

NRC PUBLIC DOCUMENT ROOM

NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF:

CINCINNATI GAS AND ELECTRIC COMPANY, ET AL

(WILLIAM H. ZIMMER NUCLEAR POWER PLANT
Unit No. 1B)

Place CINCINNATI, OHIO

Date - 22 June 1979

Pages 1156-1339

Telephone:
(202) 347-3700

ACE - FEDERAL REPORTERS, INC.

Official Reporters

444 North Capitol Street
Washington, D.C. 20001

NATIONWIDE COVERAGE - DAILY

326 131

185
7907120X170

C O N T E N T S

<u>WITNESS:</u>	<u>DIRECT</u>	<u>CROSS</u>	<u>BOARD</u>	<u>REDIRECT</u>	<u>RECROSS</u>
Edwin P. Hofstadter		1158			1391

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

P R O C E E D I N G S

1
2 CHAIRMAN BECHHOEFER: The proceeding will come to
3 order.

4 Are there any preliminary matters before we start
5 this morning?

6 (No response)

7 CHAIRMAN BECHHOEFER: We would like to announce at
8 this time that we are going to adjourn by four o'clock this
9 afternoon because of plane commitments by not only the Board but
10 the Staff, so we will now resume with the testimony and cross-
11 examination of Mr. Hofstadter.

12 Whereupon,

13 EDWIN P. HOFSTADTER

14 resumed the witness stand and having been previously duly sworn,
15 was examined and testified further as follows:

16 CROSS-EXAMINATION

17 BY MR. CONNER:

18 Q Mr. Hofstadter, first I would like to get some dates
19 straight in both our minds. Yesterday you said you worked for
20 Husky from February '73 to August 1978. That was August 4,
21 wasn't it?

22 A Right.

23 Q Now you state in your testimony that the Zimmer
24 order came in in May '74 in your question 9 or your answer to
25 question 9.

1 A That is my understanding, yes, sir.

2 Q You wouldn't quarrel with the fact that the order
3 actually came in something like in late '73?

4 A I was unaware of that.

5 Q Now you state in question 9, "We set up our certifi-
6 cation testing for August 1974." You state in the answer to
7 question 4 that certification procedures commenced in September
8 '74. Are you making the distinction between what happened in
9 those two months?

10 A Not purposefully, no, sir.

11 Q Well, tell us what you do mean. When did what you
12 call the certification testing begin?

13 A Well, when all of this started -- in other words, the
14 requirement for the certification -- there was a man from CG&E
15 that came out there by the name of Mr. Ehas and he spent most
16 of his time with a man from Husky by the name of Barry Schuster
17 and in fact I think I only met Mr. Ehas once but each time after
18 his visit, then Barry would call me over and explain to me what
19 the requirements were that Mr. Ehas and him had agreed upon.

20 Q I'm sorry, you used a name that somebody called you
21 over and told you what he had said to you.

22 A What him and Mr. Ehas agreed to.

23 Q Who was "him"?

24 A Barry Schuster.

25 Q Barry Schuster from Sargent and Lundy?

1 A No, s.r. He's a Husky man.

2 MS. KOSIK: Mr. Chairman, may I just give Mr.
3 Hofstadter a copy of his testimony for simplification?

4 CHAIRMAN BECHHOEPPER: Yes.

5 BY MR. CONNER:

6 Q Okay. What then was Mr. Schuster's from Husky
7 relationship to you? Was he your boss?

8 A No, sir. He was like the project engineer on the
9 job as far as product was concerned.

10 Q Now you haven't answered my question yet. When
11 did this testing that you have referred to in your testimony
12 begin? Was it in August or was it in September?

13 A It was either in August or September. In other
14 words, we're going by memory and the more important thing than
15 the date was the fact that there was a requirement that we
16 accomplish this before we started any production work on the
17 Zimmer job. That's the essential part.

18 Q Then, to you, August and September are interchangeable?

19 A They are meaningless.

20 Q You didn't check, then, to make sure about the
21 accuracy of your statements in your testimony?

22 A I had no manner or means to check, sir. The only
23 thing that I could go by was my memory and it was either August
24 or September.

25 Q Well, you did take some files from Husky when you

1 left, didn't you?

2 A Only that which was my own personal material, sir.

3 Q Were you authorized by anybody when you left Husky
4 to take the memorandum dated August 29, 1977, identified as
5 MVPP Exhibit 1?

6 A That was in my own file, sir.

7 Q Will you answer the question?

8 A I didn't feel -- in other words, that was not like
9 a restricted document. That was where I had been copied or
10 where I had sent copies to other people, so it was just like a
11 general piece of paper.

12 Q Does your answer mean that you did not ask anybody
13 for authorization to remove that document?

14 A Yes, sir. I did not ask anybody. I treated that as
15 a personal piece of paper.

16 Q Now when did production start on the Zimmer cable
17 trays?

18 A I would have no way of knowing because I was not
19 responsible for production. I was responsible for the processes
20 used by production and there's a big distinction between the
21 two.

22 Q Have you finished your answer?

23 A Yes.

24 Q We started into that a little bit yesterday. I
25 wanted to get the distinction by what you mean by being

1 responsible for the processes as distinguished from your overall
2 responsibility in your job for the Zimmer cable trays. Please
3 understand any question I ask you, unless it's otherwise is
4 about the Zimmer cable trays.

5 A All right.

6 Q Would you go ahead and explain what you mean by
7 responsibility for processes?

8 A Primarily the responsibility for the processes dealt
9 with the fact that myself and my people were responsible for
10 determining what the standards were on the different operations
11 so that we could determine what an item was costing us.

12 Q Does this have anything to do with the qualification
13 of welders?

14 A Certainly it would, because the one responsibility
15 that was given after we had the Zimmer job was to see that the
16 welders were certified per the requirements of Mr. Ehas.

17 Q You heard the explanation from ASME Section IX about
18 what is qualification and what is certification. Do you accept
19 that explanation that was made yesterday?

20 A Yes, because essentially what we said is certification
21 and qualification are the same thing. In other words, when a man
22 proves his qualifications he then can be certified.

23 Q But when you say that a man took a certification test
24 in your testimony, you really mean he took a qualification test;
25 is that true?

1 A Prior to his becoming certified. When he proved
2 his qualification he became certified.

3 Q Okay. Exactly what happens when a man passes a
4 qualification test to make him certified?

5 A I don't understand your question. You mean what
6 happens? The most essential thing -- in other words, we keep
7 records of every test and when a test is favorable, then the
8 man was assigned a stamp with a number and that then becomes
9 his stamp. In other words, the stamp had the symbol HW and it
10 had a number on it and we had those stamps in consecutive
11 number and no stamp was issued or reissued to more than one man
12 and one man would get one stamp and there was a record kept of
13 that number and who it was assigned to.

14 Q Then in your mind issuing a man a stamp like so
15 (indicating), is what is meant by certification under ASME
16 Section IX?

17 A No. That was only to show that that man had passed
18 one test and was certified at least to pass in one aspect.

19 Q Who certified it?

20 A Initially the certification was on the parts where
21 the people had qualified -- the original by Gladstone.

22 Q Isn't it a fact that the responsible person or
23 organization giving the test merely certified that a given
24 welder had passed a given qualification test?

25 A Yes, sir.

1 Q And when you use certification here, you mean it in
2 that context; is that correct?

3 A Yes, sir.

4 Q To what extent were you personally responsible for
5 the qualification tests?

6 A Well, it started from the very beginning, in other
7 words, when the requirement came through from Mr. Ehas to Barry
8 Schuster, who in turn assigned -- the assignment became mine to
9 see how many of our people that we could get certified as
10 quickly as possible so that we were in a position where we
11 could start the Zimmer job with no delay.

12 Q No. What did you do, you personally?

13 A The first thing that I can recall that I did was to
14 set up an arrangement with Gladstone to start the preliminary
15 work and make the arrangements for the initial test.

16 Q Were you the boss of the qualification tests?

17 A The what?

18 Q The boss. I'm trying -- you won't seem to answer
19 what your responsibility was.

20 A Yes. I had the responsibility of seeing that that
21 work was accomplished, yes.

22 Q And you were authorized in your position to contact
23 Gladstone?

24 A Yes, sir.

25 Q You didn't have to go to the boss and say, "May I
call Gladstone?"

1 A No, sir.

2 Q You just called Gladstone yourself?

3 A As I recall, I'm not sure I made the initial contact
4 with Gladstone. I think that Barry Schuster made the initial
5 contact with Gladstone and then he called me over and that was--
6 but from there on I made the contact with Gladstone. So I may
7 not have made the very first contact.

8 Q Well, was Barry Schuster your boss?

9 A No, sir. Barry Schuster was like in a liaison
10 capacity with Mr. Ehas. In the portion of which him and Mr.
11 Ehas had made some agreement, I then carried out that portion
12 that was applicable to me.

13 Q Okay. In your answer to question 9, you say, "I
14 observed all the testing because I was responsible for processes
15 used in manufacturing." I read that as saying that you were
16 the person responsible to Husky for seeing that this testing
17 program and procedures were properly carried out. Is that what
18 you meant?

19 A Yes, sir.

20 Q Then you were really the boss of setting up these
21 procedures?

22 A I didn't say I wasn't, sir.

23 Q Okay. That's fine.

24 A I said that was my responsibility. If that responsi-
25 bility becomes being the boss, then I was the boss.

1 Q All right. Now you set up the Gladstone work,
2 whatever it may be?

3 A Yes, sir.

4 Q And you indicated in your testimony and in the
5 cross-examination yesterday that these Gladstone people did a
6 lot of the work but that it was unsatisfactory, that the testing
7 was unsatisfactory; is that correct?

8 A That was no fault of theirs. You're right. In other
9 words, the results were terrible.

10 Q Is that why you called John Uhrig at Hobart
11 Manufacturing?

12 A Yes, sir.

13 Q Because the Gladstone program hadn't been able to
14 work?

15 A Not because --

16 MR. FELDMAN: We would like to object. I believe
17 Mr. Conner indicated something Mr. Hofstadter said on cross-
18 examination yesterday. I don't think there was any cross-
19 examination yesterday. I don't see how he could have said some-
20 thing on cross-examination and I'd like to strike that question.

21 BY MR. CONNER:

22 Q In the cross-examination of Mr. Banta, isn't it a
23 fact that you were assisting Ms. Kosik in the cross-examination
24 of Mr. Banta yesterday?

25 MR. FELDMAN: I make an objection --

1 MR. CONNER: I simply asked the witness isn't it a
2 fact that he was assisting Ms. Kosik in the questions given in
3 the cross-examination of Mr. Banta yesterday.

4 THE WITNESS: At times, yes, I did. Is that wrong?

5 MR. CONNER: Your counsel objected. I didn't.

6 MR. FELDMAN: I misheard the question. I thought he
7 asked Mr. Hofstadter if he answered something on cross-examination
8 yesterday. I withdraw my objection.

9 CHAIRMAN BECHHOEFER: Okay.

10 BY MR. CONNER:

11 Q When did you contact Mr. John Uhrig?

12 A I would not recall the date. In other words, it was
13 when we knew we had a problem is when we contacted John Uhrig.

14 Q That's what we want to know. When did you, the
15 responsible person, first know you had a problem?

16 A We knew we had a problem immediately after the
17 first work by Gladstone. After the second work by Gladstone we
18 knew we had a major problem.

19 Q Well, when did you first contact Mr. Uhrig?

20 A It could have been after the first test or it could
21 have been after the second test. I would think -- I really
22 don't know here. I would think it was after the second test
23 because I think then we became more -- we became alarmed. We
24 were disturbed at the results of the first test, but we were
25 very much alarmed at the results of the second test.

1 Q Now when you say, "I would think," that indicates
2 just your best estimate because you don't actually remember?

3 A Right.

4 Q All right. Now when did you contact Lee Spievack of
5 Technichron?

6 A To the best of my knowledge, we contacted Mr. Spievack
7 after the second test because I believe we contacted him and
8 John both after the second test because then we thought we had
9 a major problem and that's the best of my memory.

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Tp 2
OB-1

- 1 Q When you say the second test, what do you mean?
- 2 A When the steel failed.
- 3 Q When the steel failed?
- 4 A Yes, sir, failed.
- 5 Q Is that performance tests on the welders?
- 6 A Yes, sir.
- 7 Q And how about the qualification test on the welders?
- 8 A They are the same.
- 9 Q The qualification of the procedure test?
- 10 A The procedure piece itself? That is the first step.
- 11 Q All right. When was that?
- 12 A When was what? That really is supposed to come
- 13 before you test any welder, you should have the procedure
- 14 qualified and passed before you start testing.
- 15 Q I understand that. I am trying to find out the
- 16 time. When you refer to the second test, I gather you mean
- 17 the whole thing to be done for steel on the Zimmer cable
- 18 trays. Is that what you mean by the second test?
- 19 A Yes, sir.
- 20 Q Okay.
- 21 A We had two requirements for Zimmer. In other words,
- 22 when Mr. --
- 23 Q If you will answer my questions, and let your counsel
- 24 ask you on redirect, we will get along quicker.
- 25 MR. FELDMAN: Your Honor, I think he is explaining

DB2

1 his answer.

2 MR. CONNER: I asked about one test and he started
3 to answer about two.

4 THE WITNESS: It becomes relevant that I explain
5 why there were two tests.

6 MR. CONNER: Let the Board decide what is relevant,
7 if you will, sir.

8 CHAIRMAN BECHHOEFER: I think that question can be
9 asked on redirect.

10 BY MR. CONNER:

11 Q Now when was the procedure qualification test for
12 steel performed?

13 A The procedure was attempted on both tests by
14 Gladstone at the very beginning.

15 Q You mean at the very beginning, back in August
16 or September, one of those two months?

17 A No, I am saying prior to doing the testing, the
18 procedure piece was welded first.

19 Q Let's make sure we understand our terms. As I
20 understand what you are talking about, the testing that
21 was done, the initial testing, I am not talking about
22 the ongoing program, the initial testing by Gladstone,
23 in which Gladstone was involved, which, in your words, was
24 in either August or September 1974, you have referred to
25 this as the first test. Is that what you mean?

A Yes, sir.

326 149

DB3

1 Q As I understand it, the second test, as you use
2 the term, was something that happened later, applied to
3 steel for the Zimmer cable trays?

4 A Yes, sir.

5 Q When did the procedure qualification test on steel
6 take place?

7 A The only way I can answer your question there is
8 by way of an explanation. When we had picked up Gladstone, as
9 far as I know, like I explained before, the arrangements for
10 Gladstone to do the work had been agreed upon by Mr. Ehas
11 and Barry Schuster. Then I took over with them to accomplish
12 the work. Now at that time this was completely new to
13 us as far as ASME requirements, and we trusted Gladstone
14 that they knew exactly what they were doing. And later on,
15 as we became a little bit more knowledgable in ASME, we
16 found out that Gladstone was not as knowledgable in the
17 testing work as they should have been and we thought they
18 were. And that is how there was a mixup on this qualification
19 piece that you are talking about. Technically, you should
20 not test a welder until you have made a qualification piece,
21 which proves, or establishes that that is the process that
22 you want to test for. And that was not done. That was not
23 a Husky error, that was Gladstone, because Gladstone told us
24 they could do it that way and we believed them.

25 MR. CORNER: I move that be stricken as not responsive.

DB4

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

BY MR. CONNER:

Q Will you kindly answer my question?

A I explained to you, when you asked the question, that there was no way to answer it except to explain the whole story.

MR. CONNER: May that be stricken, your Honor?

THE WITNESS: Would you repeat your question, than?

CHAIRMAN BECHHOEFER: What was the question again? He did say he could answer only through an explanation.

MR. CONNER: The question asked for a date. When were the procedure qualification tests on steel conducted.

THE WITNESS: They were conducted prior -- the work on the qualification piece was done at the same time, the same day the testing was done, but it was done first.

BY MR. CONNER:

Q What was that date?

A Whatever date Gladstone was there. If you people had given us the Gladstone reports, that we asked for yesterday, I could give you the exact date.

Q The answer is you don't know?

A That's right, not the exact date, no, sir.

Q All right. Do you know now when you contacted Mr. Lee Spievack of Technicron?

A In that same time frame, yes, sir.

Q Before or after the qualification test?

DB5

1 A I feel that it was after the qualification test,
2 and the reason for that was because at that point we became
3 seriously alarmed that we had a major problem.

4 Q Did this all happen very quickly, or did you have
5 to wait for the results of the test to come back, or was
6 this something that you knew instantly and went to the
7 phone and called?

8 A We did not know it instantly. We knew it before
9 Gladstone left. In other words, the Gladstone people told
10 us that the test parts did not look good. Then as they started
11 performing the work on surfacing them and making the bend
12 tests, they called us to tell us that the results were going
13 to be bad.

14 Q What time frame is this? I mean, a week or a day?

15 A I would say within two days to three days, that
16 we knew we had a big problem coming up.

17 Q You apparently got two different pieces of infor-
18 mation. Did you call Mr. Spavack immediately?

19 A It would be highly likely that we would, yes, sir.

20 Q You use "we", "we would do this" and so forth.
21 Do you mean personally, do you mean "I"?

22 A When I say "we", from the time that this started,
23 I had a man who worked for me by the name of Randy Pratt,
24 and between Randy and myself, one of us watched everything
25 that was done in this and there were times when Randy would

DB-6

1 make the phone calls and there were times when I would
2 make the phone call. We worked together very closely
3 on this.

4 Q That is what you mean by "we". But it was
5 still your responsibility?

6 A Right.

7 Q Still your program?

8 A Right. I knew what was going on.

9 Q Why did you call John Uhrig before you called
10 Spievack?

11 A Mainly because I knew John Uhrig, I mean
12 as a friend. In other words, as a representative of
13 Hobart, with whom we did a lot of business over the years.

14 Q What did you want him to do?

15 A I only wanted his honest opinion of what
16 the situation was we had, and what his recommendations were
17 in respect to resolving our particular problem.

18 Q I mean did he manufacture cable trays?

19 A No, sir. Mr. John Uhrig, he was either a
20 welding engineer or the equivalent of a welding engineer,
21 and was very knowledgable in welding, the most know-
22 ledgable person in welding that we knew of at that
23 time.

24 C Did you talk to anybody inside your own
25 company?

A Certainly.

DB7

1 Q And you decided that your welding engineers
2 couldn't answer this?

3 A We didn't have a welding engineer, sir.

4 Q Your engineers. Did you talk to an engineer
5 about this? Did you talk to your superior about this?

6 A I talked to my superior about it, yes, sir.

7 Q Did they tell you to call John Uhrig?

8 A No, sir.

9 Q You just did that yourself?

10 A Yes, sir.

11 Q Is that also true of Mr. Spievack from Tech-
12 nicron?

13 A Yes, sir.

14 Q You called him, I think you said, at Mr.
15 Uhrig's suggestion?

16 A Yes, sir.

17 Q What did Mr. Spievack do? You invited
18 him to come out, I gather, and you took him around, as
19 I understand?

20 A The day he was there Randy Pratt and myself both
21 were with him all of the while he was there.

22 Q What Zimmer work did you show him?

23 A We weren't doing any Zimmer work, sir.

24 Q So his letter had nothing to do with the
25 work subsequently performed on Zimm

A His observations were of the welding that

DB8

1 was being performed on the particular day he was there.

2 Q He was there about how long?

3 A It was nearly the whole afternoon. I would
4 guess time-wise he came shortly after one and I
5 would guess that it was close to five o'clock when he
6 left. That is to the best of my memory.

7 Q Almost a whole afternoon?

8 A If it wasn't the whole afternoon, it was
9 essentially nearly the whole afternoon, yes.

10 Q Did you perform any destructive testing on
11 any specimens while he was there?

12 A No, sir. We showed him, we had the test
13 specimens there, that Gladstone had given us. And that
14 is why I am thinking that he was there after we
15 had all of the results from Gladstone.

16 Q Now I am going back to your definition of
17 job. When these processes, whatever they were, were
18 completed, do I understand that you had no further
19 responsibilities whatsoever with regard to
20 the Zimmer cable trays?

21 A As far as the production aspects of it, no
22 sir. Now there was one area in which at times I would
23 have responsibility and that was that the man that I
24 worked for was responsible for production and in his
25 absence I took his place.

DB9

1 Q Who was that?

2 A Harry Wong.

3 Q When was that? When did you replace Mr.
4 Wong?

5 A Any time in his absence.

6 Q Was this frequently?

7 A Well, say for his vacation or if he went
8 out on business and was gone a day or two, or he had
9 some personal business to take care of. In other words,
10 if a question came up, other people could get an answer
11 when it was needed immediately.

12 Q Once again, always with regard just to the
13 Zimmer cable trays, what did you do for Mr. Wong in
14 his absence?

15 A Nothing that I can remember.

16 Q Now you state in your testimony that production
17 welding took place, not the quality welding process
18 that was required in specifications for Zimmer. That is
19 your answer to number 11. Were you responsible for the
20 quality assurance or QA in your job?

