and so forth. We don't know what they will do

mm6

1 down the road.

2 We also don't know -- at least I don't know,  
3 Intervenors don't know -- what type of investigation is  
4 being conducted either by the NRC Staff or by the National  
5 Boiler Board with respect to all of Mr. Podworny's  
6 allegations; that he was pressured, that he was asked to  
7 sign off on things that he hadn't, in fact, inspected, and  
8 this sort of thing, which do not appear clearly on the face  
9 of this memorandum. And which I would suggest to the  
10 Board, do raise questions about the procedures and the  
11 intentions of the personnel who are in charge of making  
12 sure that Hunter's hardware at Byron is safe.

13 I don't know when we will receive a statement  
14 that those allegations are either substantiated or not,  
15 which is the usual practice in NRC responses to  
16 allegations, and I don't know whether we will receive any  
17 such statement from the NRC Staff or from the Boiler Board  
18 separate from the audit or in what mechanism that ultimate  
19 resolution will be offered. But it seems to me that we  
20 clearly have enough here that is new and of potential  
21 safety significance, and is relevant to the existing scope  
22 of this proceeding as it was remanded by the Appeal Board,  
23 so that we are not talking about having to apply all the  
24 usual standards for reopening the hearing, because here we  
25 are talking about matters that are directly relevant to the

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1 scope of the reopened hearing.

2 But, even if we were required to meet the  
3 requirements for reopening of hearing, those requirements --  
4 the key requirement of them, as you will recall, is that  
5 the information might have a significant impact on safety.  
6 And it seems to me that that standard which was reiterated  
7 by the Appeal Board in its ruling is met by the information  
8 that we have so far. And that Intervenors, and I respectfully  
9 suggest, the Board, ought to take a look at this information  
10 and make sure we fully understand what its implications are  
11 before making any determination that there is reasonable  
12 assurance that Byron can be safely operated.

end T2

13 Thank you.  
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JUDGE SMITH: Mr. Miller?

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MR. MILLER: Judge Smith, listening to

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Mr. Cassel's presentation in the hope that he would somehow

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provide some connection between what is in the National'

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Boiler Board's audit report and the subject matter of this

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hearing, other than some generalized references to matters

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that potentially affect the safety of the plant and the

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fact that it involves a contractor, Hunter, whose

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reinspection results are the subject matter of this hearing,

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I haven't heard anything that relates it to the subject

11

matter of this hearing.

12

As I am sure the Board is aware, the activities

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of Hunter Corporation and indeed the inspection activities

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of Hunter Corporation comprise much more than the activities

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that are subject to ANSI N-45-26; that is, those activities

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which were the subject of the reinspection program. What

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we have here is a situation in which an audit team from

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the National Boiler Board came in and made a number of

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findings with respect to the activities of Commonwealth

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Edison Company and with respect to the activities of Hunter.

21

The findings as such are not the final word on

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these matters. I have in my hand -- and I will be happy to

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provide for the Board and parties -- a letter dated July 31,

24

1984, from Mr. Schlosser, the Project Manager of Byron

25

Station, to Mr. D.J. MacDonald, the head of the audit team,



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1 this audit by the National Boiler Board. I apologize  
2 that I only have one copy, but we will make additional  
3 copies available for the other copies.

4 (Document tendered to the Board.)

5 MR. MILLER: This is a process that is going  
6 very quickly. That is, the audit team issued its findings  
7 on July 16th, and we now have a response from Commonwealth  
8 Edison Company on July 31st. But as the original scope  
9 of the audit makes clear, Hunter is not the only  
10 contractor on the site as to which the audit team is going  
11 to direct its attention. The audit team will now go on to  
12 look at the activities of other contractors such as  
13 Powers-ASCO-Pope and NISCO, who also hold ASME certificates.

14 So it is not clear at all when there is going to  
15 be ultimate resolution of these issues by the Boiler Board,  
16 and certainly no indication at all as to when the NRC,  
17 who is a participant in this process, is going to conclude  
18 its investigation.

19 If you look at Commonwealth Edison Company's  
20 response, you will see that in certain instances, a code  
21 interpretation is asked for. That is, the response of  
22 Commonwealth Edison Company indicates a difference of  
23 professional opinion among Commonwealth Edison personnel  
24 and the position taken by the audit team with respect to  
25 the requirements of the ASME Code. That can only be resolved

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1 by a code interpretation. I am led to believe that that  
2 is a process that takes some months.

ck

3 I have assembled the cognizant code committee  
4 to present the issue and obtain a determination.

5 In that connection, then, I think that we can't  
6 hope for any earlier resolution of this issue by the Boiler  
7 Board. I don't believe, although Mr. Lewis will have to  
8 speak for himself, that the NRC is going to be in a position  
9 to close this issue out at any point early in the  
10 proceedings. And I'm afraid it is left to the Board, on the  
11 basis of the evidence or the papers that are before it, to  
12 make some sort of determination as to the relevance of  
13 this material to the issues in this proceeding and generally  
14 the importance of what is before you as disclosed by the  
15 audit findings.

16 While there has been some testimony with respect  
17 to ASME welding, that testimony has been limited to the  
18 visual inspection of that welding. If one looks at  
19 paragraph 3.3, which is one of the paragraphs referred to  
20 by Mr. Cassel, which he says there are hardware concerns,  
21 one sees that that refers to nondestructive examination by  
22 Hunter Corporation and Pittsburgh Testing Laboratory. This  
23 nondestructive examination presumably is radiography or  
24 liquid penetrant, dye penetrant, examination. But the  
25 qualifications for those inspectors are not covered by

mgc3-3

1 N-45 --

2 JUDGE SMITH: Does that rule out visual? NDE,  
3 for sure, would include those two methods, but does that  
4 rule out visual inspection?

5 MR. MILLER: I believe that this specific  
6 finding by the National Boiler Board, in fact, relates to  
7 radiography only, and it is a question of the interpretation  
8 of certain X-rays of welds and how those X-rays were  
9 interpreted by different individuals.

10 Now if one looks at Commonwealth Edison Company's  
11 response on that item of hardware -- and it's found on  
12 page 5 of that July 31st letter -- one sees that the  
13 response to the hardware concern, which is at the very bottom  
14 of the page, Response 3.3.1, says all of the examinations  
15 affected by the arbitration laws have been reviewed or have  
16 been reexamined and found acceptable by Hunter Corporation's  
17 Level III, and therefore this finding does not impact the  
18 hardware.

19 JUDGE SMITH: Was it the Boiler Board's concern  
20 here that the arrangement they criticized was an  
21 inappropriate redelegation of Hunter's delegated responsi-  
22 bilities?

23 MR. MILLER: I believe that the Boiler Board's  
24 concern was that there was a provision in the agreement  
25 which provided for arbitration of the results, of differing

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1 results of an interpretation of a radiograph, and that --  
2 and that the arbiter, if you will, was Commonwealth Edison  
3 Company.

4 So Commonwealth Edison Company, under the terms  
5 of the arbitration agreement that the Boiler Board  
6 criticized, was the arbiter of whether a radiograph  
7 indicated an acceptable or a nonacceptable weld. That was  
8 the practice that was criticized.

9 JUDGE COLE: And what did the Boiler people want?

10 MR. MILLER: Well, they believed that it was  
11 inappropriate for Commonwealth Edison Company to be in a  
12 position to arbitrate or decide ultimately what these  
13 radiographs meant. And if you look at the response -- this  
14 arbitration provision was invoked, I believe, in the case  
15 of Hunter, only 22 times. So we're not talking about a large  
16 population of welds that were subject to this finding. And  
17 Commonwealth Edison's response has been, number one, to  
18 eliminate the arbitration provision from this agreement so  
19 that they are not going to be in a position to arbitrate  
20 these results in the future, and, number two, go back and  
21 have the Hunter Level III review the radiographs  
22 of interest and abide by his determination.

23 JUDGE SMITH: They want that, because the Hunter  
24 Level III is under the control of the ASME Board.

25 MR. MILLER: That's correct. They are the ASME



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1 certificate holder of interest.

2 JUDGE SMITH: So the Level III, the Hunter Level  
3 III person is answerable, while the Commonwealth Edison  
4 person Level III was not?

5 MR. MILLER: Well, correct. You are testing my  
6 knowledge of the ASME Code. As a matter of fact, you've  
7 probably gone beyond -- that question goes beyond my ability  
8 to respond, Judge Smith.

9 But I think it's fair to say that the approach of  
10 the audit team was that the ASME Code certificate holder --  
11 in this case, Hunter -- should be the one that makes the  
12 ultimate determination of the acceptability or not of these  
13 radiographs.

14 Having discussed this now on the record for a few  
15 minutes, I think it is apparent that this issue has nothing  
16 to do with any other matter that has been before this  
17 Licensing Board in the reopened hearings and that, in and  
18 of itself, assuming that an evidentiary presentation would  
19 substantiate what Commonwealth Edison's response to the  
20 National Boiler Board is, has absolutely no safety  
21 significance.

22 What it was was a question of who should  
23 interpret 22 X-rays, and it has not been resolved to the  
24 satisfaction of the ASME certificate holder, because the  
25 Hunter Level III has reexamined those radiographs, and his



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1 decision is now considered to be final.

2 JUDGE COLE: Well, how do you know that? Have  
3 they responded to this yet?

4 MR. MILLER: I'm sorry? Who?

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1 JUDGE COLE: You say that the ASME people are  
2 now satisfied with that issue?

3 MR. MILLER: Oh, I can't represent that, Judge  
4 Cole. I don't know whether they are satisfied with that or  
5 not.

6 JUDGE COLE: That's what I thought you just said.

7 MR. MILLER: No, I'm sorry. Hunter is the  
8 certificate holder, and has now had its own Level III review  
9 of these 22 radiographs, and concluded that they are  
10 acceptable. That is the sum and substance of the evidence  
11 we would be able to present to this Licensing Board were  
12 we to go to hearing on this in the near future.

13 JUDGE COLE: But, you don't know whether the ASME  
14 Board that is reviewing this, and currently has a finding in  
15 that area, has now accepted that and withdrawn that finding?

16 MR. MILLER: I do not know.

17 Now I will say that Commonwealth Edison for a  
18 number of reasons, not the least of which is the desire to  
19 provide this Licensing Board with as much information as  
20 possible, has attempted to expedite review of this by the  
21 audit team of the National Boiler Board so we can determine  
22 whether in fact this satisfies their finding.

23 Let me go to the second finding that  
24 Mr. Cassel suggests has safety significance, and also is  
25 related to the issues in this case. That is Finding 3.2,

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1 which discusses the Hunter Corporation acceptance of NDE  
2 personnel based on a review and acceptance by the Owners'  
3 Level III of the NDE personnel certifications.

4 I believe that this is essentially a question of  
5 the interpretation of the contractual arrangements between  
6 Commonwealth Edison Company and Hunter Corporation, and it  
7 something that from the perspective of the ASME Code  
8 Committee is significant because it is a question of which  
9 entity views the certifications of these NDE examiners.

10 In fact, the individuals who are the subject of  
11 this dispute, that is these NDE examiners, are properly  
12 qualified and properly certified. That is not the issue.  
13 The issue is which entity decides that they are properly  
14 qualified and properly certified. That is what the ASME  
15 finding is about.

16 Now once again, should this matter become the  
17 subject of a hearing by this Licensing Board? That is the  
18 sum and substance of our group. That in terms of a safety  
19 concern within the purview of this Licensing Board, what we  
20 are looking at is establishing that the men and women  
21 who were conducting those NDE examinations were properly  
22 qualified and properly certified.

23 Now I don't understand why this Licensing Board  
24 would wish to mesh itself with the intricacies of ASME Code  
25 interpretations and division of responsibilities among

mm3 1 contractors when the underlying safety significance of that  
2 dispute is nil. Mr. Cassel simply has not made any showing  
3 that there is any safety significance to any of these  
4 findings. We have moved from the allegations of Mr. Podworny  
5 to the findings of the audit team. I think this  
6 discloses what Mr. Cassel and the Intervenors are hoping  
7 for, in the words of Mr. Micawber, "something will turn up."

8 If they are just allowed to discover, to cross  
9 examine, maybe -- just maybe -- they might be able to find  
10 something that is related to the issues before this Board.  
11 But on the documents that have been presented to you so far,  
12 that just doesn't exist, and the motion should be denied.

13 JUDGE SMITH: Mr. Millèr, or everybody, are we  
14 now free to discuss all aspects of the background of this  
15 now that Mr. Podworny has identified himself, or given  
16 permission to be identified?

17 MR. LEWIS: To my knowledge, your Honor, we are.

18 There may be documents in the possession of the  
19 Staff that may have other names in them. That I can't --

20 JUDGE SMITH: Oh, all right. Except for that,  
21 yes.

22 MR. LEWIS: Yes.

23 We take the position that the first question was  
24 the anonymity of Mr. Podworny and that has been waived by  
25 him. The other question was whether or not the Staff would,



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1 for its part, assert to this Board that these matters should  
2 not be discussed publicly because they would have such a  
3 detrimental effect on the investigation.

4 We had discussions ourselves with the National  
5 Board regarding that question. And although the clear  
6 preference of the National Board was that they be allowed  
7 to complete their procedures according to their own procedures  
8 and without having to have wide notoriety about them yet  
9 nevertheless it was decided that we did not have a strong  
10 basis to assert to you that these matters should not be  
11 discussed publicly.

12 So, the Staff is not coming to you asserting that  
13 there are any restrictions that we know of on a discussion  
14 of these matters.

15 JUDGE SMITH: When Commonwealth Edison requested  
16 the Boiler Board to come into Byron, did they know the basis  
17 of Region III's concern?

18 MR. LEWIS: Let me address that as I understand  
19 it, and then perhaps Mr. Miller can express his perspective.

20 The arrangement that we made with the National  
21 Board was that we did not want there to be a disclosure to  
22 Commonwealth Edison Company of the specifics of the allega-  
23 tions. And, to the best of our knowledge, based upon  
24 discussions with the National Board, that is how they pro-  
25 ceeded.



SYM 4-1

1 JUDGE SMITH: Now that Mr. Podworny no longer  
2 wishes anonymity, is there any reason why the Boiler  
3 Board should not be informed of the specifics of his  
4 allegations?

5 MR. LEWIS: Oh, the Boiler Board was.

6 JUDGE SMITH: All right. So they are under no  
7 restraint anymore. They can inquire right directly into  
8 Mr. Podworny's particular allegations if they believe it  
9 is necessary to fulfill their responsibilities.

10 MR. MILLER: I believe that they have always  
11 had that right, if you will.

12 JUDGE SMITH: How could they have?

13 MR. LEWIS: No, Your Honor, I believe you may  
14 have misunderstood what I said. The National Board was  
15 fully apprised by the NRC Staff of the allegations which  
16 it had received.

17 JUDGE SMITH: And the alleger's identity?

18 MR. LEWIS: And the alleger's identify. That was  
19 made available, I think, to certain people within the  
20 National Board.

21 JUDGE SMITH: All right. Now have they been made  
22 aware that they are under no restraint now? I mean, before  
23 it was necessary for them to -- well, in fact, it looked like  
24 it was necessary for them to inquire into Powers-ASCO-Pope  
25 and NISCO and others because of allegations made to Hunter

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1 practices.

2 MR. LEWIS: I don't know. I don't know the  
3 intricacies of the reasons why other contractors may be  
4 also looked into.

5 JUDGE SMITH: Well, one reason is that Hartford  
6 Steam Boiler represents all those people, provides nuclear  
7 inspector services for all of them.

8 MR. MILLER: I think that's just exactly the  
9 reason why these other contractors are being looked into  
10 by the audit team. I don't recall all of Mr. Podworny's  
11 allegations, whether they were limited to Hunter or not,  
12 but presumably the Boiler Board audit team felt obligated  
13 to look into the activities of all of the ASME certificate  
14 holders on site that were covered by the activities of  
15 Hartford.

16 JUDGE SMITH: One could infer that they were  
17 making a very unspecific inquiry to honor their commitment,  
18 not to reveal the identity of Mr. Podworny. And since his  
19 allegations only related to the detachment of Hartford  
20 people assigned to Hunter work, however, it's not a  
21 very good inference, but one is somewhat bolstered in the  
22 inference when you see there is very little specific  
23 correlation between Mr. Podworny's particular allegations --  
24 the rubber star stamp I think is an exception -- and the  
25 findings and concerns of the interim report.

mgc4-3

1                   It seems that they have had a very, very broad  
2                   unspecific inquiry, which perhaps or perhaps not might  
3                   have captured Mr. Podworny's particular concerns. But would  
4                   you agree with that?

5                   MR. LEWIS: Excuse me one moment.

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1 MR. MILLER: If I might be heard briefly on  
2 that, it seems to me an equally plausible difference that  
3 the Boiler Board looked at Mr. Podworny's allegations and  
4 decided that the vast majority of them simply were not  
5 worth pursuing in any specific detail.

6 MR. CASSEL: Judge, Mr. Miller can so speculate.  
7 In fact, Mr. Podworny has met with representatives of the  
8 audit team on at least two occasions; once in late May,  
9 which is discussed in the May 31 memorandum from Mr. Hines  
10 offered in support of our motion in which Mr. Hines discusses  
11 how Mr. Podworny was able to recount almost verbatim, without  
12 notes, references or documentation, the concerns he had  
13 expressed.

14 Mr. Podworny later met again with representatives  
15 of the Board in mid-June. He was advised that his allegations  
16 appeared to be accurate. I think Mr. Miller's speculation  
17 is unsupported by anything in the record, and we continue  
18 to believe that Mr. Podworny's allegations will be  
19 substantiated by the Board, to the extent it looks into them.

20 I continue to be concerned about the question of  
21 how the Staff could have reached the conclusion that there  
22 is no risk to the investigation from disclosing the  
23 specifics of the allegations, because up until yesterday,  
24 when the Staff made its decision and so advised the Board,  
25 the National Boiler Board had been quite discrete in



1 conducting its inquiry under instructions from the NRC as  
2 set forth in the documents attached to our motion not to  
3 reveal his specific identity or his specific allegations.

4 Their report does not cover some of the specifics,  
5 including issues of intimidation, requests to sign off on  
6 things he hadn't looked at and so forth. Where obviously,  
7 the very nature of the allegation points the finger at a  
8 person, that person is certainly now alerted that he has  
9 been accused. If there's any evidence around that would  
10 tend to support the accusation, he has got time before the  
11 investigators get there.

12 I find the entire manner in which the investiga-  
13 tion has been permitted by the NRC Staff to be disclosed  
14 to raise questions which you have told me I don't have  
15 standing, in a legal sense, to raise about what it's going  
16 to do to the ultimate results of the investigation.

17 But at a minimum, we can say that based on all  
18 the information we have, there is no reason to suggest that  
19 the Board is not going to substantiate Mr. Podworny's  
20 allegations to the extent that they can look into it.

21 JUDGE SMITH: All right. You had begun to give  
22 me some information. Apparently, you have an advisor with  
23 you, Mr. Lewis?

24 MR. LEWIS: Yes. John Streeter, the Director of  
25 the Byron Project Division, Region III. And he may well be

1 able to tell you more definitively than I, certain information  
2 on -- I forget what the question pending was.

3 JUDGE SMITH: Well, the question related to  
4 whether one may infer from the nature of the findings and  
5 concerns in the Interim Report that the Boiler Board was  
6 making an intentionally broad inquiry to protect the  
7 identity of the allegor. And that's when there was suggested  
8 another inference, and that's where we are.

9 Do you know, Mr. Streeter?

10 MR. STREETER: I think I can provide some  
11 information on this. The original audit plan developed by  
12 the National Board was, as you suggested -- appeared to be  
13 general. The scope of that audit plan was such that it  
14 encompassed all of Mr. Podworny's specific allegations.

15 They conducted their inquiry in such similar  
16 fashion that we normally do when we're trying to avoid  
17 divulging the identity of the allegors and protecting them,  
18 because the person had requested confidentiality. So although  
19 the audit plan or the approach would appear to be general,  
20 the National Board and the NRC was confident that it  
21 encompassed all the specific allegations and would, in fact,  
22 given an answer to those allegations.

23 JUDGE SMITH: And the rubber stamp, star stamp,  
24 may be an example of that.

25 MR. STREETER: That is an example. And I would

1 also like to offer that although you see -- this report is  
2 basically a reflection of the Boiler Board's approach in  
3 attempting not to divulge the identity of the employee.  
4 This is only the first in a series of at least two reports.  
5 The next one that comes out perhaps will be more specific  
6 to the individual, and will cover the remainder of the  
7 allegations.

8 JUDGE SMITH: I forget the answer to my question.  
9 Has the Boiler Board been advised that they are no longer  
10 under any restraint in their manner of inquiry?

11 MR. STREETER: They have not been -- I'm  
12 assuming that they are aware, as of Monday, that that is  
13 the case. I will make it a point to assure that they are  
14 fully aware that they are under no restraint.

15 JUDGE SMITH: That could be one of this Board's  
16 considerations in ruling on the motion. It's a consideration  
17 that I would like to propose to my colleagues on the Board.

18 Mr. Lewis, you haven't been heard on the motion  
19 itself.

20 MR. LEWIS: The only other point I wanted to  
21 respond to at this time is that although Mr. Cassel has  
22 speculated -- and really, I think that's all it is -- that  
23 the Staff might have been somehow foolish in agreeing to  
24 allow these matters to be made public at this time, the  
25 fact is that we gave serious consideration under the

1 standards that apply to us as to whether or not we could,  
2 in good faith, assert to this Board that disclosure would  
3 be of such a nature that it would undermine the effectiveness  
4 of the investigation.

5 And we went through the process of considering  
6 the stage of the investigation, those issues that remained  
7 for the National Board to look into, those people on the  
8 National Board we still needed to speak to and things of  
9 that nature. And we made our judgment that it would not have  
10 a significantly interfering effect on the wrapping up of  
11 that investigation to have the matters disclosed.

12 And we were mindful of the fact that this Board  
13 is very reluctant to entertain these kinds of matters in  
14 non-public sessions, and we did weigh that in our  
15 consideration.

16 So other than that, I really --

17 JUDGE SMITH: Did you also weigh any possible  
18 benefit of relieving the Boiler Board of restraint in  
19 their investigations?

20 MR. LEWIS: I think the National Board was fully  
21 prepared to proceed on the groundrules that had been  
22 established, and we were not made aware of any concern or  
23 request on their part that they were being hampered by the  
24 restrictions.

25 And, Your Honor, to get more to the point of the



1 motion, I really have no basis to disagree with the  
2 characterization that Mr. Miller has made of the facts. I  
3 am not as familiar with all the exact status of Commonwealth  
4 Edison's response. I haven't seen Commonwealth Edison's  
5 response, and things of that nature.

6 But from the indication I have from Mr. Streeter  
7 who is advising me, what Mr. Miller stated appears to be  
8 consistent with our understanding of the facts. And we  
9 do believe that although the function of the Hartford  
10 Company under the ASME Code is certainly an important safety  
11 function, and the National Board recognizes that right at  
12 the front of their document, it really is an additional  
13 function on top of the Commonwealth Edison Company QA Program,  
14 and its contractors' QA programs, which really are the  
15 subject matter of this proceeding.

16 And I believe this does go to the Board's  
17 fundamental question raised yesterday, which was supposing  
18 there were some infirmities in the way in which the Hartford  
19 Company went about its certifications under the ASME Code;  
20 what would that mean in terms of any conclusions this Board  
21 has to draw regarding the effectiveness of the Commonwealth  
22 Edison Company or its contractors' QA programs.

23 And we really see these two issues as being  
24 separate. And although there may be matters within this  
25 report which refer to certain Commonwealth Edison Company

1 site implementation procedures and certain certification  
2 practices, we really think that those are not matters that  
3 are related to the subjects before this Board.

4 If I may have one moment.

5 (Pause.)

6 Thank you. That would conclude my statement  
7 for the moment.

8 (Board conferring.)

9 JUDGE COLE: Do I remember correctly that the  
10 National Board group is likely to conclude their work  
11 this week?

12 MR. STREETER: They are likely to conclude it  
13 if everything goes as scheduled; at least by the end of  
14 next week, I would say. And then the report would follow  
15 that. That is providing that they don't encounter any  
16 difficulties beyond what we know now.

17 JUDGE COLE: When would you expect a report to  
18 be out? Do you know?

19 MR. STREETER: I would expect their report to  
20 be out by the end of August.

21 JUDGE COLE: Okay, thank you.

22 MR. CASSEL: Judge, I hate to raise a lawyer's  
23 point, but nonetheless, I think I would be remiss if I  
24 didn't raise it.

25 I, of course, have not seen the document which

1 Mr. Miller distributed, and I trust that the Board does not  
2 intend to rule in any way that would take into account  
3 that document until we've at least had an opportunity to  
4 review it.

5 JUDGE SMITH: That's right. Anything further  
6 on this motion?

7 (No response.)

8 Okay, we will take the matter under advisement.

9 Do you want this back, Mr. Miller? The response--

10 MR. MILLER: I'm just now arranging for  
11 additional copies to be made, and I will be in a position  
12 I hope to distribute them within an hour or so.

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SYMGC6-1

1 MR. LEWIS: Mr. Chairman, as I understand it,  
2 the next order of business is the NRC Staff's panel on  
3 allegations, which is Mr. Hayes and Mr. Connaughton. I  
4 wanted to discuss some preliminary matters before they go  
5 on, which I believe need to be addressed, as it relates  
6 to the Staff's responsibilities with respect to the closing  
7 out of allegations.

8 As I understand the posture in which we come before  
9 this Board, it is that with respect to allegations which  
10 were pending as of August of 1983, a number of those  
11 matters were addressed in an in camera session, in several  
12 in camera sessions, both with the NRC Staff and with the  
13 Office of Investigations. It is my recollection that the  
14 transcript of the in camera session with the NRC Staff has  
15 now been made public some time ago.

16 I have today provided to the parties a transcript  
17 of the session held with the Office of Investigations with  
18 appropriate deletions made by the Office of Investigations  
19 to protect the confidentiality.

20 I had yesterday made available to the Board and  
21 parties a copy of the Office of Investigations report  
22 on the allegations which had been given to it to investigate,  
23 and those were the allegations that were the subject of  
24 the in camera session. That report similarly has been  
25 reviewed by the Office of Investigations and deletions have



ngc6-2

1 been made where there are confidentiality concerns.

2 The Staff has reviewed the report of the Office  
3 of Investigations with the deletions, and although we  
4 recognize that there are lengthy portions that were necessary  
5 to be excised, we looked at it from the point of view of  
6 whether or not the information disclosed therein addresses  
7 the question of whether or not the allegations that were  
8 received have implications for the integrity of the  
9 reinspection program. And we believe that the information  
10 that is contained in the OI report is sufficient to address  
11 that question.

12 Additionally, as you know, the Office of  
13 Investigations is an independent office, and it really is  
14 their call as to what they need to do to one of their  
15 reports in order to honor certain confidentiality agreements  
16 that exist.

17 So we really come before you with a document that  
18 has been provided to us and has been appropriately reviewed  
19 by the investigators, and we believe, however, that the  
20 information contained therein does address the question --  
21 is sufficient to address the question of whether or not the  
22 allegations that were investigated raise any questions with  
23 regard to the reinspection program.

24 The Region III Staff has reviewed that report.  
25 We, ourselves, only received that report very recently.

ngc6-3

1 It was not, therefore, able to be a portion of our direct  
2 prefiled testimony on allegations which, as you know, was  
3 only able to deal with those allegations which were within  
4 the responsibility at that time of the Region III office.  
5 And I would propose that in addition to the prefiled  
6 testimony of Mr. Hayes and Mr. Connaughton, that we can  
7 pose certain additional questions, and propose to do so,  
8 to Mr. Hayes regarding the results of his review of the OI  
9 report.

10 In particular, the Board had advised the Applicant,  
11 specifically the Applicant but also the Staff, to address  
12 the question of whether or not circumstances surrounding  
13 the termination of Mr. Koca as the QC supervisor at Hatfield  
14 had any implications for the integrity of the reinspection  
15 program. And we, in our correspondence with the Board and  
16 our earlier testimony, advised you that we were unable to  
17 address that until we had the OI report. We now have it,  
18 and we would be able to address that on supplemental oral  
19 direct.

20 The reason I wanted to discuss this at this time  
21 is that I recognize that we provided these documents only  
22 yesterday, in the case of the report, and today in the case  
23 of the transcript of the in camera session. And I thought  
24 it would be advisable to air this matter and to get some  
25 understanding of the groundrules as to how we will proceed

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1 this morning.

2 MR. MILLER: Judge Smith, perhaps if we could  
3 have some further identification by Mr. Lewis of what, in  
4 addition to Mr. Koca, he intends to have some supplemental  
5 direct on on the basis of the OI report, we would be in a  
6 better position to make some rudimentary preparations for  
7 cross-examination.

8 MR. LEWIS: Well, that really is the substance of  
9 what it would be. What I will represent to you is that  
10 Region III, in the person of Mr. Hayes, has reviewed the  
11 report. When Region III gets an Office of Investigations  
12 report on an investigation that was requested by the  
13 Regional Administrator, it is routinely reviewed by the  
14 Regional Staff to determine whether there are any technical  
15 issues raised in it that require Staff follow-up, and that  
16 review has been done, and Mr. Hayes is in a position to  
17 state generally what that is.

18 That would not be a detailed discussion. It would  
19 simply be a summation of the results of his review.

20 MR. CASSEL: May I comment on that, Judge?

21 JUDGE SMITH: Certainly.

22 MR. CASSEL: I understand that OI is, in some  
23 sense, independent from other portions of the Staff, and  
24 therefore I realize, of course, that the Staff probably had  
25 no ability to get these documents available to us as early

agc6-5

1 as they might have preferred, so I'm not raising any  
2 questions about the Staff's conduct here. And by the way,  
3 earlier I wasn't raising questions about the Staff's good  
4 faith either.

5           However, the fact remains that yesterday and today  
6 I have, for the first time, received the OI report on the  
7 allegations made by one of the Intervenors' witnesses in  
8 last years proceeding. I have not had time to discuss --  
9 I have read the report we got yesterday. I have not read  
10 the transcript we received today. I certainly haven't had  
11 time to discuss the findings made by OI either with  
12 Ms. Wicher, who, as you know, handled the proceeding last  
13 year, or with the witness, Mr. Hughes.

14           I would have, I think, no objection to the Staff  
15 proceeding with whatever direct testimony it would want  
16 to present on this issue at any time convenient to the Board,  
17 including today, if you wish, so long as I have an opportunity  
18 at a later date to conduct any appropriate cross-examination,  
19 and it may even be necessary to call Mr. Hughes as a rebuttal  
20 witness.

21           Now that is speculation.

22           JUDGE SMITH: I don't recoment that.

23           MR. CASSEL: I'm not recommending it either, Judge.  
24 I'm just pointing out that until I have had an opportunity --

25           JUDGE SMITH: You know, we made findings about the



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1 credibility of Mr. Hughes, and I would not recommend  
2 that approach. But nevertheless, we don't foreclose it.  
3 We will listen to your arguments.

4 MR. CASSEL: As you know, Judge, I've had limited  
5 opportunity to prepare for this proceeding, and I have  
6 prepared on those issues which were addressed. I have not  
7 prepared on any matters relating to Mr. Hughes. I am simply  
8 stating as a lawyer, it was not done so that we are not in  
9 a position to begin cross-examination or whatever rebuttal  
10 through whatever evidence we might have of the OI allegations  
11 until we have had some opportunity to review them.

12 I would suggest, if this procedure is acceptable,  
13 that the Staff, if it chooses and the Board desires, go ahead  
14 and present its supplemental oral testimony today, and then  
15 Intervenors reserve the right to cross any testimony presented  
16 on that issue until the hearings resume on August 20th, and  
17 if Intervenors want to present any evidence of their own  
18 relating to this matter, that we present it on August 13th,  
19 along with the prefiled testimony. And I am not at this  
20 time representing that we will have any cross or that we  
21 will have any evidence. It is simply until I have a chance  
22 to look into the matter and investigate it, I don't know.

23 JUDGE SMITH: Mr. Miller?

24 MR. MILLER: I agree with Mr. Cassel's approach.  
25 I think we ought to go ahead and get the evidence, the direct

ngc6-7

1 evidence, in the record now, and then I don't know whether  
2 we will want to conduct any cross-examination or not.

3 A cursory review of the OI report itself suggests  
4 to me that we would not have any cross with respect to  
5 Mr. Koca.

6 JUDGE SMITH: I guess there is also a matter of  
7 some concern, and that is, are you in a position yet --  
8 are either of you in a position yet to know if you are  
9 satisfied with the deletions, or if you are satisfied with  
10 the material as it is presented?

11 MR. CASSEL: I am not, Judge, for the same reasons.

12 JUDGE SMITH: Of course, you know, we were not  
13 a part of the protective order, but we continued it for this  
14 hearing. But the terms of it are not fresh in my mind.

15 Does it protect against revealing the identity  
16 of allegers? Is that included?

17 MR. LEWIS: I believe, Your Honor, that even under  
18 the protective order, the identities of allegers are still  
19 withheld. What was made available was information regarding  
20 the substance of allegations. There has always been an  
21 intention to accept, where the identity of the alleger is  
22 necessary or the identity of the source is necessary to  
23 some board of adjudication, to keep that information strictly  
24 confidential.

25 JUDGE SMITH: So the protective order does not

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1 satisfy -- would not satisfy --

2 MR. LEWIS: Not in our view.

3 MR. MILLER: As I understand from the conversations  
4 off the record with Mr. Lewis, the information that is  
5 deleted, including those portions of the OI report that say  
6 "Paragraphs deleted," contain only or mainly information  
7 that would reveal the identity of the informer.

8 JUDGE SMITH: Well, I don't think it can be  
9 represented that that's all the deleted information does.  
10 That is not your purpose, is it?

11 MR. LEWIS: I have attempted to go through -- I do  
12 have in my possession the full version, and I attempted,  
13 within the time that I had to compare, the Office of  
14 Investigations informed me that the reason for all the  
15 deletions was confidentiality concerns.