21 A At one time when I first went to Husky
22 I was responsible for the QC programs, yes.

23 Q That was before the Zimmer cable tray
24 production work?

25 A Yes, sir.

CR5316

ldavid
avid 1
take 3

1 Q Once again, everything I'm asking you about
2 is the Zimmer cable trays, unless I specify otherwise.

3 You had nothing to do, then, with the
4 QA program for the Zimmer cable trays?

5 A Nothing directly, no, sir.

6 Q You had nothing to do with the production work
7 on the Zimmer cable trays?

8 A No, sir.

9 Now, that is one rea on the previous question: I
10 had the responsibility on the QC and Mr. Duncan, who is a
11 QC manager, one time reported to me. Now, somewhere along
12 the line that had to be changed, and I think that was
13 changed: part of the changes that happened was that
14 QC was separated from production.

15 Q All right. Now, going back to -- as I understand
16 it you are, as far as the Zimmer cable trays are concerned,
17 the limits of your responsibility was setting up these
18 procedures and testing on the welding.

19 A Primarily, yes, sir.

20 Q Are you saying -- you say in your answer to question
21 seven that some welders were falsely certified.

22 -Are you here talking about work that was done
23 on Zimmer cable trays? That's in question seven.

24 A There is a possibility of that, yes, sir.

25 Q A possibility?

david2

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

A Yes, sir.

Q Possibilities, sir, are not evidence. Can you testify that any welder who worked on the Zimmer cable trays was not certified with the exception of the two mentioned yesterday?

A I can say -- I can say this: that some received certification that was not properly conducted in all its aspects, and that means roughly that before somebody can certify a man's piece, he has to witness the piece being welded, and that was not done in some cases.

Q You are now changing your testimony?

A I'm not changing --

Q In your answer to number seven to say it was not falsely certified, but it was as you just explained it.

A I'm answering your question in regard to the Zimmer job. There were other instances that were a little different than this, than the one I described to you.

Q Let me ask you one more time: were any of the welders on the Zimmer -- who worked on the Zimmer cable trays, in your words, falsely certified?

A I would say -- I would change the word "falsely" to say that they were not certified properly.

Q Now --

A Degree -- degree -- degree becomes the question there.

david3

1 Q Now, are you using certified as qualified here
2 or are you using certified in the ASME meaning, meaning
3 the responsible tester writing out the certification?

4 A They really are very near the same thing; in
5 other words, if a man proves his qualifications properly,
6 then you can certify him.

7 Q All right. You were the person responsible, is that
8 correct?

9 A Yes, sir.

10 Q Are you the person who falsely or wrongly
11 certified these people?

12 A I did not certify the people.

13 Q Were you responsible for the people who did?

14 A Yes, sir.

15 Q And you let them do it?

16 A Under protest, yes, I did.

17 Q Under protest?

18 A Yes, sir.

19 Q Because you were the boss?

20 A Yes. I also had a boss, sir.

21 Q Somebody that worked for you, in your words,
22 wrongly or falsely certified the welder and you let it happen?

23 A Only to the extent that I reported it to the
24 person that I worked for who felt that we could let it go.

25 Q And that was sometime in 1974, is that correct?

David

1 A Yes, sir. Yes, sir.

2 Q How long was it after that that you left Husky?

3 A That was '74; I left Husky in '78, sir.

4 Q And two weeks after you left Husky you wrote
5 a letter to all kinds of people saying that it was your
6 duty to report that certain things had been wrong with the
7 Husky welds.

8 You said, I believe in your letter of August
9 18th, addressed to Public Interest Research Group, that you
10 wanted to report serious and deliberate nonconformance to
11 10 CFR 50 nuclear requirements, et cetera.

12 You did that on August th 18th, 1978; is that
13 correct?

14 A Yes, sir.

15 Q So for four years you didn't do anything about
16 this wrongful certification that you've talked about?

17 A No, sir, that's not right.

18 Q You did not report to the NRC?

19 A I did not report to the NRC, but I reported to
20 my superiors.

21 Q And it was because you were let go in 19 -- in
22 August of 1978 that you then decided that you would report
23 to EIRG and a number of engineering companies and government
24 agencies, as appears on page 3 of your August 18 letter; is
25 that true?

david5 1

A That is not true, sir.

2

Q Did you send this letter?

3

A I sent the letter, but not for the reason that you gave. You just assumed a reason.

4

5

Q Well, what was it?

6

A The reason? The reason was -- it was a double reason: after the trip that I had made to the Zimmer plant in May and I saw the cable trays overloaded like they were and I had been assured by the product engineering people that the cable trays at Zimmer would only be partially loaded and that was my reason for not ever saying anything about the welds because with the trays only partially loaded there would only be a small load on them.

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

Then when I got there and saw the trays overloaded, then that made me start to worry, and then when I saw the continuing vibration going on in the Clinton job in July that is what decided me, that I was tired of going on with a farce.

23

24

25

26

27

28

29

Q Your letter says nothing about overloading of the trays at Zimmer as the basis for anything. Your letter says that it was deliberate nonconformance with the part 50 to the cable trays themselves and the welds. Isn't that correct?

30

31

A That is correct.

Q And are you now stating that your letter --

david6

1 A You asked me the reason why I wrote the
2 letter. I gave you an answer why I wrote the letter;
3 I didn't say in the letter why I wrote it. I said I wished
4 to report that and that is essentially what I did. I
5 didn't say why I wished to report it.

6 Q Okay, then, as I understand your testimony, your
7 position is that you were quite willing to be responsible
8 for the testing procedures which turned out material which
9 was inferior to your personal knowledge, but were quite
10 willing to be let it sent out to the public as long as
11 you thought the customer wouldn't use it for the specifications
12 required.

13 MR. FELDMAN: I object to this line of questioning,
14 your Honor. He's putting words into the witness's mouth.
15 That's not what he testified to. I would appreciate it if
16 Mr. Conner would stick to asking questions and letting
17 Mr. Hofstadter answer the questions.

18 If Mr. Conner wants to testify himself, he can
19 do it.

20 MR. CONNER: I recognize counsel has some confusion
21 about when to lead a witness, but this is cross examination.

22 CHAIRMAN BECHHOEFER: I think you have added a
23 little bit to Mr. Hofstadter's answer. Why don't you
24 rephrase your question a little more along the lines of the
25 answers he gave.

david7

1 BY MR. CONNER:

2 Q Mr. Hofstadter, did you know of your own
3 personal knowledge that the Zimmer cable trays in your
4 opinion did not meet specifications while they were at
5 Zimmer?

6 A Yes, I knew that the day they were shipped, sir.

7 Q All right, and when was that?

8 A Well, there were several shipments. Every day.
9 Anytime we shipped them, sir. Or when they were made would
10 be applicable.

11 Q Therefore, beginning sometime in late 1974 until
12 the work was completed, you knew and were responsible for
13 sending out shipments that you knew --

14 A I wasn't responsible for sending out the
15 shipments, sir.

16 Q All right. You were responsible for the
17 qualifying tests?

18 A Right.

19 Q And you knew that you were sending out in your
20 mind components which did not meet specifications.

21 A That is my opinion, yes, sir.

22 Q And you were willing to have these sent out to
23 the customer --

24 A Because I had assurances from our product
25 engineering people that the material going out would be

david8

1 safe without any question.

2 Q Did you say earlier you had assurances that the
3 company -- that Zimmer would not use these to their
4 design capacity?

5 A I -- yes, sir. I was told that, sir.

6 Q And on that basis, you would have allowed material
7 which you knew did not meet specifications to go out?

8 A There's an additional reason because I felt that
9 way.

10 Q Is that part of your reason?

11 A No, as I have to explain a little further, there's
12 an additional reason. I felt that what they were talking
13 about was right because I did get out and see other
14 installation of cable tray and the loading, and when I
15 got the installations of cable tray loading that I saw,
16 that the trays were loaded, generally, 50 to 60 percent.
17 And if that was going to be the case at Zimmer, very likely
18 these trays would be satisfactory.

19 Q 50 or 60 percent of what?

20 A Capacity.

21 Q What does "capacity" mean?

22 A Capacity means the loading in relation to the
23 width and the depth of the tray.

24 Q And what are the specifications for the cable
25 trays to carry? I mean, what pounds per square inch?

david9

1 A That varies on the type of tray that it is, sir.
2 There are many types of trays. It would vary on the type
3 of tray, particular type of tray.

4 Q Is 40 pounds per square inch the design limit for
5 the cable trays?

6 A There are different trays at Zimmer, sir. There
7 would be different loading requirements on different
8 trays.

9 Q Do you know whether any cable tray at Zimmer is
10 loaded in excess of 40 pounds per square foot?

11 A I do not know what the load capacity is. I know
12 what the area capacity is.

13 Q I'm sorry. The area --

14 A The area that the cables occupy.

15 Q But you don't know whether the specifications,
16 the loading specification is exceeded or not?

17 A No, sir; I would have no way of knowing that.

18 Q Did you make any dynamic analysis of the loads
19 in those cable trays?

20 A I would say this: that --

21 Q Would you answer my question and then explain.

22 A Please repeat your question.

23 Q Did you make any dynamic analysis of the loads in
24 the cable trays?

25 A No, sir.

david10 1

2 Q In other words, the only basis for your
3 conclusions are you think it's piled too high, too many
4 cables in the tray; is that it?

5 A Yes, sir.

6 Q Directing your attention to question five and
7 the answer -- question five in about the, oh, seventh line
8 down, you say, quote, "All the test pieces broke on the
9 first round."

10 Does this relate to the qualification tests on
11 aluminum in 19 -- August or September of 1974?

12 A Yes, sir.

13 Q In question nine you are also then talking about
14 matters involving aluminum; is that correct?

15 A Please repeat your question, sir.

16 Q Directing your attention to your answer in question
17 nine, you say in the third sentence that all the welders
18 were tested and all of them failed; that would refer to --
19 if correct -- would refer to the work on aluminum, wouldn't
20 it?

21 A No, this would -- this would refer here
22 specifically to the total requirement in the particular
23 work center.

24 In other words, after both tests, not one
25 welder was completely -- or had all the certification he
needed for all of the positions that he would use.

david11 1

2 Q Let me ask you the question differently: does
3 your answer to number nine have anything to do with Zimmer cable
4 trays?

5 A I would say yes it does.

6 Q And was the work you're referring to in August
7 of '74 done on steel?

8 A Would you please repeat the question, sir.

9 Q Mr. Witness, you state after the Zimmer order had
10 arrived in May of '74 we set up our certification testing
11 for August of '74.

12 "I contacted Gladstone Laboratories and the lab
13 helped to develop the first tests on aluminum."

14 Is that correct?

15 A Yes, sir.

end 3

16

17

18

19

20

21

22

23

24

25

#4ngl

1 Q "All welders were tested and all of them failed." Is
2 that referring to the same test in the previous sentence?

3 A No. I would say that this applies here after the
4 second test because we didn't test all of the welders the first
5 time.

6 Q Now is it then your testimony that all of the welders
7 failed the qualification tests on steel for the Zimmer cable
8 tray?

9 A I just said they failed, we'll say, to get the full
10 certification that they would need, yes. In that respect they
11 failed.

12 Q Isn't it a fact --

13 CHAIRMAN BECHHOEFER: Could we have that answer
14 repeated? We didn't hear it.

15 (Whereupon, the preceding answer was read by the reporter)

16 BY P.R. CONNER:

17 Q Isn't it a fact that for welding on the Zimmer cable
18 trays the only qualification test a welder had to pass was for
19 MIG on steel horizontal?

20 A That would be possible, yes. This is a possibility.

21 Q You were responsible, sir. Don't you know?

22 A Wait a minute. I would be responsible for testing
23 the people, but I would not be responsible for the production
24 process that the production would use.

25 Q I'm asking you about the test that you said all

1 welders failed. You tried to say it had to do with some kind of
2 a broader certification. Will you answer my question? Aren't
3 we involved here only for the qualification test for MIG on
4 steel horizontal welding?

5 A On a technical sense, in other words, that the parts
6 could have been welded with MIG, you're correct; but in practice
7 HUSky always welds those parts with TIG. So in theory, you're
8 correct. In practice, you're wrong. I couldn't change a
9 practice.

10 CHAIRMAN BECHHOEFER: We didn't get that answer.

11 (Whereupon, the answer was read by the reporter)

12 THE WITNESS: We have two work centers. One work
13 center was set up for MIG welders with MIG welders. The other
14 work center was set up with TIG welders. These parts normally
15 went through the center that had the TIG welders.

16 BY MR. CONNER:

17 Q Mr. Hofstadter, please recall I'm asking you about
18 your answer in question 9 where you talk about what Gladstone
19 Laboratories did. You have now said that your statement that
20 all welders failed did not apply to the first test and we are
21 taking it to the second test. That's all I'm asking you about
22 now.

23 A The total of the two tests.

24 Q The first was on aluminum. The second was on steel.
25 Is that right?

1 A Yes, sir.

2 Q Now for the Zimmer cable tray job, isn't it a fact
3 that all the Gladstone tests involved was qualification of
4 welders for MIG steel in horizontal position?

5 A That is right. Now there is one little thing that
6 you seem to be forgetting, and that is that the Husky QC manual
7 was revised and it said that all welders would weld to Section
8 IX and be certified. So in that aspect the fact that we could not
9 comply with the manual itself.

10 Q Mr. Hofstadter, you may be right, but this hearing
11 is only concerned with Zimmer cable trays and the qualification
12 of welders under Section IX of the ASME code for that purpose.
13 That's the limit of my question, too.

14 Now how long were you responsible for the welder
15 qualification process?

16 A From the time I started until I left.

17 Q Then you observed all of these changes in the
18 program over the years and agreed to them and concurred in
19 them. Is that a fair understanding?

20 A Yes, sir.

21 MR. CONNER: May I have just one second?

22 DR. HOOPER: Sir, could I ask a question? I'm not
23 sure I understood your previous answer. When you said that all
24 tests -- all failed their test, did they all fail their test
25 on MIG horizontal steel?

1 MR. CONNER: Dr. Hooper, I'm sorry. I couldn't hear
2 your question, the end of it.

3 THE WITNESS: There would be a possibility that
4 somebody passed the MIG horizontal, yes, because there were
5 some passes, yes.

6 DR. HOOPER: You're now saying that some passed MIG
7 horizontal steel?

8 THE WITNESS: Well, say a man should pass a
9 horizontal and vertical in MIG and maybe he failed the vertical
10 but he passed the horizontal. Then another man would pass the
11 vertical and fail the horizontal.

12 DR. HOOPER: Let me ask you again then, it is not
13 true that all failed MIG horizontal steel?

14 THE WITNESS: Right.

15 DR. HOOPER: Thank you.

16 MR. CONNER: I couldn't quite hear all of your
17 questions, Dr. Hooper.

18 DR. HOOPER: My question was when he said that all
19 failed, did he mean that all failed MIG horizontal steel, and
20 that was my original question.

21 BY MR. CONNER:

22 Q And you answered that, as I now understand the
23 question, by saying, yes, all welders failed the MIG horizontal
24 steel test?

25

1 DR. HOOPER: No, he did not say that.

2 THE WITNESS: No, I did not say that. I said that we
3 had people -- the people were tested in horizontal and vertical.
4 Some people would pass a horizontal and some people would pass
5 a vertical, and it was mixed up to the extent that we felt that
6 the requirement for that part should be vertical and horizontal
7 and we did not have one man that met both or passed both tests.

8 BY MR. CONNER:

9 Q Well, it's a fact, isn't it, that passing either
10 horizontal or vertical under ASME Section IX qualifies the
11 welders for flat welds?

12 A Yes, sir.

13 Q Did you ever pass a qualification test as a welder
14 at Husky?

15 A I'm not a welder, sir.

16 Q Did you see, personally observe, the installation of
17 the cable trays at Zimmer?

18 A No, sir. Let me explain my answer on that last
19 question. You said did I see the installation of them and I
20 took that to mean the actual installing of them. I saw the
21 trays after they were installed.

22 Q Yes. That's what you said; you had made no dynamic
23 analysis of them. You're right. I mean did you see them
24 physically installed in Zimmer.

25 A That's what I took your question to be and that's

1 what I answered, sir.

2 MR. CONNER: I have no further questions.

3 CHAIRMAN BECHHOEFER: Well, I guess the Staff should
4 be next on this.

5 BY MR. BARTH:

6 Q Mr. Hofstadter, do you weld?

7 A I just previously answered that a few minutes ago.

8 No, sir; I'm not a welder.

9 Q Have you ever engaged in examining welds, sir?

10 A I can't hear you, sir.

11 Q Have you engaged in examining welds?

12 A Yes, sir.

13 Q Have you ever taken any course in welding?

14 A No, sir.

15 Q And have you ever been certified?

16 A I just stated I'm not a welder, sir.

17 Q I'd like an answer to the question, sir.

18 A No, sir.

19 Q Did you examine any of the welds on the cable trays
20 which were welded by the non-certified welders?

21 A Would you repeat that question and be a little more
22 specific? You mean the cable trays for Zimmer?

23 Q Yes, sir.

24 A I may have. I really don't recall, but I examined
25 many welds after the fact in the shop, yes.

1 Q Do you recall, sir, examining any of the welds, TIG
2 welds, for the Zimmer work which were performed by non-certified
3 welders?

4 A I don't recall any specifically, sir.

5 Q Did you come to a determination that any of the
6 welds -- we're talking about the TIG welds -- on work for the
7 Zimmer facility were improperly performed?

8 A No. There's a different reason for that --

9 Q I'll take the "no", sir. If you want to make
10 speeches I think this is proper on rehabilitation.

11 CHAIRMAN BECHHOEFER: If he wants to explain an
12 answer I think he can do that.

13 MR. BARTH: Sir, there's no explanation. The an
14 question is a yes or no question. I'm trying to be careful to
15 ask yes or no questions. If the court feels he should make
16 an explanation --

17 THE WITNESS: It is not a yes or no question, sir,
18 because you have to operate on the laws of probability and the
19 laws of probability are predicated we'll say on a person's
20 ability or qualifications to do a certain task. If the man has
21 shown that he does not have all of the qualification and the
22 ability to do a certain task, then the results that you get from
23 him are going to vary as his ability varies. So in the laws of
24 probability there have to be some bad welds. That was proven.
25 That's a proven when you do the testing.

1 MR. BARTH: Sir, I move to strike the answer. It is
2 non-responsive. It's immaterial. It's irrelevant. He has no
3 qualifications to --

4 CHAIRMAN BECHHOEFER: I think we'll let the answer
5 stand. It's expanding the answer somewhat, but it is relevant
6 and I think we will let it stand. You can ask a further
7 question about it if you wish.

8 MR. BARTH: Sir, he did not answer the question. I
9 beg your pardon, sir. I take your ruling.

10 CHAIRMAN BECHHOEFER: I think he said, "No, but" --
11 and that's the answer that I remember.

12 MR. BARTH: The "but" --

13 MR. FELDMAN: I'd like the Board to admonish Mr.
14 Barth to stop arguing with the Board and let's get on with this
15 cross-examination.

16 CHAIRMAN BECHHOEFER: The Board is not going to
17 admonish anybody. We have ruled that we will allow him to
18 answer.

19 MR. BARTH: I have accepted the answer. There's no
20 argument. Let's get on with this.

21 BY MR. BARTH:

22 Q Mr. Hofstadter, what is the highest course you have
23 had in mathematics?

24 A I would think algebra II.

25 MR. BARTH: Would the reporter read the answer?

(Whereupon, the preceding answer was read by the reporter)

326 175

1 THE WITNESS: As I recall, it would be algebra II
2 and trigonometry.

3 BY MR. BARTH:

4 Q In trigonometry, did they teach probability calculus?

5 A What, sir?

6 MR. HEILE: Mr. Chairman, I'd like to know the
7 reason for this kind of cross-examination. It even befuddles
8 me. I'm not really too sure what this has to do with the direct
9 testimony that Mr. Hofstadter has given.

10 CHAIRMAN BECHHOEFER: He's asking about his background.

11 MR. BARTH: An answer was permitted to stand which
12 was completely irrelevant to the question which was based on
13 probability. I want to know if this man knows anything about
14 probability calculus.

15 CHAIRMAN BECHHOEFER: All right.

16 BY MR. BARTH:

17 Q Now, sir, would you answer the question?

18 A Would you please repeat the question?

19 (Whereupon, the question was read by the reporter)

20 THE WITNESS: No.

21 BY MR. BARTH:

22 Q In algebra II, do they teach probability calculus?

23 A No, sir.

24 Q What kind of background do you have, sir, in the
25 analysis of probability?

1 A Because when I was at Bendix the manager of
2 the quality control program conducted several seminars dealing
3 with the laws of probability in respect to quality control where
4 for purposes of illustration he used the black marbles and the
5 white marbles.