16 JUDGE SMITH: Yes. That's not the point.

17 MR. LEWIS: I understand. But there are matters  
18 that were felt it was necessary to delete because they could  
19 lead to or one could infer from them the identity of certain --

20 JUDGE SMITH: That's right. We all understand that.

21 MR. LEWIS: Now there may be other matters. I am  
22 not familiar with what other considerations may have gone  
23 into withholding of certain other information, and there  
24 may be --

25 JUDGE SMITH: That's still not the point. The point

mgc6-9

1 is, information has been deleted because it may have  
2 a tendency to identify allegeders, also may contain information  
3 of substance. I think that's Mr. Miller's point.

4 MR. LEWIS: That may be so, Your Honor.

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1 MR. LEWIS: That may be so, your Honor.

2 JUDGE SMITH: I might also comment, however, that  
3 having been present during the in-camera session, I really  
4 hope that we are not led into a large digression, because  
5 there just simply isn't anything new that is going to make  
6 a big difference in this lawsuit. It isn't worth it.

7 I realize careful lawyers have to be careful. But,  
8 I can tell you that you have a lot more important things to  
9 worry about than the delted information in these reports and  
10 in this in-camera session. It is a tempest in a teapot.

11 MR. MILLER: I was going to comment, Judge Smith,  
12 that having dealt with this question now for over a year,  
13 my belief is that if there is information of substance  
14 relating to the issues in this proceeding, they would have  
15 come up some other way, and perhaps they have. And the Board  
16 and the Parties have addressed those issues with evidence  
17 that is on the record and fully public.

18 Frankly, personally, I am sick and tired of the  
19 issue. It seems to me that there is simply no way that this  
20 Board or anybody else can get the Office of Investigations  
21 to do anything it doesn't want to do.

22 JUDGE SMITH: That's not true. We can. But it  
23 is going to be a big --

24 MR. MILLER: That's true, without moving heaven  
25 and earth. And, speaking for the Applicant, it is just

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1 not worth it.

2 We have got, as you suggest, enough on our plate  
3 to deal with in terms of real issues, rather than going and  
4 chasing will o' the wisps. And for the Applicant, I doubt  
5 very much that we are going to pursue this issue further.

6 MR. CASSEL: For the Intervenors, Judge, I  
7 agree with the philosophy expressed in Mr. Miller's  
8 statement. I have been through a lot of these cases where  
9 you spend half your time chasing after secret information  
10 and when you get there it turns out you wish you hadn't even  
11 started on the hunt.

12 But, until I have had a chance to look into  
13 this -- I may very well agree with Mr. Miller's characteriza-  
14 tion of the importance of the information -- I can't commit  
15 to that until I've had a chance to look into it.

16 JUDGE SMITH: Okay.

17 We will go one step further, too, if you wish.  
18 As I indicated, we did not depend upon this in-camera  
19 information in our first initial decision. I, for one,  
20 have never reread it.

21 If it will put the Intervenors at rest, or anybody  
22 at rest on the issue, we would go back and read the  
23 unexpurgated version in camera ourselves, and make a  
24 determination afresh, whether there is any need to pursue  
25 secret information again, if that would be helpful.

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1 My preference would be never to look at it  
2 again.

3 MR. MILLER: That would be my preference, that the  
4 Board not look at it again.

5 MR. CASSELL: I'm not at this point asking the  
6 Board to review it for that purpose. Again, if I  
7 decide later to pursue it, that would be one way to  
8 address it.

9 JUDGE SMITH: Okay.

10 There is one other problem, too, it may be neces-  
11 sary for one or two questions to Mr. Hayes to be put in  
12 camera. I don't know. I don't want to complicate things  
13 but the question would be, would the question in his view  
14 tend to identify the allegor. I don't know. I will  
15 ponder it.

16 MR. CASSEL: Judge, if we could try to do whatever  
17 we can without going into in-camera session, then I really  
18 prefer to avoid in-camera sessions if we can.

19 JUDGE SMITH: Yes, right. I really have a very  
20 strong desire to do that, too.

21 All right.

22 MR. LEWIS: If we may take a very brief break?

23 JUDGE SMITH: It is a good time for it.

24 (Recess)  
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1 JUDGE SMITH: Before we proceed, I want to  
2 correct a misimpression that perhaps my statement before  
3 the break may have caused.

4 I see no need in this proceeding presently for  
5 any in-camera ex-parte sessions. My reference to in-camera  
6 session was a reference to the possibility of a limited  
7 number of questions being asked under a protective order  
8 with representatives of all Parties present.

9 MR. CASSEL: I understood that to be what you  
10 meant before, Judge.

11 JUDGE SMITH: I did not use the word ex parte  
12 before, I just said in camera.

13 MR. CASSEL: I also understood your statement  
14 that you preferred to avoid that, if necessary. Meaning  
15 your preferred to avoid it even if not ex parte.

16 JUDGE SMITH: That's correct, yes.

17 MR. LEWIS: Your Honor, I have called to the  
18 stand Mr. Hayes and Mr. Connaughton regarding the Staff's  
19 second panel.

20 I think you know Mr. Hayes is closer to you,  
21 and Mr. Connaughton has previously testified and is further  
22 away from the Board. I believe they have both been previously  
23 sworn in this proceeding.

24 JUDGE SMITH: Yes they have, and they are still  
25 under oath.

1 Whereupon,

2 D. W. HAYES

3 K. A. CONNAUGHTON

4 were called as witnesses on behalf of the NRC Staff, and  
5 having been previously duly sworn, were further examined  
6 and testified as follows:

7 DIRECT EXAMINATION

8 BY MR. LEWIS:

9 Q Mr. Hayes, would you state your name and position  
10 with the NRC for the record?

11 A (Witness Hayes) My name is D. W. Hayes. I am  
12 employed by the U.S. Nuclear Regulatory Commission as Chief  
13 of Project Section 1B. My primary responsibility is the  
14 Byron Station.

15 Q And Mr. Hayes, did you -- do you have in front  
16 of you a copy of the testimony of the NRC Staff on Allegations  
17 Resolved Based in Whole or in Part on the Reinspection Program  
18 or Otherwise Relevant to the Reinspection Program?

19 A Yes, I do.

20 Q And does that testimony contain within it answers  
21 that bear your name?

22 A Yes, it does.

23 Q Did you prepre those?

24 A Yes. In conjunction with Mr. Connaughton.

25 Q And, are the answers contained in that testimony



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1 true and correct to the best of your knowledge and belief?

2 A Yes, they are.

3 Q Do you also have attached to that testimony a  
4 one-page statement entitled "Special Qualifications of D. W.  
5 Hayes?"

6 A Yes.

7 Q And, does that accurately reflect your Statement  
8 of Professional Qualifications?

9 A Yes, it does.

10 Q Mr. Connaughton, would you please reidentify  
11 yourself for the record and state your position?

12 A (Witness Connaughton) My name is Kevin Connaughton.  
13 I am employed by the Nuclear Regulatory Commission as a  
14 resident inspector assigned to the Byron Station.

15 Q Mr. Connaughton, the testimony -- do you have in  
16 front of you a copy of the testimony of NRC Staff on the  
17 Allegations -- I am not going to read the whole title --

18 A Yes.

19 Q That is your testimony that we are referring to.  
20 Did you assist Mr. Hayes in the preparation of  
21 this testimony?

22 A That is correct.

23 Q And where Mr. Hayes' name appears as the identified  
24 witness, are you familiar with the responses to those  
25 questions?

mm7

1           A     Yes, I am.

2           Q     Do you adopt them as your testimony in this  
3 proceeding?

4           A     Yes, I do.

5           Q     Are they true and correct to the best of your  
6 knowledge and belief?

7           A     Yes, it is.

8           Q     Gentlemen, attached to your testimony are  
9 attachments A, B, C, D1 and D2. Do these represent the  
10 Inspection Reports which are referenced in your testimony?

11          A     (Witness Hayes) Yes, they do.

12          A     (Witness Connaughton) Yes, they do.

13          Q     Are these Inspection Reports which either of  
14 you or both of you are involved in?

15          A     (Witness Hayes) I would be involved in all of  
16 them, from the standpoint of, I reviewed them and concurred  
17 in the reports.

18                   I believe there is one, 84-02, which myself and  
19 Mr. Connaughton prepared.

20                   MR. LEWIS: Mr. Chairman, with that preliminary  
21 information --

22                   BY MR. LEWIS:

23           Q     Let me ask, Mr. Connaughton, whether there are  
24 any corrections you wish to make to the testimony?

25          A     (Witness Connaughton) Yes, sir, there is one

mm8

1 correction. Answer A1, second paragraph, fourth line down  
2 should read: "attached to the testimony of NRC Staff on  
3 remanded issues."

4 Q Instead of "to remand"?

5 A That's correct.

6 Q Is that all of the corrections you have?

7 A Yes, it is.

8 Q Mr. Hayes, do you have any corrections?

9 A (Witness Hayes) No, I do not.

10 MR. LEWIS: Mr. Chairman, I would move the  
11 admission of the testimony of NRC Staff on Allegations  
12 Resolved Based in Whole or in Part on Reinspection Program  
13 or Otherwise Relevant to the Reinspection Program into the  
14 record, and ask that it be bound into the transcript as if  
15 read.

16 That would include attachments A through D.

17 JUDGE SMITH: Are there any objections?

18 MR. GALLO: No objection.

19 MR. CASSEL: No objection.

20 JUDGE SMITH: The testimony is received.

21 (Testimony of NRC Staff on Allegations Resolved  
22 Based in Part or in Whole on the Reinspection  
23 Program or Otherwise Relevant to the Reinspection  
24 Program, follows:)  
25

SUMMARY OF "TESTIMONY OF NRC STAFF ON ALLEGATIONS  
RESOLVED BASED (IN PART OR IN WHOLE) ON THE REINSPECTION  
PROGRAM OR OTHERWISE RELEVANT TO THE REINSPECTION PROGRAM"

This testimony discusses allegations which were either resolved in part or in whole by the reinspection program or otherwise have relevance to the reinspection program. It makes the following principal points:

1. Two allegations, concerning weld undercut and quality control inspector certification, were resolved on the basis of the reinspection program.
2. For three allegations concerning Hatfield welding, data from the reinspection program were reviewed to supplement the resolution of the allegations.
3. One allegation concerning the certification of a Hatfield QC inspector was substantiated. However, appropriate corrective actions were taken.



UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )  
COMMONWEALTH EDISON COMPANY ) Docket Nos. 50-454  
(Byron Station, Units 1 and 2) ) 50-455

TESTIMONY OF NRC STAFF ON ALLEGATIONS RESOLVED BASED  
(IN PART OR IN WHOLE) ON THE REINSPECTION PROGRAM  
OR OTHERWISE RELEVANT TO THE REINSPECTION PROGRAM

Q1. Would each of the panel members please reintroduce themselves by stating their names, employment affiliation, and professional qualifications.

A1. (Mr. Hayes). My name is D. W. Hayes. I am employed by the U.S. Nuclear Regulatory Commission as Chief of a Reactor Projects Section in the Region III Office. A copy of my professional qualifications is attached.

(Mr. Connaughton) My name is K. A. Connaughton. I am employed by the U.S. Nuclear Regulatory Commission as Resident Inspector in the Region III Office. A copy of my professional qualifications is attached to the Testimony of NRC Staff <sup>on</sup> ~~to~~ <sup>ed</sup> Remand Issues With Respect to the Reinspection Program.

Q2. Could each of the panel members describe their responsibilities with respect to the Byron plant?

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A2. (Mr. Hayes). I have project responsibility as a Section Chief for the Byron Plant. My duties as the Project Section Chief are to assure the accomplishment of the inspection program requirements for the Byron Plant. I have also been personally involved in the inspection of allegations received regarding Byron.

(Mr. Connaughton) I have been the assigned Resident Inspector (RI) for the Byron Station since August 1982. My duties are to perform inspections of construction and preoperational test activities at the Byron Station, Units 1 and 2. I report to the Senior Resident Inspector (SRI) assigned to Byron.

Q3. Could you briefly describe the contents of this testimony?

A3. (Mr. Hayes) The testimony which follows discusses the extent to which the staff relied upon the Byron reinspection program to resolve worker allegations uninvestigated at the close of the evidentiary record in August 1983. The testimony also addresses any other allegations received by the Staff of potential significance to the reinspection program.

The testimony is accompanied by four attachments. Attachments A through D contain excerpts from Inspection Reports 50-454/83-39, 84-02, 83-07, 83-49.

Q4. In what way were the Byron reinspection results relied upon by the staff to dispose of allegations, particularly in relation to Hatfield welding?

A4. (Mr. Hayes). The Byron reinspection program was relied upon to resolve two allegations and supplemented the resolution of three others. The remainder of the 23 allegations assigned to Region III and uninvestigated at the close of the hearing in August 1983 were resolved independent of the reinspection program.

Of the two resolved by the reinspection program, one concerned welding by Hatfield (i.e., "weld undercut is a widespread and serious problem"). This allegation was received in November 1982 and is documented with its resolution in Inspection Report 454/83-39 pages 41 and 42 (See Attachment A). As stated there, third party inspections and independent NRC inspection of Hatfield welds led to the conclusion that there were few cases of undercut in excess of American Welding Society (AWS) code limits and that these were mostly border-line cases. The allegation was not, therefore, substantiated.

The other allegation, discussed in Inspection Report 454/84-02, page 15, item W (See Attachment B) concerned quality control inspector certification. The allegation, which was received in August 1982, stated that based on the allegor's review of certification records of eight quality control inspectors the allegor considered two individuals to be unqualified. The allegor did not identify the two individuals. At the time the allegation was received, corrective actions in response

to noncompliance item 454/82-05-19; 455/82-04-19 were not yet complete. The allegation was therefore considered substantiated. The issue raised by the allegation has, however, been resolved by the reinspection program's extensive examination of the work of QC inspectors at the Byron site.

The three allegations where data from the reinspection program were reviewed to supplement their resolution all concerned Hatfield welding. These are documented in Inspection Report 454/83-39, pages 44, 47, and 48-49, items d, f and h. (See Attachment C).

The first allegation stated that approximately 90% of certain Hatfield hangers covered with fireproofing which were inspected because weld travelers were missing were found to be rejectable. This allegation was disproven by the results of inspections conducted to resolve Nonconformance Report (NR) No. 407. Furthermore, the reinspection program provided additional confirmation of this finding wherein welds covered with fireproofing were reinspected. There were no welds identified that required repair.

The second allegation claimed that there was a high enough reject rate for Hatfield hanger welds to have warranted removal of fireproofing to reinspect additional welds. This allegation was considered substantiated in part, but was resolved in the Reinspection Program by the removal of all of the fireproofing in the areas identified by

the allegor and the reinspection of all of the connections. Of the 300 connections, one was found to be unacceptable.

The third allegation stated that some Hatfield welds which had been covered with fireproofing had only been tack-welded (i.e., incomplete welds) and that Discrepancy Reports should have been written when inspections determined that documentation did not exist of completed welds. This allegation was resolved on two bases: 1) the welds referred to by the allegor were completed and subject to inspection and 2) the reinspection program looked at approximately 5,500 welds which had been fireproofed and found only two tack-welds. The staff further noted that Discrepancy Reports would have been required only if the items in question had been accepted by quality control inspectors (QC) and that it appeared that the allegedly tack-welded items had not yet been accepted by QC at the time of the allegation. On these bases, the staff closed the allegation.

Q5. Do any particular allegations inspected by the staff have independent and important relevance to the Byron reinspection program?

(Prehearing Conference Order, p. 9).

A5. (Mr. Hayes). The NRC did receive several allegations concerning training and certification of quality control inspectors at Hatfield. Some of these allegations could raise questions regarding the effectiveness of the upgraded certification program for QC inspectors. One such allegation (involving the certification of one individual) was substantiated. Appropriate corrective actions were taken with regard to this individual.



The individual was recertified in accordance with the June 9, 1982 CECo memorandum and his recertification was acceptable to the staff. (See Inspection Reports 50-454/83-07, pages 7-8, item 3, and 50-454/83-49, page 4, item f, which are Attachments D-1 and D-2 to this testimony).

The staff has not identified any other allegations which are of significance to the reinspection program.



PROFESSIONAL QUALIFICATIONS

OF

D. W. HAYES

REGION III, UNITED STATES NUCLEAR REGULATORY COMMISSION

Mr. Hayes is Chief, Reactor Project Section 1B, Division of Project and Resident Programs, NRC, Region III, Glen Ellyn, Illinois. Mr. Hayes is responsible for supervision of six reactor inspectors in the conduct of a prescribed inspection program at nuclear power facilities under construction within the State of Illinois.

Mr. Hayes attended Illinois Institute of Technology under the Navy V-12 and ROTC programs, majoring in Electrical Engineering.

Prior Work History

Mr. Hayes has been in his present or similar positions since September, 1973. From August 1970 until September 1973, he was assigned and performed the duties of a reactor inspector, Division of Compliance, Region III, U.S. Atomic Energy Commission (Office of Inspection and Enforcement, United States Nuclear Regulatory Commission). Mr. Hayes has conducted, or participated in over 100 inspections of reactor facilities under construction, including special investigative inspections at North Anna Nuclear Power Facility, Midland Power Facility, Marble Hill, the South Texas Project and Clinton.

Prior to his employment with the Atomic Energy Commission, Mr. Hayes worked for the Battelle Northwest Laboratory from January 1965 until August 1970, as a Senior Research Engineer and as a Control Engineer. In addition, from 1948 until January 1965, Mr. Hayes was employed by the General Electric Company in various positions relating to nuclear energy, including Reactor Engineer, Maintenance Manager, Supervisor, Planning and Scheduling and Maintenance Foreman, Multicraft Crews.

# From Inspection Report 454/83-39

- . Purchase Orders
- . Component Drawings
- . Material Receiving Reports
- . Quality Release Forms
- . ASME Data Forms
- . Certificates of Conformance
- . QA Checklists
- . Vendor Surveillance Reports
- . Audit Reports
- . QA Evaluation Reports
- . Qualification Records for 10 Welders

## c. Safety Related Components - Review of Quality Documents

The inspector reviewed the following documents as they pertain to safety related components and determined that they conform to the QA program as described in Chapter 17 of the facility SAR.

- . 2702 NSSS Specification
- . QA Manuals:
  - Commonwealth Edison
  - Hunter
- . Westinghouse Technical Manuals
- . L2781 Rigging and Lifting Specification
- . Equipment Installation Process Sheets
- . Procedure No. 3.102, Material Procurement
- . Procedure No. 3.602, Material Receiving and Inspection
- . Procedure No. 3.801, Storage of Components and Materials
- . Procedure No. 5.201, Welding Procedure Qualification
- . Procedure No. 50, Welding Procedure
- . Procedure No. 5.502, Grinding Supports
- . Procedure No. 4.001, Bolted Connections
- . Procedure No. 118 and 119, Load Testing Cranes
- . Procedure No. 120, Crane Erection
- . Procedure Nos. 101, 109, 113 and 117, Transport and Setting of Steam Generators and Pressurizer

No items of noncompliance or deviations were identified.

## 7. Allegations

On November 23, 1982, Level II Quality Control Inspectors employed by Pittsburgh Testing Laboratory detailed to Hatfield Electric Company contacted the Resident Inspector's Office and stated the following allegations:

### a. Allegation

Weld undercut is a widespread and serious problem.

# From Inspection Report 454/E3-39

## NRC Findings

Undercut is a groove melted into the base metal adjacent to the toe or root of the weld and left unfilled by weld metal. The allegor was referring specifically to welding performed by Hatfield Electric Company involving cable trays, hangers and associated structural elements. The applicable American Welding Society (AWS) Codes specify maximum permissible undercut as a function of structural member thickness or 1/32", whichever is less. The allegor characterized weld undercut as a "serious" problem in the context of AWS Code compliance. The reinspection program established in response to the noncompliance item identified as 454/82-05-19; 455/82-04-19, and which is currently underway identified instances of undercut resulting in weld rejection and requiring rework/repair to achieve AWS Code compliance. The inspector visually examined a nonrandom sample consisting of 204 Hatfield welds (see paragraph D.1.(b)) including 138 welds that were determined not to have unacceptable undercut by the contractor, 21 welds that were determined to be unacceptable by both the contractor and the third party and 45 welds that were determined to be unacceptable by the contractor and later determined to be acceptable by the third party. The inspector found the reinspections to be overly critical in the evaluation of undercut with most rejected welds being border-line cases. The inspector was informed that in some cases the original reinspections were performed without the use of gages to measure undercut. If gages were not used, it would have been extremely difficult to determine undercut which was close to, but not in excess of, 1/32" as being acceptable. The third party was reinspecting all of the unacceptable welds found in the reinspection program by the contractor. The third party inspections were identifying most of the overcalls. Weld undercut could not be substantiated as being a widespread and serious problem because of the few, mostly border-line, cases of undercut in excess of AWS code limits being identified.

The weld applications involved in electrical installation at Byron Station are such that in most cases, undercut would have to greatly exceed AWS Code limits to compromise the structural adequacy of the installations. This allegation could not be substantiated and is considered closed.

### b. Allegation

Some hangers do not have weld travelers for the auxiliary steel.

### NRC Findings

The allegation concerns lack of documentation (either lost or destroyed) of quality control inspections for certain welds. Weld card travelers are issued to welders prior to welding on a given item. The traveler is used to document the welding activity and quality control inspection of the completed welds. When a weld traveler is illegible, lost, or destroyed, a new weld traveler is initiated to re-establish and document the quality of an item. The item (weld) must be reinspected. As a result of nonconformance

## From Inspection Report 454/84-02

- HECO Engineering reviews the DR and recalculates the maximum allowable pulling tension based on the "as built" configuration of the conduit rather than the minimum (the actual bend radius is generally larger than the minimum allowed).
- If the actual pulling tension exceeds the recalculated maximum then a nonconformance report (NCR) is issued and sent to CECO/S&L for resolution.

A cursory review of the NCR log for the period February 24, 1982 through January 12, 1984 indicated that at least 25 NCRs concerning over tensioning of cables had occurred. Fourteen of these were still open as of January 14, 1984. Most of the NCRs had been issued in 1983 subsequent to receipt of the allegation.

The DR log was also reviewed but did not contain enough detail to identify a DR concerning cable over tensioning.

Discussions with cognizant Hatfield QC personnel indicated that the number of over tensioned cables was not unusual considering the several thousand cables being installed and that when over tensioning did occur it was documented and properly resolved.

Documentation relative to the broken instrument cable was not located but only a cursory review was performed.

This item remains open pending further and more detailed review of the records, discussions with other QC inspectors and electrical craftsmen and verification of corrective action on: (1) cables identified on DRs and NCRs as over tensioned, and (2) cables installed prior to when installed tension measurements were required. (50-454/84-02-03; 50-455/84-02-03)

### Ⓜ Allegation

Alleger claimed to have reviewed the qualification records of the Hatfield and Pittsburgh Testing electrical inspectors. Alleger considered only about six of eight Level II inspectors to be qualified for the position they hold. As an example, the lead inspectors had background in civil, not electrical, inspection.

### Finding

This allegation is true but the item was previously identified during the team inspection at Byron Station and is being tracked as an item of noncompliance, No. 454/82-05-19; 455/82-05-19. Also see NRC Inspection Report No. 50-454/82-17; 50-455/82-12, Item 3.b.(1) on Pages 4 and 5.



# From Inspection Report 454/83-39

were all certified. QC hold points for preheat verification and temperature stick logs were not required by AWS. Based upon the inspector's review of the welding procedures, unacceptable welds would not have been attributable to deficient weld procedures. This allegation could not be substantiated and is considered closed.

## d. Allegation

For certain hangers covered with fireproofing insulation and for which weld travelers were missing, the insulation was removed and welds reinspected. A reject rate of approximately 90% has been established for these welds.

## NRC Findings

The allegation in this area identified welds which were subject to corrective action and reinspection. These welds therefore do not have potential safety significance. Weld card travelers are issued to welders prior to welding on a given item. The traveler is used to document the welding activity and quality control inspection of the completed welds. When a weld traveler is illegible, lost, or destroyed, a new weld traveler is initiated to re-establish and document the quality of an item. The item (weld) must be reinspected. As a result of Nonconformance Report (NR) No. 407, dated February 11, 1982, (cable pan hanger inspection was inadequate corrective action, reinspection of all cable pan hangers) 137 hangers have had the fireproofing insulation removed and inspected. Three hangers have been found to be unacceptable, and one hanger did not have a weld traveler. Hatfield is in the process of identifying each hanger that does not have a complete inspection, or some type of documentation, by reviewing printouts on hangers with weld travelers referencing S&L Drawings to determine which hangers have no documentation as being inspected. The inspector was informed that NR No. 407 will be closed prior to fuel load.

If there is no record or documentation for a hanger it will be inspected. If there is minimum documentation on a hanger, it will not be inspected at this time. All the documentation will be evaluated, depending on the type of documentation, to determine if the hanger is inspected or not at a later date. CECO has an open QA Audit No. 6-83-124 on the above item. Additionally, as part of the reinspection program established in response to noncompliance item identified as 454/82-05-19; 455/82-04-19, welds covered with fireproofing will be reinspected even though weld travelers exist to document the quality of these welds. A reject rate of approximately 90% could not be substantiated.

## e. Allegation

A "Unit Surveillance Walkdown" of a system (not specified) performed by Pittsburgh Testing Laboratory and CECO resulted in a 38% weld rejection rate.



## From Inspection Report 454/83-39

This allegation was substantiated, but made after the reinspection program had started. This allegation is considered closed.

### f. Allegation

In drawing area 03051 or 13051 (426' level) 64 hangers were to be checked. Of the 36 or 37 hangers with all welds accessible, 14 had bad connections. The inaccessible connections had to be accepted on the strength of the weld cards. Authorization to remove insulation to inspect welds was denied.

### NRC Findings

The allegation details a reinspection effort conducted by the allegor. Though it is not clear from the allegation as it is stated, the allegor apparently felt the weld connection detail reject rate was high enough to warrant the removal of fireproofing to reinspect additional welds. The allegor states that 14 of 36 or 37 hangers had bad connections (individual welds). The allegor identified welds found rejectable were subject to corrective action. Whether or not the removal of fireproofing to reinspect additional welds was warranted in the instance referred to by the allegor is not clear. As stated in the discussion of the allegation in this area, weld connection details covered by fireproofing are included in the reinspection program established in response to the noncompliance item identified as 454/82-05-19; 455/82-04-19. The licensee had all the fireproofing removed in drawing areas 03051 and 13051 and approximately 300 connections were inspected (all weld connection details). One was found to be unacceptable.

During the pan hanger program (June 1982 to January 1983), it was the policy of Hatfield QA/QC department to accept cable pan hanger connections that were fireproofed with a traveler card number that had been accepted by a weld inspector. If there was no weld inspection in the file for the specified hanger, the fireproofing was to be removed and the required inspection performed and documented. As of January 1983, the policy was changed. Welds are not accepted on the strength of traveler cards only. This allegation was substantiated in part and is now considered closed.

### g. Allegation

Panels in Unit 1 containment supplied by Systems Controls Corporation have welds that are not to code (AWS) in that they are undersized (3/8" vs 5/8").

### NRC Findings

The allegation in this area concerns undersize welds on panels supplied by System Controls Corporation (SCC). The problem of various deficiencies with panels supplied by SCC was identified December 1979 and January in 1980 the first local instrument control panels were shipped from SCC to the Byron site. CECO initially waived final inspection of the panels at SCC and conducted a receipt inspection of

## From Inspection Report 454/B3-39

the panels when they arrived at the site but did not include a review of workmanship due to the lack of a dimensional drawing accompanying the panels upon arrival on site. This led the receipt inspector to "N/A" that step in the inspection report. RIII received allegations on February 11, 1980, via a telephone call, that local instrument panels from SCC may have nonconforming welds. Site QA personnel inspected and identified nonconforming welds on panels which had passed receipt inspection by site receipt inspectors. CECO administered NCRs F-474 and F-484, February 1980. The NCRs were closed by the licensee on October 21, 1980, based on repairs and inspections of the panels. The seventh and final licensee status report on this subject was sent to Region III on March 25, 1982 and no further response was required. The inspector reviewed the following drawings of panels in Unit 1 containment supplied by Systems Controls Corporation, and found that the only weld sizes involved for Class 1, 4 and 8 foot panels were 3/16" and 1/8" welds.

Drawing No. 6577-W5, Rev. 0, Welding Details (5 details)  
Drawing No. 6577-M-1 PL 50J, Rev. 3, Construction  
Drawing No. 6577-M-1 PL 52J, Rev. 4, Construction  
Drawing No. 6577-M-1 PL 66J, Rev. 3, Construction  
Drawing No. 6577-M-1 PL 67J, Rev. 4, Construction  
Drawing No. 6577-M-1 PL 71J, Rev. 3, Construction  
Drawing No. 6577-M-1 PL 75J, Rev. 3, Construction  
Drawing No. 6577-M-1 PL 54J, Rev. 4, Construction  
Drawing No. 6577-M-1 PL 55J, Rev. 4, Construction  
Drawing No. 6577-M-1 PL 56J, Rev. 3, Construction  
Drawing No. 6577-M-1 PL 57J, Rev. 3, Construction  
Drawing No. 6577-M-1 PL 60JA, Rev. 3, Construction  
Drawing No. 6577-M-1 PL 60JB, Rev. 4, Construction  
Drawing No. 6577-M-1 PL 60JC, Rev. 3, Construction  
Drawing No. 6577-M-1 PL 60JD, Rev. 3, Construction  
Drawing No. 6577-M-1 PL 61JA, Rev. 3, Construction  
Drawing No. 6577-M-1 PL 61JB, Rev. 4, Construction  
Drawing No. 6577-M-1 PL 61JC, Rev. 3, Construction  
Drawing No. 6577-M-1 PL 61JD, Rev. 3, Construction  
Drawing No. 6577-M-1 PL 69J, Rev. 3, Construction  
Drawing No. 6577-M-1 PL 70J, Rev. 4, Construction  
Drawing No. 6577-M-1 PL 72J, Rev. 5, Construction  
Drawing No. 6577-M-1 PL 74J, Rev. 4, Construction  
Drawing No. 6577-M-1 PL 76J, Rev. 3, Construction

The 3/8" vs 5/8" welds could not be substantiated. The only welding Hatfield performed on the panels was the termination of the electrical connections. This allegation is considered closed.

### (h) Allegation

Some welds that have been covered with fireproofing are only tack-welded. When found, a traveler is written without a Discrepancy Report being written.

## From Inspection Report 454/83-39

### NRC Findings

The allegation concerns incomplete welds being covered by fireproofing insulation. Since welding was not completed, weld travelers indicating weld completion and quality control inspection did not exist. To complete the connection and establish and document the quality of the welds, fireproofing was removed. Detection of such welds was accomplished when assembling the required documentation for the item as is required prior to release to the CECO. Ideally, coordination of fireproofing activities with cable tray hanger installation would have precluded such occurrences. The welds referred to by the allegor were completed and subject to inspection. The allegor felt that Discrepancy Reports should have been written. Had the items been previously accepted, a Discrepancy Report should have been written, but this apparently was not the case. Fireproofing an incomplete and/or uninspected item, while not a good practice, does not result in the item being accepted because, in order to satisfy quality control documentation requirements, the item must be complete, inspected and found acceptable. As part of the reinspection program established in response to the noncompliance item identified as 454/82-05-19; 455/82-04-19, certain welds covered with fireproofing are being reinspected even though weld travelers exist to document the quality of the welds. As a result of the reinspection program, approximately 5,500 welds have had fireproofing removed by Hatfield. Two welds were found to be tack welded. The fireproofing was removed to find welds that seven inspectors had inspected for their first 90 days of inspection in accordance with the reinspection program. These welds were to be fillets and were located in the auxiliary building. The safety significance of this allegation is minimal when considering the mechanism in place, particularly the system of quality documentation, to assure detection of incomplete or uninspected items. This allegation is considered closed.

#### i. Allegation

An inspection by an allegor revealed a weld not to plan. The welder indicated on the traveler was neither onsite, nor issued weld rod on the date indicated on the traveler. A person asked the allegor to change the date on the traveler. The allegor stated that he would not.

### NRC Findings

The allegation concerns an apparent discrepancy between the date on a weld traveler and other documents which indicate that the welder identified on the traveler was not on site on that date. When a weld traveler was lost, a new weld traveler was initiated to re-establish and document the quality of affected items. The item(s) (welds) must be reinspected. Since the original record was lost, it was impossible to determine the date on which the weld was made. The welders identification, however, could be obtained since it was marked or stamped on the item.



*From Inspection Report 454/83-07*

- (2) Allegation 8-19-82-1.C.1 - It was alleged that an individual had been hired by HEC0 as a Quality Control Inspector after only a short period of employment with another service group at Byron Station. In addition certain HEC0 managers had stated that this individual was qualified and working as a Level II inspector. These HEC0 managers were purported to have suggested that other QC inspectors write letters to formally upgrade the subject individual to the Level II position.

This concern is of a subjective nature and lacks sufficient detail to be evaluated without additional specific information in terms of time frame and colleague involvement. This item is closed. The second portion of this item, that the subject individual "was unqualified in the level I position," and "could not read drawings or welding symbols" is being tracked as open item 82-05-19 and will be examined in a subsequent inspection.

- (3) Allegation 11-30-82-IV.B - It was alleged that "Tom Wells is a level II inspector. Prior experience was as a carpenter."

The inspectors reviewed the qualification and certification packages for seven HEC0 QC inspectors including Tom Wells. The review of Mr. Wells' certification indicated that HEC0 was taking credit for "three and one half years nuclear power experience" to qualify him as a level II Quality Control Inspector. The information in Mr. Wells' file was incomplete in the descriptions of duties and responsibilities and did not provide sufficient data to support the claim of three and one-half years nuclear experience. Mr. Wells was interviewed for the purpose of establishing duties, responsibilities, training, certification and qualification for the period of 1973 through the present. Based on the information provided by Mr. Wells in the interview a resume of his experience was prepared. A review of this resume revealed that Mr. Wells' total combined related equivalent inspection experience, prior to certification as a level II QC inspector by HEC0, consisted of a period of 5 months and 7 days as a HEC0 level I QC inspector.