6 Q Sir, what is the probability under the assumptions
7 that you gave in your answer permitted by the Board that there
8 was a bad weld?

9 A I wish you'd complete your question.

10 MR. BARTH: I'll let the Board review the question
11 and determine whether or not the question is a complete
12 question, sir.

13 CHAIRMAN BECHHOEFER: Are you referring to Zimmer
14 cable trays or -- what's the scope of that?

15 MR. BARTH: The scope of the question is the context
16 of the dialogue that we are having which is, of course, Zimmer.
17 I'm not talking about Shearon Harris or Shoreham pressure
18 vessels.

19 CHAIRMAN BECHHOEFER: You're not talking about all
20 welds at Husky, I take it.

21 MR. BARTH: We have limited ourselves previously,
22 Your Honor, to TIG welds.

23 CHAIRMAN BECHHOEFER: With that in mind, I think he
24 can answer.

25 THE WITNESS: Well, to answer your question I'd like

1 to use the model that I have.

2 Q Sir, the components of probability do not take a
3 physical model. It's a mathematical question and I would like
4 you to answer the question without pieces of cardboard and I
5 would ask you to direct the witness to answer the question.

6 MR. FELDMAN: Your Honor, the witness hasn't even
7 begun his answer and it might be quite relevant. Mr. Barth
8 has asked a question and he's like an answer.

9 CHAIRMAN BECHHOEFER: All right.

10 THE WITNESS: The welds that I'm talking about, and
11 the problem with where the question of probability comes up
12 concerns the welds in these fittings which are the red spots
13 right here (indicating), and when this is together with the
14 other part these -- all of the weight of the cables is directly
15 carried by these little welds. That is the welds that I'm
16 talking about and when you have this many welds and you have
17 that many welds made by people that are not completely
18 qualified or capable you're going to have some of those welds --
19 there's going to be some weld failure.

20 MR. BARTH: Your Honor, I move to strike the answer.
21 First of all, it's completely unresponsive to the question and
22 before the Board rules I wish to consult a scientific member
23 who's well aware of what probability calculus is. I'm entitled
24 to an answer and I want an answer.

25 MR. FELDMAN: I think it is as responsive as Mr.

1 Hofstadter can be to that question. As Mr. Barth knows, Mr.
2 Hofstadter has already answered he's not an expert on probability
3 calculus. Mr. Hofstadter answered the question to the best of
4 his ability. That's all we can expect and I think the answer
5 should stand.

6 (Board conferring)
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Tp 5
DB 1

1 CHAIRMAN BECHHOEFER: The Board has conferred.
2 We think that perhaps if Mr. Hofstadter could give a
3 further answer -- I think what he answered was certainly
4 relevant. It may not have been as complete as you
5 would want. If he can give a further answer, that
6 would be desirable. I don't think he has to do a
7 scientific probability calculation necessarily.
8 He used "probability" and you may inquire since he used
9 it. But I think if he can give a further answer as
10 to exactly what the probability is or was, he should do
11 so. I think to that extent he can give a further
12 answer, if he can. The answer so far we think should
13 stand.

14 BY MR. BARTH:

15 Q How many TIG welds are there on a riser?

16 A What is a riser?

17 Q Sir, the term "riser" in relation to cable
18 trays is unfamiliar to you?

19 A Not with respect in the way in which you
20 are using it, no, sir.

21 Q I used it in no way.

22 MR. BARTH: Your Honor, I ask you to direct
23 the witness to respond to the question.

24 THE WITNESS: I am unfamiliar with what a
25 riser is, sir.

326 180

DB2

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

BY MR. BARTH:

Q In relation to the cable trays for the Zimmer project.

A I don't know what a rise is, sir.

MR. FELDMAN: Your HONor, I would request Mr. Barth to explain what this is. If Mr. Barth really wants an answer to the question, I would request that he make it clear what he is referring to.

MR. BARTH: Mr. Chairman, I ask you admonish counsel to let me conduct my examination and he can conduct rehabilitation on redirect.

CHAIRMAN BECHHOEFER: You can continue with your examination.

BY MR. BARTH:

Q Mr. Hofstadter, --

MR. FELDMAN: I withdraw my objection.

BY MR. BARTH:

Q Mr. Hofstadter, what would happen to a piece of cable tray if a TIG weld failed?

A You say if one weld failed?

Q TIG weld. We are talking about Zimmer, talking about cable trays, talking about TIG welds, not talking about other plants or pressure vessels.

A You are asking for a conjecture on my part and that is all I can give you is a conjecture. In other words, if one weld fails, the problem becomes

DB3

1 that the other succeeding or remaining welds then
2 have to carry more load and it means that their
3 probability of failure would be increased.

4 Q What piece of equipment are these TIG welds
5 on, sir?

6 A What piece of equipment?

7 Q Yes, sir.

8 A You mean with respect to the cable tray
9 itself? Are you talking about the particular item in
10 question? Is that what you mean? If I knew what you
11 meant, I could answer your question. When I don't know
12 what you mean --

13 Q For the last time I will lay this out very
14 carefully. We are talking about Zimmer, talking about
15 cable trays, talking about TIG welds on the cable
16 trays.

17 A Then we are talking of the vertical fittings
18 in particular, yes, all right.

19 MR. BARTH: Your Honor, would you direct
20 the witness to answer the question?

21 THE WITNESS: Repeat the question now.

22 CHAIRMAN BECHHOEFER: What is the piece of
23 equipment, first? I think he gave you a part. I don't
24 know if that is a piece of equipment or not. I am
25 confused by it also.

DB4

1 BY MR. BARTH:

2 Q Could you describe the fitting which you
3 are thinking about, sir?

4 A It would be similar to the sample that I
5 picked up to show you, sir.

6 MR. BARTH: The unfortunate problem is that
7 we have a printed record. If you could describe it
8 so that the reporter could type it and those in the
9 future will understand what we are talking about.
10 Your Honor, I ask that you direct the witness to
11 describe his answers so the reporter can get this
12 and have a coherent record.

13 MR. FELDMAN: I don't believe that Mr.
14 Hofstadter understands what you are requesting.

15 CHAIRMAN BECHHOEFER: I think to the extent
16 you can, you should describe it.

17 MR. BARTH: I would like to stipulate for the
18 record that this was very carefully discussed by
19 co-counsel, Mr. Brenner, last night with Mr. Hofstadter.
20 The problem is the fact that we have a written record
21 and these kinds of demonstrations must be in such
22 context that the reporter can understand it. I would
23 like a description of the fitting, an oral description.
24 I don't want pictures drawn, I would like an oral
25 description of the fitting, so we can get on with the
questions.

DB5

1 MR. WOLIVER: Your Honor, I am also concerned
2 that we have an accurate record. Possibly we could
3 stipulate to what he is showing and have that written
4 into the record. I don't think it is fair to put this
5 burden on Mr. Hofstadter. He has brought us what he
6 wants to show us, and if we could stipulate to
7 what he is showing, so the record will reflect that,
8 that may be more accurate.

9 THE WITNESS: I think maybe I can describe it.

10 MR. FELDMAN: Please wait until the Board
11 rules.

12 MR. WOLIVER: That is the normal procedure
13 in court, and I would assume the Board would adopt the
14 same standard.

15 MR. BARTH: No, sir, I think he can describe
16 the fitting. I ask the Board to consult with the
17 scientific members to decide is it possible for this
18 man to describe a fitting or is it not. If the Board
19 feels it is not, I will lose. I ask for a ruling, sir.

20 (Board conferring)

21 CHAIRMAN BECHHOEFER: Just do your best
22 and see if you can describe it for the record.

23 THE WITNESS: I am talking about three pieces
24 of steel, one of which is a radius segment, and the
25 width of the segment is approximatley -- it would vary
from four inches to six inches.

1 Now the length would be dependent upon the
2 arc, and the arc would be we will say in degrees, 45
3 degrees, 60 degrees, or 90 degrees.

4 Now to this flat piece there is a segment.
5 You then would take a flat piece and it would be welded
6 to the side perpendicular to the segment piece. And
7 one would be welded at the top and one would be welded
8 at the bottom. And these welds would consist of
9 welds approximately one inch in length spaced every
10 five to six inches along the edge. Equally spaced.

11 BY MR. BARTH:

12 Q Sir, do you have reference in your mind
13 to any particular fitting made by Husky which would
14 more or less approximate the description you have
15 given?

16 DR. HOOPER: Excuse me, sir, can I interrupt
17 for a second? Mr. Hofstadter, what have you just
18 described? I don't want to know about your model. I
19 want to know what you have just talked about. Is that a
20 cable tray, sir?

21 THE WITNESS: No. This would be one
22 section of a cable tray. This would be like what
23 is known as --

24 DR. HOOPER: Part of the cable tray?

25 THE WITNESS: Right, the side rail. Each

DB7

1 cable tray has two rails, the right side and the left
2 side. This would be either side. They are identical.
3 But there would be a right side and a left side and
4 there would be a bottom. So I have described one of the
5 sides. It would be either right or left.

6 DR. HOOPER: Now this is a cable tray you
7 are describing, is that right?

8 THE WITNESS: A cable tray fitting. In
9 other words, the tray itself normally is an item that
10 is either 12 feet or 24 feet in length. Now fittings
11 are what connect different trays when you change
12 direction. In other words, when you come to a wall,
13 for example, you don't go through the wall, you have
14 to go right or left or up and down. And the fitting
15 is used to change direction.

16 DR. HOOPER: This is something that is
17 attached onto a cable tray?

18 THE WITNESS: Yes, sir. It is what is used
19 to change the direction of the tray.

20 BY MR. BARTH:

21 Q Sir, do you have in mind any particular
22 fitting manufactured by Husky which meets the general
23 description you have given, both in response to my
24 question and Dr. Hooper's question?

25

326 186

1 A Yes, sir. Vertical fittings, wherein the
2 direction of the tray is changed from horizontal to
3 vertical.

4 Q Will you please tell me, sir, how many TIG
5 welds would be on that fitting?

6 A The spacing is roughly equal. The length
7 of the weld is one inch. And the spacing between the
8 welds is in the area of five to six inches, whatever
9 gives you an equal spacing, so that we will say in
10 respect to appearance, that you don't have one three
11 inches and one eight inches.

12 MR. BARTH: Your Honor, that was a nice
13 speech, and I will ask you to direct the witness to
14 answer the question. I am looking for a number. He
15 has previously testified that he has a specific fitting
16 in mind. I want to know the number of welds on that
17 fitting.

18 CHAIRMAN BECHHOEFER: He testified that
19 the fittings, I thik, had different lengths, depending --

20 MR. BARTH: Sir, he testified that he had
21 a specific fitting in mind. I want to know how many
22 welds are on that fitting. I apologize for raising my
23 voice, sir.

24 THE WITNESS: I said specific type of fitting.
25 You have changed it to specific fitting. I am talking
about type.

DB9

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. BARTH: Your Honor, I am quite willing to let the reporter read the record. I am confident of my questions.

CHAIRMAN BECHHOEFER: Well, the reporter can go back and check. It was my recollection that Mr. Hofstadter said that the fittings could be different lengths, depending upon the location. If I am wrong, let the reporter check.

MR. BARTH: Right, but that was not responsive to the question.

CHAIRMAN BECHHOEFER: If there are many lengths, obviously he described that there will be welds every five or six inches, plus the space between the welds.

MR. BARTH: I think counsel's problem is I don't understand you, sir. He said he had in mind a particular fitting. The darn thing has got a length. It doesn't have an indefinite length. And I want to know what it is.

CHAIRMAN BECHHOEFER: The reporter can go back and check that.

MR. BARTH: I think the reporter for my purpose need check nothing. I think this is absolutely crucial to my examination, sir, and you are killing me. The man says he knows of a fitting. I want to

DB10

1 how long the fitting is.

2 MR. FELDMAN: I think Mr. Barth is correct
3 in his question, bu. I don't believe that Mr. Hofstadter
4 answered the question that way. If Mr. Barth wants to
5 ask him the question again, and let Mr. Hofstadter
6 answer it, I think that is fine.

7 CHAIRMAN BECHHOEFER: Why don't we clarify
8 it that way? Why don't you ask if there is a particular
9 fitting.

10 MR. BARTH: I have already done that.

11 THE WITNESS: Wait a minute. I have
12 answered your question. I told you I am talking of a
13 specific type of fitting, which is a vertical. Now
14 when we talk of vertical, there are many combinations
15 of verticals. In other words, you have verticals
16 that have we will say, for example, a 12 inch radius,
17 you have 18 inch radius, or a 24 inch radius.

18 BY MR. BARTH:

19 Q Take your 18-inch radius.

20 A All right.

21 Q Onthe 18-inch radius --

22 A You have the 18-inch radius, then you have
23 different widths, and the width will go from three inches
24 to I guess some possibly as wide as 12 inches.

25 Q Sir, would you tell me what you mean by width?

DB11

1 Are you talking about the bottom panel?

2 A I am talking, in other words, if you have one
3 that is 48 inches in radius, the inside radius is 48
4 inches, then for a six-inch tray, the outside radius would
5 be 54 inches. Now the welds, the spacing of the welds,
6 would be in relation to the cordal length, around
7 the circumference.

8 What I am saying is you have a weld at each
9 end, and you have a weld approximately every five to
10 six inches.

11 MR. BARTH: Mr. Chairman, so you may understand
12 the line of questioning, I am quite willing to spend
13 all of next week here on this, but I want to know
14 what he meant by width. I move the Bench direct the
15 witness to answer what he means by width. We are
16 talking about several pieces, there is a bottom, there are
17 two sides, there is a rail on each side. I am not
18 interested in the demonstration, I want no more cardboard,
19 I move the Bench direct him to tell us what he means
20 by width.

21 MR. FELDMAN: Your Honor, if the witness
22 needs to use his model to explain, I see no reason not
23 to permit him to do this.

24 THE WITNESS: On any tray --

25 MR. BARTH: May I ask the Bench to rule before
the witness speaks.

1 (Board conferring)

2 CHAIRMAN BECHHOEFER: Would you explain a
3 little more what you mean by width? You may use the
4 model to help us understand, but describe it as best
5 you can for the record.

6 THE WITNESS: When you cut the flat piece
7 out and come up the cordal segment, you have an inside
8 radius and an outside radius. The difference between
9 the inside radius and the outside radius would become
10 the width of the assembled part.

11 BY MR. BARTH:

12 Q Thank you, sir. With an outside width of
13 18 inches, which was the figure you chose, how many
14 TIG welds are involved, if you please, sir?

15 A We have never made a tray of 18 inch width
16 to my knowledge.

17 MR. BARTH: I move that the Bench require
18 the witness to answer.

19 MR. FELDMAN: Mr. Chairman, if Mr. Barth
20 would listen to the answer perhaps he would understand
21 it. I think his answer was quite clear. If Mr. Barth
22 would listen, perhaps he would hear as well.

23 I think he testified it was an 18-inch length, not an
24 18-inch width

25 THE WITNESS: He said width.

DB13

1 CHAIRMAN BECHHOEFER: Do you mean width or
2 length?

3 MR. BARTH: I am using his own terms. He
4 testified that the outside circumference is width.
5 He has testified that there is an 18-inch width fitting.
6 It is all in the record. Now with that fitting he
7 has defined, sir, I want to know how many TIG welds are
8 involved. I ask that you direct him to answer how
9 many TIG welds are involved in the fitting he has
10 described. It is hard to get a number, but I will be
11 patient.

12 THE WITNESS: In the first place, I really
13 don't recall saying what you said I said. What I said
14 was each of those parts has a radius. In other words,
15 we are talking of a segment and you have an inside
16 radius and an outside radius. The difference between
17 the two radiuses becomes the width.

18 CHAIRMAN BECHHOEFER: You mean the space
19 between the two radiuses?

20 THE WITNESS: Right, yes.

21 CHAIRMAN BECHHOEFER: I am recorrected. Radii.

22 THE WITNESS: If this is a 12-inch radius,
23 then it follows, if this is four inches thick, it
24 follows this would be a 16-inch radius. So the difference
25 between the two, from 16 to 12, is four inches and

1 that becomes the width of the assembled item.

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

2david

david 1

take 6

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

BY MR. BARTH:

Q Mr. Hofstadter, are you familiar with any particular fitting made by Husky which has curved designs such as you have described?

A Right.

Q Of any of those with which you are familiar, can you identify the external circumference, the top circumference for any fitting?

A That isn't the way it's done in practice. This -- when they -- the welders put the spots on, they try to hold the distance between the welds of five to six inches, and that is the way it is done.

There is no -- it's not complicated. You're trying to make it complicated.

Q I'm delighted to hear the lecture, sir. Now, I would move again --

CHAIRMAN BECHHOEFER: I think you've not answered the question. I think the way I understand it, he wants you to designate a particular fitting, if I'm not right, the size.

MR. BARTH: We'll get there. We'll get there. We'll get it fitly described before I'm done. It may take awhile.

CHAIRMAN BECHHOEFER: The particular --

THE WITNESS: The simplest way to do it is to, as

david2 1 as I say, would be quicker than any calculation would be,
2 would be to take a tape and find out what the length along
3 the outside diameter is, roughly divided up by --

4 CHAIRMAN BECHHOEFER: Yes, I think Mr. Barth wants
5 you to come up with a particular length that is actually --
6 of the type of fitting that you're talking about, which
7 was actually used in the Zimmer cable tray.

8 Am I correct?

9 MR. BARTH: You are, your Honor.

10 CHAIRMAN BECHHOEFER: The board would like to
11 find that out, too.

12 MR. BARTH: I can use all the help I can get.

13 CHAIRMAN BECHHOEFER: Maybe it would be desirable
14 for us to take a break while you try to figure one out and
15 be back in about 10 minutes.

16 (Brief recess.)

17 CHAIRMAN BECHHOEFER: Okay, back on the record.
18 Mr. Hofstadter, do you remember the question you were asked?

19 THE WITNESS: I think I do; in other words, what
20 he wants to know is how many welds would be placed in a
21 given radius.

22 BY MR. BARTH:

23 Q In any given fitting, sir; I'll let you describe
24 the fitting; I will let you describe the dimensions. I'll
25 accept your dimensions, your fitting, and I would like you

david3

1 to tell me how many TIG wells are involved, sir.

2 MR. FELDMAN: Would you put the microphone a
3 little closer?

4 THE WITNESS: This is nearly a 12 inch radius on
5 the inside, which then becomes 60 inches on the outside; now,
6 we have nearly 20 inches on the circumference in this area
7 here and the spacing of four to five or six inches, we
8 would probably put a weld here (indicating), here (indicating)
9 and one in the center and one on either side of it.
10 (Indicating).

11 In other words --

12 MR. FELDMAN: Let the record reflect he was
13 pointing to either end of the interior radius.

14 THE WITNESS: Either end, one in the center, and
15 then one dividing up the other two parts (indicating).

16 BY MR. BARTH:

17 Q How many does that total, sir?

18 A Five.

19 Q Five?

20 A Yes, sir.

21 Q Are there two insides to be TIG welded?

22 A No, sir.

23 Q This tray only has one side?

24 A It has a top and a bottom; on the top, which would
25 be the outside, we have a length of approximately 26 inches,

david4

1 and the 26 inches with the five and six inch spacing following
2 roughly the same setup, we would have six welds.

3 Q So on a particular fitting --

4 CHAIRMAN BECHHOEFER: Is that --

5 MR. BARTH: Mr. Bechhoefer, may I please
6 continue, sir?

7 CHAIRMAN BECHHOEFER: I just -- one thing I
8 didn't understand. I didn't hear: did you say 26 or 16?

9 THE WITNESS: On the outside approximately 26,
10 and then with that spacing we would have six welds.

11 BY MR. BARTH:

12 Q Sir, on the fitting --

13 CHAIRMAN BECHHOEFER: Just a minute.

14 BY MR. BARTH:

15 Q This particular piece is described as a bottom?

16 A Yes, sir.

17 Q On the other side of that bottom, is there not
18 a piece similar to that you have just described, which has
19 a total of 11 welds?

20 A Your arithmetic is wrong, sir; the other piece
21 would be identical to it, so then on the bottom portion of
22 the two pieces we would have 10 welds, if that's what you're
23 trying to arrive at.

24 DR. HOOPER: Excuse me; what was your figure?

25 THE WITNESS: We would have five welds on the

326 197

David5

1 right side and five welds on the left side on the bottom
2 section, so it would be a total of 10 welds on the assembled
3 part.