The inspector also noted that the licensee stated in the Stiede to Keppler memo dated November 5, 1982, "The minimum features and methodologies to be verified in our review at Byron were established in a June 9, 1982 directive." The memo continues "Our review of qualification records is expected to be complete by December 31, 1982. Any required retraining/requalification/recertification is to be completed by February 1, 1983.

Contrary to the above, although the program outlined in the June 9, 1982 memo is in fact in place, Mr. Wells was still

## From Inspection Report 454/83-07

certified as a HECO level II QC inspector and continuing to perform safety related inspection functions as of February 17, 1983.

Therefore, this failure to establish the requisite related experience in equivalent inspection for level II certification is considered to be a violation of 10 CFR, Appendix B, Criterion II and ANSI N45.2.6-1978 and is considered to be an item of noncompliance as described in the Appendix to the report transmittal letter (454/83-07-01; 455/83-03-01).

- (4) Allegation 1-18-83-II.C - This allegation concerned the use of DV-24 connections where plan calls for a DV-22 connection. This concern is now no longer an issue since the alleged stated that he had subsequently seen a memo from Sargent and Lundy which allowed this substitution. Based on the apparent withdrawal of this concern, this item is closed.
- (5) Allegation 1-18-83-II.D - The alleged's previously stated position regarding lack of QA/QC review of rework authorization prior to initiation of rework was not really a concern regarding lack of QA/QC but rather an opinion that QA/QC review prior to initiating rework might reduce costs. Based on the nature and content of this opinion, this item is closed.

### 6. Plant Tour

The inspector walked through various areas of the site including Units 1 and 2 containment, auxiliary building, and turbine building to observe operations and activities in progress, to inspect the general state of cleanliness, housekeeping and adherence to fire protection rules.

No apparent items of noncompliance or deviations were observed.

### 7. Exit Meeting

The inspector met with licensee representatives identified in Paragraph 1 at an exit meeting at the conclusion of the inspection on February 17, 1983. The inspector summarized the purpose, scope, and findings of the inspection. The licensee's representatives acknowledged the findings reported herein.



From Inspection Report 454/83-49

- d. (Closed) Noncompliance 454/82-24-01c; 455/82-18-01c - "Failure to Ensure Access to Stored Items."

The Applicant's response indicated that the layout in warehouse #3 was reorganized to facilitate easy access to stored items and scheduled surveillances would be performed to verify access according to BSI #27. The inspector verified by touring warehouse #3 that by the reorganization performed does provide ready access for inspection or maintenance without excessive handling. Review of BSI #27, Exhibit B, Item A.5, Items stored, etc., dated March 21, 1983 indicated this item was acceptable.

This item is considered "CLOSED".

- e. (Closed) Noncompliance 454/82-24-01d; 455/82-18-01d - "Failure to Control Hazardous Materials."

The inspector verified that hazardous materials are being properly segregated in warehouse #3 as required and that surveillances specified in the Applicant's response were being performed as specified in BSI #27. A review of BSI #27, Exhibit B, Item A.10 "flammables not stored near safety related items", showed the item to be acceptable.

This item is considered "CLOSED".

- (f.) (Closed) Noncompliance 454/83-07-01; 455/83-03-01 - "HECo Utilizing a Level II QC Inspector Who Did Not Meet Minimum Related Equivalent Inspector Experience."

Applicant's response indicated that subject inspector's Level II certification was rescinded on February 18, 1983. In subsequent discussion related to the Applicant's response the time frame and methodology for re-certification was determined to be re-examination of the first three months of the subject inspector's work as a Level I plus the first 30 days of his work as a Level II. Based on providing evidence of acceptable performance for both these periods, the subject inspector would be re-certified to perform safety related inspection activities in the areas for which he was certified.

The inspector reviewed reinspection results for the subject inspector as provided in the raw data input for the 82-05-19 reinspection report for his Level I performance and HECo QA memo #76 for his Level II performance. The results of the Level I performance provided a 97.1% acceptance rate for Visual Weld Inspections and the Level II performance data provided a minimum acceptance rate of 94.01%. Both acceptance rates exceed the 90% established requirement for acceptance.

Subject to satisfactory evaluation and acceptance of the 82-05-19 reinspection program, this item is considered "CLOSED".

1 BY MR. LEWIS:

2 Q Mr. Hayes, at the time that you prepared this  
3 testimony, had you received the OI Report, that being the  
4 report on the Byron investigation dated July 18, 1984?

5 A (Witness Hayes) No, I did not.

6 Q Since that time, have you received in your  
7 capacity at Region III a copy of the OI Report?

8 A Yes, I have.

9 Q And did you undertake a review of that report  
10 in order to determine whether or not there were any issues  
11 in there requiring further Region III inspection?

12 A Yes, I did.

13 Q And what was the conclusion of your review?

14 A There was nothing in the report or the exhibits  
15 that raised a technical issue that had not been resolved.

16 Q The Board had earlier asked the parties to  
17 comment upon whether or not any circumstances surrounding  
18 the termination of the employment of Mr. Allen Koca of  
19 Hatfield Electric Company, who was the QC supervisor, may  
20 have had any implications for the Reinspection Program,  
21 which we have been discussing in this proceeding.

22 Have you reviewed the OI Report as it relates  
23 to the functions performed by Mr. Koca and any allegations  
24 that relate to his performance of those functions?

25 A Yes, I have.

1 Q With respect to what is noted to be Allegation  
2 No. 2 in the OI Report which related to retesting of QC  
3 inspectors, or QC inspector candidates, for Hatfield, has  
4 the NRC Staff looked into questions regarding the validity  
5 of the certification and the adequacy of the certification  
6 of Hatfield inspectors, including the testing process  
7 involved?

8 A Yes.

9 JUDGE SMITH: Wait a minute. Allegation 2 is  
10 "Hughes was encouraged and permitted to cheat on written  
11 Level II electrical certification examination." I regard  
12 that as res judicata in this case.

13 MR. LEWIS: Yes, Your Honor, my questioning  
14 would go to the question of whether or not the matters that  
15 the NRC Staff has looked at in its review of the Reinspection  
16 Program and the recertification program have encompassed  
17 these kinds of concerns. And that's what I was focusing on.

18 JUDGE SMITH: Okay. I think that's okay. I'm  
19 not sure I understand, but proceed. There's no objection.

20 MR. LEWIS: I believe he did answer the question.

21 BY MR. LEWIS:

22 Q Would you repeat your answer please? If you  
23 want me to repeat the question, I will.

24 A (Witness Hayes) Perhaps just to make sure.

25 Q I'm inquiring as to whether or not with respect

1 to the issue that is discussed in Allegation 2 regarding  
2 testing practices, whether or not the Staff has looked into  
3 the Hatfield testing process of QC inspectors and the  
4 certification process, and have we identified any problems.

5 A We did look into them. In fact, Kavin Ward  
6 looked at all of the certification packages for the visual  
7 weld inspectors for Hatfield, and Ray Love looked at a number  
8 of certification packages for inspectors inspecting other  
9 attributes by Hatfield. Junior Hines, present resident  
10 inspector, also did some inspection in that area, as well  
11 as Bill Forney, and did not identify any problems.

12 Q Has Commonwealth Edison Company also reviewed  
13 certification packages of Hatfield inspectors?

14 A Yes. As part of the recertification program,  
15 it's my understanding they looked at 100 percent of the  
16 Hatfield certification packages.

17 Q In Allegation No. 7, a concern was raised regarding  
18 whether or not certain documents may have been removed from  
19 certification packages that the NRC Staff was requested to  
20 review during the course of its inspections.

21 Has the NRC Staff satisfied itself that it has  
22 looked into certification packages of Hatfield inspectors  
23 in order to be able to determine whether or not the relevant  
24 information was contained therein?

25 A Yes. As part of our review and certification I



1 just discussed.

2 Q Did we identify any deficiencies in those  
3 certification packages that was of concern to Staff?

4 A No. Removal of the documents resulted in an  
5 adverse finding.

6 Q By that do you mean that if certain documents  
7 were removed from the certification package, the package  
8 would not --

9 A We would have some question as to the certifica-  
10 tion of that individual.

11 Q We did not find those circumstances to exist,  
12 did we?

13 A No, we did not.

14 Q With regard to the matters that are discussed  
15 in the OI Report, do they raise any question in your mind  
16 as to the validity or the integrity of the Reinspection  
17 Program conducted by Commonwealth Edison?

18 A No, they do not. In no way.

19 MR. LEWIS: I think with those additional  
20 questions, Your Honor, I will make this panel available for  
21 cross examination on their prefiled, direct testimony, if  
22 the parties wish at this time to undertake any cross  
23 examination of the additional oral supplemental testimony.

24 JUDGE SMITH: Mr. Cassel?

25 MR. CASSEL: Judge, as I indicated earlier, I



1 would like to reserve until a later date any potential  
2 cross examination on the supplemental oral testimony.  
3 I will limit my cross examination to the prefiled, written  
4 testimony of these witnesses.

5 JUDGE SMITH: That seems reasonable. Do you  
6 object to that, Mr. Lewis?

7 MR. LEWIS: No.

8 MR. CASSEL: I would hope not to inconvenience  
9 the witnesses. If need be, a stipulation or something might  
10 take care of that if the issue arose.

11 CROSS EXAMINATION

12 BY MR. CASSEL:

13 Q Good morning, Mr. Hayes and Mr. Connaughton.

14 A (Witness Hayes) Good morning.

15 A (Witness Connaughton) Good morning.

16 Q Mr. Hayes, on page 2 of your prefiled testimony --  
17 excuse me -- page 3, answer 4, second paragraph, you refer  
18 to allegations -- you discuss allegations that weld undercuts  
19 is a widespread and serious problem.

20 Now, weld undercut is when the welder accidentally  
21 digs into the underlying metal or structure and doesn't fill  
22 it up with the weld?

23 A (Witness Connaughton) That's correct.

24 A (Witness Hayes) Very generally, yes.

25 Q And the potential problem with the weld undercut

1 is that it weaknes the underlying metal or underlying  
2 structure; is that correct?

3 A Yes. It's a little groove in the base metal  
4 itself.

5 Q These allegations that weld undercuts were  
6 widespread and serious problems were brought to the NRC's  
7 attention by PTL inspectors assigned to Hatfield. Is that  
8 correct?

9 A Yes.

10 Q And these PTL inspectors were Level II inspectors,  
11 which is the same level of the people who had conducted the  
12 reinspections at Byron?

13 A Yes.

14 JUDGE SMITH: Excuse me. Is everyone comfortable  
15 that all of this information has been revealed on the  
16 public record?

17 MR. CASSEL: All of which information, Judge?

18 JUDGE SMITH: The information contained in your  
19 question.

20 MR. CASSEL: The questions that I just asked  
21 were based on Attachment A to Mr. Hayes' testimony.

22 JUDGE SMITH: Okay.

23 MR. CASSEL: I assumed that that was a public  
24 document.

25 JUDGE SMITH: Yes, it is.

MMmc9-1

1 BY MR. CASSEL:

2 Q Your testimony goes on to state, Mr. Hayes, that  
3 third-party inspections and NRC inspections of Hatfield  
4 led to the conclusion that there were few cases of undercut  
5 in excess of the AWS Code, contrary to the allegations made  
6 by these Level II inspectors; is that correct?

7 A (Witness Hayes) That's correct.

8 Q And as you sit here today, it is your testimony  
9 that there were few cases of undercut in violation of code  
10 limits detected with respect to Hatfield?

11 A Few in relationship to the total, yes.

12 Q Do you have with you, Mr. Hayes, a copy of the  
13 Staff's testimony on the reinspection program and the  
14 exhibits thereto, the attachments thereto?

15 A I do not.

16 Q Mr. Connaughton, do you have it?

17 A (Witness Connaughton) One moment. I believe I do.  
18 Yes.

19 Q Would you turn, please, to the attachments to that  
20 testimony, specifically Enclosure 1, pages 20 through 24?

21 A (Witness Hayes) Yes, we've got it.

22 Q Just take a moment to review it, if you are not  
23 already fully familiar with it. These four pages, 20 through  
24 24 of Enclosure 1, summarize, do they not, the results of  
25 Mr. Kevin Ward's review of welds which had been reviewed by

ngc9-2

1 the third party as part of the reinspection program; is  
2 that correct?

3 A That's my understanding, yes.

4 Q And the symbol, U/C, in that table stands for  
5 undercut wherever it appears, does it not?

6 A That's correct.

7 Q Is it not the case that a good many of these welds  
8 have U/C next to them in Mr. Ward's review?

9 A Yes, they do, on these welds, yes.

10 Q Now do you have any other welds where you have  
11 documentation of review by Mr. Ward on an individual basis  
12 like this for Hatfield?

13 A Not where I have documentation, no.

14 Q Do you have any documentation of individual review of  
15 welds by the third-party reviewer in the reinspection program  
16 with respect to Hatfield, other than what is listed here?

17 A I do not, no.

18 MR. LEWIS: Mr. Connaughton, do you have anything  
19 on that?

20 WITNESS CONNAUGHTON: No, I do not. Not here.

21 BY MR. CASSEL:

22 Q When you said, then, Mr. Hayes, that there were  
23 few cases of undercut, did you have an approximate number  
24 in mind when you said there were few?

25 A (Witness Hayes) I don't have an exact percentage,



ngc9-3

1 but something less than ten percent. We did have  
2 discussions with Kavin Ward, and I believe he testified  
3 that he took at least 1000 or more welds which he did not  
4 document, and I personally looked at a number of welds  
5 myself.

6 A (Witness Connaughton) Generally less than ten  
7 percent, as Mr. Hayes states, in that the majority of  
8 inspectors did meet the criterion, such that the total  
9 number of welds looked at, something less than ten percent  
10 after third-party review were determined to be defective.  
11 Those which were rejectable for undercut comprised a subset  
12 of that.

13 Q And they comprised a substantial subset of the  
14 population of rejected welds; is that correct?

15 MR. LEWIS: I'm going to object, that the table  
16 sets forth a certain designation of numbers that was referred  
17 to previously by Counsel as "a good many," not "a  
18 substantial." I would ask that the witnesses, rather than  
19 Counsel characterizing it, the witnesses would be asked  
20 whether or not they agree with that characterization of the  
21 table.

22 MR. CASSEL: Judge, I wasn't even asking about  
23 the table. That table only deals with the limited sample  
24 of Hatfield welds that were individually reviewed and  
25 documented by Mr. Ward. My question was to the total



mgc9-4

1 population of rejected Hatfield welds, which after third-  
2 party review, was on the order of eight percent of all the  
3 welds done by Hatfield for review.

4 MR. LEWIS: I misunderstood the question. I will  
5 withdraw the objection.

6 BY MR. CASSEL:

7 Q Do you recall the question, Mr. Connaughton?

8 A (Witness Connaughton) No.

9 Q The question is, there are approximately eight  
10 percent of all the Hatfield welds in the reinspection program  
11 that were found rejectable after third-party review? Isn't  
12 it a case that -- isn't it true that a substantial portion  
13 of those were rejectable because of undercut?

14 MR. GALLO: I don't know if a record has been  
15 established that the 8 percent figure is correct or not.  
16 I think the witnesses should be allowed to decide for  
17 themselves whether or not the 8 percent figure is correct.  
18 The way the question is asked, as if the percentage is a  
19 certainty and clear on this record.

20 MR. CASSEL: Judge, I was trying to save time,  
21 in not having to go back to redo this.

22 BY MR. CASSEL:

23 Q First of all, Mr. Connaughton and Mr. Hayes, do  
24 you know whether 8 percent is approximately correct as  
25 percentage of rejected Hatfield welds?

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1 A (Witness Hayes) I haven't counted them.

2 I might bring out that Mr. Ward concentrated his  
3 review and the documentation on those areas -- on those  
4 welds that were questionable. It is a biased type approach  
5 here, is what he has documented.

6 A (Witness Connaughton) Perhaps you could refer us  
7 to the composite score reported in the Reinspection Report?

8 Q Sure.

9 Would you accept the representation by Mr. DelGeorge  
10 in attachment E to his testimony, page 1, that after third-  
11 party review, 92.8 percent of the subjective criteria --  
12 which of course is visual weld inspections -- were found  
13 acceptable? Do you have any reason to question that  
14 representation by Mr. DelGeorge?

15 A May we refer to that document?

16 Q Sure.

17 MR. CASSEL: Alternatively, will counsel stipulate  
18 that was a result of that based on Mr. DelGeorge's attachment  
19 E, page 1?

20 MR. GALLO: I will stipulate to 7.2 percent, subject  
21 to check.

22 BY MR. CASSEL:

23 Q Now, with respect to the 7.2 percent of the welds  
24 that were found objectionable for Hatfield at the third-party  
25 review, isn't it the case, gentlemen, that the substantial

mm2 1 portion of those were rejectable by reason of undercut,  
2 as opposed to other reasons?

3 A (Witness Connaughton) It is not clear to me that  
4 it was necessarily a substantial portion. I can provide an  
5 answer based on a quick review of the sample Mr. Ward  
6 looked at.

7 Q By quick review, do you mean you can look at it  
8 here in 15 seconds, or do you mean you can --

9 A I mean a minute or so.

10 In any event, I think our characterization in  
11 testimony stands. Would not characterize it as a substantial  
12 portion of the total population of welds looked at.

13 Q But you would still characterize it as a "few  
14 cases"?

15 A Relatively few cases, yes.

16 Q You also say that they were mostly borderline  
17 cases.

18 Do you have any information as to how many of them  
19 were not borderline cases?

20 A Not specifically. That characterization was  
21 provided Mr. Hayes and I by Mr. Ward, who has first-hand  
22 knowledge.

23 Q Turning to the next paragraph in your testimony,  
24 Mr. Hayes, you discuss here an allegation that an alleged  
25 reviewed the certification records of eight quality control

mm3 1 inspectors and considered two of them to be unqualified.

2           These inspectors were inspectors for Hatfield and  
3 Pittsburgh Testing, is that correct?

4           A     That's incorrect. They were Hatfield inspectors.

5           Q     It may be a difference in terminology, but if you  
6 turn to Attachment B of your testimony, Mr. Connaughton,  
7 page 15, Allegatin W, do I misread that or does that indicate  
8 that these were Hatfield and Pittsburgh Testing inspectors  
9 including, perhaps some PTL inspectors who were assigned to  
10 Hatfield?

11          A     My statement meant that they were assigned to  
12 Hatfield. They may have been employed by Pittsburgh Testing  
13 Laboratory, but they performed as QC inspectors for Hatfield  
14 functionally.

15          Q     Fine.

16                 Now, isn't it the case that this allegation that  
17 two of the eight inspectors were unqualified was found by  
18 the NRC inspectors to be true?

19          A     (Witness Hayes) This allegation was received  
20 shortly after completion of our CAT team inspection. I  
21 guess from that standpoint, that team made a finding that  
22 there was some question of certification of QC inspectors.  
23 From that standpoint, I guess you could say yes, it was  
24 true.

25                 But the two individuals that we felt certification



1 records were not proper,, were never named.

2 So, I have no way of knowing whether he was right  
3 or wrong.

4 A (Witness Connaughton) We treated it as substantiated.  
5 That is, we felt that it could very well be that the  
6 specific individuals whose certification packages he reviewed  
7 and in his opinion, the allegers opinion, felt were unquali-  
8 fied, may have in fact been individuals not subject to  
9 corrective actions at the point in time the alleger made  
10 his determination.

11 So, since we had identified certification practices  
12 as deficient in certain areas, we felt that in the case of  
13 this allegation where it was very nonspecific, that we would  
14 give the alleger "the benefit of the doubt," and follow up  
15 this matter as part of our resolution of the noncompliance  
16 82-05 19. We will never know, based on the lack of  
17 specificity in the allegation whether, indeed, the allegers  
18 review and opinion with regards to the two individuals were  
19 valid.

20 Q I thought Mr. Hayes testified earlier that you  
21 were the two inspectors who wrote up report 84-02.

22 A That's correct.

23 Q And that is the one that is Attachment B to your  
24 testimony, correct? Specifically page 15 of Attachment B.

25 A (Witness Hayes) 84-02. We summarized the status

mgc9-5

1 of the allegation. So if you were referring to the  
2 words here, these are just a summary from the inspector  
3 who did look at this.

4 Q You were not the inspector who did the inspection  
5 discussed under Allegation W? It's Attachment B. It's  
6 Report 84-02, Allegation W.

7 I thought you testified earlier that you were  
8 the two inspectors who had prepared Report 84-02.

9 A (Witness Hayes) That's correct. We did.

10 A (Witness Connaughton) Yes, we did. We refer  
11 to Inspection 8205-19, which identified deficiencies in  
12 certification practices for Hatfield and others. And we  
13 also referred to Inspection Report 8217, which essentially  
14 reports the allegations received and indicates that the  
15 allegation will be resolved with resolution of 8205-19.

16 Q Didn't you state right here under Allegation W  
17 under the word "Finding," quote: "This allegation is  
18 true."

19 A Yes. And perhaps that statement is unclear. We  
20 considered it true in the presence of the findings in  
21 8205-19 and the lack of specificity provided in the  
22 allegation. But as I just stated, literally speaking,  
23 we will never know whether the two individuals the allegor  
24 determined to be unqualified were, in fact, unqualified.  
25 We just do not have that information.

mgc9-6

1 Q And on page 4 of your testimony, Mr. Hayes,  
2 you indicate that the allegation was, in any event,  
3 resolved, which was your word, by the reinspection program.

4 Do you know whether the eight quality control  
5 inspectors whose records had been reviewed by the alleged  
6 were among the inspectors who were reinspected as part of  
7 the reinspection program?

8 A (Witness Hayes) No, I don't. But we do know that  
9 the certification packages for all the inspectors were  
10 reviewed by Commonwealth Edison Company.

11 Q And that review of all the certification packages  
12 by Commonwealth Edison Company occurred in what frame of  
13 time, if you know?

14 A In early 1983.

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2 Q Turning to your testimony at the bottom of page  
3 5, Mr. Hayes, that refers to -- at the very bottom it says,  
4 "referring to allegation involving certification of a  
5 Hatfield inspector was substantiated."

6 Now that refers to the recertification of Hatfield  
7 inspectors following 82-05, does it not?

8 A Yes. He was identified following the date that  
9 all inspectors were to be recertified by Hatfield.

10 A (Witness Connaughton) It was also prior to  
11 completion of Commonwealth Edison's 100 percent review of  
12 certification packages.

13 Q The information that this individual was unquali-  
14 fied was brought to your attention by an alleger, is that  
15 correct?

16 A (Witness Hayes) That's correct.

17 Q And Commonwealth Edison had asked the contractors  
18 to implement recertification by a date in advance of the  
19 date in which the alleger reported missed welds to you,  
20 is that correct?

21 A (Witness Connaughton) Not recertification.  
22 Commonwealth Edison directed that individuals certified  
23 after September 30th, 1982, be certified in accordance  
24 with their June 9, 1982 directive.

25 Q Didn't Commonwealth Edison also require that  
inspectors certified before September 30th, be recertified?



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1           A     Ultimately, yes. But not by -- not before the  
2 time this allegation was recieved.

3           Q     Now, in this same testimony here concerning the  
4 allegations that QC inspectors were unqualified, you state,  
5 Mr. Hayes, in answer 5, line 3 -- lines 2 and 3, some of  
6 these allegations could raise questions regarding the  
7 effectiveness of the upgraded certification program for QC  
8 inspectors.

9                     What questions were you referring to there?

10          A     (Witness Hayes) Well, the fact that we found  
11 one whose certification was questionable did raise some  
12 questions in our mind. Those questions were put to bed by  
13 followup inspections.

MM end 10

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1 Q I take it that not only -- referring back to the  
2 allegation we were discussing just before this one -- that  
3 not only the two who were alleged to be unqualified but the  
4 entire eight whose files had been reviewed, were not  
5 identified to you?

6 A (Witness Connaughton) No, they were not.

7 Q Turning to page 4 of your testimony, Mr. Hayes,  
8 the second full paragraph discusses an allegation that  
9 approximately 90 percent of certain Hatfield hangers covered  
10 with fireproofing, which were inspected because weld  
11 travelers were missing and found to be rejectable. Now in  
12 fact, upon further review and inspection it turned out that  
13 the number of 90 percent was not accurate as far as the  
14 NRC could determine. Is that correct?

15 A (Witness Hayes) That's correct.

16 Q Do you know whether any of the hangers discussed --  
17 let me back up on that. Are you familiar, or have you seen  
18 Mr. Del George's testimony in this case, Mr. Hayes?

19 A I have seen it but I haven't read it, I'm sorry.

20 Q Mr. Connaughton, have you?

21 A (Witness Connaughton) I've seen it, but again,  
22 I'm not intimately familiar with it.

23 Q Let me ask you if you are familiar with the  
24 subject matter discussed on pages 43 through 45 of his  
25 testimony, and if it doesn't lean to mine, I will bring it

1 over to you and you can take a look at it. I'll tell you  
2 what it is. It entails -- it discusses certain cable tray  
3 hangers which had been reinspected by Hatfield because of  
4 a documentation deficiency, and then it zeroes in on the  
5 connection between structural steel and certain hangers,  
6 and indicates that 119 out of 345 hangers that were covered  
7 by fire proofing or encasement in walls were found to have  
8 discrepancies.

9 Are you familiar with that issue at all?

10 A (Witness Hayes) Yes. Those are two different  
11 issues you're talking about.

12 Q That has nothing to do with the allegation here  
13 discussed on page 4 of your testimony?

14 A (Witness Connaughton) Not specifically. The  
15 program referenced by Mr. Del George is, in fact, -- was, in  
16 fact, a program initiated under this very same non-conformance  
17 report, number 407. The 119 discrepancies Mr. Del George  
18 refers to were for fireproofed welds, fireproof connections,  
19 for which original travelers did, in fact, exist. There  
20 was a population of 131 hangers that did not have weld  
21 travelers, and this is the population referenced by the  
22 allegor in the allegation that we address here.

23 And of those 131, it's my understanding that  
24 there were three found to be discrepant. And whether or not  
25 they required repair I don't know at this point in time.

1 But they are related to the extent that the same NCR  
2 generated data.

3 Q Thank you. Now, the allegation was that the  
4 welds -- whatever the number was -- were rejectable, and  
5 your paragraph here concludes that there were no welds  
6 identified in the Reinspection Program that required repair.

7 You're not suggesting that rejectable and  
8 requiring repair mean one and the same thing, are you?

9 A No.

10 Q Turning to the allegation discussed on page 5  
11 of your testimony -- or actually, it's -- yes, the third  
12 allegation is discussed on page 5 of your testimony. It  
13 concerns certain tack welding allegations. What is a tack  
14 weld, Mr. Hayes?

15 A (Witness Hayes) This is a weld that is just a  
16 real small spot weld to hold a hanger in place until he  
17 can get a position so he can weld it in.

18 Q You discuss in here the fact that in the  
19 Reinspection Program, only two tack welds were found, and  
20 furthermore, it appeared that those tack welds had not yet  
21 been accepted by QC at the time the allegation was made.

22 Do you know how long those tack welds went  
23 undetected before they were discovered?

24 MR. LEWIS: I object to the characterization.  
25 I'm not sure there's any testimony in here about anything



1 going undetected. Lack of foundation in that sense.

2 BY MR. CASSEL:

3 Q Well, shouldn't they have been picked up in the  
4 normal -- I mean, it's my understanding that the Reinspection  
5 Program was a reinspection program of the original inspection.  
6 If the original inspection had found it, there would have  
7 been no occasion to discover it through the Reinspection  
8 Program.

9 A (Witness Connaughton) That is correct.

10 MR. CASSEL: Are you still objecting, Steve?

11 MR. LEWIS: No.

12 JUDGE SMITH: Well, wait a minute. That seems  
13 to be an inference that can be drawn.

14 MR. LEWIS: I withdraw my objection.

15 BY MR. CASSEL:

16 Q Do you know how long these tack welds have gone  
17 undetected before they happened to be picked up in the  
18 Reinspection Program?

19 A (Witness Hayes) No, I don't know how long, but  
20 I do know that in some cases the fireproofing activity got  
21 ahead of the weld and weld inspection activities, and  
22 that's what happened in some of these cases. Before they  
23 had a chance to weld it up, the fireproofers were in there  
24 and sprayed it.

25 JUDGE COLE: Was that the same contractor,

1 Mr. Hayes, or a different contractor?

2 WITNESS HAYES: It's a different contractor.

3 BY MR. CASSEL:

4 Q Just a clarification on Judge Cole's question.  
5 Do you mean the fireproofer was a different contractor than  
6 the inspector of the welds and the welders themselves?

7 A (Witness Hayes) And the welder that was making  
8 the weld.

9 JUDGE SMITH: Before you leave that point, this  
10 is the only time that I can recall during this session, of  
11 a reference to tack welds. I don't recall any reference  
12 to it in Sargent & Lundy testimony or in any other testimony.

13 What was the disposition of these welds?

14 WITNESS HAYES: This was a result of an allegation  
15 that where they found that the hanger had only been tack  
16 welded they did go back and weld it improperly.

17 JUDGE SMITH: Were they evaluated under the  
18 Reinspection Program?

19 WITNESS CONNAUGHTON: Your Honor, I believe there  
20 is some ambiguity in the Inspection Report that talks about  
21 of 5500, only 2 were found to be tack welded. It's not  
22 clear to me that when the inspector acquired those statistics  
23 that he was referring to the Reinspection Program conducted  
24 in response to 82-05-19.

25 JUDGE SMITH: Well, that makes sense, because

1 otherwise, why would you have -- you see, we've been  
2 proceeding under the assumption that they were not caught,  
3 contrary to your testimony, because -- they were not caught  
4 by QC because they were caught in the Reinspection Program.  
5 But that isn't necessarily the case, is it?

6 WITNESS HAYES: No.

7 WITNESS CONNAUGHTON: No, sir.

8 JUDGE SMITH: So that inference -- and you  
9 should have persisted in your objection, I believe --

10 MR. LEWIS: Thank you.

11 BY MR. CASSEL:

12 Q Well, your testimony does say, does it not,  
13 Mr. Hayes, on page 5, that the Reinspection Program looked  
14 at approximately 5500 welds which had been been fireproofed  
15 and found only two tack welds. You are not referring in that  
16 testimony to the Reinspection Program that is the central  
17 issue in this case.

18 A (Witness Hayes) We were referring to the  
19 Reinspection Program itself. You have to realize that there  
20 was a lot of other activity in progress. One of those  
21 activities that related to the Reinspection Program was  
22 the records by Hatfield. They were trying to reconcile a  
23 lot of their records.

24 They knew there were welds out there for which  
25 they had no weld travelers, and they were going through their

SYmgc11-1

1 records, and as they identified areas or, say, a weld  
2 where they didn't have a traveler for it, they had to  
3 recreate that, go back and reinspect the weld and establish  
4 that record.

5 Q Doesn't Attachment C to your testimony at page 49  
6 state that, "These two tack welds were found as part of a  
7 reinspection program established in response to  
8 Noncompliance 8205"?

9 MR. LEWIS: I thought that's what he just stated.

10 MR. CASSEL: Well, maybe it is what he just stated,  
11 and I misunderstood what he just stated.

12 BY MR. CASSEL:

13 Q If you look at the middle of the paragraph there,  
14 is there a reference to 82-05-19?

15 A (Witness Connaughton) Yes.

16 MR. GALLO: Judge Smith, I have been silent through  
17 this, but there is confusion over what these witnesses mean  
18 by "reinspection program" which I think requires  
19 clarification. I'm not sure these witnesses understand that  
20 the reinspection program that is central to this proceeding  
21 is that developed to qualify or determine the qualification  
22 of the QC inspectors with the contractors subject to  
23 reinspection.

24 This issue, as I understand it, was peripheral.  
25 Now just because it was covered by these two inspection



mgc11-2

1 reports doesn't make it a part of the reinspection program  
2 as we defined it for this proceeding. I think somehow we  
3 ought to get that cleared up.

4 MR. CASSEL: That's exactly what the pending  
5 question does, Joe. I just asked the witness, and I think  
6 he gave a yes answer to the question of whether Attachment C,  
7 page 49, in the middle of the paragraph, it does indicate  
8 quite clearly that these tack welds were found in the  
9 reinspection program established in response to 8205.

10 I thought the witness answered yes to that  
11 question.

12 MR. GALLO: Well, we've had one example of poor  
13 choice of words in the reinspection report, and this might  
14 be another.

15 It seems to me the record should be cleared up in  
16 some way.

17 WITNESS CONNAUGHTON: I thought that might be the  
18 case, too, that there was some confusion on the part of  
19 the inspector as to just under what program, if you will,  
20 this condition was found. Had it been found under the  
21 reinspection program established in response to 82-05-19,  
22 it may have been referred to as an insufficient length  
23 or that type of defect.

24 JUDGE SMITH: But inasmuch as -- if Hatfield's  
25 records were properly reconstructed, inasmuch as welds were

mgc11-3

1 captured in the reinspection program through the quality  
2 control inspector, a weld that had not yet been inspected  
3 should not have been captured.

4 WITNESS CONNAUGHTON: Correct.

5 WITNESS HAYES: Correct.

6 MR. CASSEL: I have no further questions, Judge.

7 JUDGE SMITH: Well, so then with that observation,  
8 does your testimony require some additional explanation on  
9 this point on page 5?

10 Well, wait a minute. Maybe I'm doing you a  
11 disservice. You did say that in the course -- for the  
12 purposes of the reinspection program and in the course of  
13 identifying those welds which were to be captured, there  
14 were other welds examined. Is that --

15 WITNESS CONNAUGHTON: There are a number of  
16 circumstances that may have resulted in the tack welds  
17 being identified without knowing one way or the other that  
18 it ever had been inspected, a visual weld inspection.