4 DR. HOOPER: I get six plus five is 11.

5 MR. BARTH: I'm with you, Dr. Hooper, but I
6 will straighten this out if it takes me all week.

7 MR. FELDMAN: Mr. Hofstadter is trying to explain
8 his answer, Mr. Chairman, if Mr. Barth would let him.

9 BY MR. BARTH:

10 Q Sir, would you please tell us how many welds --

11 MR. FELDMAN: I believe Mr. Hofstadter was trying
12 to explain his answer, Mr. Barth, if you'd let him.

13 MR. BARTH: I need no explanation; I have the
14 answer: 10.

15 MR. FELDMAN: He was right in the middle of a
16 sentence, if the chairman would rule on it.

17 MR. BARTH: Please rule, Mr. Chairman.

18 CHAIRMAN BECHHOEFER: I think he can continue.
19 Well, he can answer your question at the same time he's
20 trying to explain.

21 THE WITNESS: We would have six welds at the
22 top on each piece which would be a total of 12 welds on the
23 top portion. On the bottom portion, we would have five welds
24 on each side, which would be a total of 10 pieces -- 10
25 welds on a completed assembly.

david6

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

(Pause.)

MR. BARTH: May I have a moment, sir?

(Pause.)

BY MR. BARTH:

Q Now, Mr. Hofstadter, if we assume that two welds on any part of the bottom fail, could you tell me what is the random probability of this occurrence, sir?

A NO, sir, I cannot predict.

Q I'm not asking you to predict. I'm asking you to figure out the probability, sir.

A I told you, I'm not capable of figuring out the --

MR. FELDMAN: I object to that question, Your Honor. Mr. Hofstadter has already testified he's not an expert in that area. I see no reason to explore this. If Mr. Barth wants to call a witness with that expertise, he's free to do so.

MR. BARTH: I'd be delighted to explain the line of questioning, sir.

CHAIRMAN BECHHOEFER: He doesn't want an explanation; he's indicated he does know. I think that's the answer.

MR. BARTH: There was an objection to stop the line, sir, and I'll wait for you to rule on that or I will explain my --

CHAIRMAN BECHHOEFER: I'm not going to stop the

david7

1 line of questioning: continue. I think he's given you an
2 answer.

3 BY MR. BARTH:

4 Q Numerically, sir, how is probability expressed?

5 MR. FELDMAN: Objection, your Honor. This is
6 repetitive; these questions regarding probability theory
7 have been asked and answered many times this morning. I
8 don't think we need to waste any more time with this, your
9 Honor.

10 I object to this continuing.

11 MR. BARTH: Sir, you've already overruled that
12 objection.

13 CHAIRMAN BECHHOEFER: Yes, I think this can
14 continue.

15 THE WITNESS: Please repeat your question.

16 BY MR. BARTH:

17 Q How is probability expressed?

18 A I don't know the proper term for it, sir.

19 Q Mathematically, if you took numbers, how would you
20 write any probabilistic figure?

21 A I don't know that either, sir.

22 Q Given a finite universe such as we have with
23 10 welds on the bottom --

24 A What?

25 Q Given a finite universe such as we have of

david8

1 10 welds on the bottom of the fitting you've described, how
2 would you compute the probability of any two welds
3 sequentially failing?

4 A I jst told you -- I think all you're trying to
5 do is embarrass me. I keep telling you that I don't know,
6 sir.

7 MR. FELDMAN: Mr. Hofstadter, I have an objection.
8 Once more, this is a continuing objection in this case. This
9 is certainly by now -- this is repetitive. I believe
10 this is the third or fourth time he's asked the same question
11 and Mr. Hofstadter's answer is the same way. Now, I see no
12 reason --

13 CHAIRMAN BECHHOEFER: I think Mr. Hofstadter did
14 testify he took into account the probability of the welds
15 failing in some of the actions which he took, and I think
16 the questioning is relevant; to the extent it doesn't get
17 too repetitious, I think it can be completed.

18 MR. FELDMAN: I note my continuing objection to
19 this repetitious line of questioning.

20 MR. BARTH: Could the reporter read back the
21 last question.

22 (The record was read as requested.)

23 BY MR. BARTH:

24 Q Sir, earlier I asked you if you had any
25 knowledge, personal knowledge, of any of the welds -- again

david9

1 we're talking about Zimmer cable trays -- earlier I asked
2 you if you had any knowledge that any of the welds were
3 defective. Please correct me if I'm wrong: you stated
4 no, but it is probable

5 A No, you asked if I had personal knowledge through
6 actually inspecting the welds or looking at the welds, and
7 I said no. Right.

8 Q I accept that, sir.

9 Do you have any other personal knowledge by any
10 other means?

11 MR. FELDMAN: I didn't understand your question,
12 Mr. Barth.

13 (The record was read as requested.)

14 THE WITNESS: I'll say the same answer again: I
15 have no other knowledge.

16 MR. BARTH: Mr. Chairman, may I go off the record
17 for a moment?

18 CHAIRMAN BECHHOEFER: Yes.

19 (Discussion off the record.)

end 5

20

21

22

23

24

25

1 CHAIRMAN BECHHOEFER: Okay. Back on the record.

2 MR. BARTH: I believe the answer was missed, sir. May
3 I reask the question that was previously asked and ask that the
4 witness answer again?

5 CHAIRMAN BECHHOEFER: Yes.

6 BY MR. BARTH:

7 Q Mr. Hofstadter, given the finite universe that we
8 have of 10 TIG welds on the bottom of the fitting, that is,
9 the inside smaller arc, can you compute the probability of any
10 two welds sequentially failing?

11 A No, sir. The same answer as before.

12 Q Thank you. Sir, I believe -- please correct me --
13 that you have now testified that you have no personal knowledge
14 by inspection or any other means that any weld, TIG weld, was
15 improperly done or defective. Is that correct, sir?

16 A Yes, sir.

17 Q I believe you also testified that probability was
18 that there were defective welds. Is that also correct, sir?

19 A Yes, sir.

20 Q Will you please tell me the mathematical components
21 of the probability?

22 A No, sir; only to the extent like, say you were to
23 drive down the road at 100 miles per hour constantly every day,
24 your chance of having an accident and a severe accident would
25 be far greater than somebody who drives down the same road every

2

1 day at 50 miles per hour.

2 Q Thank you, sir. Sir, have you in your occupation
3 with Husky during the period we're discussing had access to
4 their records of welding?

5 A I don't know what type of records you're talking
6 about. There are all kinds of records. What specific records
7 are you talking about?

8 Q Inspection records, sir.

9 A I had access to the records if I needed them, yes.

10 Q Did you inspect any of the inspection records of
11 Husky regarding any of the TIG welds on the fittings, sir?

12 A To my knowledge, on the TIG welds, there was no
13 inspection made, sir.

14 MR BARTH: May I ask again, Your Honor, to direct
15 the witness to answer the question as asked rather than the
16 question he would like to be asked?

17 MR. FELDMAN: I believe he did answer the question.

18 THE WITNESS: I wouldn't know how else to answer
19 your question.

20 MR. BARTH: I'm quite patient. Would you please ask
21 the reporter to read the question back?

22 CHAIRMAN BECHHOEFER: Would you read the question,
23 please?

24 (Whereupon, the question was read by the reporter)

25 THE WITNESS: To my knowledge, there were no records

326 204

1 as such.

2 BY MR. BARTH:

3 Q Did you inspect any records of TIG welding,
4 irregardless of whether or not any records existed?

5 A I have never seen any records. If I have never seen
6 any records I could not inspect any records, sir.

7 Q Sir, after you became aware that two of the non-
8 certified welders did work, did you check any of their work?

9 A No, sir. The work would not have been any different
10 whether it had been certified or not certified. It would still
11 have been the same work. This was done at other instances so
12 that doesn't make a particle of difference.

13 MR. BARTH: May I have five minutes?

14 CHAIRMAN BECHHOEFER: Off the record.

15 (Discussion held off the record)

16 CHAIRMAN BECHHOEFER: Mr. Barth, are you ready to
17 continue?

18 MR. BARTH: Yes, sir.

19 BY MR. BARTH:

20 Q Mr. Hofstadter, after you became aware that some
21 welding had been done by non-qualified welders, did you examine
22 any of their work?

23 A No, sir.

24 Q Did you have any concern for their work?

25 A Not at that time; no, sir.

1 Q Can you tell me what intervened that makes the work
2 acceptable on Monday not acceptable to you at a future date?

3 A Because prior to their doing their work and when
4 we had the problem in the certification of the people I had
5 talked with the product engineers and they had given me assurance
6 that that would not make any difference. So I accepted their
7 assurances.

8 Q What turned up later that gave you a feeling that
9 these assurances were invalid?

10 A I explained this before to Mr. Conner, that after
11 being out to the Zimmer plant and seeing how the trays were
12 loaded to capacity -- in fact, maybe in some cases even over-
13 loaded -- and I'm speaking not by weight but by area -- I
14 became concerned; yes, sir.

15 Q You mean they stacked too many wires in these trays,
16 sir?

17 A That's exactly what I mean. You said too many. Now
18 I said -- any container will hold so much. Let's say a box,
19 for example, will hold so many pencils. When it's full, it's
20 full.

21 Q Now can you tell me what is the volume of wiring
22 that a particular piece of cable tray you would have in mind
23 would hold?

24 A No, because the cables that were in the trays varied
25 in size considerably. There were some fairly heavy cables.

1 There are some fairly light cables. So each cable would have
2 its own weight.

3 Q Were the cables overflowing in 10-foot straight
4 raceways, sir?

5 A I don't understand your question of 10-foot raceways.
6 If you're speaking of the straight sections, that was normally
7 12-foot long, not 10-foot long. Is that what you have reference
8 to?

9 Q I'll take your measurement, sir. In these straight
10 sections, were the wires stacked too high?

11 A I can't say they were stacked too high. All I can
12 say is that they were -- the complete area of the tray was
13 filled with cables.

14 If it was not stacked too high, I'm missing how we define
15 overflowing. So will you please tell me, sir, what overflowing
16 is?

17 A Well, the trays that I had in mind, from visual
18 remembrance of them, they were approximately six inches high,
19 24 inches wide, and the cables were in the -- to the top of the
20 flange on the sides, and there was a slight crown in the middle.
21 Now how high that crown was, I don't know; but as that crown
22 would get higher that would be, in my estimation, too full. In
23 fact, they would probably not be properly contained.

24 Q Now we are now talking about the straight sections,
25 sir?

1 A Yes, sir.

2 Q Were there any side plates attached to any of the
3 straight trays which might help hold?

4 A No, sir. When I was there on a visit in May I asked
5 the representative of CG&E that was taking me around, I asked
6 him in looking at the cables in the trays -- I asked him, "Do
7 you have all of your cables pulled?" And he said, "No." I
8 said, "Well, what percentage?" He said, "About 70 percent."
9 So when Mr. Keppler came down in February, in a conversation
10 with Mr. Keppler, I asked him if he knew what happened to
11 the other 30 percent that still had to go; where did they put
12 those; and he told me they put special sides on the trays and
13 managed to get the other cables in on top of these other cables
14 with the special sides.

15 Then, I also asked him if he didn't feel that that
16 overloaded the basic cable system and he said, "No, we feel we
17 have a small margin of safety left."

18 Q Sir, when you come to a fitting which has the manual
19 TIG welds, visibly to the eye, does the cable increase at these
20 transfer points?

21 A Please repeat that question. I didn't think you
22 got to a question.

23 (Whereupon, the question was read by the reporter)

24 THE WITNESS: I don't understand how you mean the
25 cable increases. If you've got 100 cables and it's horizontal

1 and it goes in vertical and it goes in the vertical fitting,
2 it's still the cables.

3 BY MR. BARTH:

4 Q Sir, then, what you're telling me is that given the
5 identical number of cables -- I'm not going to change the number
6 of cables and size -- and put those in the flat raceway,
7 visibly to the eye, that is the space they occupied, the
8 transfer points which are the fittings used in TIG welds; is
9 that correct, sir?

10 A Yes, sir.

11 Q At the transfer points from one level to another or
12 in a splitting of cables from one straight section to another
13 level or another direction, the wires change direction; is that
14 correct, sir?

15 A You don't split the cables.

16 MR. BARTH: Your Honor, we'll go faster if he will
17 answer the question rather than play cute.

18 THE WITNESS: I'm trying to understand your question.

19 MR. FELDMAN: The witness was trying to answer your
20 question. Your Honor, I'd appreciate it if you would instruct
21 Mr. Barth to stop arguing with the witness on this. Mr.
22 Hofstadter has answered the question.

23 MR. BARTH: First of all, young man --

24 MR. FELDMAN: Mr. Barth can ask another question if
25 he doesn't understand it.

1 MR. BARTH: The remark was made to the Board, not the
2 witness. Will you please direct the witness to answer the
3 question, sir?

4 CHAIRMAN BECHHOEFER: Would the reporter read the
5 question?

6 (Whereupon, the question was read by the reporter)

7 CHAIRMAN BECHHOEFER: Well, I think he might have
8 answered a small part of the question.

9 THE WITNESS: He's really got about five questions
10 there, in other words, because he's asking about three or four
11 or five different conditions and then he wants one answer.

12 MR. BARTH: I think the objections to the question,
13 sir, had best come through counsel for the witness and I wish
14 you would admonish the witness not to argue with the court and
15 let his counsel make the objections.

16 MR. FELDMAN: Your Honor, apparently the question --
17 I didn't count the number of conditions, but Mr. Hofstadter
18 answered the question as best he could in that he's really
19 indicating that the facts which he's asked to assume don't
20 exist and therefore he can't answer the question.

21 CHAIRMAN BECHHOEFER: I think the question probably
22 had two parts. One part he answered perhaps. The other part
23 has not been answered. The basic part of the question I think
24 has been answered. I think it's been answered in terms of
25 splitting the cables, but in terms of the rest of it it has not
been.

1 MR. BARTH: Sir, there was no assumption of splitting
2 cables. I was very careful to say that the cables are separated
3 and changed direction. I would like an answer.

4 THE WITNESS: Please repeat the question again.

5 CHAIRMAN BECHHOEFER: Would you reread the question
6 again?

7 (Whereupon, the question was again read by the reporter)

8 THE WITNESS: Yes, sir; the wires change direction.

9 BY MR. BARTH:

10 Q Thank you. Do they also change their position
11 relative to those to which they are juxtapositioned in the
12 straight trays at the transfer points?

13 A Well, if you're talking of the cables that are on the
14 top and you're going this way and then you go vertical, they
15 would be to the side of them, or whatever change of direction
16 that you take, whether you go horizontal -- if you go
17 horizontal, for example, it would still remain the same. If
18 you go vertical, the top becomes the side.

19 Q Sir, do you know what juxtaposition means? It means
20 next to it, and I think we may have a difficulty in communication.
21 I'm asking you, sir, when a cable changes direction from going
22 up, down or sideways, and we split these in these fittings that
23 you have described that Husky made --

24 A You keep talking of splitting. I don't understand.
25 Please explain the splitting and maybe I can answer your question.

1 Q Yes, sir. That's a fair statement. By splitting, I
2 mean some cables go one place out of a straight tray and some
3 out of that same tray go another place. Some go up and some go
4 down, and at this place where they go up or down or sideways
5 is a transfer point. That is controlled by a fitting which you
6 have described to us which has TIG welds.

7 A Oh, no. Oh, no. You're saying all this. I have
8 never said that. I'm only talking of a fitting where the
9 cables are traveling as a group. In other words, if we have
10 100 cables when we start, we have 100 cables when we finish. In
11 other words, we're just making a drop or, say, like the fifth
12 floor to the first floor or the second floor, and it is all of
13 the cables.

14 Q Sir, does Husky make a T fitting?

15 A Yes, sir.

16 Q Is that T fitting put together with TIG welding?

17 A It could be, but more than likely it would be put
18 together with MIG welding.

19 Q Do you know, sir, which?

20 A I just told you. I said more than likely it would
21 be MIG weld.

22 Q I don't like the probability of "likely." I would
23 like you to answer. Do you know whether the T fittings were
24 TIG welding?

25 MR. FELDMAN: He's not indicated which T weldings

1 he's talking about. I object.

2 CHAIRMAN BECHOEFER: I think the question could be
3 answered.

4 THE WITNESS: The reason there would be a variable
5 and that would be depending on production and the problems in
6 production. In other words, there are times, for example, in
7 the TIG section if the two welders would be off one on vacation
8 and one sick, and parts that normally go through there and they
9 are needed, they would be sent through the MIG section involved
10 in that particular run. MIG and TIG are both used and they are
11 used interchangeably.

12 BY MR. BARTH:

13 Q Sir, have you ever seen a T fitting produced by
14 Husky for the Zimmer project?

15 A If you're asking did I see one specifically, I'd
16 have to say no.

17

18

19

20

21

22

23

24

25

Tp 8 DB-1j

Q Have you seen one generally, sir?

2 A I have seen T fittings, yes, certainly.

3 Q You have seen T fittings?

4 A Certainly.

5 Q Have you ever held a T fitting in your
6 hands, or been within 12 or 14 inches of it?

7 A Certainly.

8 Q Was that T fitting put together with TIG
9 welding?

10 MR. FELDMAN: I object. He has not related
11 this to the Zimmer project. He is asking about
12 general T fittings and this has nothing to do with the
13 Zimmer project.

14 MR. BARTH: Mr. Chairman, patience has finally
15 worn out. We have very carefully identified that we
16 are talking about Zimmer, talking about cable trays,
17 talking about TIG welding. I ask that you instruct
18 counsel to restrain himself from interfering with
19 my cross-examination. It will go faster without this.
20 This is a professional discourtesy. I request you rule,
21 sir.

22 (Board conferring)

23 MR. FELDMAN: Your Honor, before you respond,
24 I would like to say I did not mean to interfere with
25 the cross-examination. But the first question was
"Do you specifically know of a T fitting for the

DB2 1 Zimmer project." Then he changed it and said "In
2 general, have you ever seen a T fitting." That, I am
3 sure if read back, is how it would come out. That is
4 why I objected.

5 CHAIRMAN BECHHOEFER: We will consider the
6 objection as going to relevance. But we will allow the
7 question. I think it should be answered.

8 MR. FELDMAN: If it relates to the Zimmer
9 project, I have no objection.

10 THE WITNESS: What was the question?

11 (Question read)

12 THE WITNESS: I have explained that answer
13 before. It could have been TIG, it could have been MIG.
14 In other words, if you are asking on a weld or T
15 fitting I have seen, I have seen T fittings MIG welded,
16 I have seen T fittings TIG welded, both ways.

17 DR. HOOPER: Mr. Hofstadter, are you saying
18 that you don't know whether it is MIG or TIG, you
19 can't tell? Is that what you are saying?

20 THE WITNESS: No, I am not saying that, sir.
21 What I am saying is that they may run, we will say,
22 like 40 T fittings through in a given week, and 30
23 of those may be TIG welds, 10 of those may be MIG welds.

24 DR. HOOPER: I am not clear on that. If you
25 held up the fitting and looked at it, could you tell

DB3

1 whether it was one kind or the other?

2 THE WITNESS: No, sir.

3 DR. HOOPER: You couldn't?

4 THE WITNESS: No, sir.

5 MR. BARTH: Thank you, Dr. Hooper. You have
6 helped me.

7 BY MR. BARTH:

8 Q Sir, on any of the cable trays for the
9 Zimmer project, can you identify a TIG weld from a
10 MIG weld?

11 A No, sir.

12 MR. FELDMAN: I have to object to that
13 question. I don't think it was clear what is meant
14 by "can you identify." Is this visual or in any way
15 at all? I think that needs to be qualified further.

16 MR. BARTH: Will you please instruct counsel
17 to cease interfering with the cross-examination, sir?

18 CHAIRMAN BECHHOEFER: I think the answer
19 to the question has already been given.

20 THE WITNESS: If you want to know how --

21 MR. BARTH: I have the answer. I need
22 nothing further from the witness. This is a matter
23 before the Bench, please, sir. Will you please, Mr.
24 Chairman, admonish counsel, eager though he may be,
25 to cease interfering with this?

DB4
1 MR. FELDMAN: I am not trying to interfere.
2 I am trying to have this process as orderly and under-
3 standable as possible. I don't believe the question
4 was specific enough and therefore I am objecting. The
5 question makes no sense.

6 CHAIRMAN BECHHOEFER: The answer has already
7 been given.

8 MR. FELDMAN: I would like to strike that
9 answer. It is not relevant unless the question is more
10 specific.

11 CHAIRMAN BECHHOEFER: I think we will leave
12 the answer stand. I think Mr. Barth can continue. Later
13 on you may ask your witness to clarify that.

14 MR. FELDMAN: Thank you, your Honor.

15 BY MR. BARTH:

16 Q Now, Mr. Hofstadter, since you can not
17 identify, as you testified under oath, both to Dr. Hooper
18 and myself, you can not identify a TIG weld from a
19 MIG weld on a T fitting, how can you be so certain that
20 there is a problem with the TIG welds?

21 A Primarily because it is the work center
22 where the work was done. All work that was done in
23 work center 2 is TIG welds. All work that was done
24 in work center 35 was MIG welds. So all you have to
25 know is which work center did the work, then you know
what weld was performed. Every day the daily performance

DB5

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

of each job came through our office each day.