19 For example, if an inspector whose work was being  
20 reinspected performed a hanger configuration verification,  
21 that is a different type of inspection, and that may have  
22 required the removal of fireproofing to verify the  
23 connection detail. It may have been discovered under those  
24 circumstances. It's just not clear, Judge.

25 JUDGE SMITH: I see. So everything that was

mgc11-4

1 captured here, either purposely or coincidentally, in  
2 the reinspection program was addressed.

3 WITNESS CONNAUGHTON: That's correct, whether it  
4 was the result of visual weld inspections or other types  
5 of inspection that may have led to the removal of  
6 fireproofing.

7 MR. CASSEL: Well, I do need to ask another  
8 question or two, then.

9 BY MR. CASSEL:

10 Q Apparently, if I understand your testimony, you  
11 are saying that as part of an effort to find or to  
12 reinspect welds that were not tack welds, by some  
13 coincidence a couple of tack welds were found in the same  
14 effort to look at other welds; is that correct?

15 A (Witness Connaughton) Perhaps to look at other  
16 attributes.

17 Q At other attributes?

18 A Yes. That's why I say it is not clear to me.  
19 It's possible that, in fact, there was a traveler that  
20 indicated this item had been inspected and, in fact, it  
21 was tack welding -- a possibility. It may well have been  
22 in the course of looking at other attributes, hanger  
23 configuration for example, that tack welds were identified.

24 Q And tack welds are sometimes used on purpose  
25 at the plant for specific functions that can be fulfilled

ngc11-5

1 by tack welds; is that correct?

2 A That's correct, as described by Mr. Hayes.

3 Q But in this case, what we're talking about is  
4 not intentional tack welds, but welds that should have  
5 been complete welds but, in fact, were only tack welds.

6 A That is our understanding.

7 A (Witness Hayes) That's my understanding, too.

8 Q Isn't a tack weld one of the most obvious weld  
9 discrepancies that a weld could have, if it's not supposed  
10 to be a tack weld?

11 A It would be like a missing weld.

12 Q Would it be on the same order of inspector  
13 error as, say, when an inspector misses a crack in a weld,  
14 if he fails to notice that a weld, instead of being a  
15 complete weld, is a tack weld?

16 A In my opinion, that would be an objective  
17 attribute. If the weld is not there, if it's only a tack  
18 weld, that would be obvious, that the weld didn't exist.

19 MR. LEWIS: Just a point of clarification. What  
20 inspector is it that you are referring to who has missed  
21 this tack weld? I don't think that's what the testimony  
22 says.

23 MR. CASSEL: Well, that's a good point.

24 MR. LEWIS: Well, I'll come back to it afterwards.

25 MR. CASSEL: No. Let's clear that up.



mgc11-6

1 BY MR. CASSEL:

2 Q In other words, you don't know whether these tack  
3 welds were ever looked at by anybody before the reinspection  
4 program?

5 A (Witness Hayes) That's correct.

6 A (Witness Connaughton) That's correct.

7 MR. CASSEL: I have no further questions, Judge.  
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ngcl2-1

1 JUDGE SMITH: Mr. Gallo?

2 MR. GALLO: Judge Smith, I have three areas of  
3 questioning based on Counsel's questions, therefore I have  
4 no cross-examination plan.

5 CROSS-EXAMINATION

6 BY MR. GALLO:

7 Q Gentlemen, let's continue with the discussion of  
8 this matter on page 5. As I recall, it was -- first of all,  
9 let me follow up with a question just asked by Counsel,  
10 whichever one of the members of the panel can answer this  
11 question.

12 As I understood your last answer, I believe it  
13 was you, Mr. Hayes, that if the tack welds in question had  
14 not been reviewed by a QC inspector, that it would not,  
15 then, have been captured in the reinspection program. Is  
16 that a correct characterization?

17 A (Witness Hayes) That's my understanding, yes.

18 Q That means that no QC inspector had looked at  
19 that particular weld prior to the time of the reinspection  
20 program; is that correct?

21 A That's right. An inspection report would not  
22 exist.

23 Q And under the requirements and procedures that  
24 existed, if this particular tack weld had been covered  
25 with fireproofing, it wouldn't have been necessary to remove

ngcl2-2

1 the fireproofing and then conduct that inspection?

2 A Yes, it would.

3 Q Do you know whether or not Commonwealth Edison  
4 had intended to take that action?

5 A Yes, they did take that action in connection with  
6 this reconciliation of the records. For every weld, there  
7 had to be a corresponding weld record that that weld had  
8 been inspected.

9 Q Now let's get back to the question of whether or  
10 not this particular matter we are discussing was a part  
11 of the reinspection program utilized for determining the  
12 qualification of certain QC inspectors or whether it was  
13 a reinspection effort prompted by a different concern.

14 Counsel's questions in this area emanated from  
15 Mr. Del George's testimony. I don't believe you have had  
16 the opportunity to review that testimony.

17 I wondered if you would review that testimony,  
18 starting on the page -- or at the bottom of page 43 and  
19 over to the rest of page 44, and determine whether, as  
20 Mr. Connaughton suggested, the effort involved was  
21 verification of hanger configuration, rather than qualifica-  
22 tion of QC inspectors.

23 (Pause.)

24 JUDGE SMITH: Off the record.

25 (Discussion off the record.)

ngc12-3

1 WITNESS CONNAUGHTON: We have familiarized  
2 ourselves with that portion.

3 MR. CASSEL: What portion are we on now?

4 WITNESS CONNAUGHTON: Page 44.

5 BY MR. GALLO:

6 Q Do you have the question?

7 A (Witness Connaughton) Could we have it, please?

8 Q Can you tell, by reviewing that portion of the  
9 testimony of Mr. Del George, whether the inspection effort  
10 that was the subject of Counsel's questions and is the  
11 subject of your testimony on page 5, that inspection effort,  
12 was it encompassed by the reinspection program as we  
13 know it for the qualification of certain QC inspectors, or  
14 was it an inspection effort emanating from a different  
15 source -- or a different purpose, I should say -- and that  
16 is the verification of hanger configurations?

17 A The latter characterization is correct.

18 Q So that if these particular tack welds had never  
19 been inspected, you couldn't charge that as a mark against  
20 the QC inspectors of interest that were reinspected under  
21 the reinspection program; isn't that correct?

22 A (Witness Hayes) That's correct.

23 A (Witness Connaughton) If, in fact, there were  
24 no weld traveler attesting to the presence of the required  
25 weld.



mgc12-4

1 Q Well, indeed, you don't know whether these  
2 particular welds were captured in the reinspection program  
3 or not, do you, Mr. Connaughton?

4 A I am not certain. I believe our inspector was  
5 under the impression that that may have been the case in  
6 the way he --

7 Q What inspector are you referring to?

8 A The inspector who followed up on this allegation.  
9 The inspection report portion of our report, which is  
10 attached to our testimony, on page --

11 MR. LEWIS: I think he is asking you if you know  
12 who the inspector is.

13 WITNESS CONNAUGHTON: Yes. That was Mr. Ward.

14 BY MR. GALLO:

15 Q If he had found these welds as a part of either  
16 his review or the Licensee's review -- or I should say  
17 the Applicant's review -- in the reinspection program,  
18 wouldn't he have included them in the statistics attached  
19 to his testimony?

20 A (Witness Hayes) I would assume so, yes.

21 Q Do you know whether or not they're there?

22 A To my recollection, they were not.

23 A (Witness Connaughton) There are no discrepancies  
24 called out as tack welds. As I indicated earlier, if they  
25 were, in fact, captured in that sample that Mr. Ward looked

mgc12-5

1 at, they may have been called insufficient length.

2 Q You don't know that for certain?

3 A I don't know that.

4 Q Let me ask you the bottomline question here.

5 Isn't it apparent from this cross-examination that this  
6 particular allegation was resolved by an inspection program,  
7 independent from the reinspection program that we've been  
8 talking about in this proceeding, that therefore nothing  
9 from the reinspection program really bears on the resolution  
10 of this allegation?

11 MR. CASSEL: Objection to the question on the  
12 grounds that it is two questions at once, and it's also  
13 asking the witness a question of relevance: Does anything  
14 in the reinspection program really bear on this issue?

15 I think he's entitled to ask a precise question,  
16 but that's a decision that the Board has to make.

17 MR. GALLO: I will withdraw the question to save  
18 Mr. Cassel further argument.

19 I would like to move into another area on page 4  
20 of these witnesses' testimony. Again, I just might be  
21 confused, but at the top of the page of page 4 there is  
22 a sentence that reads: "The issue raised by the  
23 allegations has, however, been resolved by the reinspection  
24 program's extensive examinations of the work of QC  
25 inspectors at the Byron site."

mgc12-6

1 Mr. Cassel asked a number of questions about  
2 this matter, and I have just one or two.

3 BY MR. GALLO:

4 Q As I understand the concern as suggested by the  
5 allegor, there was a question, at least in the allegor's  
6 mind, as to whether or not certain QC inspectors were  
7 properly certified; is that correct?

8 A (Witness Hayes) As I understand it, yes.

9 Q Then you infer from the finding in 85 -- I'm  
10 sorry -- 82-05-19, that the certification practices used  
11 for this class of inspectors were not accpetable. But  
12 these allegations were substantiated; is that correct?

13 A (Witness Connaughton) That was our rationale.

14 Q And then you say that now, since 82-05-19 has  
15 been closed out, you consider the matter resolved. I wonder  
16 if the resolution is the recertification of these inspectors,  
17 rather than as stated in this sentence, "The resolution is  
18 based on the extensive examination of the work of QC  
19 inspectors"? Can you clarify that for me?

20 A (Witness Hayes) In my opinion, you're correct.  
21 When we went through the documentation to see if this  
22 allegation had been independently resolved, independent  
23 from the reinspection program, our inspection reports just  
24 were not clear in this regard. But we did have knowleāge  
25 of an extensive number of certification packages for QC

ngcl2-7

1 inspectors that were reviewed and found to be acceptable.  
2 And we were also aware of the audits conducted by  
3 Commonwealth Edison Company.

4 Q So the Region III is resolving -- I'm sorry --  
5 let me start again.

6 Region III is relying on the recertification  
7 packages that were reviewed for this class of inspectors  
8 for resolving this allegation, rather than the work itself?

9 A I think both.

10 A (Witness Connaughton) I think we are relying on  
11 both. We can't know when the individuals were certified,  
12 and the implications are that they may have been certified  
13 improperly prior to initiation of corrective action, in  
14 which case they performed work, or they may have been  
15 certified subsequent to implementation of corrective actions.  
16 That we will never know.

17 They may have been properly recertified. In fact,  
18 we believe if individuals were still on site when CECO QA  
19 did their 100 percent review and after we did our extensive  
20 reviews, that they would be certified. But the implications  
21 are that perhaps at one point in time these people were  
22 certified under the old practices and did perform  
23 inspections. And to that extent, we do consider the results  
24 of the reinspection program and the look at the inspectors'  
25 work as part of the resolution of this item.



ngc12-8

1 Q All right. I take it your quandry is due to the  
2 fact that the allegor never identified these eight QC  
3 inspectors; is that true?

4 A That's correct. Therefore, we feel that the  
5 allegation was covered one way or another by the confidence  
6 in the work that the reinspection program provides, as well  
7 as the fact that ultimately all inspectors were certified  
8 to the new requirements.

9 Q Did you ask the allegor for the identity of these  
10 QC inspectors?

11 A Yes, we did.

12 Q Did he provide that information?

13 A No. He explicitly stated -- and I was present  
14 at the time -- he explicitly stated he could not recall.

15 Q At the bottom of page 5, I believe, of Mr. Hayes'  
16 testimony, there is a reference -- again this is based on  
17 Counsel's questions -- there is a reference at the very last  
18 line of page 5 to "appropriate corrective actions were  
19 taken with regard to this individual."

20 Mr. Hayes, do you know what those appropriate  
21 corrective actions were?

22 A (Witness Hayes) Yes. This individual had been  
23 on -- well, he had been hired twice, actually. He had been  
24 on site earlier as a Level I inspector, and then approximately  
25 a month before we received this allegation, he had been

ngcl2-9re

1 rehired. So the corrective action was that they went back  
2 and looked at 100 percent of those inspections he had  
3 conducted during that one-month period, and further, they  
4 recertified him, and this individual was not involved -- he  
5 did not affect the reinspection program. This was all  
6 cleared up before this started.

7 JUDGE SMITH: Hasn't he been identified?

8 WITNESS HAYES: Yes, his name is Tom Wells.

9 BY MR. GALLO:

10 Q And Mr. Wells' inspections were reinspected 100  
11 percent during the period of time of his infirmity, if I  
12 could use that term?

13 Let me restate the question.

14 As I understand your testimony, Mr. Wells'  
15 inspections were reinspected 100 percent during the period  
16 of time that his certification was questioned?

17 A (Witness Hayes) That's correct.

18 A (Witness Connaughton) It was my understanding it  
19 was his first 30 days of work following the improper  
20 certification. I'm not sure that that covered the entire  
21 period of time between his certification and the time he  
22 was identified as improperly certified.

23 MR. GALLO: No more questions.  
24  
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Pg 12-10

## BOARD EXAMINATION

BY JUDGE COLE:

Q Mr. Hayes, you stated that at least at one point in time the fireproofing contractor got ahead of the welding inspectors.

Whose job is it to coordinate that, sir? Do you know?

A (Witness Hayes) Well, it would be partly Commonwealth Edison's job to coordinate the activities, but I think also there is coordination between contractors.

Q Did you know if those problems had been resolved?

A To the best of my knowledge, they were, but I don't have any direct -- these are things we found out after the fact.

Q Did you consider that kind of action a deficiency, or just the fact that the weld wasn't inspected?

A Well, you know, any time one contractor gets ahead of another, such that he can cover up work, yes, that's a deficiency, and that shouldn't happen. Whenever we identify that, we have to go back and make sure that anything that was covered up was adequate and was proper and had received all the required inspections or whatever else was required.

A (Witness Connaughton) It may to some measure increase the likelihood that an inspector going through the

mgc12-11

1 plant doesn't see a tack weld because it is covered by  
2 fireproofing.

3           However, the documentation systems that are  
4 established would ultimately result in the identification  
5 that this item has not been inspected and requires  
6 inspection. And it is our understanding that in all such  
7 cases, fireproofing is not grounds for waiving inspection  
8 requirements, and that fireproofing is removed, and the item  
9 is inspected.

10           Q     On page 3 of your testimony, Mr. Hayes, the first  
11 paragraph of your answer says that, "The remainder of the  
12 23 allegations" -- that is 18 -- "have been resolved  
13 independent of the reinspection program."

14                     Are all of those resolved now?

15           A     (Witness Hayes) Yes, they are. They have all  
16 been inspected or investigated.

17                     JUDGE COLE: Thank you.

18                     BY JUDGE CALLIHAN:

19           Q     How were they resolved? Just one example.

20           A     (Witness Hayes) We looked into the specifics  
21 of the allegation and determined whether they were  
22 substantiated or not substantiated.

23           A     (Witness Connaughton) Some were resolved on  
24 evaluation of the allegation itself. Byron, in the electrical  
25 area, is another one. That's one such allegation. There



mgc12-12

1 are others that were substantive where we indeed went out  
2 and -- an example was when the Board expressed some interest  
3 in the previous hearings in the crack in the steel beam.  
4 I personally went out and verified that. The responsible  
5 contractor had been alerted by Hatfield and they had, in  
6 fact, repaired that.

7 BY JUDGE SMITH:

8 Q These have been subjects of inspection reports  
9 that the parties have been provided?

10 A (Witness Connaughton) That's correct. Each and  
11 every one was addressed.

12 A (Witness Hayes) And report 8204 does provide the  
13 status at that time of all of the allegations.

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1 Q I still have a certain amount of confusion, though.  
2 My memory of the in-camera ex-parte session a year ago, the  
3 first evening when we heard from region 3 people, I have a  
4 memory of substantial amount of additional allegations  
5 that you had hoped to resolve by a reinspection program.

6 Maybe it is just how you count. Maybe that is  
7 the problem. Inasmuch as a substantial amount of allegations  
8 were made by one individual and they all related to welding,  
9 maybe that is just one allegation. I don't know But,  
10 could that be my problem, or can you help me without  
11 revealing confidential information?

12 A (Witness Hayes) At the time we had not looked  
13 into these allegations. There was approximately ten that  
14 did relate to welding.

15 Q Yes.

16 A And we knew the reinspection program was  
17 going to delve pretty heavily into the welding area. So, I  
18 think at that time we felt that a number of these would be  
19 resolved by the reinspection program. But as we got into  
20 them and pursued them, we were able to independently make  
21 a judgement in regard to the allegation independent, not  
22 relying on the reinspection program for data.

23 Q So that group of them was not included in your  
24 testimony here?

25 A That's correct.

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1 Q And were not among those -- well, look at your  
2 testimony on page 3. You have some which -- well, I don't  
3 understand that. I had a wrong perception.

4 In any event, that group of ten allegations or  
5 eleven -- I think finally there was a second count and there  
6 was ten or eleven allegations -- were made by what you  
7 regarded to be an informed and rather credible allegor.  
8 You feel that they have been resolved and have not depended  
9 upon the reinspection program.

10 MR. LEWIS: You have to answer in words.

11 WITNESS HAYES: That's correct.

12 WITNESS CONNAUGHTON: That's correct.

13 BY JUDGE SMITH:

14 Q I wonder if you could point me to the Inspection  
15 Report where they resolved all in one Inspection Report?

16 A (Witness Connaughton) 454/83-39, solved many of  
17 them.

18 A (Witness Hayes) I believe the affidavit by  
19 Mr. Connaughton also discusses each one of them and where  
20 they were resolved at.

21 BY JUDGE CALLIHAN:

22 Q I think I have one remaining. This has to do with  
23 Attachment C to your testimony, gentlemen.

24 Down at the bottom of page 44 of Attachment C,  
25 which are excerpts from Inspection Report 83-39.

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1 This is an item which is not circled, and the caption is  
2 not part of your testimony. But, nonetheless, there is a  
3 statement at that location that quotes, "unit surveillance  
4 walkdown" of a system performed by Pittsburgh Testing  
5 Laboratory and the utility resulted in a 38 percent weld  
6 rejection rate.

7 That seems a little startling, and I thought I  
8 would ask about it, particularly since, in continuing,  
9 there is the remark, "this allegation was substantiated,  
10 but made after the reinspection program was started."

11 A (Witness Hayes) You skipped a page there, I  
12 think. There is 44, and we jumped to 47.

13 Q I apologize, I'm sorry.

14 Have you got page 45, Mr. Hayes? I started this.  
15 Let's get something finished up. I apologize.

16 A I sure do.

17 Q This endeavor to keep down the bulk of paper is  
18 admirable, but can lead some of us astray.

19 A We tried to cut down on the bulk. Did you want  
20 to see the three pages?

21 Q No, I don't want to see it. Just tell me what  
22 page 45 read. This read with such continuity -- I fell into  
23 the trap.

24 (Laughter)

25 A I think from memory I can address that.



MMmc13-1

1 Q Do so.

2 A The allegation was not substantiated. These  
3 walkdowns are a part of the Licensee's program for the very  
4 purpose of identifying any deficiencies, so he is really  
5 using their own club to beat them with, you might say.

6 Q So your opinion for which you have, I trust,  
7 considerable basis, is that the 38 percent in just incorrect?

8 A That was incorrect. They did find deficiencies,  
9 for that was the whole purpose of the walkdown, and there  
10 were several walkdowns conducted.

11 BY JUDGE COLE:

12 Q Mr. Hayes, I guess I'm confused. Even though it  
13 goes from 44 to 47, page 44 ends with some statements about  
14 Allegation E, and then prior to going to F, which would be  
15 the next one alphabetically, the statement that Dr. Callihan  
16 appears. So it seems to apply to E unless there is more  
17 material in between.

18 MR. LEWIS: It might have been a different number.

19 JUDGE CALLIHAN: It's the same report.

20 JUDGE SMITH: Since the document is actually here --

21 JUDGE CALLIHAN: What you're saying, in effect,  
22 I trust, is, Allegation E which begins on page 44, and  
23 by the alphabetical designations, ends on page 47.  
24 Allegation E had lots of words in between, namely pages  
25 45 and 46, true?

ngc13-2

1 WITNESS CONNAUGHTON: Yes. The NRC findings  
2 relative to this document the fact that the very first  
3 unit concept inspection did, in fact, reject something  
4 like 41 out of 115 welds inspected. They were Hatfield  
5 welds.

6 WITNESS HAYES: 41 of 303 welds.

7 WITNESS CONNAUGHTON: I'm sorry. 41 out of 115  
8 were found to have overlap, welds not long enough, et  
9 cetera, performed by Hatfield. That was Report No. 1,  
10 the first unit concept.

11 JUDGE CALLIHAN: Excuse me. How does that relate  
12 to the 38 percent, if at all?

13 WITNESS CONNAUGHTON: It's pretty darn close.

14 JUDGE CALLIHAN: Thank you.

15 WITNESS CONNAUGHTON: Report No. 31, there were  
16 41 out of 303, which is a significantly smaller number,  
17 lower by a factor of approximately three. And all of the  
18 other unit concepts that the inspector looked at had weld  
19 reject rates below ten percent generally, though he did,  
20 in fact, find one occasion where the reject rate was that  
21 high.

22 JUDGE COLE: So then that statement does apply?

23 WITNESS CONNAUGHTON: Yes, it does.

24 WITNESS HAYES: That's correct.

25 WITNESS CONNAUGHTON: That statement was correct.

1 JUDGE COLE: But in order to put it in the  
2 proper context, you need the other pages.

3 WITNESS CONNAUGHTON: It helps. Right.

4 JUDGE CALLIHAN: Thank you. That's all I have.

5 MR. CASSEL: I don't know whether you're wrapping  
6 up on this panel. I have a couple of follow-up questions.

7 JUDGE SMITH: I thought we had completed -- no --  
8 excuse me.

9 MR. CASSEL: First of all, Judge, I'm not sure  
10 that I agree or share the confidence that Edison has that  
11 this particular report is immaterial to this proceeding, in  
12 light of the discussion that has gone on.

13 I wonder if we might not have those two pages  
14 inserted into the record in order to clarify the head and  
15 the tail of this horse we have just discussed. Without  
16 having any information in great depth about what came in  
17 between, it does seem to me that certainly a question is  
18 raised when you find 38 percent of the welds in a  
19 particular system -- in this case, Hatfield, I gather -- well,  
20 it doesn't say whose system it was -- done by PTL.

21 MR. LEWIS: I don't think there's any problem with  
22 our supplying those two pages.

23 MR. GALLO: I'm going to object to this procedure.

24 MR. LEWIS: I think there has been discussion  
25 about it, although it is, I believe, contained in other

ngc13-4

1 matters that have been made, Board notifications. I think  
2 the record will be clearer if we do include those two pages.  
3 The pages that were chosen were chosen because they  
4 contain the allegations that were discussed in the testimony.

5 Mr. Hayes, do you have a copy of the two pages  
6 in question?

7 WITNESS HAYES: Yes, I do.

8 MR. LEWIS: We would be happy at the next break  
9 to make a copy of them and supply them for the record for  
10 clarity.

11 MR. GALLO: I am going to object to the gracious  
12 offer of Counsel. First of all, all parties had this  
13 inspection report. If they want to read the missing pages,  
14 all they have to do is resort to their own copies to read  
15 the missing pages.

16 As I understand the thrust of the Staff's testimony,  
17 they have excerpted those pages of these various I&E  
18 inspection reports that bear on allegations that were  
19 resolved by the reinspection program. As I understand it,  
20 Allegation E on page 44 was not resolved by the reinspection  
21 program, and that's why it wasn't included in their testimony.

22 Mr. Cassel's suggestion and Counsel's agreement  
23 to that suggestion should not be allowed. If Mr. Cassel  
24 believes that there is a connection that the Staff has  
25 overlooked here, he can view the report at lunchtime and make



mgcl2-5

1 a proper motion to include that matter. Otherwise, we're  
2 just confusing part of the record with extraneous pages  
3 that serve no purpose.

4 JUDGE SMITH: All right. Read it over the  
5 lunch time and see if you need it in. This is a problem  
6 which is presented when the Board is permitted to ask  
7 questions of any matter it deems to be significant to the  
8 issues in the remand, and we are not obliged to follow the  
9 same discipline that the parties are.

10 MR. GALLO: I intended no criticism certainly,  
11 Judge.

12 JUDGE SMITH: I'm not apologizing either. I'm  
13 saying the questions were absolutely correct, and that  
14 course of action will be followed in the future.

15 However, we do have to give deference also to  
16 your point of view that the parties were not prepared for  
17 cross-examination on those missing pages. There has to  
18 be some discipline in the proceedings, so we recognize  
19 that.

20 So let's look at the pages during the break  
21 and readdress it afterwards.

22 But the point is, the Board cannot raise issues  
23 and not allow the parties to follow them through to a  
24 logical conclusion. So we are going to have to make a  
25 balancing here.

mgcl3-6

1 MR. GALLO: I would just add, Judge Smith, that  
2 at least in my mind, without having gone back and looked at  
3 the pages to refresh my memory, that there's a presumption  
4 that it is irrelevant. Otherwise, the Staff would have  
5 included it in its testimony. If somebody thinks otherwise,  
6 then they can have the burden to come forward and make the  
7 argument.

8 JUDGE SMITH: What are you going to do when the  
9 Board asks irrelevant questions?

10 MR. GALLO: I probably should have taken the  
11 tack that the Board should have been given the entire report  
12 prior to asking the questions, so that it could satisfy  
13 itself on that point.

14 JUDGE SMITH: I doubt if you're going to be able  
15 to impose that discipline on the Board. We will look at the  
16 pages and we'll see.

17 I am sympathetic to your problem, Mr. Gallo,  
18 you know, that the pages have not been the subject of  
19 preparation or consideration.

20 MR. GALLO: Thank you.

End13MM

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1 JUDGE SMITH: Do you have more questions?

2 MR. CASSEL: I do. I'll try to keep them  
3 brief. I take it your intention is to have a lunch break  
4 after this panel?

5 JUDGE SMITH: I would think it would be time.  
6 Let's finish this panel if we can. Do you have much redirect?

7 MR. LEWIS: I don't have any redirect at the  
8 moment. We'll hear what Mr. Cassel has to ask.

9 CROSS EXAMINATION - Further

10 BY MR. CASSEL:

11 Q Mr. Hayes or Mr. Connaughton, I can't recall  
12 which of you answered Mr. Gallo's questions concerning the  
13 allegation involving two out of eight inspectors whose  
14 certifications were alleged to be inadequate.

15 You stated that part of the resolution of that  
16 was the recertification program, but that program, of course,  
17 would resolve it only with respect to inspections that occur  
18 after recertification; is that correct?

19 A (Witness Connaughton) That's correct. We relied  
20 not only on that, but the Reinspection Program provided  
21 confidence in the quality of inspection performed prior to  
22 the recertification.

23 Q And so -- this turns out to be a nice bridge  
24 to the next panel, because what that really does is say that  
25 with respect to any inspections that have already been done,

1 the extent of the Staff's resolution really turns on the  
2 question that we're going to address with the next panel;  
3 namely, the extent to which you can infer that the inspector  
4 was capable, based on the results of reinspections of a  
5 sample of his work.

6 MR. LEWIS: Is that a question?

7 MR. CASSEL: Yes.

8 WITNESS CONNAUGHTON: No, I don't think that's  
9 a fair characterization, because regardless of the view you  
10 take with regards to the strength of inferences, the safety  
11 implications that would be attached to this allegation  
12 ultimately speak to the quality of the work.

13 And regardless of your views on the strength of  
14 the inferences for capable inspectors, we still think that  
15 the Reinspection Program was adequate to address the safety  
16 implications that may have been associated with this  
17 allegation.

18 BY MR. CASSEL:

19 Q If these two inspectors were, in fact,  
20 unqualified as alleged and they were not caught in the  
21 reinspector's sample, or in the inspector's sample in the  
22 Reinspection Program, then the resolution of that allegation  
23 with respect to inspection they had already done depends  
24 entirely on the inference that you can infer from an inspector  
25 who was reinspected to one who was not. Correct?



1           A       (Witness Connaughton) Not entirely. It also  
2 depends upon the quality of the work irrespective of QC  
3 inspections. So not entirely. To some degree yes, but  
4 not entirely.

5           Q       All right. And in addition, even if these two  
6 inspectors were captured in the inspector's sample that  
7 was reinspected in the Reinspection Program, the resolution  
8 of this allegation with respect to their capabilities depends  
9 on an inference from the sample of their work; i.e., the  
10 first three months, or in some cases the first six months  
11 from that sample to all the inspections done by them that  
12 were not captured in the sample.

13          A       We don't know that that inference has to be made,  
14 so no, it doesn't. It's a hypothetical that we will never  
15 be able to respond to. We don't know that they were or  
16 weren't captured in that sample.

17                   We're confident that the program provides the  
18 basis for resolution without knowing that.

19           MR. CASSEL: I have no further questions, Judge.

20           JUDGE SMITH: Any further questions of this panel?

21           MR. GALLO: No.

22           MR. LEWIS: No.

23           JUDGE SMITH: All right, gentlemen, you may  
24 step down for the moment.

25                   (Witnesses Hayes and Connaughton were excused.)

1 JUDGE SMITH: Shall we break for lunch, then  
2 we'll have Mr. Keppler.

3 MR. LEWIS: No, we will have the panel -- I had  
4 discussed this with Mr. Cassel. I'm sorry I didn't get a  
5 chance to discuss it with you. Mr. Keppler will testify  
6 after the panel, Forney, Hayes and Little.

7 JUDGE SMITH: All right.

8 (Whereupon, at 12:00 p.m. the hearing in the  
9 above-entitled matter was recessed for lunch, to reconvene  
10 at 1:15 p.m. the same day.)

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1 defective welds, which it's not clear from the document,  
2 but apparently they were welds which had been painted over.

3           So there's a question of whether that is similar  
4 to the kind of situation involving the fireproofing that  
5 we discussed earlier.

6           But the real safety relevance, or the real  
7 relevance to this proceeding and the issue of safety of  
8 those missing two pages, I think are that they exemplify  
9 what the safety problem is with Byron.

10           We have heard a lot of testimony that you can  
11 walk all around the plant and everything looks fine, and  
12 the average percentages are quite high -- 99 percent for  
13 this inspector, 95 percent for that company, and so forth.

14           And assuming all of that to be true, the safety  
15 problem is not that everything, or anything close to  
16 everything, is unsafe. The problem is that there are little  
17 pockets here and there, as exemplified by the unit concept  
18 inspection results of finding 38 percent welds defective in  
19 a particular system.

20           And it's that minority of subsystems, or  
21 locations within the plant, or work done by a particular  
22 inspector even though the other 92 inspectors did fine --  
23 it is that minority of concentrated problems that raises  
24 safety issues.

25           It's the same issue raised by the discussion of



1 Mr. Sing of Sargent & Lundy last week about the clustered  
2 sampling. It may well be that 80 out of 100 inspectors  
3 did not miss anything major; maybe the number is even 95 out  
4 of 100. But what raises the safety issue is what if the  
5 five who didn't have those qualifications missed; or what  
6 was missed in a particular area because the fireproofer got  
7 ahead?

8 That is the relevance of pages 45 and 46 that  
9 I would like to inquire into. I think because it relates  
10 to Hatfield welds, it's clearly within the scope of the  
11 reopened proceeding, and I think it would be important to  
12 have a full answer to the line of inquiry that Judge Callihan  
13 began.

14 We do now have -- I do have a copy of pages 45 and  
15 46 for the Board, and if you would like to look at for  
16 purposes of ruling on my motion to recall the Hayes and  
17 Connaughton panel for cross examination on these pages.

18 JUDGE SMITH: Or in the alternative, accept the  
19 pages into evidence.

20 MR. CASSEL: I don't think that's quite an  
21 adequate alternative. It may be that Mr. Hayes and  
22 Mr. Connaughton do not know the answers to the questions  
23 raised by these pages. And if they would state upfront that  
24 they have no knowledge other than what's on the pages, then  
25 it would be an acceptable alternative.

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1 MR. LEWIS: Mr. Chairman, when I offered before  
2 to have these two pages received into the record, it was  
3 mostly for the purpose of identification of two pages  
4 as to which Dr. Callihan was questioning.

5 During the break, I have also had an opportunity  
6 to look at these two pages, and I find, first of all, that  
7 they are an inspection finding of Mr. Ward. I discussed  
8 this with Mr. Hayes and Mr. Connaughton at lunch, and although  
9 Mr. Connaughton has some knowledge through his discussions  
10 with Mr. Ward, it is not his finding, and he would not be  
11 the appropriate to undertake to respond to any of these  
12 details.

13 This is a part of an inspection report, 83-39,  
14 which, of course, as with all inspection reports, as with  
15 all Byron inspection reports, a copy was sent to the  
16 Intervenors' counsel. Additionally, it was a Board  
17 notification. We believe it was December 30, 1983.

18 This inspection report, in any event, has been in  
19 the possession of Intervenors' counsel since prior to that  
20 date. It is not a part of the attachments, although it is  
21 physically -- although page 44 and 47 contain allegations  
22 which were the subject of the Hayes/Connaughton testimony,  
23 this other allegation was not addressed in their testimony,  
24 and they are frankly, as I said, not in a position to comment  
25 in detail upon it.

mgc14II-2

1 It is true that the finding does relate to the  
2 so-called unit concept inspections, and certainly unit  
3 concept inspections have been discussed extensively on the  
4 record in this proceeding.

5 JUDGE SMITH: Does it relate to the original  
6 unit concept inspections or the special unit concept  
7 inspections which were a part of the testing in the  
8 reinspection program?

9 MR. LEWIS: I believe there's a reference here to  
10 a so-called weekly unit concept inspection that was started  
11 in September 1982.