Q Did you visit the Zimmer facility, sir?

A Yes.

Q How long were you taere?

A I would guess three hours, maybe a little over or a little less.

Q Did you observe cable trays that were over-filled?

A If you call peaking of the tray over-filled, I saw trays like that.

Q Have you examined the technical specifications for the amount of wiring that can be put into one of the cable trays, sir?

A Not very easily, sir, because I was on the floor and the cable trays were maybe 16 or 18 feet in the ceiling.

Q I don't care whether it is easy or uneasy, did you examine the specifications --

A No, sir.

Q Thank you. Haveyou ever examined any of the technical specifications for the amount of wiring in terms of pounds that may be put in a cable tray?

A I have seen we will say, on different jobs --

Q I am talking about Zimmer, remember.

326 218

DB6 1 A I can't say I specifically saw the load
2 requirement on Zimmer, no, sir.

3 Q Have you ever seen the volume requirements
4 for cable trays at Zimmer, sir?

5 A I didn't know there was a volume requirement,
6 sir.

7 Q If there is no volume requirement, how could
8 they be over-filled?

9 A I am only talking of the actual area
10 involved. In other words, when you have got a two-
11 pound sack, for example, and put two pounds of sugar
12 in it, it is filled, wouldn't you say? You would have
13 difficulty putting five pounds in it.

14 MR. BARTH: Will you please ask the
15 reporter to read the question, and direct the witness
16 to answer the question that was asked, sir? I am not
17 interested in sacks of sugar.

18 CHAIRMAN BECHHOEFER: Please read the
19 question.

20 (Question read)

21 THE WITNESS: When something is full, it is
22 full. I don't know any other way to tell you.

23 BY MR. BARTH:

24 Q Just as a matter of personal judgment
25 you felt there were too many wires sticking out of the
top of these?

DB7 1 A If it wasn't, it was approaching it, yes.

2 Q Was it your personal judgment there were
3 too many wires sticking up above the cable trays?

4 A It was more than I would put in if I had
5 any responsibility for it, sir.

6 Q Did you call this to the attention of
7 anyone at the Company at the time?

8 A No, sir. I was a guest there. That is not
9 my prerogative at that time to tell people they have
10 got something that doesn't look right to me.

11 Q When you left the Company property and
12 closed the gates and drove out to highway 52, so
13 you were not a guest any longer, did you make any
14 effort to tell the Company that you felt there were
15 too many wires in these cable trays?

16 A No, because I could see where somebody else
17 could feel that there was nothing wrong with it. In
18 other words, it was at the point where one person
19 could say "this is bad," another person could say
20 "It is not too bad," and another could say "It is okay."
21 It was in that area.

22 Q What would happen if we would take a section
23 of cable tray, 50 or 100 feet, evaporate it, like that.
24 What would happen to the wiring, sir?

25 A Now where are we talking about?

DB8

1 MR. FELDMAN: I object. That is irrelevant
2 because they will never evaporate. They might fall or
3 something, but they are not going to evaporate unless
4 there is a meltdown.

5 CHAIRMAN BECHHOEFER: The question perhaps
6 could be restated. I don't know that the cable trays will
7 evaporate.

8 MR. BARTH: It is a hypothetical, your Honor.
9 I am entitled to a hypothetical.

10 MR. FELDMAN: It is a hypothetical that will
11 never occur unless the ultimate disaster happened.

12 CHAIRMAN BECHHOEFER: Right. I think the
13 hypothetical goes a little far. But the Board is
14 interested in the answer to the question. So maybe you
15 can rephrase it.

16 MR. CONNER: If the Board please, we would
17 object to counsel for Intervenors using the guise of an
18 objection to a hypothetical question as a stump speech.

19 MR. BARTH: You have been instructed to
20 answer the question. Please do so.

21 THE WITNESS: Please repeat the question.

22 (Question read)

23 THE WITNESS: As best as I understand the
24 situation, and as I recall it, the tray is supported by
25 supports from up above and these are at -- and I am

1 going strictly from memory now -- it would seem to me
2 they are about 10 feet apart. I would say if the trays
3 disappeared, the supports are heavy enough to carry
4 the trays and the cables, so they could carry the cables.
5 But in between the trays or in between the supports,
6 the cables would sag.

7 BY MR. BARTH:

8 Q Now, sir, again a hypothetical. Let us
9 assume that just one of the side rails falls off.
10 What would happen to the wiring?

11 A It would bulge out there, in between the
12 two hangars or supports in that area.

13 Q As a matter of personal judgment, if several
14 of the welds in a TIG welded section failed, would
15 this piece of equipment fall apart? Two or three welds.

16 A Would this what?

17 Q Would this piece of equipment fall apart?

18 A What equipment are we talking about now?
19 Are you talking about the tray itself?

20 Q We are talking about the piece of equipment
21 with the TIG weld, which excludes T fittings because
22 they also have MIG welds by definition, and also
23 excludes the straight cable trays, which are also MIG
24 welded.

25 A The straight trays were resistance welded.

326 222

DB10 1 Q We are talking about a fitting, sir. In
2 your personal judgment -- we don't need a lot of
3 scientific stuff-- what would happen if two or three
4 of these welds failed?

5 A That is the same question you asked previously
6 and I told you then if one or two welds break, that
7 puts more load on the remaining welds, with the
8 likelihood that if any of those are bad welds, you
9 would have succeeding failures, you could have a
10 domino effect, and the whole section would fail.

11 Q You have been at the plant and looked at
12 it. I am asking you if two or three welds failed
13 at 11:49, what is going to happen at 11:50? Your
14 personal judgment.

15 A You are asking me to predict. I can't
16 predict. But I can tell you what will happen sooner
17 or later. More of the welds will break, and when they will
18 break, you don't know and I don't know.

19 Q Now, sir, after you left the Company
20 property on your visit and went home, or wherever you
21 went, did you make any effort to inform Cincinnati Gas
22 & Electric, or Kaiser or anyone responsible -- or the
23 Nuclear Regulatory Commission --

24 A No, sir.

25 Q I have to finish the question. I appreciate
the answer.

DB11

1 A I thought you were through.

2 Q I have to finish the question for the
3 record.

4 Did you tell anybody at NRC or the Company
5 that there were too many wires stacked in these cable
6 trays?

7 MR. FELDMAN: I object. I would like a time
8 frame. Years after, a day after, a minute after?

9 MR. BARTH: That is a good objection.

10 BY MR. BARTH:

11 Q One day?

12 A No, sir.

13 Q Two days?

14 A No, sir.

15 Q Three days?

16 A No, sir.

17 Q Four?

18 A No, sir.

19 Q Within a week?

20 A No.

21 Q At any time?

22 A Certainly.

23 Q BY letter?

24 A Yes, sir.

25 Q When?

A It was in August.

326 224

DB12 1 Q How long was that after you were in the
2 facility, sir?

3 A Four months.

4 Q Four months. Could you explain to me
5 why it took you four months to tell the Company that
6 they had too many wires in the cable trays?

7 A Because it took me four months to decide what
8 I should do, to tell you the truth.

9 Q With whom were you in the facility with,
10 sir?

11 A Fred Banta.

12 Q Was anybody with you besides Mr. Banta?

13 A Not from Husky.

14 Q From anybody, anywhere?

15 A Certainly. We were conducted through there
16 by the CG&E people.

17 Q Who were these people, sir?

18 A I do not remember.

19 Q Did you ask Mr. Banta or any of the CG&E
20 people "Is that the way the wires are supposed to be
21 in the cable trays?"

22 A I don't recall if I asked that. I do recall
23 asking the man that I was with from CG&E if they
24 had all of their cables pulled.

25

326 225

DB13

1 Q Did you make any measurement or estimations
2 of distances of wires protruding, sir?

3 A No, sir.

4 Q Was this a uniform condition throughout the
5 facility, that the cable trays were overloaded?

6 A We were not given, we will say, a complete
7 tour of the plant. We were taken to specific areas
8 to look at specific installations in respect to the
9 possible insulation for fire protection.

10 Q Sir, when were you in the plant?

11 A In May.

12 Q Of what year, sir?

13 A 1978. It was either the end of April or
14 early May. I do not recall the exact date.

15 Q Something like 13 months ago?

16 A Yes.

17 Q To the best of your knowledge, have any
18 of these overloaded, in your judgment, cable trays
19 failed in these 13 months?

20 A Not to my knowledge, no, sir.

21 Q Have any of the fittings made with the
22 TIG welds failed, sir?

23 A Not to my knowledge. I don't think any
24 of them have been energized, either.

25 Q In your mind what does energized mean, sir?

326 226

DB14

1

A Where they carry current, sir.

2

Q Do these cables carry current all of the

3

time in the cable trays you saw?

4

A I assume they will carry current some day.

5

Q If a cable is energized, does it increase

6

the weight of the cable, sir?

7

A I wouldn't say that it increases the weight

8

of the cable, but I would say that when power is

9

turned on and off suddenly, cables will kick.

wend #8

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

326 227

fls db

1 Q What kind of voltage do these cables carry?

2 david
2 davidl

2 A I would have no idea.

take 9

3 Q Are these power carrying cables you're
4 talking about, sir or signal carrying cables?

5 A I would say they were power carrying cables, based
6 on the size of them.

7 Q Could you tell me where the power carrying cables
8 were located?

9 A I can tell you they were in the containment
10 building somewhere; the ones we saw were up relatively
11 high.

12 Q Is there any difference in the specifications of
13 the trays for power carrying cables from signal carrying
14 cables that you know of, sir, for Husky?

15 A I don't know that we make cable trays for signal
16 cables.

17 Q Now, by signals, I'll identify what I mean; I
18 thinking of a cable that goes from an instrument that
19 may be activated --

20 A No, normally those are traveling conduits, like
21 telephone lines.

22 Q Did you make any notes of your observations
23 contemporaneously to being in the plant, sir of too many
24 cables in the trays?

25 A No, sir.

326 228

david2

1 Q Now, if we were to energize one of these cables,
2 sir, how much heat would result from doing so?

3 A I have no idea of the amount of heat that would
4 be generated from a single cable, but I do know that the
5 total number of cables that you have a considerable amount
6 of heat total that would be generated.

7 Q If the cables are energized or not energized --
8 in your term, sir -- do you think the cables would
9 kick or jump?

10 A I don't think they would kick or jump; I know
11 that they would kick or jump.

12 Q Would they continue to kick or jump?

13 A No, only when the load is turned suddenly on or
14 suddenly off.

15 Q So are you aware of the fact, sir, that before
16 Zimmer will turn on power commercially, this plant will be
17 tested and parts turned on and off and various systems
18 checked out and start at a very low power and work its way
19 up? I don't ask --

20 A I would assume you would make trials like that,
21 yes, sir. That would be normal.

22 Q Would that require energizing cables, sir?

23 A Certainly it would.

24 Q So if there were anything defective in these
25 cable trays that would collapse because of energizing the

david3

1 cables, we could find this immediately at the first turnon --

2 MR. FELDMAN: I believe Mr. Barth is testifying
3 at this point. If he wants to ask a question, he can. If
4 he wants to make a statement, I think that's for the witness
5 to do.

6 CHAIRMAN BECHHOEFER: I think the witness --

7 MR. FELDMAN: I said statement, but I meant question.

8 MR. BARTH: Could the reporter read back the
9 question.

10 (The record was read as requested.)

11 CHAIRMAN BECHHOEFER: Why don't you rephrase it?

12 BY MR. BARTH:

13 Q Mr. Hofstadter, when they turn on power to test
14 this facility for the first time, would this not, in your
15 theory, cause the cables to jump and any resulting damage
16 to be noticed?

17 A That is a possibility. It could go either way.
18 It may or it may not.

19 Q And if the energizing which makes the cables jump
20 does not cause the cable trays to collapse, would the
21 continuation of power make the cabling continue to jump?

22 A I explained that before: normally the cables --
23 the cables ordinarily only jump when the power is turned
24 suddenly on or suddenly off.

25 MR. BARTH: May I have about 60 seconds, your

CHAIRMAN BECHHOEFER: Yes.

david4 1

Off the record.

2

(Discussion off the record.)

3

MR. BARTH: I have no further questions of

4

Mr. Hofstadter, sir.

5

CHAIRMAN BECHHOEFER: Well, that should be on the

6

record. Put that on, but let's go off the record.

7

(Discussion off the record.)

8

CHAIRMAN BECHHOEFER: Mr. Woliver, do you have

9

questions you want to ask?

10

MR. WOLIVER: Yes, I do, your Honor.

11

BY MR. WOLIVER:

12

Q Mr. Hofstadter, in your testimony you talked about

13

uncertified or falsely certified welders. Is there a

14

difference? You may have testified to this earlier on cross

15

and for my own benefit, we'd like to know if there is a

16

difference in the way you refer to it.

17

A Well, it goes by degree. In other words, they

18

receive a certification in, say, a question -- a manner not

19

according to the proper procedure. So then the question

20

becomes by degree whether -- the question whether welders

21

were certified falsely; in other words, when people had

22

been certified, it is not -- and it does not follow

23

procedure exactly as outlined and they receive certification,

24

it is a degree presented at least improperly certified to

25

the extent that some people could consider it falsely

david5

1 certified.

2 Q I think I understand that; so somebody who is
3 uncertified would presumably never take a test and be
4 certified, never take a certification test?

5 A (Nods in the affirmative).

6 Q When they receive certifications -- the way you
7 describe it, though, there could be persons that took tests
8 that were not properly administered and served
9 certification as a result of these improper tests, is that a
10 correct --

11 A Well, in the -- to describe a particular instance
12 that occurred several times, and that was we were presented
13 with weld test pieces which we did not know who observed the
14 pieces, and these pieces were supposed to have been welded by
15 a certain individual.

16 And then we went through and made the test and
17 eventually the man received certification. So when you
18 received test pieces that nobody really witnesses, it's
19 hard to say in a strict analysis that that man should not
20 have received his certification.

21 Q Let's get into the question of the testing procedure.
22 This may be a starting point from your last statement. Are
23 you -- could you describe -- you've alluded to it in your
24 testimony and on cross examination that there were
25 deficiencies in the certification testing process.

david6

1 MR. CONNER: Objection, your Honor. This is not
2 cross examination. This is really a question designed to
3 elicit evidence in chief.

4 MR. WOLIVER: Your Honor, I am -- I have heard
5 testimony -- it's in the direct testimony of Mr. Hofstadter
6 concerning this falsely certified issue. I think that we
7 should try to determine precisely what's being described.
8 That's what I'm trying to get at.

9 (Board conferring.)

10 CHAIRMAN BECHHOEFER: Yes, I think these questions
11 are relevant to the direct testimony.

12 BY MR. WOLIVER:

13 Q Could you answer the question?

14 A Could you repeat the question, please?

15 MR. CONNER: I'm sorry, Mr. Chairman, did you rule
16 it was relevant or irrelevant?

17 CHAIRMAN BECHHOEFER: Relevant.

18 MR. CONNER: Your Honor, but that was not the
19 nature of our objection.

20 CHAIRMAN BECHHOEFER: I said it was relevant to
21 the direct testimony.

22 MR. CONNER: That does not mean it was --

23 CHAIRMAN BECHHOEFER: I think I've allowed
24 every party to cross examine rather broadly on statements
25 made on direct.

david7

1 MR. CONNER: For the record, would you state that
2 my objection is denied.

3 CHAIRMAN BECHHOEFER: Yes, it is denied.

4 MR. CONNER: Thank you.

5 MR. WOLIVER: Could we have the question read
6 back?

7 (Discussion off the record.)

8 (The record was read as requested.)

9 THE WITNESS: It was in the same area as what I
10 described before. In other words, where we completed on
11 test pieces, where we did not know exactly who welded the
12 piece --

13 BY MR. WOLIVER:

14 Q Am I to understand that during the testing the
15 welder being tested would be required to weld something
16 together; is that correct?

17 A Yes, sir.

18 Q And you're saying that at times you would notice a
19 piece that would be correctly welded but nobody watched the
20 alleged welder weld it together.

21 A Right. Then it would be turned in to us; supposedly
22 we'll say it started out for just an analysis, and then it
23 would go beyond analysis, and when it became a good piece, then
24 they would say, well, now, this man is now -- attains or
25 has proven his qualifications. We'll have to certify him

david8

1 Q When the piece was turned in and before it's
2 analyzed, at that point do the testers know who did the
3 piece?

4 A No, sir, not specifically because it was not
5 witnessed.

6 Q At what point is it determined that --

7 A Well, let me illustrate: here's how a situation
8 would occur -- in other words, some of the welders came
9 back and night and stayed late and a few would come in in
10 the morning and we would have a test piece. The foreman
11 would bring a test piece in and say that so-and-so welded
12 this last night. Could you look at this piece and say what
13 you think of it?

14 So, we would start out with it, and it would
15 appear to be reasonably good, so we would go out and we
16 would go all the way through and test it so as soon as -- and
17 those pieces that tested good -- where we should have gone
18 back and told the man to weld us another piece, that was
19 always decided it was unnecessary.

20 We were forced to accept it, this piece.

21 Q Why were you forced to accept that particular
22 piece?

23 A Because this became a hassle between the
24 person bringing it to us and the fellow working for me and
25 myself.

davdi9

1

And then we would all go to our problem -- to

2

our superior and we would get a decision and that would be

3

it.

4

Q And your superior's decision was that that piece

5

had to be accepted?

6

A Yes, sir.

7

Q How widespread was this particular practice?

8

A It occurred, I would say, at least three times

9

and possibly as many as six times.

10

Q How many welders were tested or were tested and

11

certified?

12

A At different times that would vary. We usually

13

tried to keep enough welders certified so that we could use

14

certified welders when nuclear work came through.

15

Q When the nuclear -- strike that.

16

When the nuclear work would come through, you

17

would make a point of using the welders that you had

18

certified?

19

A If at all possible, they would use certified

20

welders, yes, sir.

21

Q Were there times when you used welders who were

22

uncertified even through your process on the nuclear work?

23

A Yes, sir.

24

Q Did that nuclear work include the Zimmer site?

25

A Yes, sir.

326 236

david10 1

Q How often would that be the case?

2

A Well, the frequency of that would occur with the

3

volume of nuclear work.

4

Q What volume of your work was nuclear?

5

A Percentagewise --

6

Q If you could state a percentage --

7

A That would vary, but I would guess, totally it

8

could have been maybe 15 -- in the area of 15 or 20 percent,

9

I suppose.

end 9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

326 237

410ng1

1 Q How many welders at any given time in this period --
2 and I'm talking about the period from 1974 into the future --
3 how many welders were there at Husky?

4 MR. CONNER: Your Honor, this has gone on for quite
5 a while and if I've ever seen anything that is not cross-
6 examination designed to bring out evidence in chief it is this.
7 The fact that they didn't write all the questions they wanted
8 to perhaps in the direct evidence is now being attempted to be
9 expanded, but it's clearly not cross-examination, as shown -
10 from the last 20 odd questions and answers.

11 MR. WOLIVER: Your Honor, I'm referring to question
12 7 -- or answer 7 and 8, 9, 6 -- actually 5 through 10.

13 CHAIRMAN BECHHOEFER: Objection overruled. These
14 are relevant to the direct testimony.

15 BY MR. WOLIVER:

16 Q Do you remember the question?

17 A No.

18 Q I'll restate it for speed sake. During this period
19 from 1974 and the three years into the future -- three or four
20 years into the future -- how many welders were there at Husky
21 at any one time?

22 A Well, the total number of welders would vary because
23 the workload would vary, but it would run, we'll say, from
24 approximately 8 to 12 in that range.

25 Q Once a welder is certified by the Husky testing

1 procedures, would that welder ever have to be recertified?

2 A Yes. In other words, at times -- in fact this had
3 occurred and that was that people bid out of the welding
4 department and went into another department and they would be out
5 of the welding group for five or six months. After they were out
6 that long, they then had lost their certification.

7 Q There was a certain time period if one is out of the
8 welding process that that person would lose his certification?

9 A Right. Then we also had another instance, and that
10 was last year, when Fred Banta started a new program up when
11 they were going to work with the welders on a training program.
12 The first step was to test all of the welders to see where we
13 stood with every welder and when we did that the first two
14 welders we checked that were certified they failed the test and
15 these welders lost their certification.

16 Q When was this test performed as best as you can
17 remember?

18 A This program started sometime approximately the
19 middle of June because ---

20 Q Excuse me. June 1978?

21 A June 1978, because the man that ran the test was a
22 school teacher and we had to wait until school was finished.

23 Q You stated that the first two welders who took the
24 test failed the test?

25 A Yes, sir.

1 Q What happened after that?

2 MR. CONNER: Your Honor, I move to object to the
3 question and move to strike the two previous questions and
4 answers. It was something that happened in June 1978 which had
5 nothing to do with Zimmer cable trays.

6 MR. WOLIVER: I think it does.

7 MR. CONNER: No foundation.

8 MR. WOLIVER: I think he said -- and correct me if
9 I'm wrong -- that the two welders that were tested had been
10 welding for Husky prior to that time and had been certified by
11 Husky prior to June of 1978.

12 THE WITNESS: That's right.

13 MR. WOLIVER: If that's irrelevant --

14 CHAIRMAN BECHHOEFER: Why don't you ask him that
15 question? That will make the other one relevant. I can't
16 remember if you asked that question or not.

17 MR. WOLIVER: Okay.

18 BY MR. WOLIVER:

19 Q Mr. Hofstadter, you stated that two welders who were
20 tested in June of 1978 were found to be unqualified; is that
21 not true?

22 A In the respect that they failed their test.

23 Q Were these welders previously certified?

24 A Yes, sir.

25 Q By Husky?

326 240

1 A Yes, sir.

2 Q They were certified as qualified welders?

3 A Yes, sir.

4 Q Therefore, presumably they failed the same test in
5 June of 1978 that they had, according to Husky, passed at a
6 previous time?

7 A Yes, sir.

8 Q Do you know how long these two welders were employed
9 at Husky prior to June of 1978?

10 A No, not exactly.

11 Q Can you estimate?

12 A I would guess a rough estimate over ten years.

13 Q Is that ten years each or --

14 A Yes, ten years seniority.

15 Q Do you know whether or not these two welders did any
16 welding work related to the Zimmer plant?

17 A Not to my knowledge.

18 Q Would you be able to identify any work that these two
19 welders did for any particular job?

20 MR. CONNER: Objection.

21 THE WITNESS: No.

22 MR. WOLIVER: Your Honor, what I'm trying to show
23 here, and I will proffer this, he stated that he was not -- to
24 his knowledge, he was unaware of the fact that whether or not
25 these welders did work on the Zimmer plant. What I would like
to proffer is a showing -- and I think this will come out -- that

1 he would be unaware of any work these persons did. They did
2 welding like the other welders at Husky and --

3 THE WITNESS: Right. Of a general nature, right.

4 CHAIRMAN BECHHOEFER: With that clarification, the
5 question may be answered.

6 MR. CONNER: It's still irrelevant.

7 CHAIRMAN BECHHOEFER: Are you at a good breaking
8 point?

9 MR. CONNER: We might as well get the answer on the
10 record now.

11 BY MR. WOLIVER:

12 Q Okay. Let me make sure. You stated before, Mr.
13 Hofstadter, that concerning these two welders who failed the
14 June 1978 test you were unaware of whether or not they had
15 worked on the Zimmer site prior to June of '78?

16 A Yes.

17 Q And your reason for not knowing that is that you
18 would be unable to determine what particular work these two
19 welders did at any time?

20 A Right.

21 Q Zimmer was one piece of work of many that was being
22 done at any particular time?

23 A Right.

24 CHAIRMAN BECHHOEFER: Okay. Let's return at 1:45.

25 (Luncheon Recess)

Tp 11
DB-1

AFTERNOON SESSION

(1:50 p.m.)

1
2 CHAIRMAN BECHHOEFER: On the record.

3 Thereupon,

4 EDWIN HOFSTADTER

5 resumed the witness stand, and having been previously
6 duly sworn, was examined and testified further as
7 follows:

8 CROSS-EXAMINATION (resumed)

9 BY MR. WOLIVER:

10 Q Mr. Hofstadter, before lunch you were
11 discussing the 1978 testing of welders at Husky. You
12 mentioned the first two welders failed the certification
13 tests. What happened after that? Were there other
14 welders who failed?

15 A Immediately after that happened, I reported
16 it to Fred Banta that the first two welders failed,
17 and a little while after that Fred came back and we
18 talked a little more on it. Then I told him that that
19 meant those welders lost their certification. So then
20 later Fred came back and said "Let's don't test any
21 more welders that have certification," and he said
22 to destroy the paper work on those two that were
23 tested.

24 Q Excuse me, I hate to interrump you. What
25 did he say to do? Not test any more and what?

326 243

DB2

1 A Destroy the paper work on the two that had
2 been tested.

3 Q Okay, go on. I am sorry I interrupted you.

4 A Then I told him if he wanted the paper
5 work destroyed, he would have to destroy it.

6 Q What happened to the paper work?

7 A I don't know.

8 Q The two persons who were tested in June,
9 do you have any idea when they were certified prior to
10 June of '78?

11 A No, I don't.

12 Q Well, you know they were certified?

13 A Yes.

14 Q After June of '78 were any programs
15 developed to improve the conditions at Husky?

16 A Well, the program that was started in May
17 there, that was a complete outlined program to try
18 to get all of the welders certified eventually. The
19 first step of the program was to find out exactly what
20 the status of each welder was, to see what his
21 capabilities actually were.

22 MR. CONNER: If the Board please, I renew my
23 objection that this is irrelevant and immaterial to the
24 Zimmer proceeding. We are talking about some general
25 qualifications after sometime in June of 1978. There

1 is no connection to Zimmer.

2 CHAIRMAN BECHHOEFER: Do you propose to try
3 to connect this up?

4 MR. WOLIVER: I will refrain from this line
5 of questioning. I think it is bringing out what appears
6 to be certain questionable procedures by Husky, be it
7 in June of '78 or prior to that. I intend to work back
8 chronologically, instead of forward.

9 MR. CONNER: If the Board please, the NRC
10 proceeding is not a place to permit somebody to carry
11 on a personal vendetta against a former employer unless
12 there is some way they can show a connection with the
13 Zimmer cable trays. This is obviously well after the
14 event.

15 MR. WOLIVER: I understand that, your Honor.
16 It is an issue of what is Husky's customary practice.
17 We have seen their practice as testified to, how
18 they certify welders. We are seeing how they deal with
19 their own internal problems. I think that is relevant.
20 I will defer to the Board's judgment on that. But I
21 don't intend to continue this line much longer.

22 CHAIRMAN BECHHOEFER: I think unless there
23 is a further connection with Zimmer, you ought to refrain
24 from this line of questioning.

25

326 245

DB4

1 BY MR. WOLIVER:

2 Q Before lunch, Mr. Hofstadter, you stated
3 the number of welders at Kusky from 1974 on into the
4 next few years varied between a couple of numbers.
5 What were those numbers?

6 A Probably a low of 8 and a maximum of 12.

7 Q And you stated that on nuclear work, you
8 tried to have certified welders working, is that true?

9 A Right.

10 Q Could you give me any estimate of how many
11 certified welders there were at Husky, out of the 8
12 to 20?

13 A I think on the --

14 MR. CONNER: Objection, your Honor,
15 again unless there is some connection with Zimmer what is
16 going on here is truly irrelevant.

17 MR. WOLIVER: I will proffer what I intend
18 to show. He testified that two of the certified welders
19 were discovered to be unqualified in June of 1978. He
20 has stated he did not know what, if any, work those
21 two welders did on the Zimmer plant. If there were
22 only four or five, or whatever number, of certified
23 welders, and the practice is to have certified welders
24 on the nuclear work, I think there is an assumption, a
25 valid inference based on the facts.

326 246

DB5

1 MR. CONNER: If that is the point, your
2 Honor, why doesn't he simply ask the names of the
3 welders who worked on Zimmer and get it on the record.
4 That is what we are going to do when we get a chance
5 to recross on this examination.

6 MR. WOLIVER: I will ask that. But I don't
7 know if he knows.

8 THE WITNESS: No, I don't know that.

9 BY MR. WOLIVER:

10 Q How many certified welders were there
11 during this period, out of the eight to twenty number
12 you have provided?

13 A See, we had so many people that had like
14 a partial certification. In other words, theoretically
15 if a man had the possibility of working in every work
16 center, if we wanted to switch him around to any
17 work center, and some people would do that in a 30-day
18 period, he needed to pass eight tests. And we never
19 had one man that passed eight tests.

20 Q Are you saying particular types of tests?

21 A Right.

22 Q To do particular types of welding?

23 A Well, like on MIG, for example, if you
24 want to be able to do any type of MIG work that comes
25 along in steel and aluminum, you have to pass horizontal

DB6 1 and vertical. So that is steel and aluminum, two, and
2 horizontal and vertical, two, and two times two is
3 four, and you have the same condition in TIG, so four
4 and four is eight.

5 Q In your answer to question number 10 in
6 your testimony -- I will read the first sentence.

7 "After the welders failed, I contacted John Uhrig
8 at Hobart Manufacturing."

9 What was Mr. Uhrig's reaction, other than
10 he suggested you contact the welding school? Did he
11 take any other action?

12 MR. CONNER: Objection. I can't think of
13 any conceivable materiality or probative value that
14 Mr. Uhrig's reaction to a phone call would have.

15 THE WITNESS: Mr. Uhrig actually became
16 very much involved --

17 CHAIRMAN BECHHOEFER: Wait a moment, there
18 is an objection.

19 MR. CONNER: It is irrelevant and immaterial,
20 Mr. Uhrig's reaction has nothing to do with the
21 issues in this proceeding.

22 CHAIRMAN BECHHOEFER: I think that is correct.
23 Could you rephrase the question?

24 BY MR. WOLIVER:

25 Q What occurred after you talked to Mr. Uhrig?

1 A Actually in my initial contact with Mr.
2 Uhrig, he confirmed that we had a problem, and like
3 it says here, he suggested we contact a welding school.

4 Q Excuse me. Did he confirm you had a
5 problem?

6 A Yes.

7 Q How did he do that?

8 A By looking at the sample test parts.

9 Q How many did he look at?

10 A I really think he saw the steel and aluminum
11 both, because this was very near the time that the
12 second test was run. And I think it was after we found
13 we had a problem on the steel, because then we knew
14 it was going from just a problem to becoming a major
15 problem. So I would say it was after the test, when
16 Gladstone ran the second test.

17 Q So what is that time?

18 A That would be in October.

19 Q Of what year?

20 A 1974.

21 Q October of '74. It is stated also in your
22 answer to number 10, it talks about the incentive
23 system at Husky as not being conducive to quality welding.
24 Why is that conclusion stated?

25 A Because the incentive system has a tendency
to make the people place emphasis on quantity; when

1 you place emphasis on quantity, quality suffers.

2 Q Wasn't there also built into it an emphasis
3 on quality?

4 A No, there was not, sir.

5 Q There was only an emphasis on quantity?

6 A Right.

7 Q How did the incentive system work?

8 A Basically they were allowed --we will say
9 there was a time set on assembly. So the time set
10 on assembly say was 30 minutes, for example and the
11 man welded it in 15 minutes, he made 200 percent
12 incentive and 200 percent means he made double his
13 hourly rate.

14 Q Were there any other factors that went
15 into the incentive system that you know of?

16 A Yes. There were some other factors, but
17 they were relatively minor. In other words, he was
18 allowed a walk allowance and some different allowances,
19 but they were relatively minor.

20 Q In your answer to 11 you have assumed --
21 and correct me if I am wrong -- you have assumed that with
22 the emphasis on quantity, inferior welds were the
23 result?

24 A Yes, sir.

25 Q Why is that? Why can't a welder operate

1 faster than another welder?

2 A Some welders can operate a little faster
3 than others. If in both cases they are operating
4 beyond their skill, and their level to produce the
5 best weld possible, you will get a bad weld, a degree
6 of bad welds from both of them, regardless of what
7 their welding speed is. Their total welding speed
8 is consistent on their particular skill.

9 Q You stated in your testimony that you
10 believe there to be a probability that inferior welds
11 made at Husky were in the Zimmer plant. How did you
12 come to that conclusion?

13 MR. CONNER: Objection. I mean you reach
14 a point when it becomes so repetitious I think it is
15 proper for the Board to strike it. I repeat this is
16 direct examination, but this is an area that has been
17 covered several times.

18 MR. WOLIVER: The question of probability
19 was brought out in other cross-examination. At least
20 in my mind I am not satisfied that I have a clear
21 understanding from what has been asked and answered
22 just what factors went into his saying it is a
23 probability. I am not talking about a scientific
24 statistical probability.

25 (Board conferring) 326 251

1 MR. CONNER: Direct evidence may not be
2 unduly repetitious under the rules.

3 CHAIRMAN BECHHOEFER: I don't regard this as
4 direct evidence. But the objection is overruled.

5 THE WITNESS: I would think you need
6 an explanation to answer your question. And that
7 would be that on the certification, the certification
8 is actually, in other words, it starts out with
9 testing the man, you test the man under prescribed
10 conditions, in a prescribed set-up and if he then
11 produces say satisfactory pieces which test completely
12 out in every respect, with no difficulty, then you
13 certify him, when it proves that he has the capability
14 of producing a quality weld. All right.

15 But now if when he is going through this
16 step of being certified he goes through it with
17 considerable difficulty or with great difficulty and
18 it means say like maybe he finally welded one good
19 piece, after he welded 30 bad ones, then to say that that
20 man, now that he welded one good piece, to now certify
21 that man, certify that he is qualified, the least you
22 could say is that he showed qualification for certifi-
23 cation one time out of 30.

24 Now if you follow that on through, the chance
25 of that man performing quality work day in and day out

1 after that in his normal work, anybody that would
2 expect that would be completely unrealistic.

3 Now even in the ASME, when it comes to
4 retesting people, in fact on the test itself, when
5 it is obvious that the man is not doing a good job,
6 the test is supposed to be stopped right then and there.
7 When the man has made several tests, in other words,
8 he has been tested or made his test piece, you can
9 repeat a test if you have some good reasons. After
10 you have made a test and a repeat of a test, you are
11 not supposed to make another test. It then goes
12 to another test and the next test is not to be made
13 until after the man has received training in the
14 areas in which he had been deficient, until he has
15 acquired some skill and some practice in the training,
16 a combination of training and practice, acquired the
17 skill. Until that has been proven, he is not to be
18 retested. That was not the procedure that was followed.
19 The procedure that was followed was the man was tested,
20 in fact on some of the tests, to acquire certification
21 one man was tested hour after hour, day after day, for a
22 total of a full week he didn't do anything but
23 make test pieces.

24 BY MR. WOLIVER:

25 Q Did he eventually make a test piece correctly?

1 A Yes, sir, the last hour of the last day.

2 Q Then did he receive his certification?

3 A Yes, sir.

4 Q Are you stating that this was also a normal
5 testing procedure at Husky?

6 A Normal to the extent that it went longer
7 than the average.

8 Q What would you consider the average to be?

9 A I would guess the average would be over
10 30 hours of testing per man. Per man per test.

11 Q What would be the average testing per man
12 per test at Husky?

13 A I really don't understand that question.

14 Q Maybe we are not communicating here. I was
15 asking you what you thought the average test per
16 man should be. I have used the word "average" to
17 mean acceptable.

18 A You mean for a person to be fully qualified?

19 Q Yes.

20 A We have people come in off the street who
21 were welders in other places where they had
22 certified and we give them say two tests, horizontal
23 and vertical, and they would complete both tests in
24 less than an hour.

25 Q What would be the average time that a Husky
employee would take to complete the test?
328 231

1 A The average has got to be over 20 hours,
2 somewhere around 20 to 30 hours per man per test per
3 position.

4 Q There are eight positions?

5 A Yes, sir.

6 Q Therefore it would take 160 hours on the
7 average to certify a welder at Husky, fully certify a
8 welder?

9 A If we ever got that far, it could take
10 that long, yes, sir. Unless we found a way to go
11 faster.

12 Q How would you find a way to go faster?

13 A To start out with what was essentially
14 proven to be the need and that was the fact that they
15 needed a basic understanding of simple welding, acetylene
16 gas welding, which is slower than the electric welding,
17 so they can get a complete understanding of what is
18 taking place when they weld. And when they lack that
19 understanding of what is taking place, then all they
20 do is practice and a person watches and tries to correct
21 the obvious faults they have. And that is doing it
22 in a very backward way.

23 Q How should it be done?

24 A You have to start at the beginning, the same
25 way when you learn to read, you first learn the alphabet.

1 MR. CONNER: If the Board please, I move
2 this last colloquy of several Q and As be dismissed
3 on two grounds. One, it is obviously nothing
4 to do with Zimmer, talking about acetylene gas welding,
5 which doesn't even apply to anything at Zimmer. The
6 witness has previously mentioned he is not a welder,
7 does not purport to be an expert on welding, but he is
8 sitting here criticizing how the ASME code works and
9 is now making recommendations how welders -should be
10 trained, when he admits he doesn't understand it.

11 We think this is truly not of any probative
12 value in this proceeding. I mean this business of
13 sitting here letting this man criticize Husky because
14 he doesn't like having been let go from Husky surely
15 should not burden this record.

16 THE WITNESS: I am not asking the questions.

17 MR. WOLIVER: First of all, as interrogator
18 of this witness, I would object to the characterization
19 of the relationship that Mr. Conner just stated of
20 Mr. Hofstadter to Husky. I think no attorney here
21 should insult a witness under any circumstances.

22 CHAIRMAN BECHHOEFER: I think that is accurate.
23 But you asked a question about the general practice.
24 Do you propose to try to connect this with Zimmer?

25 MR. WOLIVER: Precisely.

CHAIRMAN BECHHOEFER: We are concerned

1 about the welding on the Zimmer cable trays. And the
2 qualifications of the welders to make those welds.

3 MR. WOLIVER: Mr. Connor's objection went
4 to the lack of competence of this witness to be able
5 to testify as to what a proper welding procedure is.
6 I am trying to elicit as much as I can as to what
7 this particular witness saw. I admit that at certain
8 times this witness may be providing opinions which
9 may not be relevant. But I am essentially trying to get
10 at what this witness saw.

11 (Board conferring)

12
13
14
15
16
17
18
19
20
21
22
23
24
25

#12ng1

1 MR. HEILE: Mr. Chairman, may I address the question?
2 I believe that the probative value of this witness' testimony
3 goes to the overall methodology employed by Husky Products and
4 the fact that maybe whatever they are doing may be done improperly
5 and actually if it doesn't go to a particular weld, nonetheless,
6 it's probative in the sense that it tells us the kind of quality
7 control that's involved in the welds that eventually went up
8 to Zimmer. So it would be nice to know how Husky conducts the
9 procedure, and while this witness may not be able to say, "I saw
10 a weld at 'x' point on the cable tray," he may be able to say,
11 "I know the kind of quality that went to the person who welded
12 that," and I do think it's probative in that regard.

13 CHAIRMAN BECHHOEFER: I think you're going to have to be
14 prepared to connect it up to Zimmer. I think the witness is
15 competent to answer the kind of questions you're asking, but
16 he's got to be prepared to connect it up with Zimmer.

17 MR. WOLIVER: Certainly.

18 CHAIRMAN BECHHOEFER: It may well be that Husky
19 products are competent or not competent, but if it doesn't relate
20 to the welds at Zimmer there has to be some connection.

21 MR. CONNER: I would request that since Mr. Woliver
22 seems to agree that Mr. Hofstadter is not an expert in this
23 area, any stated opinions about how something should be done as
24 to welding or how the ASME code should be applied should be
25 disregarded in the record.

1 MR. WOLIVER: I didn't go that far.

2 CHAIRMAN BOENHOEFER: I will not instruct Mr. Woliver
3 that way. I don't think Mr. Woliver nor the Board necessarily
4 agrees that Mr. Hofstadter is not competent to talk about
5 procedure. He may not be a welder, but he's been responsible
6 for Husky's welding procedure or had some responsibility with
7 respect thereto. So I will not grant the instruction that you
8 have requested.

9 MR. CONNER: Mr. Chairman, you obviously didn't
10 understand me. I guess I wasn't speaking loudly enough. The
11 fact I was talking about are the expressions of opinions on how
12 something should be done on an expert basis, the training
13 program, for example, or how the ASME code should be applied.

14 CHAIRMAN BECHHOEFER: Well, Mr. Hofstadter was
15 responsible for setting up the qualification program, so he had
16 to comply with ASME standards. I think he has some expertise.
17 He may not be fully qualified in all aspects of it. We can
18 give some weight to his testimony in this regard. It was his
19 job. So I think on that ground, on the relevance ground, we do
20 want a connection.

21 MR. WOLIVER: I will establish that now.

22 BY MR. WOLIVER:

23 Q This particular testing methodology that you have
24 been describing at Husky, did that essentially apply to all
25 welders?

3

1 A It is the generally accepted -- it was a method that
2 is in general acceptance by most people doing work in this area
3 of certifying the people, yes.