12 MR. CASSEL: I don't think this was -- the one  
13 with the 38 percent was one of the regular ones. It was  
14 not the special one for the reinspection program.

15 MR. LEWIS: And the reference, the 38 percent is  
16 in the course of a reference that says the first report  
17 had a finding of 41 welds out of 115 which were found to  
18 have overlap, welds not long enough, et cetera, and it  
19 identifies Hatfield as the contractor. And then it goes  
20 on from there and discusses other reports.

21 I believe that the subject of the unit concept  
22 inspection has been fairly fully discussed. The inspection  
23 report was available to Intervenors and could have been  
24 the subject of examination of Mr. Ward when he was here  
25 as part of the first panel, and is not part of the testimony

mgcl4II-3

1 that we just offered with respect to resolution of  
2 allegations.

3 I would have to oppose the motion at this time.

4 JUDGE SMITH: Mr. Gallo?

5 MR. GALLO: I would continue my objection.

6 think the last statement made by counsel for the Region is  
7 really the important point. These witnesses testified to  
8 allegations that were closed out by virtue of the results  
9 of the reinspection program, and Allegation E, if I can call  
10 it that, was not so closed out in that manner and therefore  
11 was not a part of their testimony when submitted.

12 This issue of Allegation E is really beyond the  
13 scope of these witnesses' testimony. What Mr. Cassel is  
14 attempting to do is really to expand his direct -- well,  
15 not expand, but improve his direct case in some fashion.

16 If I understood his attempt to link this particular  
17 matter up to -- for relevance purposes under this  
18 proceeding, he was attempting to indicate how he might use  
19 this information to prove or disprove a particular precept  
20 that he had in mind. It seems to me that Mr. Cassel, when  
21 he submits his direct case on the 13th, is free to use  
22 this information as he believes appropriate, and if it's  
23 to come into the record, it should come into the record  
24 in that fashion and not through the back door by piggybacking  
25 onto an issue that it is really not related to.



mgc14II-4

1 I think it is really quite clear that this issue  
2 is really something different. I should mention that I  
3 am informed to represent that the unit concept inspection  
4 report that is talked about in that part of Allegation E  
5 that we can read is not the special unit concept inspection,  
6 but one of the regular ones, and I think that one should  
7 be reminded that the issue in this case is not the Hatfield  
8 welds, per se, and their adequacy, but it's the QC  
9 inspectors who inspected Hatfield welds and their records  
10 as to those inspections.

11 And I think for all those reasons, the motion  
12 should be denied.

13 JUDGE SMITH: Do you have any further comment?

14 MR. CASSEL: Well, Mr. Gallo is correct. I think  
15 I would intend to use this kind of information in my  
16 direct case, but none of my witnesses are going to be able  
17 to answer any questions about anything relating to the  
18 document. I don't know whether Mr. Hayes in his capacity  
19 within Region III is able to answer any questions. If he  
20 is not and if Mr. Ward is the only witness who can answer  
21 those questions, then I would have to deal with that on my  
22 direct.

23 JUDGE SMITH: Are you representing to the Board  
24 that this is information that you had planned to make a  
25 part of your direct case, or are you just now identifying it?

mgcl4II-5

1 MR. CASSEL: No. I have just now identified it,  
2 and frankly until Judge Callihan raised the question, I had  
3 not been alerted to the information. So to the extent that  
4 anyone has argued that Intervenors' counsel might have  
5 discovered this sooner and should have, those arguments are  
6 entirely correct. I am not defending on that ground. But  
7 it does seem to be a much more important issue, is whether  
8 this information is worth consideration by the Board.

End14II

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(The Board confers.)

2 JUDGE CALLIHAN: Mr. Lewis, to your knowledge,  
3 is Report 83-39 in a discussion in the record as such?

4 MR. LEWIS: Yes, that's correct. Portions are  
5 attached to the testimony of the panel on the remanded  
6 issues, but I do not believe it encompassed these pages.  
7 If it had, then we wouldn't be in this situation.

8 Yes, it does not. The enclosures to the Staff's  
9 testimony do not include this portion of that report.

10 JUDGE SMITH: The Board had decided prior to the  
11 arguments that we would not accept the two pages, and an  
12 extension of that decision is that we will not for that  
13 purpose have Mr. Hayes and Connaughton recalled. As we  
14 observed when the matter first arose, Board members are  
15 not required to abide by the same discipline that the parties  
16 are with respect to asking questions beyond the scope of  
17 the direct testimony. We may, from time to time, ask a  
18 question because, one, not having familiarity with the  
19 issues as some of the parties do, we may not recognize  
20 that a particular point is irrelevant to direct testimony  
21 or irrelevant to the issue at hand. And another reason why  
22 Board members might ask questions, irrelevant questions, is  
23 to make a preliminary determination somewhat on the order  
24 of self-induced Board notification, you might say, to determine  
25 whether a matter is of such importance that it requires

mgc15-2

1 inquiry, notwithstanding the fact that it had not been a  
2 part of testimony or relevant to the issue at hand.

3 So from time to time, we will be asking questions  
4 that the parties may believe are inappropriate in the  
5 narrow context of the direct testimony. When that is done,  
6 usually there is no particular problem. It becomes a  
7 matter of evidentiary record, and it's available for  
8 proposed findings and decision.

9 Sometimes, however, it does create the very  
10 problem that is identified here, and, of course, a Board  
11 could never bring in evidence into the evidentiary record  
12 without allowing all the parties who are affected by that  
13 evidence to explore it fully.

14 Therefore, once we do start down a road of inquiry,  
15 we are faced with the choice of either allowing a complete  
16 exploration of it as a matter of due process or making  
17 some other remedy. In all instances and in this instance,  
18 Mr. Gallo, I believe, has approached it rather correctly.  
19 He has pointed out that although it is our right to ask  
20 questions, it did make an irrelevant excursion, and he  
21 sought appropriate relief.

22 I might also say that appropriate relief in a  
23 circumstance like that would be to even go further, and  
24 that is, ask for a ruling from the Board that certain  
25 questions and answers not be available for proposed findings.



mgc15-4

1 And I think that is the remedy we should have here, and  
2 that is neither the pages nor the questions and answers  
3 which you believe, Mr. Cassel, create an unfair picture of  
4 the missing pages be available for proposed findings.  
5 They will not be information upon which we would make a  
6 decision.

7 MR. CASSEL: On that particular proposal, Judge,  
8 Mr. Shewski has testified at some length that one of the  
9 reasons that this Board can be assured that there is  
10 reasonable assurance of safety at Byron is because of these  
11 unit concept inspections.

12 JUDGE SMITH: That was in the main hearing,  
13 Mr. Cassel. In the reopened hearing, he alluded to the  
14 special walkthrough inspections, the special unit concept  
15 inspections that are superimposed on the reinspection program  
16 as a check. That's why I asked the question.

17 MR. CASSEL: I believe Mr. Shewski went beyond  
18 in his reopened hearing testimony, which is the only  
19 Mr. Shewski testimony that I have seen, he went beyond the  
20 special unit concept inspection to discuss the concept. And  
21 I believe that both he and Mr. Behnke and Mr. Laney have  
22 all relied on the existence of this system of unit concept  
23 inspections, and all of their testimony has been admitted  
24 into the record of the reopened proceeding over my  
25 objection.

mgcl5-4

1 JUDGE SMITH: Oh, I don't question whether the  
2 original unit concept inspections have been alluded to and  
3 have become a part of this decision. But you have had a  
4 full opportunity to cross-examine Mr. Shewski, Behnke and  
5 anyone else on this perceived -- well, in the first place,  
6 it doesn't suggest a defect in the unit concept inspections,  
7 in any event. But you have had a full opportunity to  
8 explore that matter.

9 Now you are making the argument that they have  
10 relied upon the unit concept inspection, and here the  
11 unit concept inspection has accomplished an important  
12 result, apparently, and I don't know what the relevance would  
13 be or how you would use it to attack Mr. Shewski's testimony.

14 MR. CASSEL: I would use it in the following way.  
15 There are two different issues here. One is whether I have  
16 really missed my opportunity on cross-examination by not  
17 having perceived the issue then.

18 JUDGE SMITH: Mr. Shewski's cross-examination.

19 MR. CASSEL: Mr. Shewski's, Mr. Laney's and  
20 Mr. Behnke's and Mr. Ward's, perhaps, as well. On that,  
21 I have no argument other than to say, if that's the basis  
22 for the decision, then I --

23 JUDGE SMITH: We will take that as an alternative  
24 argument on your part, that you overlooked an opportunity  
25 to cross-examine Mr. Shewski, and you can make a motion that

ngcl5-5

1 you be given that opportunity. I'm not saying we will grant  
2 it, but we'll consider it.

3 MR. CASSEL: Sure. I'm not at this point even  
4 inclined to offer that motion. But what concerns me is that  
5 your statement of reasons for not wanting to consider the  
6 information included a suggestion that it's not relevant  
7 to the issues in this reopened proceeding.

8 If that were true and I were to present, as  
9 Mr. Gallo suggests --

10 JUDGE SMITH: No. I said relevant to the issues  
11 at hand. That is, what we are talking about with that  
12 panel.

13 MR. CASSEL: I see. I just want to be clear that  
14 there has not been a ruling that this is irrelevant to the  
15 issues in the reopened proceeding, because I do think it is  
16 relevant.

17 JUDGE SMITH: No. In the first place, we're still  
18 talking about pages that we have yet to see. But our  
19 ruling should not be construed that that is the basis for  
20 our ruling.

21 MR. MILLER: Excuse me. I would just like to  
22 reconstruct, if I can, how we got here. This panel was  
23 tendered for the purpose of addressing allegations, and  
24 the Board made very clear in its prehearing conference  
25 order that it would not simply consider allegations, whatever

mgc15-6

1 they were. It wanted to hear about allegations that were  
2 disposed of by the reinspection program. That has been  
3 done by this panel.

4 There is another allegation, and I think we have  
5 to separate the question of the pertinence of the  
6 allegation as such to the pertinence of the subject matter.  
7 The unit concept inspection, as Mr. Cassel is quite right,  
8 is referred to by at least three Commonwealth Edison  
9 witnesses, and the time for cross-examining them has come  
10 and gone. It was not within the scope of the previous  
11 panel's testimony, except insofar as it related to an  
12 allegation, an allegation that was not disposed of by the  
13 reinspection program.

14 As the issue has arisen here today, it simply  
15 has no relevance under the Board's order.

16 JUDGE SMITH: And finally another basis for our  
17 ruling is, notwithstanding everything we said, we would not  
18 walk away from an item of information if we believed that  
19 it was necessary to explore it fully to have an adequate  
20 record, and we do not believe that it is necessary to  
21 explore this fully.

22 Now putting those two pages into evidence without  
23 having a full confrontation on it would not be appropriate,  
24 and we don't believe that the allegation and the resolution  
25 of the allegation warrants it.

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mgc15-7

1                   So that's always one of our considerations, and  
2                   it's a consideration now.

3                   MR. CASSEL: I understand that, Judge, and by the  
4                   way, I don't disagree with any of the statements that  
5                   Mr. Miller just made.

6                   From our point of view, the relevance of these  
7                   two pages is not the particular incidents described in  
8                   there, the 38 percent or the 15 percent. Those were  
9                   apparently taken care of now. The welds were fixed.

10                  We intend to offer them in our direct testimony,  
11                  not because of these particular instances, but rather  
12                  because of what they show about the nature of the safety  
13                  problem at Byron. In other words, it would be clustered.  
14                  It would be particular areas, rather than spread uniformly  
15                  and evenly.

16                  JUDGE SMITH: All right. There's nothing we have  
17                  done that forecloses that tactic. But just for the purpose  
18                  that it's being offered today, for the purpose for which it  
19                  came up, the way it first came up, we believe that the  
20                  appropriate remedy is to have the record disregard  
21                  Dr. Callihan's and Dr. Cole's questions and the intervening  
22                  two pages.

23                  MR. CASSEL: I have no objection to that ruling,  
24                  Judge.

25                  JUDGE SMITH: Any other preliminary business?

mgc15-8

1 MR. LEWIS: Well, I don't know. Was the  
2 discussion of the ANI matter to be addressed now?

3 JUDGE SMITH: No. We are not quite ready for that.

4 MR. MILLER: I should report that I have a  
5 revised letter to Mr. MacDonald from Mr. Schlosser, dated  
6 August 1, 1984. It contains certain changes to the letter  
7 which I passed out a few hours ago. They are indicated in  
8 the margin, and to my knowledge, there are no changes in the  
9 two paragraphs that were discussed by Mr. Cassel and myself.  
10 But just so that everybody has an up-to-the-minute version.

11 JUDGE COLE: This supersedes the July 31st letter?

12 MR. MILLER: Yes, sir. It repeats those parts  
13 that are not changed and indicates the additions or  
14 changes.

15 (Counsel distributing documents.)

16 MR. CASSEL: Just so the record is clear, I didn't  
17 discuss any paragraphs in the July 31 letter either, because  
18 I hadn't seen it either.

19 MR. MILLER: I'm sorry. The paragraphs in the  
20 Boiler Board letter.

21 MR. CASSEL: Okay.

22 JUDGE CALLIHAN: This, however, Mr. Miller, is an  
23 entity unto itself?

24 MR. MILLER: Yes, sir.

25 MR. CASSEL: So we can disregard the July 31 letter?

nac15-9

1 MR. MILLER: Correct.

2 JUDGE SMITH: I will just return that letter to  
3 you and substitute the August 1st version, in which event --  
4 what do you have? Asterisks that indicate changes?

5 MR. MILLER: Yes, sir. There are asterisks in  
6 the righthand margin.

7 MR. LEWIS: Your Honor, I am waiting for  
8 Mr. Forney to come back, and then I'll be prepared. He  
9 stepped out for a moment. And then we will be prepared to  
10 proceed with this panel.

11 End 15  
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T16 MM/mmq

Whereupon,

WILLIAM LITTLE

WILIAM L. FORNEY

D. W. HAYES

resumed the stand, and having been previously duly sworn, were further examined and testified as follows:

MR. LEWIS: Mr. Chairman, Staff offered, and the Board requested that we make Mr. Forney available, and Mr. Hayes, regarding questions that arose during the course of examination on Monday and Tuesday.

In the case of Mr. Forney, it was regarding his affidavit of July 12, 1984, which we provided the Board and Parties at the beginning of this proceeding.

And with respect to Mr. Hayes, it was regarding a memorandum that he prepared dated February 13, 1984 to Mr. Spessard.

Additionally, we suggested and the Board adopted the idea that we would have Mr. Little join the panel, so that if there were questioning that required him to reiterate his testimony that had been put into the proceeding, and to respond to whatever issues may be raised, that he would be present.

Let me start by asking a few brief questions which I think were the principal issues that the Board and parties had raised.



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XXX

## 1 DIRECT EXAMINATION

2 BY MR. LEWIS:

3 Q Mr. Forney, the Board and Parties expressed the  
4 view that the July 12, 1984 affidavit did not fully, and with  
5 sufficient clarity articulate the areas in which you agree,  
6 and the area in which you may disagree to some extent with  
7 the testimony of the NRC Staff on the remanded issues.

8 I would like to give you this opportunity to  
9 state for the Board and Parties what you were articulating  
10 in the affidavit, and what your present views are regarding  
11 the reinspection program.

12 MR. MILLER: Judge Smith, I object to the question.  
13 It is not very often that I get a chance to make the objection  
14 that a question calls for a narrative answer. But, if  
15 there was ever a question that calls for a narrative answer,  
16 it is that one.

17 There are procedures that this Board has  
18 imposed with respect to direct testimony. Ordinarily, it  
19 is created in advance and served on the Parties. In  
20 proceedings in which I have participated where there is no  
21 prepared testimony, then the witness is examined on  
22 Direct Examination by his attorney, and he responds to  
23 questions without making statements.

24 Mr. Forney has provided the Board and the Parties  
25 an affidavit, and I would have no objection to having that

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1 stand as his direct testimony in this case. But, to  
2 simply ask him to express his views on the reinspection  
3 program is going to probably result in an answer that goes  
4 on for ten or twelve pages of transcript, and may or may  
5 not be consistent with the statements in the affidavit.

6 So, I object on that basis.

7 MR. LEWIS: Your Honor, I think that under the  
8 circumstances in which the questions regarding what  
9 Mr. Forney's views are arose, it was my judgment that the  
10 most direct way to clarify his views was to allow him to  
11 directly express them.

12 Now I can, I suppose, break down the question into  
13 two questions. The first question would be to direct his  
14 attention to his affidavit, paragraph number 8, in which  
15 he states --

16 JUDGE SMITH: Wait a minute. Since he is going  
17 to be examined on the affidavit, apparently, why don't  
18 we put the affidavit into the transcript as his testimony.  
19 And now he is here for clarifying testimony.

20 MR. LEWIS: I believe everyone has copies. The  
21 document would be -- attached to it is my covering letter  
22 which I can remove, if it is considered inappropriate to  
23 have it attached. That is a letter dated July 20th.

24 JUDGE SMITH: Just the affidavit is enough.

25 We have an extra copy of it, if you need it. In

mm4

1 fact, here is the original. You might as well use that  
2 one.

3 Mr. Forney, is your affidavit of July 12, 1984 --  
4 do you still regard that as accurate?

5 WITNESS FORNEY: I am trying to look at the  
6 date on it. I can't tell from my copy what the date was.

7 12th day of July. Yes, that is my affidavit that  
8 I filed.

9 JUDGE SMITH: And, is it accurate?

10 WITNESS FORNEY: Yes, sir.

11 MR. LEWIS: Then I would propose that it be  
12 received into the transcript as if read.

13 JUDGE SMITH: It will be bound into the transcript  
14 at this point.

15 (Affidavit of William L. Forney, Regarding  
16 the Reinspection Program, follows:)

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
Commonwealth Edison Company	)	Docket Nos. 50-454; 50-455
	)	
Byron Station, Units 1 and 2	)	

Affidavit of William L. Forney  
Regarding the Reinspection Program

I, William L. Forney, being duly sworn, state as follows:

1. I am employed by the U. S. Nuclear Regulatory Commission as Chief, Reactor Project Section 1A in Region III, Division of Reactor Projects. In this capacity, I am currently responsible for coordinating inspection and enforcement activities related to construction and operation of the Braidwood, Callaway, Zimmer and Marble Hill nuclear plants.
2. I received a B.S. degree in Management Science from California State University, Hayward, California in 1974.
3. I was assigned as the Senior Resident Inspector (SRI) at Byron from October 5, 1981 until July 10, 1983, at which time I was promoted to my current position. In my capacity at Byron, I performed inspections of construction and preoperational test phases to ascertain licensee conformance with NRC regulatory requirements, Final Safety Analysis Report (FSAR) commitments, and procedures. Prior to assignment at Byron, I was the SRI at the LaCrosse Boiling Water Reactor Facility, Genoa, Wisconsin.
4. Prior to joining the Commission in January, 1980, I worked for 13 years for the Department of Defense, U. S. Navy, Mare Island Naval Shipyard, Vallejo, California. I held the positions of Senior Nuclear Ship Superintendent, Senior Refueling Engineer and Reactor Plant Test Manager. From September 1959 to January 1967 I was in the United States Navy. While in the Navy I was in the Naval Nuclear Propulsion Program and was Nuclear and Submarine Qualified.
5. As part of my responsibilities while serving as Byron SRI, I participated in the Region III Construction Assessment Team (CAT) inspection which was documented in Inspection Report 50-454/82-05; 50-455/82-04. I wrote noncompliance finding (82-05-19/82-04-19) regarding the lack of proper qualification and certification of some contractor quality control inspectors and was involved in the discussions with the applicant regarding the development of the reinspection program.

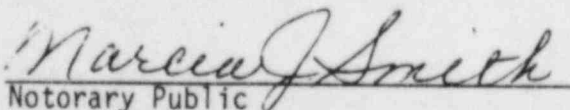


6. The purpose of this affidavit is to provide information on my position on the acceptability of the reinspection program, since during my earlier testimony I had expressed certain reservations regarding that program. My reservations regarding the program's acceptability centered around the fact that the inspection scope was not known at the time of my testimony. I also stated that the 90-95 acceptance criteria might not prove to be acceptable because it was not yet known whether deficiencies would be identified which had safety significance such that a higher acceptance criterion would be warranted.
7. I reviewed the reinspection program report (final) and Region III inspection Report 50-454/84-13, 50-455/84-09 and found them to be acceptable.
8. I reviewed staff testimony on the reinspection program as it was under development, and provided comments where I considered the testimony to require modification or clarification. The comments which I provided were resolved to my satisfaction except for the conclusion(s) which may be drawn regarding the "capability" or qualification of a particular inspector(s). See "Testimony of NRC Staff on Remanded Issues with Respect to the Reinspection Program," question and answer 6, p. 4. I believe that the statement can be made that the overall quality of the work of the contractors is acceptable whether it is by inference of good workmanship or capable inspectors.
9. In my view, while the reinspection program was not intended to, and did not directly determine whether CECO contractors at Byron always used qualified inspectors, it provided a good basis to evaluate whether inspectors had overlooked significant safety-related deficiencies. I agree with the staff position to this effect. I agree that the conclusions of the reinspection program are valid for both accessible and inaccessible work. Based on the safety importance of the elements inspected, the importance of each inspection attribute, and the type of deficiencies that were identified, I further agree that the acceptance criteria, of 95% for objective inspections and 90% for subjective inspections, are acceptable.
10. In conclusion, I agree that the reinspection program achieved the purpose I understood it to have, namely, to determine whether prior to September 1982 inspectors overlooked significant safety related hardware problems.

This answer is true and accurate to the best of my knowledge and belief.

  
William L. Focney

Subscribed and sworn to before me  
this 12th day of July, 1984.

  
Notary Public

My Commission Expires: February 8, 1986

mm5

1 BY MR. LEWIS:

2 Q Mr. Forney, in your affidavit you state, in  
3 paragraph 8, that you provided certain comments on the  
4 Staff's testimony on the remanded issue, and that those  
5 comments were resolved to your satisfaction except for the  
6 conclusion, and I will quote:

7 ". . . which may be drawn regarding the capability  
8 or qualification of a particular inspector (or  
9 inspectors)."

10 Then you make reference to question and answer 6,  
11 page 4 of the Staff's testimony on the remanded issues.

12 Would you please tell the Board and Parties  
13 precisely what conclusion in the Staff's testimony it is  
14 you disagree with, and the basis for your position.

15 A (Witness Forney) Before I answer that, do I need  
16 to be sworn in again.

17 JUDGE SMITH: I just remind you that you are  
18 under oath.

19 WITNESS FORNEY: My comments specifically related  
20 to the Staff's position, or the inference that could be  
21 drawn relative to the qualification of the quality control  
22 inspectors.

23 I do acknowledge the fact that they feel in their  
24 minds that they have a position to draw that conclusion.  
25

MMmgc16-1

1 BY MR. LEWIS:

2 Q I'm sorry. The "they" is whom?

3 A (Witness Forney) "They," being Staff, have what  
4 they feel is sufficient information. I do not believe that  
5 for me to draw that conclusion, that there is a sufficient  
6 data base to do that.

7 There is some data base that could be provided  
8 that could also enhance or cause you to come to an opinion  
9 one way or another, and that might be the population of what  
10 a particular inspector ever -- prior to the reinspection  
11 program, had ever caused to be reevaluated or fixed.

12 Also, to just make a general statement that across  
13 the board the inference is that all inspectors are  
14 qualified, I think for certain types of inspectors where  
15 more direct data is known relative to another inspector  
16 coming along in the reinspection program and coming up with  
17 exactly the same measurements as the first inspector, you  
18 could probably draw a greater inference relative to that  
19 inspector than another type of inspector where you don't  
20 have those direct data base.

21 Q Mr. Forney, do you agree with the position stated  
22 in the Staff testimony on remanded issues that the primary  
23 purpose of the QC inspector reinspection program was to  
24 determine whether or not QC inspectors certified prior to  
25 -- I believe the date is September 1982 -- who may not have

ngc16-2

1 been properly certified, had overlooked significant hardware  
2 deficiencies?

3 A I do agree with that position. When the item  
4 of noncompliance was first written by myself, it became  
5 readily apparent that it was going to be a difficult issue  
6 to resolve. How do you go about finding exactly, precisely  
7 which inspectors were qualified at any given point in time  
8 over about a seven-year period. Through numerous iterations  
9 and various meetings at the site and in the Regional Office,  
10 the reinspection program was conceived and accepted in basic  
11 concept as to what it's final results would be and tell  
12 all the parties relative to the status of the installed  
13 equipment, because that's really the important part at this  
14 point. Is the installed equipment proper or is it not?

15 At the inception of the program, I had raised a  
16 question of whether the 90/95 percent criteria was  
17 acceptable or might be acceptable in the final evaluation,  
18 and I expressed that concern last time I testified, and  
19 that was based on the fact that we did not know the details  
20 of all the attributes to be inspected, nor did we have at  
21 hand the results of the reinspection.

22 Since we have received the various reports on  
23 the reinspection program, and I have talked with probably  
24 all of the inspectors in the Region that have been involved  
25 with the detailed evaluation of the reinspection program,



mgcl6-3

1 I also concluded this point, that based on the attributes  
2 that were inspected and the findings that were inspected,  
3 that the 90/95 percent was acceptable. There were not any  
4 major problems in safety-significant areas that would  
5 cause us to want to go to maybe a 98 percent criteria.

6 Q Would you agree with the statement in the Staff's  
7 testimony, which is on page 6 of the testimony, to the  
8 effect that the results of the reinspection program give  
9 reasonable assurance that the overall quality of the work  
10 of the contractors who were reinspected was good?

11 A I would agree with that. And as I believe I may  
12 have previously testified, it has been Region III's position  
13 all along, and including mine, that the construction at the  
14 Byron plant was good, because we had not discovered  
15 obvious hardware problems like we have at other sites, which  
16 I don't think are necessarily appropriate to mention at  
17 this point, and that we felt that the reinspection program  
18 would provide an additional degree of confidence or else  
19 contravert what we had considered to be the case.

20 I feel at this time that the information provided  
21 by the reinspection program did, in fact, provide a very  
22 large data base to confirm Region III's position that the  
23 quality of the Byron site is acceptable and that it is  
24 generally good, acknowledging that the reinspection program  
25 did have certain findings, as did the normal Region III

mgc16-4

1 inspection program.

2 And I might note at this point, that's why we  
3 have inspection programs, to the extent that the important  
4 aspect is the culmination of the design, which I think the  
5 reinspection program also proved that Byron is designed  
6 very conservatively -- in fact, I think in some instances  
7 the design has gone up to about 800 or eight times what  
8 would be considered minimally acceptable -- at least, that  
9 has been what I have been told by discussion with other  
10 Staff members.

11 And when you couple this with the work that the  
12 inspectors -- that the workers do, which I believe to be  
13 generally of good quality, the inspection programs that not  
14 only does the NRC undertake, but the Licensee has inspection  
15 programs, they've had reinspection programs, they've had  
16 overinspection programs, you have that, coupled with the  
17 construction testing before it's turned over to preoperational  
18 testing, and when you put those all together and you have  
19 the overlap, I believe that the end product -- it's my  
20 belief and my professional opinion that those together have  
21 provided that degree of assurance required by 10 CFR 50,  
22 Appendices A and B, as to the requisite safety and health  
23 of the public.

24 Q Mr. Forney, would it be your position that in the  
25 exercise of their individual engineering judgment, engineers --

ngc16-5

1 in this case, particularly members of NRC Region III -- could  
2 draw an inference, could justifiably draw an inference from  
3 the reinspection program results that the capability or  
4 competence of QC contractor inspectors for the contractors  
5 under study has been demonstrated or shown by the report  
6 results?

7 Did you follow my question?

8 MR. MILLER: I did not, Mr. Lewis.

9 WITNESS FORNEY: I believe I did.

10 JUDGE SMITH: Wait a minute, Mr. Forney.

11 MR. MILLER: I found it very difficult to follow.

12 If you could please restate it?

13 End 16 MM

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1 MR. LEWIS: I'd like to restate it.

2 BY MR. LEWIS:

3 Q You have stated a view that you personally did  
4 not believe that you draw an inference from the Reinspection  
5 Program results as to the capability of the contractor QC  
6 inspectors. Is that correct?

7 A (Witness Forney) That's correct.

8 Q Do you believe that in the exercise of their  
9 individual engineering judgment, other members of NRC  
10 Region III could draw such an inference?

11 A Yes, I do.

12 Q Would you consider this a matter on which  
13 reasonable engineers can differ?

14 A Yes. I do not consider this to be the degree  
15 of a differing professional opinion, however, and yesterday  
16 I heard some comments as to whether my affidavit constituted  
17 a differing professional opinion.

18 In that regard, the NRC has a program for  
19 differing professional opinions available to any individual  
20 who feels that on any issue there is a differing opinion  
21 of significant import. And I would like to note at this  
22 point that had I not been requested to provide an affidavit  
23 by Mr. Lewis relative to the Reinspection Program, I consider  
24 that this particular aspect of my difference to be a differing  
25 position, rather than an opinion, I would not have filed a



1 differing professional opinion formally had I not been asked  
2 to file this affidavit.

3 JUDGE SMITH: And you're not filing one, either.

4 WITNESS FORNEY: Yes. I've tried to put this  
5 in perspective.

6 BY MR. LEWIS:

7 Q Let me turn to Mr. Hayes. Mr. Hayes, with  
8 regard to -- did you prepare a memorandum dated February 13,  
9 1984 to Mr. Spessard, who is the Director of Division of  
10 Engineering, Region III, regarding the Byron Station?

11 A (Witness Hayes) Yes, I did.

12 Q Do you have a copy of that in front of you?

13 A Yes, I do.

14 MR. LEWIS: Your Honor, I'm wondering if the  
15 Board wishes that this also be identified on the record and  
16 entered into the record, just as we did with the affidavit  
17 of Mr. Forney. I do not have multiple copies of it. It was  
18 provided originally by Intervenors' counsel. It does have  
19 matters in it that are not the subject of what I'm going to  
20 be questioning on.

21 It goes into other matters in Part 2 of the  
22 memorandum, so I'm not certain that all of it is necessary  
23 for this examination. Perhaps I will just proceed by asking  
24 him the necessary questions.

25 JUDGE SMITH: What's the feeling of the parties

1 on this?

2 MR. CASSEL: Judge, I think if I'm not mistaken  
3 Mr. Learner had moved for the admission of this letter  
4 as an Intervenors' exhibit yesterday, and I think Mr. Gallo  
5 suggested, and I think we all agreed -- I'm not just sure  
6 exactly how it came about -- but the issue of whether it  
7 should be admitted should be deferred until Mr. Hayes was  
8 here.

9 I would have no trouble admitting either the  
10 whole letter or just the first page of the letter which, if  
11 I'm not mistaken, contains all the parts that Mr. Lewis was  
12 planning to raise, and that we dealt with yesterday. I  
13 think we need to get that part of it that's relevant into  
14 the record. I don't care how much beyond that goes in.

15 MR. LEWIS: Well, I think, Your Honor, that  
16 questioning as I understood it and the purpose of the offer  
17 was with respect to the paragraph on page 1 -- actually,  
18 several paragraphs. But I think the operative one would  
19 be -- I'll just simply read it.

20 "In my opinion, the Reinspection Program tells  
21 us little about the capability and effectiveness of the  
22 selected inspectors, and thus, those not selected, and we  
23 should not try to make an argument from this standpoint."

24 I think that that paragraph and the surrounding  
25 discussion was what was the subject of Mr. Learner's discussion.

1 JUDGE SMITH: Does page 1 accomplish your interest?

2 MR. CASSEL: I believe so, yes, Judge.

3 JUDGE SMITH: I think the better approach, then,  
4 would be to have this bound as a part of Mr. Hayes' testimony  
5 with the recognition that if this is the case that this  
6 was his view as of February 13th, 1984, if that is correct --  
7 Mr. Hayes?

8 WITNESS HAYES: Yes.

9 JUDGE SMITH: Does page 1 express your opinion  
10 as to those circumstances as of that date?

11 WITNESS HAYES: Actually, that wasn't necessarily  
12 my opinion. I was trying to play the devil's advocate, if  
13 you like.

14 JUDGE SMITH: So this doesn't accurately express  
15 your --

16 WITNESS HAYES: -- opinion, then or now. So I'm  
17 glad to clear that up if I get a chance.

18 JUDGE SMITH: Okay. That's a very good point.

19 MR. CASSEL: It expresses something that he  
20 stated, and he will have an opportunity through examination  
21 to explain what he meant when he stated it.

22 WITNESS HAYES: That's correct.

23 JUDGE SMITH: I don't think it can be identified  
24 any better than it has been. So with that modification and  
25 that qualification, let's bind it into the transcript at  
this point. (The letter referred to follows:)

T-17

W. Little



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
799 ROOSEVELT ROAD  
GLEN ELLYN, ILLINOIS 60137

February 13, 1984

MEMORANDUM FOR: R. L. Spessard, Director, Division of Engineering  
THRU: R. C. Knop, Chief, Projects Branch 1 *RLK*  
FROM: D. W. Hayes, Chief, Projects Section 1B  
SUBJECT: BYRON STATION

This memo has two parts. The first part is a list of those issues which I feel the NRC must be in a position to address in any subsequent hearing or inquiry relative to the ASLB decision to withhold authorization for an operating license for Byron Station. The second part is a list of suggestions relative to Region III's inspection and independent verification efforts to address these issues.

Part 1

1. What did the reinspection program demonstrate?

As suggested by the Byrc resident inspectors information may be available to allow a subjective characterization of the selected inspector's ability to discern between acceptable and rejectable items and his/her tenacity in performing inspections. This may be difficult to defend, since very likely information would be incomplete and difficult to resurrect. Even if it was available I'm not sure how germane it would be to other inspectors whose work was not reinspected.

In my opinion, the reinspection program tells us little about the capability and effectiveness of the selected inspectors and thus those not selected and we should not try to make an argument from this standpoint.