4 MR. CONNER: I'm sorry, Mr. Hofstadter, would you
5 please use the mike?

6 MR. WOLIVER: Do you need the answer reread?

7 MR. CONNER: Yes, please.

8 (Whereupon, the answer was read by the reporter)

9 BY MR. WOLIVER:

10 Q In this answer you're referring to the general method
11 of certifying by Husky in relation to all their welders?

12 A No. I'm speaking in terms of what is the best way
13 to get a welder certified properly, and the best way -- and this
14 is the general consensus of opinion of all the people we
15 contacted as to what is the best way -- the best way -- and this
16 was a general consensus of everyone -- this was a unanimous
17 consensus -- that is, that we should start out with the
18 acetylene oxygen weld so the man gets an understanding of what
19 is occurring at a speed that he can see, and lacking this, it
20 becomes very difficult to ever get a man certified properly.

21 Q Okay. I'm afraid that a couple of questions ago you
22 may have misunderstood me. You had described a few minutes
23 previous to this the methods used at Husky and my question,
24 which I will state now is: did these methods apply to all the
25 welders at Husky?

A No, sir.

326 260

1 Q Could you describe in more detail your answer?

2 A Well, in other words, when Husky had the problem
3 after the second test with Gladstone and we went through to see
4 what are we going to do with our problem, in other words, and
5 came up with possible solutions of our problem and, we'll say,
6 like the solution I gave you with the oxygen acetylene is the
7 ideal solution -- we settled on a solution which was far from
8 the ideal but which was necessary that we compromise and work
9 on a program that would give us this certification to some degree
10 in the shortest possible time and maybe that answers your
11 question in a way in which you --

12 Q Well, let me go back a step farther. You talked
13 about the number of hours it took at Husky to certify a welder.

14 A Right.

15 Q You described the eight different processes on the
16 average I believe you said it took 20 hours per welder; is that
17 correct?

18 A Right.

19 Q In your description of this certification process at
20 Husky, did this apply across the board to the welders at
21 Husky?

22 A Yes. Now by way of comparison timewise, when we got
23 the time to train a welder from the beginning to the end, we'll
24 say at the Technichron School of Welding, we were talking on the
25 order of 1,000 hours per welder.

5

1 Q A Thousand hours?

2 A Per welder training, and that would have covered the
3 eight tests.

4 Q Therefore, they were trained before being tested; is
5 that correct?

6 A Right.

7 Q When did this occur, this 1,000 hours of training?

8 A This was never done. This was the alternate that was
9 considered of having Technichron training welders.

10 Q Are you familiar with the Section IX ASME standards
11 for certifying welders?

12 A Yes, sir.

13 Q Were these standards ever applied at Husky during
14 your tenure at Husky?

15 A They were applied possibly you might say by degree,
16 but, yes, they were applied.

17 Q To what degree?

18 A Are you speaking -- let me ask this first -- are you
19 speaking of the ASME standard in relation to the qualification
20 test?

21 A Yes.

22 A In relation to the qualification test, those were
23 followed, we'll say, per the book, the test itself, when it was
24 followed was where it was visually observed and recorded and the
25 test pieces were analyzed and the bend test made -- yes, that
was exactly as it should have been done.

6

1 Q I'm a little unclear here. Your answers to questions
2 4 and 5 and 6, you talk about the welder is not meeting
3 certification requirements. Which requirements are you talking
4 about?

5 A Well, we'll say where a welder has been tested and
6 his piece didn't pass, then he never received certification. So
7 that would be one type where a welder would not be, and then if
8 the welder was assigned work which required certification --
9 nuclear work, for example -- then that man would not really be
10 qualified to do that work.

11 Q In your answer to question 15 you were asked to
12 describe in what way the welds on the cable trays specifically
13 on the vertical fittings did not meet the specifications. You
14 state that a visual understanding of this welding process is
15 necessary. "I will answer this question with visual aids." If
16 you're not repeating what you have already testified to in other
17 cross-examination, could you describe to us what you want to
18 show?

19 A Mainly, this is the -- yes, well, there is one
20 thing but it has been answered previously by Mr. Barth, and that
21 was when he was stressing the number of welds that we have on
22 the assembly. We have very few welds on the assembly, so that
23 means that when you have very few welds every weld that you have
24 becomes very critical.

25 Q I believe you were asked previously if you knew how

1 many welds were welded by unqualified welders, that you could
2 not give a figure; is that correct?

3 A Right.

4 Q You were also asked if one weld at a certain spot
5 or any number of welds gave out you were asked what would occur.

6 A I would think, in other words, if you have --

7 MR. CONNER: Objection. There's no question pending.

8 BY MR. WOLIVER:

9 Q Okay. You were asked that question; is that correct?

10 A Right.

11 Q Let me show you what I believe you previously showed
12 in your testimony on cross-examination. You have shown us a
13 piece like this which you have described to be what?

14 A That's a side plate.

15 MR. CONNER: Objection, Your Honor, unless the
16 question can show what Mr. Woliver is demonstrating I don't
17 believe it's an appropriate question for the record.

18 MR. WOLIVER: I will be happy to proffer what I'm
19 going to show. What I would like to show -- I think there was
20 some question on Mr. Barth's cross-examination as to what
21 particular welds may or may not be welded by an unqualified
22 welder. What I would like to know is how large a piece one
23 welder would weld. In other words, would a welder weld the
24 entire piece or would there be a chance where some welds would
25 be done by some welder and then another welder do the welds on
the same piece?

8

1 CHAIRMAN BECHHOEFER: Would you try to describe the
2 portion that you're referring to so the record will show what
3 you're talking about?

4 MR. WOLIVER: Okay. My problem is right now I want
5 to -- could we go off the record a moment?

6 CHAIRMAN BECHHOEFER: We object to that, Your Honor.
7 I think there's been too much off the record and I think
8 everything should be on the record. The situation is kind of
9 getting out of hand and I think everything should be in here.

10 CHAIRMAN BECHHOEFER: I'm not so sure about getting
11 out of hand, but back on the record.

12 MR. BARTH: Mr. Chairman, the Staff would be glad
13 to stipulate that's a mock-up of a side piece a riser. That
14 is a sufficient scientific description so it could be identified
15 in the record.

16 MR. CONNER: Of a cable tray which does not appear to
17 be to scale made of cardboard, three pieces folded together with
18 some kind of tape with some red crayon marks on it which are
19 supposed to indicate welds.

20 MR. FELDMAN: Your Honor, I don't believe we have had
21 any testimony as to the scale of these models, therefore I don't
22 think we could all agree to that.

23 MR. BARTH: Let the record note that the Intervenor
24 doesn't agree with the stipulation which counsel offered.

25 CHAIRMAN BECHHOEFER: It's a situation where the
parties don't agree.

326-265

1 MR. WOLIVER: I first wanted him to describe what he
2 would call this and then refer to it. In my previous questions
3 he was referring to particular point. I'm pointing to the
4 line of six marked points around the perimeter of this model
5 which he referred to as being spots where welds would occur, and
6 my question is would one person do all of these welds or -- in
7 other words, would one welder do an entire piece, an entire
8 section?

9 THE WITNESS: Yes.

10 MR. WOLIVER: I haven't stated the question. I'm
11 proffering it.

12 CHAIRMAN BECHHOEFER: I think that line is relevant
13 but the only trouble is to try to describe it in terms so the
14 written record will show the section or the piece that you're
15 referring to. I know Mr. Barth offered us a description which
16 I don't disagree with, but in view of the fact that one party
17 did disagree, if you could put it in terms we could understand--

18 MR. WOLIVER: We have described basically what it
19 looks like. I'd like the witness to describe what he calls it
20 since this is his product here and go from there.

21 CHAIRMAN BECHHOEFER: Let's start that way and see
22 if it sounds clear enough when we get through.

23 THE WITNESS: That is a vertical fitting side rail.

24 BY MR. WOLIVER:

25 Q That's the piece we described previously?

A Right.

326 266

1 Q What sizes do these come in?

2 A They start with a smaller radius of 12 inches -- there
3 are 12 inches and 18 inches and 24 inches.

4 Q When you say radius are you describing --

5 A The inside radius.

6 Q This distance here (indicating)?

7 A From the point out here to here (indicating).

8 Q The inner radius would be 12 inches on a smaller one?

9 A Right. Up to 48 inches.

10 Q Could you show me how this -- do you know how this
11 would be inserted in the Zimmer plant?

12 A That becomes an assembly, in other words, the right
13 and left, and whatever bottom material is welded in there.

14 Q What type of bottom material would be welded into
15 this fitting?

16 A These are the sides. This is the side so then this
17 is the bottom.

18 Q Okay. You're pointing to the inner?

19 A Remember, you've got a right and left, so bring the
20 other one up here. There's your right and left and then you've
21 got a bottom material.

22 MR. WOLIVER: I'd like the record to reflect that
23 there are two of these parallel with their --

24 CHAIRMAN BECHHOEFER: Is fitting the right word?

25 THE WITNESS: Right. There are two side rails and
the bottom material for ~~each~~ fitting.
326 25

1 BY MR. WOLIVER:

2 Q What bottom material would go inside?

3 A There are all kinds of bottom material and the bottom
4 material would be determined by the load that you want to put in
5 the trays. Heavier bottom material -- the bottom material would
6 be determined by the loading that you would want to put into
7 the tray because the width and the loading would enter into it
8 because as it got wider you would have to have heavier bottom
9 material.

10 Q What does the bottom material look like?

11 A Well, I have a few of the sample pieces of what might
12 be the bottom material.

13 Q First, let's let the record --

14 A That one is a hat-shaped rung. It goes in the other
15 way. That's it.

16 Q This goes in?

17 A Where those red spots are is where it's welded
18 together.

19 Q Let's let the record reflect that you have the two --
20 what were these?

21 A Side rails.

22 Q Side rails situated so that they are parallel with
23 each other and the inner radius is directly below the outer
24 radius, with the hat-shaped rung in between the two resting upon
25 the inner radius.

MR. CONNER: If the Board please, we object to this

1 demonstration because it doesnot reflect what's at Zimmer. For
2 aexample, the side pieces, the bottom pieces, whatever the witness
3 is calling them, are not hat-shaped at Zimmer. They are
4 corrogated. It's just not what happens to be at Zimmer.

5 THE WITNESS: The method of assembly is the same.

6 MR. WOLIVER: Well, I'm only receiving his testimony.
7 If Mr. Conner wants to testify --

8 MR. FELDMAN: I object also to Mr. Conner's statement.
9 I don't think there's been any testimony other than --

10 CHAIRMAN BECHHOEFER: I think if this is not at Zimmer
11 it should be established through a witness.

12 MR. CONNER: May I move to strike again because it is
13 not relevant to Zimmer by counsel's own admission?

14 MR. FELDMAN: No, I didn't admit this at all, other
15 than Mr. Hofstadter who is the witness testifying and you can
16 ask him if this is what's at Zimmer or not, but this statement
17 by Mr. Conner certainly isn't evidence of what is or is not at
18 Zimmer, so there's no reason to strike his testimony.

19 MR. CONNER: IN that case, it's quite simple. There's
20 no foudation laid for the use of such an exhibit. I tried to
21 save a little time by pointing out it's inaccurate but let them
22 establish that this is a Zimmer design and then proceed. I'm
23 afraid to say let's do it by the book because I'm not sure
24 anybody has read it, but that is, we object on the grounds that
25 this exhibit does not represent the facts in issue -- Zimmer
cable trays.

4 david

david 1

take 12

1 MR. WOLIVER: I'm not sure what Mr. Conner is
2 talking about, but I can establish a foundation if there's
3 some question in the board's mind at this time.

4 I assumed we were talking about Zimmer cable
5 trays.

6 CHAIRMAN BECHHOEFER: So did we, but why don't
7 you try to connect it up.

8 BY MR. WOLIVER:

9 Q Okay. Before the objection we were describing
10 the assembly that the witness has testified to. We got to
11 the point where we would say that the hat shaped run is
12 resting on the bottom side rails, the inner radius side
13 rails.

14 Is this a description of the welding of the cable
15 trays that are at Zimmer?

16 A It would be typical of the welding at Zimmer, yes,
17 sir. It would be typical, but the only difference would be
18 the bottom material, and as I said before, there is all
19 kinds of bottom material.

20 Bottom material only serves the purpose of whatever
21 cables will rest on it, and it connects the two side rails.
22 There is a lot of different bottom material, but the
23 method of assembly is the same, regardless of the bottom
24 material, as far as in -- in other words, the assembly portion
25 is welded.

david2

1 It isn't always resistance welded, but in this
2 case it is resistance welded here and at Zimmer.

3 Q In reference to the welding done at Husky and
4 the Zimmer cable trays, was there welding of the bottom
5 material via the hat shaped rung or another bottom material
6 at Husky?

7 A Right. It was at Husky.

8 Q How many -- at which point would there be welding
9 connecting the hat shaped or whatever bottom material there
10 would be with the side trays?

11 A On the actual material that was used at Zimmer,
12 it was a solid bottom and there was a weld every third
13 ridge.

14 Q How far is that?

15 A A ridge -- an index on a ridge is approximately
16 1.5 inches, but that would be a weld every 4.5 inches.

17 Q Would the welds also presumably be parallel on
18 each side of the --

19 A Right, in the same pattern that this is, yes, sir.

20 Q Out of an assembly such as the one you're holding,
21 how much of that would presumably be welded by the same welder at
22 Husky?

23 A In this particular assembly here, one welder
24 would only weld side rails because the welds of the bottom
25 material -- has been resistance welded.

david3

1 You could really have a choice there; it could
2 be resistance welded or it could be made spot, either one.

3 Q Therefore, one welder would weld the near radius,
4 the outer radius on each side -- well, on one side of the
5 welding --

6 A Very likely they're both the same, so there isn't --
7 there isn't such a thing as right and left. I'm just saying
8 that they come in a right and a left in assembly, depending on
9 which position you're facing, but one welder, if they went
10 through 50 of these assemblies, there would be 100 of each of
11 these parts.

12 One welder would probably weld all of those more
13 than likely, unless there was extremely -- then one welder
14 might weld 25 assemblies and the other welder 25 assemblies,
15 but normally one welder would weld all 100 assemblies.

16 Q On your previous testimony in cross examination
17 by Mr. Barth, you testified that you went to the Zimmer
18 site and only after being at the Zimmer site did your concerns
19 increase with the safety related to the integrity of the
20 welding one at Husky or Zimmer.

21 Is that correct?

22 A Yes, sir.

23 Q You were also -- you were also -- excuse me --
24 you were asked what you thought might happen if a weld broke,
25 improperly welded and somehow it gave out at Zimmer.

326 272

david4 1

A Yes, sir.

2

Q I was a little unclear on your answer before, but

3

if a weld breaks -- have you seen welds break?

4

A I've seen a lot of them break yes, sir.

5

Q When a weld breaks, how does it break? Does it

6

break cleanly?

7

A It breaks rather jaggedly.

8

Q Does that mean that the steel would be -- have

9

jagged edges?

10

A Yes, sir, many of them, yes, sir.

11

Q Would it have sharp edges?

12

A Yes, sir. Ordinarily it would, yes, sir.

13

Q Edges sharp enough to penetrate cables?

14

A I would say they could, yes.

15

MR. WOLIVER: No further questions.

16

(Board Conferring.)

17

MR. HEILS: Thank you. I do have some questions,

18

but not too many.

19

BY MR. HEILS:

20

Q Mr. Hofstadter, are you familiar at all with

21

whether or not Husky Products had any kind of a qualifications

22

program for their inspectors?

23

A To my knowledge they didn't have, no, sir.

24

Q Did you ever become familiar with any inspectors

25

on the job?

david5 1

2 A At the -- at one time one of the managers of
3 quality control had the responsibility for that -- had the
4 responsibility of hiring several inspectors.

5 Q What does the inspector do on the job? Does he
6 get to every weld, one out of 10? Can you tell me or do you
7 know?

8 A All the time I was there I have never seen an
9 inspector spend any time checking the welds.

10 Q Do you know if there is a qualification procedure
11 that the inspectors have to go through before they are
12 qualified to inspect a weld?

13 A There is none.

14 Q You testified to Mr. Woliver that at some point
15 there were some records made of a qualification test in
16 '74 -- and correct me if I'm wrong in characterizing your
17 testimony -- but it seems to me that your answer was -- to
18 one question that someone told you to destroy some records?

19 A That was this -- just this past year. The 1st
20 of July, I think -- the end of June, the 1st of July.

21 Q In 1979 -- '78, I mean?

22 A '78.

23 Q Could you tell us who told you to destroy the
24 records?

25 A Mr. Banta.

Q Mr. Banta?

326 274

david6

1 A Yes, sir.

2 Q Did he tell you why you should be destroying
3 the records?

4 A Yes, sir. Because we didn't want to lose
5 certification of any more welders.

6 Q At any time did you happen to observe the
7 documents which indicated whether or not a welder passed
8 a qualifying test back in 1974 when the qualifying tests
9 were done on steel and aluminum?

10 A I saw all the certification documents, yes, sir.

11 Q Did you see the originals, sir, or copies, do you
12 know?

13 A Are you speaking of -- well, as far as what
14 records we had to start with in our department, they were
15 all originals, and the ones that we got from Gladstone are
16 our -- our original receipt were the originals.

17 Q Do you know what happened to those originals?

18 A They were -- to the best of my knowledge, when
19 I was up there in August, they were in a large binder with
20 a lot of other records, certification records.

21 Q At --

22 A At Husky. And Mr. Pratt had control of the
23 binder.

24 Q How long have you known Mr. Spievack of the
25 welding school?

326 275

david7

1 A My only contact with Mr. Spievack was the night
2 when he came in for the review of our problem and for his
3 recommendations and opinions.

4 Q Did you try to influence the recommendations or
5 opinions that he made?

6 A They were -- they were considered. In other
7 words, I never made a recommendation that we adopt them, but
8 they were given consideration.

9 In other words, let's say, as a possible solution
10 of our particular problem.

11 Q Mr. Hofstadter, can you tell me what advantage
12 there is to certifying a welder or showing that a welder
13 qualified through certification after the welding has been
14 done.

15 A There is no advantage. It's a little late. The
16 damage has been done, if there is any damage.

17 Q Referring back to the testimony you have given
18 about the destruction of the records in 1978 --

19 A Yes, sir.

20 Q -- do you know if those records were actually
21 destroyed?

22 A No, I do not.

23 Q Have you ever seen them since?

24 A Yes, sir. In that particular instance it struck
25 such a sore spot that I didn't want any more -- any more to

david8

1 do with it. Period.

2 MR. HEILE: That's all. Thank you.

3 (Board conferring.)

4 MR. CONNER: Mr. Chairman, are you going to allow
5 recross -- further cross before the board's questions, or
6 is that going to be both after the board's questions and
7 so forth? There's a lot of new matters here.

8 CHAIRMAN BECHHOEFER: I realize that. Would you
9 prefer to have some recross? The board will, if you prefer
10 to do it now, the board will permit that.

11 MR. CONNER: As long as I get the right.

12 CHAIRMAN BECHHOEFER: You'll have the right. The
13 board has some questions; maybe you'll have some questions.
14 We'll have to give all of the parties the chance to do that,
15 though.

16 Well, why don't you go ahead and do that. That
17 might be desirable, too.

18 MR. FELDMAN: Your Honor, we have no objection
19 to Mr. Conner doing it now, but I would just like to point
20 out that it is 3:00 o'clock and we would appreciate it if
21 we could get on to the matters of subpoenas at least by
22 3:30.

23 CHAIRMAN BECHHOEFER: We have already discussed
24 that. We'll go over these procedural matters before we
25 adjourn.

david9

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

MR. FELDMAN: Thank you.

CHAIRMAN BECHHOEFER: Will yours take long?
Can you get through in a half an hour?

MR. CONNER: I haven't the foggiest idea. There's
been so much new material put in that we have many, many
questions to ask, and I don't know what --

CHAIRMAN BECHHOEFER: I realize that --

MR. CONNER: -- how long it will take.

CHAIRMAN BECHHOEFER: Maybe the best procedure
would be to handle the procedural matters now. Would you
have any objections to that?

MR. CONNER: I do, yes, sir. We are obviously
going to bring in several people -- we may or may not, depending
on the answers. Mr. Hofstadter has made accusations
against various people, including individual welders; I'd
like to find out who they are and we'll probably to try
produce them next week to refute his statements, but I
can't do it until I know who he's talking about.

CHAIRMAN BECHHOEFER: I realize that. Why
don't you start now. Maybe when we get to 3:30 we'll see.

I want to save some time because I think they're
going to request some other witnesses also and before we
leave, if we have to issue subpoenas or things like that,
I'd like to know.

MR. CONNER: We haven't seen any new subpoenas.

david101 1

I don't know what we're arguing about yet.

2

MR. FELDMAN: I could introduce the subpoenas right now, your Honor.

3

4

MR. CONNER: Why don't we let Mr. Wetterhahn examine it and then we can save time, perhaps.

5

6

CHAIRMAN BECHHOEFER: Can he do that while you're asking your questions?

7

8

MR. FELDMAN: These don't subpoena anything from Husky. These are just subpoenas from Glacstone Labs and an individual.