The reinspection program does give us a wealth of data on the quality of the work itself and this is where we need to concentrate our efforts to demonstrate with reasonable assurance that no unacceptable defects exist in the plant (i.e. that although there were failures in the contractors QA programs, no widespread hardware or construction problems exist).

2. What inferences can reasonably be drawn based on conclusions reached on work reinspected to items inspected which are inherently non-recreatable or inaccessible?



1 MR. LEWIS: I have only my copy which was  
2 provided to me by Intervenors' counsel.

3 WITNESS LITTLE: I'll be glad to volunteer my  
4 copy.

5 BY MR. LEWIS:

6 Q Mr. Hayes, would you explain for the Board and  
7 parties what the purpose of this memorandum was?

8 A (Witness Hayes) Yes. As I said a minute ago,  
9 I wanted to stimulate some thinking. I thought I laid the  
10 groundwork for that in the first paragraph, but I might  
11 point out this was an internal memo. Had I known it was  
12 going to be a subject of this procedure, I would have  
13 written it much clearer.

14 I did feel that the Reinspection Program did not  
15 establish conclusively that the QC inspectors were qualified.  
16 I wanted to get some thinking out before someone jumped  
17 at the kind of conclusion. I did feel then, and I feel  
18 stronger about it today, that it was reasonable to infer  
19 from the program results that the inspectors were capable.  
20 Both those inspectors that were selected and those inspectors  
21 that were not selected.

22 I thought it was more appropriate that we should  
23 concentrate or focus on the work, and the fact that no  
24 significant defects had been overlooked. And I wanted to  
25 get the Staff thinking in that direction.

1           Q       Mr. Hayes, if I understand correctly what you  
2 just testified, would it be accurate to state that to the  
3 extent you have a difference -- let me ask it this way.

4                    On page 4 of the Staff's testimony on remanded  
5 issues in Answer No. 6, the following is stated, "The NRC  
6 Staff believes that the results of the Reinspection Program  
7 provide adequate confidence in the capability of the  
8 Hatfield, Hunter and PTL quality control inspectors whose  
9 work was not reinspected." Would you agree with that  
10 statement?

11           A       Yes, I do.

12           Q       Therefore, is any difference you have related  
13 to the degree of certainty with which one can draw such  
14 an inference?

15           A       Yes, and I think Bill Forney said it very well.  
16 I would echo much -- my feelings were much the same as what  
17 he felt.

18           Q       Have you had the opportunity to review the NRC  
19 Staff's Testimony on Remanded Issues?

20           A       Yes, I have.

21           Q       Do you agree with the conclusion stated in that  
22 testimony that the overall quality of the work of the  
23 contractors covered by the program is acceptable, based in  
24 part on the results of the Reinspection Program?

25           A       Yes.

1 Q I take it -- Mr. Forney previously discussed  
2 the procedure of the so-called differing professional  
3 opinion. I take it you don't have a differing professional  
4 opinion regarding the testimony on remanded issues.

5 A There are always small points that we don't  
6 fully agree on, but there's a vast middle ground that we  
7 do agree on.

8 Q Would you agree with the conclusion in the  
9 Staff's testimony that the results of the Reinspection  
10 Program demonstrated that the inspectors who were in the  
11 population sample had not overlooked significant hardware  
12 deficiencies?

13 A Yes.

14 MR. LEWIS: Mr. Chairman, those would be the  
15 questions that I wish to pose to these witnesses, and as I  
16 say, we have made Mr. Little available as well for any  
17 questions that may come up among the parties.

18 JUDGE SMITH: Mr. Hayes, you made a statement  
19 there that I just couldn't follow. I wish I could read it,  
20 but we can't. You did make a statement that said, you can  
21 infer capability from the inspection results.

22 WITNESS HAYES: Yes.

23 JUDGE SMITH: I can't fit that statement in with  
24 the rest of your testimony. There's a subtlety there that  
25 I am missing. You say it's a matter of a tree?

1                   WITNESS HAYES: I did not feel that the Reinspection  
2 Program established conclusively that the inspectors were  
3 qualified, but I did feel that we could infer that they  
4 were capable of distinguishing a defect -- good work from  
5 bad work.

6                   JUDGE SMITH: But the inspectors were capable  
7 of doing that.

8                   WITNESS HAYES: Yes. And that there was no  
9 unacceptable defects that had been overlooked.

10                  JUDGE SMITH: And you felt that on February 13th?

11                  WITNESS HAYES: Yes, I did. I feel stronger  
12 about it today after I have talked -- we had more opportunity  
13 to explore this, and that was one of the purposes of the  
14 memo -- a number of the inspectors, including Mr. Little and  
15 I, have had many, many sessions on exactly what did this  
16 program establish, and what can we say about it.

17                  JUDGE COLE: Is it that you don't think that it  
18 was conclusively demonstrated that they had the appropriate  
19 credentials to do the inspection, or is it something else?

20                  WITNESS HAYES: I believe it's something else.  
21 If you make the assumption that the work was perfect, then  
22 the inspection results of the best inspector in the world  
23 and the inspection results of the worst inspector in the  
24 world would be the same; the work was perfect.

25                  I'm not saying that's the case, but you start from



1 that. And so without knowing how many defects were out  
2 there in the first place, to draw some conclusion that,  
3 you know, he was effective to some percentage, I just  
4 couldn't do it.

5 But we do know statistically there is a certain  
6 number of deficiencies that exist, and we do know that  
7 inspectors pick up a certain percent of those, and they  
8 miss a certain percent of them. We try to keep that  
9 sieve small enough so that they don't miss anything very  
10 important. But there are still defects out there that  
11 haven't been identified and probably never will be. But  
12 they are of a minor nature.

13 So I just didn't feel that I could draw an  
14 absolute conclusion as to whether inspectors were, you know,  
15 qualified in an absolute manner.

16 JUDGE SMITH: Mr. Hayes, let's pick up this  
17 second paragraph in Part 1. Let's actually review the  
18 words that you have used there.

19 "In my opinion, the Reinspection Program tells  
20 us little about the capability and effectiveness of the  
21 selected inspectors, and thus, those not selected. And  
22 we should not try to make an argument from this standpoint."

23 Now, was that statement actually your opinion  
24 at the time or was that a devil's advocate statement?

25 WITNESS HAYES: That was a devil's advocate

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1 statement. That was an overstatement. I think our own  
2 Regional Director uses this very effectively on us all the  
3 time. He'll take a real hard position way down here.  
4 He does that, and I did it to find out where we really stood.  
5 What did these inspectors really feel about it?

6 To do that, you sometimes have to stimulate some-  
7 thing in the opposite direction. You have to give them  
8 something to argue with, and that's what I was trying to do,

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1 JUDGE CALLIHAN: Characterizing this thought  
2 in the second paragraph of Part I, as you may, I have to  
3 use your word, you say it's your opinion, what you said was,  
4 and you have now made a comparison as to contrast between  
5 the first day of August and the 13th of February, both in  
6 1984.

7 Can you extrapolate back to -- well, I'll say  
8 August, the time of the hearing in August of 1983, and make  
9 a similar comparison or contrast? What was your, quote,  
10 "opinion," unquote, then about the proposed -- and I guess  
11 partially in effect reinspection program at that time, the  
12 last time you appeared on this subject before the Board?

13 WITNESS HAYES: I think I stated at that time  
14 that I felt the program was adequate, but we were reserving  
15 judgment until we saw the facts. But I think the question  
16 of just how well this program demonstrated that the  
17 inspectors were qualified, I think Bill Forney and I had  
18 discussed this point from almost the very beginning, you know,  
19 just how well would this do. And I think we both agreed  
20 that this was a good place to start. We just couldn't  
21 think of any other way that you could prove that the  
22 inspectors were qualified or not qualified, because you were  
23 dealing with a moving target. He may not have been  
24 qualified the first day, but in the course of doing his  
25 job, he may have become qualified.

mgc18-2

1                   You can't very well go out and try to find out  
2 when did he become qualified.

3                   JUDGE SMITH: Mr. Cassel.

4                   CROSS-EXAMINATION

5                   BY MR. CASSEL:

6                   Q     Good afternoon, gentlemen. I won't ask you that  
7 question that I tried to recall you for before, Mr. Hayes.

8                   Mr. Forney, you were able to give only a very  
9 brief answer to the question from Mr. Lewis about what is  
10 the reason for which you disagree with the Staff's statement  
11 that the reinspection program results provide adequate  
12 confidence in the capability of the QC inspectors.

13                   Could you explain as fully as you think is  
14 necessary for the Board to understand why it is that you  
15 disagree with that conclusion?

16                   MR. LEWIS: I'm not sure that he stated a  
17 disagreement with that.

18                   MR. CASSEL: I don't even mean to have --

19                   BY MR. CASSEL:

20                   Q     Why it is you hold whatever views you hold with  
21 respect to that statement. I don't mean to characterize  
22 it as disagreement or whatever.

23                   MR. MILLEK: Judge Smith, I believe that question  
24 was asked by Mr. Lewis and answered by Mr. Forney in whatever  
25 language he felt comfortable with. Certainly, no on



mgcl8-3  
1 interrupted him or tried to cut him off. The question has  
2 been asked and answered.

3 MR. CASSEL: Judge, I can say, did you mean this,  
4 did you mean that, and so forth. I think it's much simpler,  
5 as Mr. Lewis suggested at the outset, just to let the  
6 witness say in his own words what he meant.

7 He answered in one sentence before. I know from  
8 the discussion we had Monday night, that he can elaborate  
9 on that and make clearer what the basis of his position is.

10 JUDGE SMITH: Mr. Miller, would you explain your  
11 position as to why you feel that Mr. Forney should not be  
12 given the opportunity to make a narrative statement? I can  
13 identify maybe two of them: that you want an opportunity  
14 to object, and that you don't want to have, in any event,  
15 inappropriate answers come to our attention. But we are not  
16 a jury, and if inappropriate answers come out, we'll that's  
17 all right. It's not going to taint this irretrievably.

18 MR. MILLER: It's not a question of inappropriate  
19 answers, Judge Smith. I have no doubt that the Board, with  
20 all the exposure that it's had to the issues in this  
21 proceeding, can decide very well for itself what is important  
22 to its decision and what is not.

23 But just in terms of an orderly procedure so that  
24 an examination and a cross-examination can have some point  
25 to it, it seems to me that questions ought to be put to the

mgcl8-4

1 witness and he give answers, rather than simply have  
2 Mr. Forney make a speech that everybody jots down madly,  
3 more or less accurately what he said, and then goes back  
4 over it to the extent they feel obligated to to find out  
5 at that point precisely what is was that he meant when he  
6 made his long narrative answer. And it's for that reason  
7 that I object.

8 JUDGE SMITH: Well, Mr. Miller has a very important  
9 interest in his views and a right to proceed very carefully,  
10 so I think we will give deference to his request on it.

11 I ask you to go on a question-by-question basis,  
12 and do not invite long narrative answers. Not that I  
13 understood your question to be doing that.

14 MR. CASSEL: Judge, are you suggesting that it is  
15 an improper question to ask Mr. Forney -- I'm not suggesting  
16 you are; I'm merely asking for some guidance -- is it an  
17 improper question to ask Mr. Forney what is the basis for  
18 his opinion on the issue of whether one can infer from the  
19 reinspection program results that QC inspectors are capable?

20 It seems to me that that's an entirely proper  
21 question in any proceeding I've ever been in, no matter  
22 what is at stake. I can say, did you mean A, did you mean B,  
23 did you mean C.

24 JUDGE SMITH: No, that wouldn't be appropriate.

25 MR. MILLER: I don't object to the question on

mgcl8-5

1 the grounds that that calls for a narrative answer. Mr. Lewis  
2 asked him the very same question, and Mr. Forney answered.  
3 Mr. Cassel started his examination by saying, "Would you  
4 amplify on that a little bit?"

5 JUDGE SMITH: Yes. It's only in comparison to  
6 Mr. Lewis' question that he made the objection. I agree that  
7 that question, as you put it, had it not already been  
8 assertedly asked and answered, would have been a harmless  
9 question, and I'm not even sure at this moment that it is  
10 still harmful. But we are going to give deference to  
11 Mr. Miller's position.

12 So I don't know how he should proceed. However,  
13 he does have a right, Mr. Miller, to probe to a great extent.

14 MR. MILLER: Absolutely.

15 JUDGE SMITH: I'm glad I'm not in his position,  
16 but I have to figure out how to do it, given your view.

17 MR. MILLER: Mr. Cassel was present at the same  
18 informal interview with Mr. Forney that I was. I have a  
19 great deal of confidence in his ability to put proper  
20 questions to the witness and the witness to be responsive  
21 in answering.

22 MR. CASSEL: All right. I will try it this way.  
23 I continue to think that it's always best in a sensitive  
24 matter like this to let the witness explain what he things.  
25 But the ruling is that I have to throw something out and see

mgc18-6

1 if he agrees with it. We'll proceed on that basis.

2 JUDGE SMITH: That's not the ruling.

3 MR. CASSEL: Well, I will try it, as best I can.

4 JUDGE SMITH: If you will represent to the Board  
5 that you cannot proceed any differently --

6 MR. CASSEL: I can proceed.

7 JUDGE SMITH: We didn't suggest that you throw  
8 out various interpretations of what he may have meant for  
9 him to accept or reject. I don't know how you're going to  
10 proceed.

11 MR. CASSEL: I'll give it the best try I can,  
12 Judge.

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1 BY MR. CASSEL:

2 Q Mr. Forney, you do not fully agree, do you,  
3 with the statement in the Staff's testimony that the results  
4 of the Reinspection Program provide adequate confidence in  
5 the capability of Hatfield, Hunter and PTL quality control  
6 inspectors; is that correct?

7 A (Witness Forney) Yes, with some qualification.  
8 My belief is that the data base that's available does not  
9 provide conclusively that an inspector is capable. There  
10 are other things that could be taken into consideration.

11 For example, if you're going to qualify an  
12 individual and you're going to give him the capability  
13 demonstration test, you give him a sample of demonstration  
14 pieces with known problems, which would have a high  
15 percentage of problems involved, and you determine the  
16 individual's ability to discern the relative defects.

17 The Reinspection Program, in my mind, -- because  
18 I believe that the work out there is generally of good  
19 quality -- skews the data base in such a direction that  
20 most often in my mind, an inspector is merely looking at work  
21 that is already good. So it's difficult, then, to say  
22 whether he's determining good or bad.

23 You know, if an inspector or if a worker always  
24 built everything 100 percent correctly and you had never  
25 given a capability demonstration to an inspector and you

1 merely sent him out in the field to look at the work, you  
2 would never know whether he was qualified or not. So that's  
3 generally why you give a capability demonstration in advance.  
4 So that before you send him out in the field you know.

5           However, I believe -- as in one of my prior  
6 answers and I still believe it now -- that that is really a  
7 miniscule point, because I believe that all parties, and  
8 particularly the public, should be interested in what is  
9 the status of the equipment that's out there, be it from  
10 the capability of the worker or be it from the capability  
11 of an inspector. Okay. I think that's important.

12           And I believe that -- at Byron, other than some  
13 other plants with a lot of more severe problems, or with  
14 severe problems, Byron probably has one of the biggest  
15 data bases that the NRC has had occasion to review to  
16 determine what really is the quality of the work out there.

17           So I think Region III's position, you know, for  
18 the last number of years that the work out there is of good  
19 quality has been positively confirmed in my mind.

20           Q       If I understand correctly your position, from  
21 both our informal discussion and your testimony today, one  
22 of the things you're suggesting is that it's really more  
23 important to focus on what proportion of the defects were  
24 detected by the original inspector, rather than the data  
25 which was actually used to score the results of the

1 Reinspection Program. Is that correct?

2 A I included that as one of the things that I  
3 would include in the population if I were going to post facto  
4 try and determine the capability. I would possibly want to  
5 be interested in did this inspector ever identify anything  
6 and cause it to be corrected.

7 The Reinspection Program wasn't designed to take  
8 that type of a look and factor it into the program. And  
9 again, it was my understanding from the onset of the  
10 Reinspection Program that really, what the Reinspection  
11 Program was going to do was either to confirm or controvert  
12 Region III's understanding of the quality of the work that  
13 was out there.

14 JUDGE SMITH: Excuse me, Mr. Forney, may I  
15 interrupt at that point. The data with respect to the  
16 previous inspector's effectiveness was available, wasn't it?

17 WITNESS FORNEY: I don't know how difficult of  
18 a task looking into the records that are available that  
19 would have become. I think that would have been an almost  
20 monumental task then to go back and try and sort through,  
21 you know, hundreds of thousands of records to find out which  
22 one an inspector may have, on a non-conformance report or  
23 some other mechanism, caused something to be fixed.

24 For example, if you had 100 widgetts or whatever  
25 and 10 of them were bad, one position could be that you have

1 90 percent confidence in that inspector's ability to  
2 discern the quality of the work. Another person might take  
3 the view that if those are the only 10 -- or you don't  
4 know that those are the only 10 bad widgetts that were in  
5 the sample, that you have a 0 confidence in that inspector's  
6 ability.

7 And another person could take the position that  
8 would say, I would like to know something about the  
9 population of widgetts that that inspector ever caused to  
10 be fixed, and then integrate that knowledge together to come  
11 up with some perspective of your belief in an inspector's  
12 capability.

13 BY MR. CASSEL:

14 Q Using that example, I think I hear you talking  
15 about at least three different sets of data that would  
16 feed into an overall judgment on inspector capability.  
17 One would be through whatever means, to go back and find out  
18 how many of the original widgetts the original inspector  
19 determined were defective in a range to have fixed as a  
20 result of it. That would tell you something.

21 A (Witness Forney) That's correct.

22 Q The second piece of data, as I understand it,  
23 would be if you somehow knew that out of that 100 widgetts,  
24 say 10 were defective at the beginning and it turned out that  
25 the original inspector caught five of them but didn't catch



1 the other five, then you would have a finding that he had  
2 found 50 percent of the defects in the sample that he was  
3 confronted with. Is that another piece of information that  
4 you're suggesting would be relevant?

5 A Yes. That would tell you that he missed 50  
6 percent. However, that doesn't necessarily mean that  
7 collectively, because he did have to evaluate the other  
8 90 and come to some discernment, that necessarily then you  
9 only have a 50 percent confidence in him. That's why I  
10 said you'd have to come to some judgment as to how you  
11 believe those would integrate.

12 Q Sure. This would just be one of the factors  
13 that you would take a look at. And the logic of that is  
14 in part, is it not, that if there are 90 widgetts out of  
15 the 100 which are free from any defect in the first place,  
16 the fact that the original inspector didn't find any defect  
17 in welds which had no defects doesn't tell you very much  
18 about his capabilities, is that correct?

19 A That basically is the reason why I would not  
20 subscribe to the fact that you could just generally make a  
21 statement that all the individuals are capable.

22 Again, I believe that you can say something  
23 about the combination of worker and inspector.

24 Q And is it also your view that you probably could  
25 find out more about that inspector's capability by looking at

1 how he did in this example on the 10 defective widgetts,  
2 than on how he did on the 90 that had no defects to be  
3 discovered?

4 If that wasn't clear, I'll try it again. Is  
5 it your view that you can learn more about that inspector's  
6 capabilities from how well he did in terms of finding the  
7 10 defects than how well he did in terms of looking at the  
8 90 that had no defects, and finding that indeed, they had  
9 no defects?

10 A I don't know that I would characterize it as  
11 you would necessarily know more from that particular aspect.  
12 There are many other things that we haven't gone into such  
13 as what type training did the individual have, what type  
14 testing has he had. There's just a whole of information  
15 that if I were to pick on any specific inspector and then  
16 make a determination in my mind as to whether he was always  
17 capable that I would integrate into that finding for a given  
18 inspector.

19 That wasn't my understanding of what the  
20 Reinspection Program was going to do, though. So I  
21 personally believe that -- well, I don't think it renders it  
22 moot, but I think it renders that conclusion miniscule in  
23 import.

24 Q In other words, your position is that because  
25 you believe that the quality of the work is good, that it

1 doesn't at this point in time matter whether or not the  
2 inspectors were capable or not.

3 A That's correct.

4 Q You think that's a miniscule issue?

5 A That's correct. You know, the other evening --  
6 you referred to our discussions the other evening, and I  
7 think one of the important things that I discussed, in my  
8 mind, were I tried to explain my view of the plan relative  
9 to a pie. You have a worker and he's got a certain part of  
10 that pie that he has to perform. But knowing that people  
11 don't always perform the best, it's a known fact that  
12 architect engineers over-design, and quite often, too many  
13 times what is required. So this overlaps on one side the  
14 ineffectiveness of the worker.

15 I believe they also probably take into  
16 consideration the fact that we do require inspections  
17 but inspectors aren't always perfect either, and this may  
18 be one of the reasons why they also over-design.

19 Then, 10 CFR requires a very extensive quality  
20 assurance/quality control program. And when you couple  
21 the overlap on these, and if you can judge the quality  
22 assurance program to be of good quality -- and that's what  
23 the Region's conclusion is relative to the overall quality  
24 assurance program at Byron, that is of good quality, it is  
25 a good program -- when you put this pie together, it's an

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1 acceptable end product. And then, on top of that, when you  
2 put the whipped cream or whatever else, the covering or  
3 the crust on top of the pie, you have a pre-operational test  
4 program, you have various over-inspection programs,  
5 reinspection programs due to findings and so on.

6 You end up with a product that's acceptable and  
7 meets the requirements and the intent of the Code of  
8 Federal Regulations.

9 Q To the extent, Mr. Forney, that you have  
10 questions or that you believe there are limitations in  
11 what one can infer about the capabilities of the inspectors  
12 who were actually reinspecting, are not those same limita-  
13 tions, in your view, even stronger with respect to what one  
14 can infer concerning the capabilities of the inspectors  
15 who were not reinspecting?

16 A I don't know that I would typify it as any  
17 stronger. I would say that I would hold the same reservations  
18 relative to the remaining population.

19 However, looking at the end product, the  
20 Reinspection Program re-evaluated somewhere around 30 percent  
21 of the inspectors, and somewhere in the neighborhood of  
22 at least 10 to 15 percent of the construction of the plant.

23 On that end of the spectrum, you could relate  
24 the findings that the quality of the work is good, in my  
25 mind. That comes from an engineering and professional type



1 judgment that if you find that large of a percentage of the  
2 population of work not to have any significant safety  
3 problems, then I think you can draw the same conclusion  
4 relative to the rest of it.

5 Q To the panel in general, are any of you aware  
6 of any data generated by the Reinspection Program that  
7 would enable one to examine what proportion of the defects  
8 initially confronted by the original inspector he detected,  
9 as opposed to what proportion of the defects that were  
10 there in the first place he missed? He or she?

11 A I think I previously stated I do not know that  
12 aspect.

13 A (Witness Little) I know of none.

14 A (Witness Hayes) I don't, either.

15 Q Mr. Hayes, in discussing the statement in your  
16 February 13th letter, you indicated that it was a devil's  
17 advocate position and over-stated your views.

18 If you reduced your views down to what you  
19 actually believed rather than what you stated for the  
20 purpose of provoking discussion, were they approximately the  
21 same then as what Mr. Forney has just described now?

22 A (Witness Hayes) Yes, I believe so.

23 Q And you hold those same views today?

24 A Yes. I felt the program was adequate, and  
25 I thought the results pretty well showed that the work out

1 there was okay.

2           If I might point out, in the very first sentence  
3 in the first part of my memo it lists those issues which  
4 I feel the NRC must be in a position to address. And in  
5 the very first issue I list is what did the Reinspection  
6 Program demonstrate. Then I threw in some thoughts along  
7 that line, you know, we ought to be thinking about these  
8 things.

9           So I'm sorry that, you know, this thing has  
10 caused some confusion. It was not confusing in my mind  
11 about it. I knew what I was trying to accomplish.

12           Q       I think you have clarified your purpose, and  
13 I don't think there's any confusion that you need to  
14 apologize for at all. I don't think I have -- well, one  
15 other point, Mr. Forney.

16           When you were talking about this issue the other  
17 night, you used the example of what everyone does if you  
18 discover, after a number of measurements have been taken  
19 by a gauge that the gauge was improperly calibrated, and  
20 you use that as a way of illustrating your views on this.  
21 Do you recall that discussion?

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1           A       (Witness Forney) Yes, I do. And I believe this  
2 may relate to some of the discussion that went on yesterday  
3 as to whether or not I had taken a position that I felt  
4 that 100 percent reinspection should be conducted either  
5 of all of a given attribute or all of an inspector or his  
6 prior work.

7                   I think if you look at the reinspection program  
8 in the context of what it did, if the Region had held to  
9 the position that a detailed review of all the specific  
10 qualifications and the issue of, was a guy since March 16,  
11 1981 to the date of the reinspection program's inception  
12 adjudged to be not properly qualified or certified, one  
13 view could be to take that individual and reinspect everything  
14 he did, using the theory that's often used with a gauge,  
15 that if you take a gauge out in the field and you conduct  
16 tests with it, say over a six-month period, and then at the  
17 end of six months when you send it in for a calibration check,  
18 you find that it's not properly calibrated, without knowing  
19 what time in that six-month period the gauge became  
20 uncalibrated, generally you require the tests to be redone.

21                   So at the inception of the reinspection program  
22 and the discussions that went on on what should be done  
23 relative to the item of noncompliance, 82-05-19, that was,  
24 in fact, one of the things that I said we should look at.

25                   But I think at this juncture, had we taken that

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1 position, in my mind, the program probably would have  
2 involved fewer inspectors and probably considerably less  
3 of a percentage of the plant's overall equipment. So I  
4 think when the reinspection program was developed, and I  
5 agreed in its basic concept, I agreed in the concept because  
6 I felt the reinspection program covering the timespan of  
7 the construction of the site, as well as a significantly  
8 greater population of inspectors, was an acceptable  
9 alternative.

10 MR. CASSEL: I have no further questions for the  
11 panel, Judge.

12 MR. MILLER: Could I have just one second?

13 (Pause.)

14 CROSS-EXAMINATION

15 BY MR. MILLER:

16 Q Mr. Forney, it is correct that you currently  
17 have no responsibility at Byron Station and have not had  
18 since July of 1983, correct?

19 A (Witness Forney) I noted yesterday that you made  
20 a comment like that, and you asked that question now. That's  
21 not entirely true. Although I was transferred as of last  
22 July, I have been involved and have been provided at  
23 various stages the documentation that Commonwealth has  
24 supplied, as well as had the freedom to discuss with all of  
25 the Staff members at my will or leisure any concerns or



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1 questions I had when I read your information.

2 So admittedly maybe my involvement wasn't to the  
3 detail it would have been had I still been assigned to  
4 Byron. I have followed the program over the last year and  
5 particularly to even a greater degree since about last March  
6 when I was told that in September, in all likelihood, I would  
7 become a Section Chief responsible for Byron.

8 Q Quite apart from your individual interest in  
9 Byron and the reinspection program, you have no responsibility  
10 currently at the Byron Station, correct?

11 A That's correct.

12 JUDGE SMITH: Mr. Miller, may I ask a clarifying  
13 question?

14 Have we received the most recent version of the  
15 SALP Commission Report. I notice that you are on that  
16 committee for Byron.

17 WITNESS FORNEY: That's correct.

18 JUDGE SMITH: Did your duties take you beyond the  
19 time that you left Byron as a senior inspector?

20 WITNESS FORNEY: You mean for the purpose of the  
21 SALP?

22 JUDGE SMITH: Yes.

23 WITNESS FORNEY: I was a member of the panel which  
24 did evaluate findings, et cetera, that had occurred during  
25 the time that I was assigned to Byron, and it also included

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1 findings that had been documented subsequent to my transfer  
2 to another assignment.

3 JUDGE SMITH: So you have had official duties  
4 with respect to Byron by virtue of your SALP assignment?

5 WITNESS FORNEY: Yes.

6 JUDGE SMITH: And when did those duties come to  
7 an end?

8 WITNESS FORNEY: Pardon me, sir?

9 JUDGE SMITH: When did your SALP assignment with  
10 respect to Byron come to an end?

11 WITNESS FORNEY: I don't recall what the date of  
12 the last SALP meeting was, but it was in the Glen Ellyn  
13 area when the meeting was conducted with the Licensee. It  
14 has been within the last three weeks, I'd say.

15 BY MR. MILLER:

16 Q Prior to July 1983, Mr. Forney, you were the  
17 Senior Resident Inspector at the Byron site; correct?

18 A (Witness Forney) Yes.

19 Q You had been in that position for approximately  
20 22 months prior to July?

21 A That's right.

22 Q Let me finish my question before you answer, sir.

23 Now you, in fact, wrote the item of noncompliance  
24 that we have referred to in this proceeding as 82-05-19  
25 in connection with your role as a member of the so-called

mgc20-5

1 CAT team inspection; is that correct?

2 A That's correct.

3 Q Now that was the item of noncompliance that  
4 related to improper quality control inspector certification  
5 practices that you observed during the course of that  
6 inspection; is that right?

A That's correct.

8 Q Now when Commonwealth Edison Company wanted to  
9 close out that item of noncompliance, you participated,  
10 did you not, in discussions with representatives of  
11 Commonwealth Edison Company regarding the proposed reinspection  
12 program, correct?

13 A That's correct.

14 Q It is a fact, is it not, that you suggested that  
15 the inspectors from whom the list of inspectors to be  
16 reinspectors would be chosen should be listed chronologically  
17 in order of their date of certification; is that right?

18 A That's correct.

19 Q And Commonwealth Edison agreed with that suggestion,  
20 and that's the shape of the program as it is today, right?

21 A That's correct.

22 Q And you suggested that the first inspector  
23 certified for each contractor be added to the fifth, the  
24 tenth, the fifteenth and so on, as proposed by Commonwealth  
25 Edison Company, correct?

mgc20-6

1 A That's correct.

2 Q And once again, of course, Commonwealth Edison  
3 agreed to the suggestion that you had made, right?

4 A Yes.

5 JUDGE SMITH: Mr. Miller, is this all related to  
6 the purpose of this panel?

7 MR. MILLER: Judge Smith, Mr. Forney has talked  
8 about both what he perceives the purpose of the reinspection  
9 program to be and what results can be inferred from it.

10 JUDGE SMITH: Okay.

11 MR. MILLER: And I want to establish what his role  
12 was in the early stages of this program.

13 JUDGE SMITH: You're exactly right. I just was  
14 not clear if you were doing that or if you were clarifying  
15 some earlier testimony from your panel.

16 Just so long as --

17 MR. MILLER: I'm sorry. Perhaps I should scratch  
18 out a cross-examination plan at the break.

19 JUDGE SMITH: That's all right. Your representation  
20 is fine.

21 BY MR. MILLER:

22 Q And, Mr. Forney, it was you as the Senior Resident  
23 Inspector who picked the additional inspectors for each  
24 contractor that were to be added to the fifth, tenth,  
25 and fifteenth and so on, that were picked on the chronological



mgc20-7

1 listing, correct?

2 A (Witness Forney) That's correct.

3 Q And finally along this line, Mr. Forney, it was  
4 you who suggested that a three-month period be used to  
5 reinspect each inspector's work. Also correct?

6 A Yes. I believe Commonwealth originally offered  
7 a one-month, and we had some considerable discussion in  
8 the Region as to what we would consider a minimally acceptable  
9 time period, which was the three months coupled with a  
10 program to increase the inspection population.

11 Q In the event that an inspector did not meet the  
12 acceptance criteria at the end of the first three-month  
13 period, correct?

14 A That's correct.

15 Q And it was your idea, was it not, that the sample  
16 would be expanded if the acceptance criteria were not met  
17 at the end of the six-month period, correct?

18 A That's correct.

19 Q According to your affidavit, Mr. Forney, you state  
20 that you now find the 90 percent and 95 percent acceptance  
21 criteria acceptable, correct?

22 A That's correct.

23 Q Those acceptance criteria really are agreement  
24 rates, aren't they, the rate at which the reinspection  
25 results agree with the original inspection results?

ngc20-8

1 A That's correct.

2 Q I think earlier you stated that you had suggested  
3 internally within the Region that perhaps a 100 percent  
4 reinspection might be appropriate, and if my notes are  
5 correct, I think you said that it would be 100 percent of  
6 something from March 16, 1982 to the date of the CAT team  
7 inspection. Would you help me out on the dates, please?

8 A I believe I said from the March 16, 1981 date to  
9 the point in time that we were in the process of evaluating  
10 the reinspection program. The March 16th date is the  
11 date by which you formally agreed to Reg Guide 1.58, which  
12 invokes ANSI N-4526, 1978.

13 MR. LEWIS: You said 1991. At least that's what  
14 we heard. Did you mean March 16, 1981?

15 WITNESS FORNEY: If I said 1991, I meant 1981.

16 BY MR. MILLER:

17 Q Mr. Forney, was the internal discussion within  
18 the Region about the 100 percent reinspection during that  
19 timeframe 100 percent of all safety-related equipment  
20 installed in that time period?

21 A (Witness Forney) No. That would have been  
22 relative to any given inspector, if we had only looked at  
23 inspectors during that time period that were deemed to have  
24 not been properly qualified and certified, and then we  
25 would have -- we evaluated whether that was the best approach,

mgc20-9

1 to require 100 percent reinspection of that particular  
2 individual's work.

3 Q In any of your discussions with Commonwealth  
4 Edison Company, did you ever suggest this 100 percent  
5 reinspection program that you've just described?

6 A I may have. I don't recall.

7 Q But in any event, the reinspection program, in  
8 the form that we've been discussing it on the record in  
9 this proceeding, was the one that was agreed to, at least  
10 in concept, between the NRC Staff and Commonwealth Edison  
11 Company in February or March of 1983, correct?

12 A That's correct. And for the reason I stated  
13 awhile ago, which is realistically over -- it gives you  
14 a better perspective of the installed equipment. And we  
15 as a Region had come to our conclusion over a number of  
16 years that we felt the reinspection program, if it covered  
17 a number of years, would, in fact, either confirm or  
18 contravert our previous conclusion.

19 Q And that previous conclusion was?

20 A That the quality of the installed equipment at  
21 Byron was good, you know, generally good, and that there  
22 were not obvious hardware problems.

23 Q Mr. Forney, in your affidavit at paragraph 9,  
24 you state as follows: "In my view, while the reinspection  
25 program was not intended to and did not directly determine

mgc20-10

1 whether CECO contractors at Byron always used qualified  
2 inspectors, it provided a good basis to evaluate whether  
3 inspectors had overlooked significant safety-related  
4 deficiencies."

5 I want to focus on the first part of that  
6 sentence where you express your understanding of the intent  
7 of the program. I am going to present you with a series  
8 of statements, and I want to ask you whether you agree or  
9 disagree with those statements.

10 The first statement is, "The objective of the  
11 reinspection program was to evaluate the quality of the  
12 original inspectors' performance."

13 Do you agree or disagree?

14 Q Yes, it's to evaluate the record as to what  
15 existed as to the quality of the work that was out there.  
16 I don't know that I would relate that directly back to the  
17 inspector. If the work was built correctly, that doesn't  
18 necessarily tell you anything about that inspector. It  
19 merely says that, yeah, he confirmed that it was correct.

20 Q All right. Let me go on to my second one,  
21 Mr. Forney.

22 "The reinspection program undertaken at Byron  
23 was developed to verify the effectiveness of inspector  
24 qualification and certification practices utilized by site  
25 contractors prior to September 1982."



gc20-11

1 Do you agree or disagree with that statement  
2 of the reinspection program objectives.

3 A That was kind of a long one. Would you repeat  
4 that one for me?

5 Q I'll do it again. The reinspection program  
6 undertaken at Byron was developed to verify the effectiveness  
7 of inspector qualification and certification practices  
8 utilized by site contractors prior to September 1982.

9 A I would say yes to that.

10 Q Mr. Forney, does your affidavit say that the  
11 reinspection program was not intended to determine whether  
12 Commonwealth Edison contractors at Byron always used  
13 qualified inspectors? That's what the words say, isn't it?

14 A Yeah, that's correct. And again, I probably could  
15 have amplified on your last question also. Again, it is still  
16 my belief that what it tells you is the installed product,  
17 and that's what, in my belief, the reinspection was going  
18 to tell us, because it didn't have some of these other  
19 attributes that I talked about earlier to come to a more  
20 definitive conclusion about the inspector.

21 Q Mr. Forney, I want to focus, though, on what  
22 your belief was as to the intent of the reinspection program.

23 MR. CASSELL: Judge, I think the witness, unless  
24 I'm mistaken, had not completed his answer, and he's  
25 entitled --

ngc20-12

1 BY MR. MILLER:

2 Q I'm sorry. I didn't mean to cut you off,  
3 Mr. Forney. Go ahead.

4 A (Witness Forney) I don't remember where I'm at  
5 anyway. Go ahead and ask your question.

6 JUDGE SMITH: Would you read that question back  
7 to Mr. Forney?

8 MR. MILLER: Certainly. I asked him if he would  
9 agree or disagree with the statement that the reinspection  
10 program at Byron was developed to verify the effectiveness  
11 of inspection qualification and certification practices  
12 utilized by site contractors prior to September 1982.

13 WITNESS FORNEY: Yes, to the degree that it  
14 would tell us if they overlooked significant problems or  
15 not significant problems. It won't tell you totally, nor  
16 was it ever my understanding that it would totally tell  
17 you the full capability of an inspector.

18 BY MR. MILLER:

19 Q Well, Mr. Forney, as you sit here today, are you  
20 willing to draw any inference with respect to inspector  
21 qualification as a result of reviewing the reinspection  
22 program?

23 A (Witness Forney) I think with my affidavit that  
24 said that I generally agree, that you can come to the  
25 conclusion that the inspectors did not overlook any

ngc20-13

1 safety-significant deficiencies, I would make that  
2 conclusion.

3 Q Mr. Forney, is the conclusion you have just  
4 expressed identical to a conclusion that inspectors who  
5 were subject to the reinspection program were qualified?

6 A I made that statement based on the fact that --

7 Q Excuse me.

8 MR. MILLER: Judge Smith, before Mr. Forney  
9 explains, I would like a yes or no to my question.

10 JUDGE SMITH: Would you restate the question?

11 BY MR. MILLER:

12 Q Mr. Forney does your statement that the results  
13 of the program show that the inspectors did not overlook  
14 significant safety-related deficiencies mean the same thing  
15 as saying that the inspectors who were conducting inspections  
16 prior to September 15, 1982, were qualified?

17 JUDGE SMITH: Can you answer that yes or no,  
18 Mr. Forney?

19 WITNESS FORNEY: I don't really believe I can  
20 answer it yes or no.

21 JUDGE SMITH: That's a question that I have had  
22 in my mind, and I'm sure the other Board members have,  
23 and everyone involved has had, and it seems to me it is  
24 one that should be answered yes or no, but I think you should  
25 explain why you cannot.

mgc20-14

1                   WITNESS FORNEY: Okay. I view the final findings  
2 from the aspect that the reinspection program proved, yes,  
3 the inspectors do miss -- they do improperly at times  
4 accept work that doesn't meet the original specifications  
5 or whatever.

6                   After engineering reviews, in many cases it was  
7 deemed that the deficient condition that existed that was  
8 overlooked due to significant safety factors in the  
9 engineering original design deemed that particular condition  
10 not to be safety significant.

11                   So now -- I'm not willing to make a conjecture  
12 one way or the other whether that means that the inspector  
13 would always find safety-significant ones or whether he  
14 would not find safety-significant problems. But the  
15 reinspection program did, in my mind, clearly indicate that  
16 the inspectors are not overlooking significant safety  
17 concerns, and I feel that is what is important.

18                   MR. MILLER: Judge Smith, I don't believe that  
19 either your question or my question has been answered.  
20 You asked Mr. Forney to explain to us why it was that he  
21 couldn't answer my question yes or no, and I don't believe  
22 that you got an answer, and I certainly didn't.

23                   JUDGE SMITH. I do think that the question should  
24 be answered yes or no; however, I am sure -- I'm convinced  
25 that Mr. Forney wishes everyone in this room to understand



mgc20-15

1 thoroughly exactly what he believes, and he is not being  
2 evasive. There's just no reason to believe that.

3 I don't know what the problem is. Could the  
4 problem be that the statement that the reinspection program  
5 achieved the purpose of -- to determine whether prior to  
6 September 1982, inspectors overlooked safety-related  
7 hardware problems, who do what you think that statement  
8 does do, Mr. Miller, require the premise that there  
9 were significant hardware problems to be found?

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1 MR. MILLER: I don't believe so, Judge Smith,  
2 and I will tell you why.

3 Mr. Little was asked this identical question by  
4 Mr. Learner at transcript pages 9582 and 9583, and he  
5 testified that the principal purpose of the reinspection  
6 program as stated in the Staff prepared testimony in  
7 determining whether quality control inspectors had overlooked  
8 significant safety-related hardware deficiencies, was the  
9 same as saying that the purpose of the reinspection program  
10 was to determine that -- the purpose was to validate former  
11 inspector competence.

12 Mr. Little was able to put that issue to rest.

13 JUDGE SMITH: I don't know if he did or not, but  
14 I guess that is the best evidence you have on it. But for  
15 some reason the Staff witnesses have taken that statement  
16 and they cling to it, and you just, almost, cannot shake  
17 them loose from it.

18 MR. MILLER: I haven't finished yet.

19 (Laughter)

20 JUDGE SMITH: And they just cannot explain it  
21 to me very well.

22 Is it possible that you are saying that it doesn't  
23 take a very good inspector to find a significant safety-  
24 related hardware problem as compared to being a generally  
25 well-qualified inspector?

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WITNESS FORNEY: I would take that opinion, yes.

JUDGE SMITH: You agree with that statement. That is not what you are saying in your affidavit.

WITNESS FORNEY: I didn't directly state it that way, no.

JUDGE SMITH: But do you agree that that is one meaning that can be gathered from your statement in the affidavit?

WITNESS FORNEY: Yes.

BY MR. MILLER:

Q Mr. Forney, let me go back to the statements and find out whether you agree or disagree.

The reinspection program is being relied upon by Region III to make the basic empirical determination of the qualifications of the contractors' inspectors, and whether their work was deficient.

JUDGE CALLIHAN: The last word, Mr. Miller, please?

MR. MILLER: Deficient.

JUDGE CALLIHAN: Thank you.

JUDGE SMITH: Where are you reading from, sir?

MR. MILLER: I am reading from my notes, and I will disclose to the witness from where I am reading in just one second.

WITNESS FORNEY: Read that again.

mm3

1 BY MR. MILLER:

2 Q The reinspection program is being relied upon by  
3 Region III to make the basic empirical determination of the  
4 qualification of the contractors' inspectors, and whether  
5 their work was deficient.

6 A (Witness Forney) I have never read that. That  
7 may be the Region III position.

8 Q Is it your position as you sit here today?  
9 Would you agree with it?

10 A You are back to whether it demonstrates the  
11 capability of the inspector per se?

12 Q The basic empirical determination of the  
13 qualification of the contractors' inspectors.

14 A I don't go back -- you know, that is the miniscule  
15 that I disagree with. Or, I am in a different position  
16 because I feel that there is other things that can be  
17 injected into the analysis to determine if you want to look  
18 at a specific inspector.

19 But I do believe that the empirical data shows  
20 that the quality of the work out there is good.

21 JUDGE SMITH: That was a compound question.

22 MR. MILLER: Yes, sir.

23 The reason I asked it as I did was to avoid any  
24 implication or inference that I was not being totally  
25 candid with the witness, because that is a quotation from



mm4

1 this Licensing Board's initial decision at paragraph  
2 D-406.

3 BY MR. MILLER:

4 Q Now, Mr. Forney, one more.

5 Commonwealth Edison Company initiated recertifica-  
6 tion and reinspection programs for the purpose of establishing  
7 that notwithstanding the disclosure during the CAT inspection  
8 of deficiencies in the certification record of quality  
9 insurance inspectors those inspectors were, in fact, capable  
10 of performing their assigned tasks.

11 That was a long one.

12 A (Witness Forney) Let me ask a clarification on  
13 that.

14 That started out by referring to what I believe  
15 your position was?

16 Q Do you agree or disagree with this statement of  
17 why Commonwealth Edison Company initiated the recertification  
18 and reinspection programs?

19 Let me read it again.

20 Commonwealth Edison Company initiated recertifica-  
21 tion and reinspection programs for the purpose of establishing  
22 that notwithstanding the disclosure during the CAT inspection  
23 of deficiencies in the certification record of quality  
24 assurance inspectors, those inspectors were, in fact,  
25 capable of performing their assigned tasks.

mm5

1 Do you agree or disagree? Is that in that  
2 miniscule --

3 A Yes.

4 Q That one is from ALAB 770, Slip Opinion, page 22.  
5 Now, Mr. Forney, you have appeared here before,  
6 and I will provide you with a copy of transcript from the  
7 proceedings of August 12, 1983.

8 (Document handed to witness)

9 First of all, let's establish that you were  
10 present on August 12, 1983 and had sworn to tell the truth  
11 at that point in time, correct?

12 A That's correct.

13 Q And, Judge Callihan conducted an examination and  
14 he asked this question. This is also related to an  
15 earlier question. What do you gentlemen and what does the  
16 Region III conceive as truly the goal of this reinspection  
17 program.

18 MR. CASSEL: Can we have a reference to the page  
19 in the transcript here. We have extended that courtesy to  
20 every other witness.

21 JUDGE SMITH: You don't have to raise that. It  
22 is not a question of courtesy. It is an oversight.

23 MR. MILLER: 7991.

24 BY MR. MILLER:

25 Q Did you answer at line 15:

mm 6

1 "Witness Forney: I would say it has one  
2 additional thing and that is to serve to determine  
3 whether or not they have used qualified inspectors.  
4 That is the issue of the noncompliance. We have  
5 to deal with that to clear that item of noncompliance.  
6 It has to be twofold. It has to prove that they  
7 had, in fact, a program that used qualified inspec-  
8 tors, and also the program will give us a confidence  
9 level of the quality of the installed equipment or  
10 systems."

11 Did you make that answer on August 12, 1983?

12 A (Witness Forney) Yes, I did.

13 Q Thank you.

14 Mr. Forney, it was your belief when the item of  
15 noncompliance was written by you in 1982, 82-05-19, that  
16 there were unqualified inspectors conducting inspections  
17 at the Byron Station, correct?

18 A That's correct.

19 Q Have the results of the reinspection program done  
20 anything at all to change that view?

21 A You have to look at that finding, in view of  
22 the fact that that finding also addressed Powers-ASCO-Pope,  
23 who was not in the population of the reinspection program.  
24 However, you performed 100 percent reinspection, and that  
25

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1 was based on your agreement of the premise that they had, in  
2 fact, used inspectors that weren't properly qualified  
3 based on an examination that was given using their exam  
4 bank of questions, reviewed and agreed to by Powers-ASCO-Pope's  
5 quality assurance manager, and which they, in fact, failed.

6 Q Let's not talk about Powers-ASCO-Pope, let's  
7 talk about Hatfield, Hunter and PTL.

8 Do you believe that the results of the reinspec-  
9 tion program -- first of all, let me back up and ask my  
10 original question limited to those three contractors.

11 Do you believe that Hatfield, Hunter and PTL had  
12 unqualified inspectors performing quality control inspections  
13 at the Byron site prior to the time that you made your  
14 finding 82-05-19?

15 A You say at the time I wrote that did I believe  
16 that they had unqualified --

17 Q That there had been, or were presently,  
18 unqualified inspectors, those three contractors?

19 A Yes. That judgment on those three contractors  
20 was based on the commitments to the Reg Guide and the  
21 ANSI standard, and whether or not certain inspectors had  
22 the minimum equivalent inspection-related activity.

23 Q Do you believe now, as a result of the  
24 reinspection program results, that that population of  
25 inspectors who were doing work prior to September 15th, 1982,



mm8

1 for those three contractors, Hatfield, Hunter and PTL, were  
2 unqualified, or has your opinion changed?

3 A This goes right back to my miniscule difference.

4 I believe that the reinspection program proved  
5 that the inspectors didn't overlook significant safety-  
6 related deficiencies. I don't believe that if I were  
7 making the evaluation as to whether or not I would say that  
8 those three contractors always used qualified inspectors,  
9 that being that all the inspectors they always used were  
10 qualified, because again as I explained earlier, my evalua-  
11 tion to come to that determination would consider other  
12 things other than the fact that you just went back and  
13 retrieved some of the data.

14 I would look at what training he got; I would  
15 look at whether or not there is any evidence that he  
16 ever caused anything to be fixed.

17 So, there is a whole lot of things that would  
18 go into my evaluation of that position.

19 Q Let's just limit this even further to the  
20 inspectors who were actually captured by the reinspection  
21 program.

22 Do you believe that the results of the reinspection  
23 program showed that those contractors -- those inspectors, I  
24 beg your pardon -- for the three contractors, were qualified  
25 to perform inspection duties?

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1           A     Again, I didn't even make that judgment on any  
2 of those inspectors, because the judgment that I would have  
3 used would have included additional field of information.

4                     I do believe that it proved that the combination  
5 of the worker and/or the inspector has in fact proved the  
6 quality of the work.

7           Q     Mr. Forney, my question is, do you have a  
8 present opinion as to whether or not the inspectors who  
9 were captured by the reinspection program for Hatfield,  
10 Hunter and PTL, were qualified?

11           A     I think my affidavit states the fact that I  
12 would not draw that conclusion.

13                     Let me say one other thing. I would not state  
14 that that possibility does not exist. I would just not  
15 say that -- you know, like Mr. Little has the opinion that  
16 that conclusion can be drawn conclusively. I accept that  
17 as a possibility in the field, but I am not willing to  
18 limit it to that automatically, and make that general  
19 inference.

20           Q     I am not asking for any inference at all sir.  
21 I am asking you, just based on results of the reinspection  
22 program for the inspectors whose work was reinspected.

23                     MR. CASSEL: That is a question he just answered,  
24 Judge.

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BY MR. MILLER:

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Q Let me just make sure I understand it.

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As far as you are concerned, the reinspection program for those inspectors taken alone, doesn't tell you anything about their qualifications, correct?

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A (Witness Forney) I did not make that statement.

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I said that within a spectrum -- and this is where the difference is -- within a spectrum you could draw that conclusion that it does. And there is other people that would evaluate it and say that I would want more information before I would come to that general conclusion.

12

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16

And I don't think that that's a big point. I, personally, think we have been spending a whole lot of time on a miniscule position, differing position, and completely ignoring the real important factor, and that is the quality of the work that is there.

17

Q Where do you fit in that spectrum, Mr. Forney?

18

A Where do I fit in that spectrum?

19

Q Yes, sir.

20

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22

A I would not, as my affidavit says, draw that conclusion. Because, if I were to draw that conclusion I would not have filed the affidavit that I differ.

23

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25

I am of the position that if I were to say on a given inspector I would look at what -- I would look at his training and his certification; I would look at his

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1 background; I would look at what your findings were relative  
2 to the individual inspector; I would want to know something  
3 about, has he ever caused anything to be fixed.

4 Q Let me just make sure I understand this,  
5 Mr. Forney.

6 For example, a hypothetical inspector for the  
7 reinspection program for Hatfield, Hunter and PTL, if he  
8 scored 100 percent -- that is the reinspector was able to  
9 show agreement on every inspection point with the original  
10 inspector, would that fact tell you alone, tell you personally  
11 anything at all about the qualifications of the original  
12 inspector?

13 A Yes. I think I stated earlier that the different  
14 type of inspections that were performed, I would say that  
15 if you went out and took an as-built inspector and the second  
16 person came out and came back with exactly the same  
17 measurements as the first inspector, that is the type of  
18 inspector that that inference could be drawn.

19 end T21  
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1                   And I would agree with that conclusion on  
2 that particular type of population of inspectors.       But  
3 I haven't done an evaluation of the entire population of  
4 inspectors that were looked at and where they fit.

5                   MR. LEWIS: Mr. Chairman, I'd like to propose  
6 a short break.

7                   MR. MILLER: Fine.

8                   JUDGE SMITH: I want to ask just one question  
9 before we conclude this line. Putting aside for a moment  
10 your concept of the definition of a qualified inspector,  
11 going back to my earlier question to you, does the  
12 Reinspection Program provide assurance that prior to  
13 September 1982, inspectors were capable of identifying  
14 significant safety-related hardware problems?

15                   WITNESS FORNEY: I agree with that premise,  
16 yes, sir. And I think that's the important premise.

17                   JUDGE SMITH: That's your basic point?

18                   WITNESS FORNEY: Yes.

19                   JUDGE SMITH: And you infer that from the  
20 Reinspection Program.

21                   WITNESS FORNEY: Yes.

22                   JUDGE SMITH: And you have other bases but  
23 the Reinspection Program permits that inference?

24                   WITNESS FORNEY: Yes, sir. It may be helpful  
25 to understand why reason I take a certain position. I also

1 had qualified as a nuclear welder under NAVSEA 250-1500-1,  
2 and I happen to know that to qualify as a welder, I had to  
3 have an acceptable product that would pass non-destructive  
4 testing, whether it was visual, dye penetrant or radiographed.  
5 And if I do my job right, you could have 100 inspectors  
6 watch me, and if that was the only tool you were using to  
7 determine his capability, it doesn't necessarily tell you  
8 anything about that inspector if I've already done a dye  
9 penetrant exam and chased my own indications, I've ground  
10 them out, I've performed a reweld, I contoured the weld if  
11 it's required to be contoured and so on.

12           And then to bring an inspector along later --  
13 that's why normally when you do a capability demonstration  
14 you have a sample of the defective components. You may lay  
15 them out on a table and you have the inspector go by, and  
16 you determine out of a large sample of defective components  
17 whether he is able to properly identify them as opposed to  
18 having an inspector go out in an area where the population  
19 of defects is expected to be very small.

20           JUDGE SMITH: Shall we take a break?

21           MR. MILLER: Sure.

22           JUDGE SMITH: Ten minutes.

23           (A short recess was taken.)

24           MR. MILLER: May I proceed?

25           JUDGE SMITH: Yes.

1 BY MR. MILLER:

2 Q Mr. Forney, I believe in response to some  
3 earlier questions you stated that in addition to the  
4 reinspection results, one of the factors that would go  
5 into your evaluation of inspector capability was prior  
6 training and education; correct?

7 A (Witness Forney) I don't know -- yes, I would  
8 guess I would throw the education in there, relative to  
9 your commitments.

10 Q Are you aware, Mr. Forney, that in 1980 the  
11 region -- that is, Region III -- reviewed the certification  
12 packages of Hatfield personnel?

13 A All the Hatfield personnel? I'm aware I think  
14 that they did review some inspectors' qualifications during  
15 the conduct of an inspection. To the extent that a  
16 particular inspector looked at the records, I'm not  
17 knowledgeable of it.

18 Q Let me see if I can't just refresh your  
19 memory on it.

20 MR. MILLER: I would like the record to reflect  
21 that I'm handing Mr. Forney NRC Inspection Report 80-01.

22 BY MR. MILLER:

23 Q I would like to call your specific attention  
24 to page 4 and the very top of page 5. Would you look that  
25 over for just a second, please.

1 (Counsel handing document to witness.)

2 Q Have you ever seen that inspection report  
3 before, Mr. Forney?

4 A I believe I read it during my preparation for  
5 earlier testimony.

6 Q That report indicates, does it not, that of 8  
7 Hatfield quality control personnel whose certification  
8 packages were reviewed, 7 of the 8 were found acceptable  
9 by the NRC inspector at reinspection? Correct?

10 A That's correct.

11 Q Do you know whether any of those individuals  
12 whose certification packages were checked back in 1980 were  
13 then captured by the Reinspection Program that was used to  
14 close out 82-05-19?

15 A I don't have any direct knowledge.

16 Q Now, there was one Hatfield person in this  
17 inspection report 80-01 who required a further look per  
18 that inspection report. Am I right?

19 A Yes.

20 Q Do you know who that individual was?

21 A No, I don't.

22 Q I would like to show you Inspection Report  
23 80-08 and ask you to look at page 2 of the detailed section.  
24 I believe it's the very first item.

25 (Counsel handing document to witness.)



1 Q That refers to Hatfield inspector, Pete Lane,  
2 correct?

3 A That's correct.

4 Q And the conclusion of the inspection report  
5 80-08 is that Mr. Lane's certification package is  
6 satisfactory, correct?

7 A At that reinspection time, yes.

8 Q Now, do you know whether Mr. Lane was one of  
9 the Hatfield inspectors who was captured by the Reinspection  
10 Program?

11 A I have no knowledge of which inspectors for  
12 Hatfield, Hunter, or any of the population that you may  
13 question me on specifically -- any individuals were included  
14 in the population.

15 Q Let me make an assumption that three of the  
16 8 Hatfield inspectors whose certification packages were  
17 found to be adequate by the NRC in 1980 were captured by  
18 the Reinspection Program, and each of them met the appropriate  
19 acceptance criteria.

20 In your judgment, Mr. Forney, would those two  
21 facts -- earlier acceptance of the certification package  
22 by the NRC and meeting the acceptance criteria in the  
23 Reinspection Program -- say anything at all about their  
24 qualifications?

25 A About those three individuals?

1 Q Yes.

2 A Yes, I would say it would.

3 Q What would that tell you?

4 A If they were already deemed to be qualified  
5 initially and you went through the Reinspection Program and  
6 you didn't find anything that would controvert that fact,  
7 I would say that those two together would say that the  
8 person was initially qualified correct, and two years later  
9 he was still properly identified for condition of as-built  
10 equipment.

11 Q As I understand your analysis of the relation-  
12 ship between inspection and quality of the work, it's that  
13 we really can't tell whether the high agreement rates that  
14 occurred in the Reinspection Program are attributable to  
15 inspector qualification or the fact that there was good  
16 craftsmanship in the work as it was originally installed.  
17 Is that correct?

18 A That's correct.

19 Q Now, do you know whether or not there were  
20 varying rates at which an inspector's original inspections --  
21 let me strike that.

22 It's a fact, is it not, that there were varying  
23 agreement rates among attributes; that is, for some  
24 attributes the reinspectors found a 95 percent agreement rate  
25 and for others they found as high as 99 percent? Isn't that

1 correct?

2 A I believe that's correct.

3 Q Let's assume that there's a 4 percent difference  
4 between the Hatfield determination attributes, which is at  
5 99.9 percent, and the conduit as-built attribute, which  
6 is 95.9 percent. Four percent difference.

7 In your judgment, is that difference attributable  
8 to the capability of the inspectors or the capability of  
9 the craftspeople?

10 A Go over that question one more time to make sure  
11 I have it in my mind.

12 Q Sure. You have two different inspection  
13 attributes for Hatfield. Terminations and conduit as-built.  
14 In the Reinspection Program the reinspector agreed with the  
15 original inspection 99.9 percent of the time. For the  
16 conduit as-built attribute, the reinspector agreed with the  
17 original inspection 95.9 percent of the time. A four  
18 percent spread.

19 Is that difference, in your judgment, attributable  
20 to difference in the capability of the inspectors, or a  
21 difference in the capability of the craftspeople originally  
22 installing the work?

23 A Well, the product that's sitting there didn't  
24 change at all during that period of time, so that's a  
25 difference, in the inspector's view, of the as-built.

1 If I understood your question right.

2 Q Let me go at it another way. It's a fact, is  
3 it not, Mr. Forney, that no inspector was assigned to a  
4 particular craftsperson routinely for Hatfield, Hunter  
5 and PTL?

6 A That's correct.

7 Q So that probably every time every inspector  
8 inspected every craftsperson's work; correct?

9 A May have.

10 end 22

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1 Q There were individual differences among  
2 inspectors within the same attributes in terms of how they  
3 scored. That is, as to how close they came to the acceptance  
4 criteria, correct?

5 Some inspectors might have been at 96 percent,  
6 others may have been at 90 percent on visual welding, for  
7 example.

8 A That's correct.

9 Q Is that difference attributable to a difference  
10 in inspector capability, or a difference in the capability  
11 of the crafts person doing the welding in the first instance?

12 A Obviously the craft aspect didn't change. There  
13 was a difference in inspector.

14 Q Did that indicate to you --

15 A Maybe I am not understanding you.

16 Q No, no.

17 Did that indicate to you that there were  
18 qualified inspectors being used by Hatfield? They were  
19 able to -- that the crafts level stayed the same, doesn't  
20 that indicate to you that for inspectors they were picking  
21 up these deficiencies in the crafts persons' work.

22 A At a differing rate.

23 Q But in all instances a rate of the acceptance  
24 criteria of the program?

25 A Of the 95/90?

mm2±

1 Q Yes, sir.

2 A Yes, sir.

3 Q Now, isn't there some other data that we can  
4 look at, that indicates that qualified inspectors were  
5 being used?

6 I would like to call your attention specifically  
7 to an example you mentioned which is the conduit, the as-  
8 built inspection attribute. Now maybe you could describe  
9 for the record, for us all here, what an as-built  
10 inspection attribute comprises?

11 A Generally the attributes consist of verifying  
12 that for a hanger, the hanger is in the right location,  
13 given some tolerance, and that it is the proper configuration  
14 and that the dimensions are in accordance with the plan  
15 requirements.

16 Q I'm correct, am I not, that the reinspection  
17 program required the reinspector to go out and check those  
18 dimensions and tolerances that the original inspector was  
19 supposed to have reported, correct?

20 A That's correct.

21 Q And it was at your suggestion, was it not, that  
22 the reinspector was not given the information as to what  
23 the original inspector found? That is, the reinspector  
24 went out, he didn't know what the dimensions were that the  
25 original inspector recorded, correct?

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1 A That's correct.

2 I went over and reviewed the programs they were  
3 about to implement, and that wasn't an aspect of the  
4 program that they considered. And I said, to have a  
5 better feel that you know you are getting the right  
6 measurement, and you don't skew the reinspector's thought  
7 pattern by telling him ahead of time what dimension he  
8 should get, just don't give him any.

9 They readily invoked that.

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Q So the reinspection was conducted, was it not, by a properly certified inspector?

A Correct.

Q Now, can you infer anything at all, Mr. Forney, about the qualifications of the original inspector when the reinspector is able to show agreement rate in excess of 95 percent?

A I believe I testified earlier that for that particular type of an inspector I used that as an example that that is one that is much more easily equatable.

Q Mr. Forney, do you know what the general discrepancy rate is on first-time quality control inspections at the Byron site?

A I don't recall.

Q For visual weld examinations, do you believe that the original discrepancy rate is in excess of 10 percent?

A Meaning that the original --

Q Ten percent reject -- first, the inspection.

A The original inspections did?

Q Yes, sir.

A Would I believe that's possible?

Q Do you know whether it's true?

A No, I don't know whether that's true or not.

Q Are you aware, Mr. Forney, of some cable tray



1 hangers at the Byron plant that are combination hangers in  
2 that they have both electrical cables and heating,  
3 ventilating and air conditioning equipment on them?

4 A Yes.

5 Q Are you aware as to whether or not those hangers  
6 ever had or were missed in the inspection activities of  
7 each of the contractors over a period of time?

8 A I don't recall.

9 Q I would like you to look, if you will, at  
10 Attachment R to Mr. Shewski's testimony. If you would just  
11 take a minute and look it over.

12 (Counsel handing document to witness.)

13 If you would turn to the very back page of that  
14 attachment, the very last page of Attachment R, that  
15 indicates, does it not, that in conducting the first-time  
16 inspection of those combination hangers, a reject rate of  
17 approximately 13.8 percent was discovered?

18 MR. CASSEL: I'm sorry, what rate did you say?

19 MR. MILLER: 13.8 percent.

20 WITNESS FORNEY: This says 14 percent.

21 BY MR. MILLER:

22 Q Oh, I beg your pardon. Mr. Forney, you are  
23 aware, are you not, that there were numbers of discrepancy  
24 reports and non-conformance reports written by Hatfield  
25 and Hunter and PTL during the time that you were the senior

1 resident inspector at Byron? Correct?

2 A (Witness Forney) That's correct.

3 Q And those were to document discrepant conditions  
4 that were discovered by, among other people, quality control  
5 inspectors; correct?

6 A That's correct.

7 Q If the craftspeople had been doing a superior  
8 job and inspectors had been doing a poor job, one would  
9 expect not to find very many non-conformance reports and  
10 discrepancy reports and so on; correct?

11 A That's correct.

12 Q Now, having looked at Attachment R to  
13 Mr. Shewski's testimony, would you agree that a 14 percent  
14 reject rate on first-time inspections is probably pretty  
15 much in line with what you personally would expect?

16 A Meaning do I believe that a worker may be wrong  
17 14 percent of the time? Yes, that's probably reasonable.

18 Q And to the extent then that the results of the  
19 quality control Reinspection Program showed that the  
20 reinspectors were able to reproduce the original inspections  
21 in excess of 90 or 95 percent of the time, depending on the  
22 attribute, doesn't that indicate to you that the original  
23 inspectors were qualified in that they were catching  
24 discrepancies the first time they inspected a craft-  
25 person's work?

1           A       It says that they were qualified in finding  
2 problems.

3           Q       Now, Mr. Forney, you wrote the item of non-  
4 compliance 82-05-19. You told us that earlier. Did you  
5 also write that portion of the cover letter which says,  
6 "In responding to non-compliance item number 2 -- and assume  
7 with me that that is 82-05-19 -- please describe the action  
8 taken or planned to assure that (1) other quality control  
9 inspectors are properly trained and certified; (2) quality  
10 control inspectors working for contractors that have completed  
11 safety-related work and no longer have personnel onsite  
12 were properly trained and qualified to perform the inspection  
13 functions assigned; and (3) inspections performed by quality  
14 control inspectors that were improperly trained and qualified  
15 were valid."

16                   I would like to show you this document. Oh, I  
17 see Mr. Little has a copy. This is Applicant's Exhibit 8.  
18 It's also Attachment C to Mr. Binder's testimony.

19           A       I don't know that I wrote those exact words.  
20 I was involved in the development and submitted comments  
21 for that paragraph.

22           Q       Now it is a fact, is it not, Mr. Forney, that a  
23 reinspection program that was not organized around a  
24 reinspection of inspectors' work would not have been able  
25 to close out that item of non-compliance. Correct?

1           A       This is one of the points that from the  
2 inception of the Reinspection Program and the development  
3 and the iterations that transpired, that even to the point  
4 where the region accepted the Reinspection Program as a  
5 starting premise I was of the position that I was uncertain  
6 that you would ever be able to directly say you always  
7 use qualified inspectors. And that goes right back to where  
8 I am today.

9                   And that small point of whether you can say  
10 that with the data base that's available, you can always  
11 say that.

12           Q       So far as you were concerned, if I understand it,  
13 at the inception of the program there was simply no way that  
14 Commonwealth Edison Company could ever close out that item  
15 of non-compliance; is that right?

16           A       No, I didn't say that the item of non-compliance  
17 couldn't be closed out. In my mind, the item of non-  
18 compliance was ultimately going to be closed out.

19                   Maybe in retrospect, when the Reinspection Program  
20 was conceived, we could have possibly issued an update on  
21 that cover letter for the Reinspection Program -- or for the  
22 original NRC Inspection Report -- that would have stated  
23 that the Reinspection Program would resolve that issue by  
24 making the determination of the acceptability of the  
25 installed equipment. That's a possibility that could have



1 occurred. In retrospect, that's maybe an option that I  
2 should have proffered.

3 I took that position that that was not going  
4 to be an easy non-compliance if somebody ever said how do  
5 you directly relate that, because I'm not certain, with the  
6 Reinspection Program the way it was designed, that you would  
7 make that direct inference

8 And I believe if you were to ask Mr. Hayes if  
9 he was of the same relative opinion at that time and today,  
10 I believe you would get an answer from him that he is of  
11 that same basic opinion.

12 Q Let me go back to my original question for just  
13 one second. It is a fact, is it not, that unless there was  
14 a reinspection program that was organized around looking at  
15 the original inspectors' work, either on a sample basis or  
16 as you evidently discussed internally, 100 percent for a  
17 certain period of time, the item of non-compliance, 82-05-19,  
18 could not have been closed out. Correct?

19 A Okay, I would say this. That given that that  
20 non-compliance existed and given that the understanding and  
21 the regulatory requirements, had they been the same for the  
22 entire period that we're talking about, I believe that  
23 beyond a shadow of doubt the type program that would have  
24 been entered into would have been a program for you to  
25 evaluate all the inspectors' certification packages and

1       deem which one of those inspectors was or was not properly  
2 qualified and certified. And then you would have had to go  
3 and inspect those people's specific work.

4               But given the fluidity or whatever other  
5 acronym you might like to apply to the developmental stage  
6 of the understanding of what it takes to be a properly  
7 trained and qualified inspector, and your attempt to try  
8 and make that determination or CECO's attempt to make that  
9 determination of exactly who was or who wasn't qualified,  
10 you came to the conclusion that that in itself was almost  
11 a monumental task that you probably couldn't ever have come  
12 to a specific conclusion and told us that you know for a  
13 certainty who was and who wasn't.

14               That's when the complexion of your response  
15 and your submittals to that item of non-compliance changed  
16 from one of looking at it in that regard to one of what does  
17 the end product tell us.

18               Q       Isn't it a fact, though, Mr. Forney, that it had  
19 to look at the end product of specific inspectors and  
20 identify that end product with specific inspectors or you  
21 never could have closed out the item of non-compliance?

22               A       That's your position. It was my understanding  
23 that the region would have accepted the results of the  
24 Reinspection Program, and it would have proved to our mind  
25 and confirmed the status of the equipment.

1 Q Mr. Forney, isn't that what you told this  
2 licensing board --

3 MR. CASSEL: The witness has not finished his  
4 answer.

5 BY MR. MILLER:

6 Q I'm sorry. But isn't that what you told this  
7 licensing board a year ago? Again, reading from transcript  
8 page 7991, "I would say it has one additional thing, and  
9 that is to serve to determine whether or not they have  
10 used qualified inspectors. That's the issue of the non-  
11 compliance; we have to deal with that, clear that item of  
12 non-compliance."

13 A (Witness Forney) That was my position. I believe  
14 you have to do that.

15 Q Didn't you describe that --

16 A Let me finish. This one I would like to expand  
17 upon. And that is that clearly in my mind, the Reinspection  
18 Program would look at the equipment. I still do not  
19 believe that you can say without absolute certainty that  
20 you always used qualified inspectors, and that's where --  
21 I'm not saying that that possibility does not exist. I'm  
22 saying that I would not necessarily, with the information  
23 provided to me, come to that conclusion.

24 The region -- and again, you know, there's a  
25 spectrum of positions here, and the region believes that

1 that aspect, to the satisfaction of the Division of  
2 Engineering, was proved. I believe Mr. Little already  
3 stated that.

4 But at this point, I still say it's a moot  
5 point or close to a moot point because what I'm interested  
6 in is what is the quality of the work, and what does that  
7 provide for the safety and health of the public.

8 Q Okay. You reviewed the reinspection report and  
9 the report of the NRC Regional Staff, 84-13, which closed  
10 out the item of non-compliance, correct?

11 A That's correct.

12 Q And according to your affidavit, you found that  
13 report to be acceptable, right?

14 A That's a position that was acceptable to them  
15 and that's a position that I recognized could be taken.

16 Q Excuse me, Mr. Forney. Does your affidavit in  
17 paragraph 7 say, "I reviewed the Reinspection Program  
18 Report, and Region III Inspection Report 50-454/8413, and  
19 so on, and found them to be acceptable." That's what it  
20 says, isn't it?

21 A That's correct. And again, I would not have  
22 filed this affidavit because I didn't have that strong of  
23 a differing opinion. I wasn't the one that had to put my  
24 name on the dotted line, clearing that item of non-compliance.  
25 Okay? And in the collective judgment of the people of the



1 Division of Engineering, they felt that the information  
2 was adequate to clear the item of non-compliance. And I  
3 don't disagree that they could not come to that conclusion  
4 depending on which information and what aspect they viewed.

5 JUDGE SMITH: Mr. Miller, I think your cross  
6 examination has come to the point of arguing with  
7 Mr. Forney now.

8 MR. MILLER: Judge Smith, I don't intend to  
9 argue with Mr. Forney. I think it's important that this  
10 Board understand, as best as I am able to elicit from the  
11 witness, what his position is on certain key matters.

12 Frankly, that concludes my examination of  
13 Mr. Forney with one further question on an unrelated point.  
14 But it is apparent to me from your Initial Decision that  
15 you may very well have put some significant weight on what  
16 Mr. Forney had to say, and with a great deal of justification.  
17 He was the senior resident inspector. We've heard today his  
18 role in designing this Reinspection Program, which is not  
19 insignificant. And I think that in order to put his  
20 testimony in perspective with that of the other NRC witnesses,  
21 it's necessary to get just what his position was on some of  
22 these key points.

23 I have concluded that, at least to my satisfaction,  
24 and I take it that you don't wish me to go any further,  
25 and I'm certainly not going to do that.

1 I just have one or two more questions that  
2 I would like to pose to Mr. Forney, and then I'm going to  
3 move on very quickly.

4 JUDGE SMITH: Yes. You are doing this at the  
5 expense of your opportunity to ask questions of Mr. Keppler.

6 MR. MILLER: Well, that's an opportunity that  
7 I don't want to pass up, but I'll make it very brief.

8 BY MR. MILLER:

9 Q Mr. Forney, you said I think in response to  
10 questions a number of times that you couldn't say with  
11 absolute certainty. Is it your belief that absolute  
12 certainty is the standard that Commonwealth Edison Company  
13 has to meet in order to close out the item of non-compliance?

14 A (Witness Forney) No. And I don't believe that  
15 Mr. Little did, either.

16 Q Mr. Hayes, you I think used the same sort of  
17 words as Mr. Forney earlier. You said that the data base  
18 that's available does not prove conclusively that there  
19 were qualified inspectors doing inspection work prior to  
20 September 15, 1982. Forgive me if I have mischaracterized  
21 your words, but is that the substance of your position?

22 A (Witness Hayes) Yes.

23 Q And once again, need it be conclusive to close  
24 out the item of non-compliance, 82-05-19?

25 A I think there was adequate data, and we could

1 draw a reasonable inference that that did close out that  
2 item of non-compliance.

3 I have been listening to this go back and forth,  
4 and we solve a lot of problems, things that we can't  
5 recreate by looking at the work itself, and I think that's  
6 what we did, and it was good.

7 Q All right. Just one last question. Do I  
8 understand that your memorandum to Mr. Spessard -- that is,  
9 the second paragraph of that -- does not represent your  
10 opinion about the Reinspection Program as you sit here today?

11 That was a poorly phrased question. Let me  
12 withdraw it and ask it again in a positive sense.

13 JUDGE SMITH: His testimony was, neither then  
14 or now.

15 BY MR. MILLER:

16 Q Is that correct?

17 A (Witness Hayes) That's absolutely correct. You  
18 would have to sit in on many, many meetings that we had  
19 in our region to try to drive this to some conclusion.  
20 This was just one more element of trying to focus in on  
21 just exactly what this program did accomplish. And I  
22 think we have done it.

23 I think that Mr. Little's testimony summarizes  
24 what we thought that program accomplished, and I think it  
25 did resolve the issue.

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MR. MILLER: No further questions.

EXAMINATION BY THE BOARD

BY JUDGE COLE:

Q Mr. Forney, I didn't understand your response to two of Mr. Miller's questions. Your response was you had no knowledge of who was captured in the reinspection program.

Do you recall that, sir?

A (Witness Forney) Vaguely.

Q I thought you selected some of the inspectors that were in the program.

A I think he asked me by name. And, to go back to a year and a half ago as to exactly which guy it was, I don't recall.

I do know which contractors were involved, I do know that they had selected every fifth one, starting with the fifth one. I added the first one and I reviewed certain records and deemed the people who I felt should be added to the population.

Q But at that time you knew?

A Oh, yes, certainly.

Q Oh, okay.

You have been answering questions for almost three hours, and I believe I understand your positions.

Would you like to add anything to what you have said?



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(Laughter)

2           Something that you didn't get a chance to respond  
3 to, or you weren't asked that kind of question?

4           A     I can't think of anything.

5           JUDGE SMITH: Or, subtract anything?

6           (Laughter)

7           WITNESS HAYES: I don't have anything to add or  
8 subtract.

9           BY JUDGE COLE:

10          Q     Mr. Little this is your chance now.

11          A     (Witness Little) Oh, I would just like to say  
12 that all of the concerns, all of the problems that Mr. Forney  
13 went over in the last three hours, I do feel confident that  
14 all of those were discussed, really, starting in April of 1982  
15 and all the way through February and March of 1983.

16                 And the Region had considered all of those problems,  
17 and I feel like had, considering those things, agreed that  
18 this reinspection program was the best that we could come up  
19 with to satisfy our concerns.

20          A     (Witness Forney) I would just like to say at this  
21 point that I hope that this helps the Board and the members  
22 of the public understand that when the Region does confront  
23 a problem, that we go through a real rigorous dialogue, and  
24 there is a lot of interplay. And I think that is healthy to  
25 have, even to this point, my capability to at least have a

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1 different position.

2 JUDGE SMITH: Mr. Forney, we appreciate your  
3 coming, and it has been helpful.

4 And you should also recall that we are familiar  
5 with the collegial process.

6 WITNESS FORNEY: I was primarily addressing that  
7 to the public.

XX

8 BY JUDGE CALLIHAN:

9 Q I see before us two panels which I will define  
10 as follows:

11 I see a 1984 panel represented by Mr. Little,  
12 and I see a 1983 panel represented by Messrs. Forney and  
13 Hayes. And both panels and others have appeared before  
14 this Board, and we established yesterday that panels so  
15 constituted and so appearing represent at least the position  
16 of Region III.

17 Now, if the 1983 panel had remained in existence,  
18 if one would have extrapolated, or could have extrapolated  
19 its function and considerations and actions and so forth to  
20 today, and remembering that there were several references  
21 already today to conclusion on page 4, answer 6 of Mr. Little's  
22 Staff testimony -- and I pick only a part of it -- it is  
23 quote:

24 "The NRC Staff believes that the overall  
25 quality of these contractors. . ." -- the usual three --

mm4

1                    "... .is acceptable."

2                    Would there have been agreement between those  
3 two panels, on the basis of today's knowledge?

4                    A        (Witness Little)    Would we have agreed in '83,  
5 or in '84?

6                    Q        No, we have defined to you, and you have given  
7 your answer.

8                    Now I am asking if the extrapolation of the '83  
9 panel findings would have been in agreement with the '84  
10 panel;

11                    A        (Witness Forney)    I would agree with the '84  
12 panel back in that miniscule position.

13                    A        (Witness Hayes)    I think so.

14                    We would extrapolate and agree.    I had my input  
15 in this program, believe me, as this memo demonstrates.  
16 But I felt back in 1983 pretty comfortable with Byron as it  
17 was constructed then, and this reinspection program has  
18 just proved my judgment.    I just didn't have any real  
19 reservations about the adequacy of Byron at that time, and  
20 today I feel stronger about that.

21                    Q        You have just said that there is harmony within  
22 Region III, and unless you want to object, I will say  
23 thank you and that is the end of my questions.

24                    A        I don't know if I said "harmony."    We do have  
25 our differences.    Next to lawyers, I think engineers are the

1  
2 worst.

3 (Laughter.)

4 FURTHER CROSS EXAMINATION

5 BY MR. CASSEL:

6 Q The first question for Mr. Hayes -- may I quote  
7 you on that?

8 A (Witness Hayes) Oh, no.

9 JUDGE SMITH: Excuse me, Mr. Cassel, how long  
10 will your cross examination take, do you believe?

11 MR. CASSEL: Very brief, Your Honor.

12 JUDGE SMITH: I'm not suggesting you shorten  
13 it; it's just that we may have to change the order. I just  
14 wanted to know for information.

15 MR. LEWIS: My suggestion was going to be,  
16 Your Honor, that if it goes past 4:30, we would interrupt  
17 this panel in any event, and go to Mr. Keppler.

18 JUDGE SMITH: All right.

19 MR. LEWIS: And if we're not through --

20 JUDGE SMITH: Well, I think we should complete  
21 this panel by 4:30.

22 BY MR. CASSEL:

23 Q Mr. Forney, Mr. Miller showed you an attachment  
24 to Mr. Shewski's testimony involving inspection of some  
25 cable tray hangers, if I'm not correct, for which there was  
a 14 percent reject rate? Is that what happened?

1           A       (Witness Forney) As I recall, it said  
2 14 percent.

3           Q       And that was a limited sample of a certain kind  
4 of cable tray hanger, a limited number of a certain kind of  
5 cable tray hanger?

6           A       I don't recall all the details. I hope you  
7 don't ask me a lot of detailed questions because right off  
8 the top of my head -- one thing that bothered me was on the  
9 original example it was talking about reliable sheet metal'  
10 and the final page predominantly talked about what Hatfield did.

11                   Now, without being able to read everything at  
12 the beginning, to page 10 at the conclusion, I don't know  
13 what I can tell you at this point.

14           Q       Sure. I'm not looking for details. I haven't  
15 read it either. The point that I'm getting at is whether  
16 in your judgment it isn't likely that the original acceptance  
17 rate of the work quality will vary at Byron according to  
18 the type of equipment and which contractor and which  
19 supplier are involved. And it's not going to be a single  
20 flat rate all the way across the board.

21           A       I would agree with that premise.

22           Q       And in fact, the variation from supplier to  
23 supplier or from one kind of equipment to another could  
24 be a very large variation, couldn't it?

25           A       That's correct. Even in a particular weld



1 situation, depending on the configuration of, you know,  
2 interferences around and how much space a guy has to do  
3 a job.

4 Q So that the extent to which the agreement rate  
5 between the reinspector and the original inspector reflects  
6 input from the craftsmen as opposed to the input of the  
7 original inspector will vary according to the piece of  
8 equipment and the contractor that's involved. Is that  
9 correct?

10 A I believe the statistics that he gave bore  
11 that out, yes.

12 end 25  
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Ymge26-1

1 Q Mr. Miller asked you whether absolute certainty  
2 was the standard which you believe Edison had to meet,  
3 and you indicated it was not.

4 Given the Staff's answer to Answer 5 on page 4,  
5 the first sentence states. "The NRC Staff believes that  
6 the results of the reinspection program provide adequate  
7 confidence in the capability of the Hunter, Hatfield and  
8 PTL inspectors whose work was not reinspected."

9 Do you agree with that statement?

10 A That goes right back to that basic premise that  
11 I have, or that little difference. I put it in the realm  
12 of, it provides adequate confidence in the capability of  
13 the contractors' work, given that you are considering both  
14 the work and the inspector, and I again don't draw that  
15 specific inference to the capabilities of the inspector.

16 But again, like I've said probably three times  
17 today, I don't think that's the important aspect.

18 MR. CASSEL: Thank you. I have no further  
19 questions, Judge.

20 FURTHER BOARD EXAMINATION

21 BY JUDGE SMITH:

22 Q Mr. Forney, the difficulty with that sentence is  
23 that "capability" is not defined.

24 A (Witness Forney) That's correct.

25 Q And you had previously stated in response to a

ngc26-2

1 question from me that you believe that the reinspection  
2 program permitted the inference that the inspectors had  
3 the capability of identifying significant safety-related  
4 hardware deficiencies.

5 A That's correct.

6 Q Did your answer to Mr. Cassel intend to depart  
7 from that answer?

8 A No, sir.

9 Q So it would apply if "capability" in that  
10 sentence meant the capability of identifying safety-related  
11 hardware deficiencies?

12 A That's correct.

13 JUDGE SMITH: Anything further.

14 MR. CASSEL: I may have a follow-up on that,  
15 Judge.

16 CROSS ON BOARD EXAMINATION

17 BY MR. CASSEL:

18 Q I had understood, Mr. Forney, that one of the  
19 bases for your disagreement, if that's the right word,  
20 with his sentence was that the fact that the reinspection  
21 program did not find any inspectors who had overlooked  
22 safety-significant deficiencies might be, in part,  
23 attributable to the fact that there were no safety-significant  
24 deficiencies in the sample that was reinspected to overlook;  
25 is that correct?

mgc26-3

1           A       (Witness Forney)   Based on the size of the  
2 population in the reinspection program, I doubt seriously  
3 that that is a very probably -- to say that an inspector  
4 never caused a safety-related deficiency to be corrected.  
5 I believe that they did. I believe that if you were to  
6 review nonconformance reports, they have, in fact, done  
7 that at Byron, you know, so in paragraph 9, my basic  
8 conclusions says, it's a good basis to provide -- to evaluate  
9 whether inspectors had overlooked significant safety-  
10 related deficiencies, and I still go along wit that.

T28 MM/mm

1 Q And you believe that is a basis for the  
2 inspectors who were, in fact, reinspected?

3 A Yes.

4 (Pause)

5 Q Do you believe that the reinspection program  
6 results provide adequate confidence in the capability of  
7 the inspectors not to overlook discrepancies which were  
8 significant discrepancies from the point of view of whether  
9 they should have been caught by an inspector as opposed to  
10 whether a later engineering evaluation shows that the  
11 deficiency doesn't matter.

12 MR. MILLER: I am going to object to that question.  
13 I certainly don't understand what a significant discrepancy  
14 is as used in the question.

15 I believe it is a --

16 MR. CASSEL: It is a tough question to get at.

17 JUDGE SMITH: I understand the purpose of the  
18 question, and it is a difficult one to frame in one question.

19 Why don't you just ask him if -- I don't know how  
20 to ask it either.

21 (Laughter)

22 MR. CASEEL: Let me try to back up. It is very  
23 tough to get at, Judge.

24 BY MR. CASSEL:

25 Q I had understood part of your thinking on this to



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1 be that --

2 JUDGE SMITH: How about this? I'm sorry --

3 MR. CASSEL: Please do, Judge Smith.

4 JUDGE SMITH: Is your conclusion an after-the-fact  
5 conclusion based upon the fact that Sargent and Lundy made  
6 a determination that no defects, deficiencies of design  
7 significance were found in the reinspection program?

8 WITNESS FORNEY: That, coupled with the fact  
9 that NRC Staff did a sampling of NRC -- of Sargent and  
10 Lundy's evaluations and agrees that Sargent and Lundy's  
11 evaluations were appropriate, that although inspectors had  
12 overlooked certain deficient conditions, that when you  
13 couple that with the overdesign and so on, that they don't  
14 pose a safety-significant deficiency.

15 MR. CASSEL: I think you got there by the most  
16 direct route I can think of, Judge. I have no further  
17 questions.

18 JUDGE SMITH: Anything further?

19 MR. MILLER: Just one.

20  
21 BY MR. MILLER:

22 Q Mr. Forney, I think you said based on your  
23 experience you know that inspectors have, in fact, caught  
24 safety-significant discrepancies in their initial inspection.

25 Is that correct?

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1 A (Witness Forney) Certainly.

2 Q And does that fact also indicate to you that  
3 the inspectors are capable of detecting those type of  
4 discrepant conditions?

5 A I have said all along that I believe the program  
6 proves that they don't overlook, or have not overlooked  
7 safety-significant deficiencies.

8 MR. MILLER: Thank you.

9 JUDGE SMITH: Mr. Lewis?

10 MR. LEWIS: No questions.

11 JUDGE SMITH: All right, gentlemn, step down.

12 (Witnesses excused)

13 JUDGE SMITH: Mr. Keppler?

14 Whereupon,

15 JAMES G. KEPPLER

16 was called as a witness on behalf of the NRC Staff, and  
17 having been first duly sworn, was examined and testified  
18 as follows:

19 DIRECT EXAMINATION

20 BY MR. LEWIS:

21 Q Mr. Keppler, will you please state your name  
22 and position with the NRC?

23 A My name is James G. Keppler and I am the  
24 Regional Administrator of the NRC Region III Chicago office.

25 Q Do you have in front of you a copy of the document

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1 entitled Testimony of James G. Keppler, NRC Regional  
2 Administrator?

3 A Yes, I do.

4 Q Did you prepare that testimony?

5 A Yes.

6 Q Do you also have in front of you a copy of a  
7 document entitled Professional Qualifications of James G.  
8 Keppler?

9 A Yes.

10 Q And did you prepare that document?

11 A Yes.

12 Q Are the statements in the testimony and the  
13 professional qualification statements true and accurate to  
14 the best of your knowledge and belief?

15 A Yes.

16 Q do you have any corrections to make to them?

17 A No.

18 MR. LEWIS: Mr. Chairman, I would move that the  
19 testimony of Mr. Keppler and his professional qualifications  
20 be admitted into the record and bound in the transcript.

21 JUDGE SMITH: Are there objections?

22 MR. MILLER: No.

23 JUDGE SMITH: The testimony is received.

24 (Testimony of James G. Keppler, NRC Regional  
25 Administrator, and Professional Qualifications,  
Follows:)

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )  
COMMONWEALTH EDISON COMPANY ) Docket Nos. 50-454  
(Byron Station, Units 1 and 2) ) 50-455

TESTIMONY OF JAMES G. KEPPLER,  
NRC REGIONAL ADMINISTRATOR

The purpose of my testimony here today is to assist the Atomic Safety and Licensing Board in its assessment of quality assurance issues at the Byron Nuclear Power Station by providing my perspective on the Byron Reinspection Program.

In early 1982, I initiated a series of special team inspections at most reactors under construction in Region III. This effort grew out of the identification of serious quality assurance deficiencies identified at the Zimmer construction site and several other nuclear construction sites throughout the country. The purpose of these inspections was to see whether there were other sites within Region III with quality problems similar to Zimmer that may not have been recognized previously. While our extensive team inspection effort at Byron (100 man days) did not disclose significant problems with the construction of the plant, we did identify a number of quality assurance violations. The most significant of these brought into question the qualifications of contractor inspectors performing quality control checks. As a result of these findings, the NRC required Commonwealth Edison Company to carry out

a program of reinspections to determine whether quality control inspectors who may not have been properly certified had overlooked significant safety-related construction deficiencies in their inspections.

I want to take this opportunity to emphasize to the Board that, despite the identification of certain quality assurance problems at the Byron site, my staff and I had, and continue to have, confidence in the quality of completed construction at Byron. This confidence is based on our overall inspection effort and was reinforced by the special team inspection conducted in early 1982. The applicant's reinspection program further reinforced our confidence. Unfortunately, I believe that in the August 1983 hearing we may have failed to convey to this Board our degree of confidence.

I close by stressing that Region III's confidence in Byron is not based on the Reinspection Program itself, extensive as it was, but is based on the total inspection effort since 1974. This effort provides the basis for our conclusion that Byron will be completed properly and can be operated safely.



PROFESSIONAL QUALIFICATIONS OF JAMES G. KEPPLER

James G. Keppler is Regional Administrator of the Nuclear Commission's Region III Office.

The Regional Office in Glen Ellyn, Illinois is responsible for inspection and enforcement activities at NRC licensed facilities in eight midwestern states. This encompasses 23 nuclear power plants now in operation, and 10 plants under construction.

Mr. Keppler joined the AEC in 1965 as a reactor inspector. Prior to his present post as Regional Administrator, he was Chief of the Reactor Testing and Operations Branch in the AEC Headquarters in Bethesda, Maryland.

He is a 1956 graduate of LeMoyne College in New York State. Mr. Keppler's experience in the nuclear field includes nine years with General Electric Company, first in its Aircraft Nuclear Propulsion Department and later in its Atomic Power Equipment Department.

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1 JUDGE SMITH: I understood that you have no  
2 cross examination, Mr. Cassel?

3 MR. CASSEL: I have no cross examination, Judge.  
4 I was just looking at something with a view  
5 towards possible objection, and I think I have no objection.

6 JUDGE SMITH: Mr. Miller?

7 MR. MILLER: I just have very brief questions for  
8 you, Mr. Keppler.

XXX

## 9 CROSS-EXAMINATION

10 BY MR. MILLER:

11 Q The sentence at the bottom of page 1 of your  
12 testimony, that carries over to the top of page 2 states  
13 your understanding of the purpose of the reinspection program,  
14 is that correct?

15 A That's correct.

16 Q Do we agree that this is the same statement of  
17 the purpose of the reinspection program which is found at  
18 page 4 of the prepared testimony of the NRC Staff on  
19 Remanded Issues with Respect to the Reinspection Program?

20 A What page?

21 Q It is at page 4 of their testimony, sir.

22 Let me see if I can't help you out. It is the  
23 last sentence in answer 6.

24 A Yes.

25 Q Mr. Keppler, did you review the testimony of the

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1 Staff panel before it was filed in this proceeding?

2 A I reviewed it in draft form.

3 Q And as Regional Administrator, the Staff panel  
4 appeared here at your direction to represent the views of  
5 the NRC Staff, correct?

6 A Yes.

7 Q Now, at page 9582 and 9583 of the transcript,  
8 Mr. Little was asked a series of questions concerning the  
9 statement of the purpose of the reinspection program. And  
10 I would like you to just look it over, beginning at line 8  
11 on page 9582 and then carry over to the next page.

12 (Document handed to witness)

13 (Pause)

14 Now, Mr. Keppler, do you agree with Mr. Little  
15 that the purpose of the reinspection program was to validate  
16 the competence of inspector performance?

17 A Yes.

18 MR. MILLER: No further questions.

19 MR. LEWIS: Your Honor, after the Board asks  
20 questions -- we went very quickly to Mr. Miller's questions  
21 -- I may have some questions myself.

22 But, if the Board wishes to ask theirs first --

23 JUDGE SMITH: Has Mr. Miller rested?

24 MR. MILLER: Yes.

25 I hope you caught Mr. Keppler's answer.

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JUDGE SMITH: Well, as a matter of fact we didn't.

MR. MILLER: If the Court Reporter got it, I'm satisfied.

MR. CASSEL: You will catch it later, Judge, I have a feeling.

JUDGE SMITH: Perhaps we should have it. Unfortunately we were distracted at the moment.

MR. MILLER: Would you mind reading it back?

(Whereupon, the reporter read the record as requested.)

end 27

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1 JUDGE SMITH: I heard that.

2 (Laughter.)

3 JUDGE SMITH: The Board has no questions.

4 REDIRECT EXAMINATION

5 BY MR. LEWIS:

6 Q Mr. Keppler, you sat through some testimony  
7 today in which various members of your Staff expressed  
8 their views with regard to the reinspection program and  
9 discussions on inferences that can be drawn from that  
10 program.

11 Could you please explain to us your view as  
12 to what the reinspection program results demonstrated  
13 to you regarding the question of the quality control  
14 inspector certification issue at Byron?

15 A Yes. But before I do that, I would like to  
16 address again the purpose of the reinspection program,  
17 because, to me, I've heard a lot of comments made regarding  
18 the importance of this reinspection program, and there are  
19 some things that I believe are important to say to the Board,  
20 and it's really one of the reasons why I asked to come up  
21 here today.

22 Frankly, as Mr. Hayes stated earlier, when the  
23 Staff testified before this Board last year, the Staff had  
24 confidence in the quality of construction at Byron.

25 Unfortunately, as I look back on the record for



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1 that, we did not do a very good job of articulating that  
2 confidence to the Board. I take the blame for that  
3 personally, because normally in matters of this type,  
4 I would normally be testifying and representing Region III.

5 At that time, we were caught up in two major  
6 cases with Zimmer and Midland, and I was locked up in those  
7 cases myself. And I really didn't pay a lot of attention  
8 to the hearing up here at Byron and to the testimony that  
9 was being presented. I kept in touch from the standpoint  
10 of satisfying myself that the Staff felt comfortable with  
11 their testimony, but I was not aware, until the Board  
12 decision came out, that the Board had serious questions  
13 regarding the adequacy of quality in the quality assurance  
14 program at Byron.

15 So I apologize to the Board for whatever I  
16 contributed to this matter. But you should understand that  
17 the Staff had confidence in Byron at the time it testified.  
18 The basis for that confidence was not the reinspection  
19 program. The basis of that confidence was the routine  
20 inspection program that is carried out by the Regional Office  
21 and a special type of inspection that I had conducted at  
22 a number of plants as a result of the findings of problems  
23 at Zimmer.

24 When I testified before Congressman Udall's  
25 committee back in 1981, I was deeply concerned at how I would

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1 tell that committe whether or not there were other Zimmers  
2 in my Region, how did I satisfy myself that Byron wasn't  
3 another Zimmer, how did I satisfy myself that Clinton wasn't  
4 another Zimmer, Braidwood and the rest of the plants that  
5 I had under my responsibility.

6 As a result of that, I initiated a very comprehen-  
7 sive team inspection approach, which has been discussed  
8 here as the CAT inspections. These inspections were carried  
9 out at all of the Region III sites for the purpose of  
10 determining whether or not we had another plant with the  
11 potential problems of Zimmer.

12 That inspection was oriented toward the hardware:  
13 Was the adequacy of construction okay for its intended  
14 purpose?

15 We concluded from the Byron inspection that the  
16 adequacy of construction was sound. We did not identify  
17 any major hardware deficiencies. That fact seems to have  
18 gotten lost in this discussion. But we did generate a  
19 finding with respect to the fact that we could not verify  
20 that the quality control inspectors had been certified in  
21 accordance with the applicable standards.

22 As a prudent measure, we felt it was important  
23 to follow up on that finding.

24 You've heard a lot of discussion here today  
25 as to what the intended purpose of that was, but basically

ngc28-4

1 you should understand that the direction we were coming  
2 from was trying to determine whether there were major  
3 construction problems at the site. So it was a hardware  
4 oriented thing, and we really focused -- I'm not sure  
5 I can exactly tell you how this evolved, because I wasn't  
6 in on the details right from the beginning, but to me,  
7 the important measure was trying to determine whether,  
8 as a result of questions regarding the qualifications of  
9 people, whether that meant poor quality built into the  
10 plant.

11 I feel that the reinspection program, and my Staff  
12 feels that the reinspection program, gives us a high degree  
13 of assurance that that isn't the case.

14 Now I think you can go one step beyond that and  
15 infer from the fact that throughout the course of our  
16 inspection program, we found a number of problems at the  
17 site in quality assurance which tells us inspectors --  
18 workers were not always doing their jobs right.

19 I think the fact that you had a very large amount  
20 of work looked at again in the process of this reinspection  
21 program by inspectors who were qualified, checking the  
22 work of inspectors who were of questionable qualifications,  
23 I think all of this gives you an inference, perhaps not  
24 quantitatively, but gives you an inference that the inspectors  
25 who did the initial work were capable of doing their job

ngc28-5

1 properly.

2 So in that sense, I answer the question that  
3 way.

4 Another point, though, I would like to make, if  
5 I could, is, I tried to express to this Board the confidence  
6 that I have -- more importantly the Board ought to be  
7 interested in the confidence my Staff has -- and I say  
8 this because the Staff has had to contend with major  
9 quality problems at Zimmer, at Midland. We've got serious  
10 quality assurance questions at Braidwood and at Clinton,  
11 and major reinspection efforts are underway to deal with  
12 these concerns.

13 I take a great degree of comfort out of hearing  
14 my Staff tell me that they feel pretty comfortable with  
15 this plant, because they don't buy in cheap. And I would  
16 think the Board would derive some degree of comfort from  
17 that.

18 Region III has been what I would say is very  
19 aggressive in its pursuit of construction problems. We have  
20 taken some very strong regulatory actions in plants under  
21 construction. We are not afraid to deal with concerns  
22 when we have them. The fact that the Staff feels  
23 comfortable with Byron gives me a warm feeling.

24 MR. LEWIS: All it took was one question. That's  
25 all I have.



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1 JUDGE SMITH: Anything further for Mr. Keppler?

2 MR. CASSEL: No.

3 MR. MILLER: No.

4 JUDGE SMITH: Mr. Keppler, I want to thank you  
5 for coming. I thought it was appropriate for you to come,  
6 and we appreciate it.

7 THE WITNESS: I appreciate your having me.  
8 Thank you.

9 (Witness excused.)

10 JUDGE SMITH: Do you want to start the next  
11 panel this evening? We have fifteen minutes, or should we  
12 wait until tomorrow?

13 MR. MILLER: I think it makes sense to wait,  
14 myself.

15 MR. CASSEL: I would heartily concur in that.

16 JUDGE SMITH: I feel guilty leaving --

17 MR. MILLER: Maybe we ought to begin. I understand  
18 there are some quantity of minor corrections to prepared  
19 direct testimony, and perhaps we could get that out of the  
20 way in the fifteen minutes that are left.

21 JUDGE SMITH: We've got thirteen minutes.

22 One of the things we've overlooked this time is  
23 that those minor corrections, since they are on -- already  
24 on the copy that is in the transcript, do not have to be  
25 made on the record. I prefer they not be made, because there's



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1 a big gap, then, between the written testimony and where  
2 it starts making any sense.

3 MR. MILLER: Maybe what we should do is take  
4 these few minutes to advise the Board and the parties of  
5 what those corrections are, at least informally.

6 JUDGE SMITH: If there are no objections, we will  
7 do that now off the record.

8 The hearing for today is adjourned.

9 (Whereupon, at 4:52 p.m., the hearing was  
10 recessed to reconvene at 9:00 a.m., Thursday, August 2, 1984.)

11 EndMMend  
12 endendend

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CERTIFICATE OF PROCEEDINGS

This is to certify that the attached proceedings before the  
NRC COMMISSION

In the matter of: COMMONWEALTH EDISON CO., (Byron 1 & 2)

Date of Proceeding: Wednesday, 8/1/84

Place of Proceeding: Rockford, Illinois

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

Mimie Meltzer  
Official Reporter - Typed

*Mimie Meltzer*  
Official Reporter - Signature

Suzanne Young  
Official Reporter - Typed

*Suzanne Young*  
Official Reporter - Signature