9

10

CHAIRMAN BECHHOEFER: Why don't you discuss it with Mr. Wetterhahn and let Mr. Conner start his cross.

11

12

You might be interrupted. I do want to settle these other matters also before we leave today, but start and we'll let you go as long as we can.

13

14

RE-CROSS EXAMINATION

15

BY MR. CONNER:

16

Q Mr. Hofstadter, I notice you're holding something in your hand; I think it's your prepared testimony. It's -- it looks like you've been reading it, but you're just holding it. You have been reading any answers from it, have you, previously?

17

18

19

20

A No.

21

22

Q I didn't think so. All right.

23

In response to, I think it was Mr. Woliver's

1 questions, you made two statements that I find totally
2 contradictory. I'd like to get it stated on the record.

3 As I heard you, you said, talking about whatever
4 happened -- I think it was in 1978 and it may have been
5 earlier, but you said ASME certification procedures were
6 not followed; is that correct?

7 A No, that is incorrect because ASME testing
8 procedures were always followed as far as the procedural
9 portion is itself, step by step.

10 Q That's my point exactly; the very next question
11 and answer you said is ASME test -- testing qualifications
12 were followed by the book, I think you said, for the
13 qualification tests, the bend tests, and so forth.

14 A Right.

15 Q And the paperwork that goes with it.

16 Now -- and you did not say that Husky failed to
17 follow the ASME section nine requirements?

18 A As far as the paperwork goes and step by step
19 following the requirements, that was done, yes, sir.

20 Q And you didn't mean anything special by using
21 the word "certification" in response to that first question?

22 A I've explained it and I thought that everybody
23 understood.

24 In other words, when a man moves his
25 qualifications for the test, then you can certify him.

1 Q So that in other words, if a man passes a TIG
2 horizontal steel test he is qualified and somebody certifies
3 that on a piece of paper.

4 A Yes, sir.

5 Q And that man is both qualified and certified in
6 your terminology?

7 A Yes, sir, for the particular test that he has passed.

8 Q Exactly. And that means certified.

9 A Yes, sir.

10 Q Now, you said earlier that the welders -- I
11 think you say you kept them around for the nuclear jobs as
12 they came in.

13 You wanted a man who would be certified on
14 eight tests, vertical and horizontal, steel and aluminum, MIG
15 and TIG; is that correct?

16 A No. What I said there was I -- a given man in
17 a given place may work in different work centers that
18 he may use all of the processes -- the entire process --
19 all of the process in all the positions -- and then for the
20 man that may meet or have to meet that particular requirement
21 in order to comply with the QC manual, that man -- in order
22 to be that versatile, would have to pass a test.

23 Q Eight tests?

24 A Eight tests.

25 Q But that has nothing to do with ASME certification

david13

for one type of qualification; is that true?

1
2 A I just explained it, and you're saying you don't
3 understand the explanation. If a man -- in order to
4 be capable of being fully qualified, of doing all the work
5 in all the areas in any given one, if he's going to spend some
6 time in there, he'd have to have passed eight tests.

end 12

7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

13
DB-1

1 Q But there is no aluminum, for example, on
2 the nuclear work for the Zimmer cable trays, correct?

3 A Well, I am sorry to differ with you, yes,
4 there was aluminum work for Zimmer.

5 Q I said on the Zimmer cable trays.

6 A There were cable buses that were made for
7 Zimmer that is aluminum.

8 Q The issue here, sir, is Zimmer cable trays.
9 Would a man have to be qualified on aluminum to work
10 on Zimmer cable trays?

11 A Now for the cable work, that was done for
12 Zimmer, your man, Mr. Ehas, he was there and he gave us
13 the same requirement for cable buses as for cable trays.

14 MR. CONNER: Your Honor, I ask the witness
15 be orderéd to answer the question.

16 THE WITNESS: Please repeat the question.

17 BY MR. CONNER:

18 Q Would a man have to be qualified on
19 aluminum to work on Zimmer cable trays?

20 A According -- I would say your man, Mr.
21 Ehas, told us he would, yes, sir.

22 Q Would a man under the ASME Code, Section 9,
23 have to be qualified on aluminum to work on Zimmer
24 cable trays?

25 A He should be, because of what the Husky

DB2 1 manual said, that all welding would be to ASME' Section
2 9 performed by certified welders.

3 Q Would a man have to be qualified on aluminum
4 to work on Zimmer cable trays?

5 MR. BARTH: Mr. CHairman, I agree with
6 Mr. Conner, the witness is justnot answering the
7 question. And this is going to get us nowhere.

8 CHAIRMAN BECHHOEFER: YOU can answer that
9 question, I think.

10 THE WITNESS: Yes, that man, in order to
11 produce at what is supposed to be done, he should be
12 certified, yes.

13 CHAIRMAN BECHHOEFER: The question was the
14 ASME code, would he have to be qualified on aluminum to
15 work on the cable trays. That very specific
16 question.

17 THE WITNESS: Yes, he has to be certified
18 when he works on aluminum. He has to have aluminum
19 certification.

20 CHAIRMAN BECHHOEFER: That is not the question.
21 The question was to work on cable trays, did you have
22 to be qualified in aluminum.

23 MR. CONNER: The witness is being evasive,
24 your Honor. I ask he be directed to answer.

25 CHAIRMAN BECHHOEFER: Please answer that
precise question.

DB3 1 THE WITNESS: Ask the question again and I
2 will try.

3 BY MR. CONNER:

4 Q Does a welder have to be qualified in
5 aluminum to work on Zimmer cable trays?

6 A Not if -- if he works on Zimmer steel trays,
7 he does not have to be qualified in aluminum.

8 Q Thank you. That wasn't so hard.

9 Now you said in 1978 two welders were tested
10 and failed and lost their certification. Was that
11 on steel MIG horizontal qualification test?

12 A It was on steel, and I really don't know
13 whether it was vertical or horizontal.

14 Q Do you know whether it was MIG or TIG?

15 A Not exactly, no.

16 Q What were the names of those people?

17 A I really don't recall the names of the two
18 people. But I can explain how I got the story.

19 Q You have already said that once.

20 A Well, just wait a minute --

21 Q If I want any information, I guess you
22 won't answer unless you can do it in your own way.

23 A No, I didn't say that.

24 Q Let's try an answer. It might save time.
25 What are the names of the two individuals who failed

DB4 1 the qualification test in 1978?

2 A I said I can't tell you the names of these
3 two people at this time.

4 Q Then you went on to say "let me tell you
5 the story." Tell us what you heard.

6 A I knew the names at the time. We have a
7 vocational school teacher come in to run this program
8 that Fred had set up. And the first part of the program
9 involved, spelled out that all of the welders would
10 be tested and we would find out exactly the capabilities
11 of each welder that we had.

12 So we started out, Mr. Lay started out
13 and the first two welders that he tested failed their
14 test. And when he came and told me, I went and told
15 Fred, and Fred said-- he didn't say anything at first.
16 Then he came back and said "Will those welders lose
17 their certification". I said yes, they will, they have
18 to pass the test to reacquire certification.

19 So then he said, he came back a second time
20 and told me to destroy the paper work.

21 Q Told you to what?

22 A Destroy the paper work on those two people.

23 Q We will get to that in a minute. Mr. Lay,
24 L-a-y?

25 A Yes, sir.

326 295

DB 5

1 Q Was he the man from the vocational school?

2 A Yes, sir, Mr. Alvin Lay.

3 Q What is his address?

4 A I don't know his address.

5 Q Did he tell you the names of the workers
6 at the time?

7 A Yes, he did.

8 Q And you don't remember them?

9 A I really can not recall the names.

10 Q You said there were only 8 to 12 welders
11 at any one time there. Did you supervised the
12 qualification testing. Is that true?

13 A Yes, sir.

14 Q And you don't remember the names of the
15 two welders?

16 A No, sir, because this was not a qualification
17 test, this was a retest that Mr. Lay was running here of
18 all of the people.

19 Q Doesn't ASME require all people be
20 retested or requalified every 90 days?

21 A No, sir, it does not. Only when they have
22 not been working for 90 days then they have to be.

23 Q Was it part of your job to know that men
24 had either done work in a given qualified areas within
25 a quarter in order to have them retested as appropriate?

DB6

1 A That problem came up several times.

2 Q Answer the question. Was that your
3 responsibility?

4 A Yes, it was.

5 Q Then this happened, this incident you
6 mentioned in 1978, but you don't remember who it was?

7 A No, I really do not recall the names.

8 Q Was that in work center 2, do you remember
9 that?

10 A No, I do not remember.

11 Q Was it in work center 5?

12 A In other words, I do not remember the
13 name and there is no use asking, to keep on asking me.

14 Q We want to bring these men in. Can you
15 give us any idea? Was one of the men redheaded, do
16 you remember anything like that?

17 A No, sir.

18 Q You just have a total blank?

19 A Yes, sir.

20 Q What was this document you were talking
21 about that somebody told you to destroy?

22 A Mr. Lay was set up, between Mr. Lay and
23 Randy Pratt, they were set up and Mr. Lay kept a little
24 different record of his tests and then he correlated
25 this with Randy, and Randy in turn completed the rest

DB7 1 of the record keeping, and --

2 MR. FELDMAN: Your Honor, for the record,
3 I would like to have the record reflect that Mr. Barth
4 is consulting with CG&E at this point, just for the
5 record.

6 MR. CONNER: May the record reflect that the
7 six intervenor counsel have consulted with each other
8 all day.

9 BY MR. CONNER:

10 Q I am sorry for the interruption by your
11 counsel. I would like to get the answer. Do you remember
12 where you were when your counsel interrupted your
13 answer?

14 A No, not exactly.

15 Q The question was about what documents you
16 were referring to that you said you were told to destroy.
17 What were these documents?

18 A They were at that time Mr. Lay's records
19 of the tests that he was running.

20 Q Are they called anything? Are they on green
21 paper?

22 A No. He had his own record which he kept,
23 and then when he would bring that in to Randy, Randy
24 would transpose it onto our paper.

25 Q Was ther a common practice for your subordinate

DB8

1 Randy to transpose somebody else's reports onto
2 your paper?

3 A This was say like the arrangements that
4 Randy and Mr. Lay had worked out temporarily until we
5 could get set up properly.

6 Q You mean the operation you were in charge
7 of was not set up properly?

8 A IT was in the process of getting started, is
9 what it was.

10 Q Were these permanent documents, or were they
11 like scratch paper here?

12 A They were more than scratch paper. Probably
13 the best way to -- some of those I am sure are still
14 there.

15 Q You can't remember what they look like, other
16 than they weren't scratch paper -- how many pages were
17 they?

18 A It was all on one page.

19 Q One piece of paper?

20 A Yes.

21 Q Now this document was turned over to you
22 in your official capacity?

23 A It was not turned over to me. It was turned
24 over to Mr. Pratt.

end 13

25

326

#13
ngl

1 Q Wasn't he your subordinate?

2 A Yes, sir.

3 Q I thought you said he and Mr. Lay brought it into
4 him as the boss.

5 A Right.

6 Q You mean they kept you from having it?

7 A In other words, on the particular day as the story
8 came out I went in to see Ranly and then together they showed
9 me or they both told me that the first two tests that the men
10 had tested were failures.

11 Q They showed you the papers?

12 A Yes, sir.

13 Q And you physically examined it?

14 A Yes, sir.

15 Q And then apparently you gave it back to someone?

16 A I also saw the test pieces.

17 Q And then you went in to talk to Mr. Banta?

18 A Yes, sir.

19 Q All three of you?

20 A No, sir; just myself.

21 Q But you didn't take the paper with you?

22 A No, sir.

23 Q You just told him that somebody had given you a
24 piece of paper?25 A I told him the first two people that were tested
that had certification had failed their tests.

1 Q Was that all you told him?

2 A That's all.

3 Q What did you tell him about the paper?

4 A I didn't tell him about the paper.

5 Q How in the heck did he tell you to destroy it then?

6 A You would have to ask him. Don't ask me how he
7 would tell me that.

8 Q I'm asking you about your testimony. You said he
9 told you to destroy the papers.

10 A I said the second time he came back --

11 Q Aha. Now tell us about that.

12 A He came back and he asked me -- he said,-- I told
13 him just the result of the test. Then he came back the second
14 time and said, "Those people will lose their certification?"
15 The question was: "Would those people lose their certification?"
16 I said, "They will until they can be retested and pass the test
17 again."

18 Q Okay. Now he didn't tell you that then in the first
19 meeting?

20 A No, sir.

21 Q That you just mentioned?

22 A Right.

23 Q He didn't say anything in the first meeting, I guess.

24 A Right.

25 Q And you went back out to your office and then Mr. Banta

1 came out later and then said what you have said -- what you first
2 said he said in the first meeting; right?

3 A Yes, sir.

4 Q What time was the first meeting?

5 MR. FELDMAN: Your Honor, I think I may object. I
6 don't think that's a proper characterizaion of the testimony. I'd
7 appreciate it if he would ask Mr. Hofstadter if that is the
8 correct characterization.

9 MR. CONNER: There are no stated grounds for an
10 objection. I would like to have an answer.

11 THE WITNESS: As best I can recall, it was in the
12 morning, say, in the area of 10:30 or 11 o'clock, to the best
13 of my recollection.

14 Q What time was the second meeting?

15 CHAIRMAN BECHHOEFER: What were your last words there?

16 THE WITNESS: Fairly late in the morning, maybe
17 10:30 or 11 in the morning, and the next time he came back was
18 within about 15 minutes.

19 BY MR. CONNER:

20 Q He came back?

21 A Mr. Banta came back.

22 Q Did Mr. Banta come back by himself?

23 A Yes, sir.

24 Q 15 minutes later. Do you recall what day this was?

25 A No. It had to be in June some time.

Q June of 1978?

1 A Yes, sir.

2 Q Okay. You don't remember what day of the week it
3 was?

4 A No, sir.

5 Q Was it farther along in the week or Monday morning?

6 A I have no idea.

7 Q Now there was only one piece of paper ever discussed.

8 Is that it, in these two meetings that we have just talked
9 about?

10 A This would have been -- Mr. Lay would have had a
11 piece of paper on each of the men.

12 Q Now in the first meeting you told Mr. Banta nothing
13 about a piece of paper?

14 A No, sir. I only reported to Mr. Banta that the first
15 two men on the retest program had been tested and they had
16 failed their test.

17 Q And in the second meeting, 15 minutes later, what
18 did you tell Mr. Banta about the paper?

19 A I didn't mention the paper. I only answered his
20 question. His question was on those people that failed their
21 test were they certified people and did they now lose their
22 certification and they would have to be retested to get to
23 reacquire certification.

24 Q And that was all the conversation?

25 A Yes, sir.

1 Q You testified earlier that he then told you to
2 destroy any papers.

3 A Yes, sir. That was his next order was to --

4 Q And you haven't even told him about any papers?

5 A I didn't tell him about the paper and how he told me
6 to destroy the paper I don't know, but I'm assuming that he
7 knew that we had paperwork.

8 Q But you didn't show it to him?

9 A No, sir.

10 Q And you didn't have the paper?

11 A No, sir.

12 Q What had you done with this one sheet of paper you
13 talked about?

14 A There were two sheets, sir. One sheet for each man.

15 Q You said earlier that Mr. Lay and Mr. Pratt brought
16 you one piece of paper that you examined.

17 A No. I said I went over to see them and they were at
18 Randy's desk and they had the paper, a paper there, and he also
19 had test pieces and they showed me that and they were telling
20 me the first two men that were tested failed their test.

21 Q And you said you examined one piece of paper that
22 they had. You couldn't remember whether it was --

23 A I didn't even examine the paper. The pieces were
24 there. It was obvious they were failing.

25 Q You didn't look at the paper?

6

1 A I didn't need to look at the paper.

2 Q What paper then did you think you would have destroyed
3 had you done what you said Mr. Banta told you to do?

4 A The paper that Mr. Lay made, his working paper.

5 Q Mr. Witness, we want you to understand we want you
6 to identify the pieces of paper or single piece of paper you're
7 talking about because we're going to find it. We're going to
8 bring it back in here if we can find it. I don't know what
9 you're talking about just yet. We just want you to understand
10 that. But you can't say anything more about it?

11 A No, sir.

12 Q It's been one piece of paper one time and two pieces
13 of paper another time.

14 A It's always been two pieces of paper.

15 Q All right. And it's not more than that?

16 A No, sir.

17 Q That's all you're talking about, two pieces of paper?

18 A One piece of paper per man.

19 Q Does this help you refresh your recollection on the
20 names of the men?

21 A No, sir.

22 Q Now did you suggest in your answer about these two
23 welders that they had become unqualified on all previous
24 qualifications they had?

25 A No, sir. They only lost their qualification or

1 certification on the particular test that they failed. 3118

2 Q And what was that?

3 A That I don't recall.

4 Q You like to talk about eight tests or eight qualifi-
5 cations. Are you suggesting now that one of these men or both of
6 these men failed only part of all of the tests they were quali-
7 fied on?

8 A They failed only the test that they took. They only
9 took one test.

10 Q And it could have been just on whatever -- horizontal
11 MIG steel?

12 A Right.

13 Q So you're not talking about a full testing or
14 retesting program that you mentioned earlier?

15 A Right. They lost the certification in that particular
16 area in which he took the test.

17 Q Could the qualification test have been on aluminum?

18 A No, it was steel.

19 Q Why do you remember that?

20 A Because I had to order the material for it.

21 Q Do you remember then that it was on steel?

22 A Yes, sir.

23 Q Good. Can you remember now whether it was MIG or TIG?

24 A No, sir. I don't recall whether it was MIG or TIG.

25 It could have been either one.

1 Q And you were the person who ordered the material?

8 2 A Yes, sir.

3 Q How many pieces did you order of material?

4 A I would think we ordered -- it was in the neighborhood
5 of either 800 pieces or 1,000 pieces and we got approximately
6 400 of them came in, so we could get started.

7 Q Now you for some reason under this new comprehensive
8 test program were talking about only ordered half of the material
9 for the qualification?

10 A We ordered all the material. I said that the fellow
11 making the parts for us delivered only about half of them on
12 his first delivery. In other words, the other half followed
13 sometime later.

14 Q The other half was that aluminum?

15 A The other half was steel. There were 800 some pieces,
16 800 or 1,000 pieces of steel.

17 Q If you're going to have a comprehensive requalification
18 test, why would you only order half the material that you normally
19 use? Why didn't you order aluminum?

20 A We didn't order aluminum. We made the aluminum test
21 pieces at Husky.

22 Q Okay. Then how do you know the test pieces that you
23 talked about, these two men failing weren't on aluminum?

24 A Because we had started out the test in steel.

25 A Q You said earlier, though, because you remembered
ordering the steel pieces?

1 A Yes, sir.

2 Q Now you said Mr. Banta also told you that one of these
3 two meetings on this day in June '78 that he said not to test
4 any more men.

5 A Right, that had certification.

6 Q And to your knowledge, were any more men retested
7 thereafter?

8 A Not in the area in which they had a certificate.

9 Q And that was until you left in August of '78?

10 A Yes, sir.

11 Q What was your role in the test that Mr. Lay and
12 Mr. Pratt talked to you about? Did you supervise them?

13 A Did I supervise who now?

14 Q Well, you complained earlier that there was a question
15 for the test program under your jurisdiction, that there was
16 people had not watched the test being performed?

17 A Right.

18 Q On welders?

19 A Yes.

20 Q Did you watch the test on these two individual?

21 A No, sir. Mr. Lay watched the test. That was the
22 only job that Mr. Lay had was to come in and do this testing
23 work. He had no other job whatsoever.

24 Q And he was qualified to perform these tests?

25 A Yes, he was.

Q How do you know that?

326 200

1 A He was the instructor of welding at the vocational
2 school in Boone County.

3 Q Is that all? You didn't check out whether he was
4 qualified to give tests on steel?

5 A No, because we had had him in previously and we had
6 done other work with him. He had worked with us previously.

7 Q Now you talked about -- and I want to get some
8 points clear -- you were saying that you talked to people generally
9 about how many hours welders should be trained starting
10 with the acetylene, do you recall that?

11 A Yes, sir.

12 Q And I think you said somebody said that each welder
13 should receive 100 manhours -- 1,000 manhours training?

14 A Right. In other words, if you wanted to go through a
15 fairly comprehensive training program.

16 Q And was that Technichron that wanted to sell you that
17 program?

18 A No, sir.

19 Q Who was it that said the 1,000 manhours minimum?

20 A The Technichron program was a total of about 1400
21 hours.

22 Q Technichron wanted to sell you a program of 1400 hours?

23 A They made no attempt to sell us any program.

24 Q Other than the letter they sent to you?

25 A That's correct.

1 Q Now you said it was unanimous opinion of everyone to
2 start with acetylene.

3 A That the ideal way is to start training of people in
4 welding is to start with acetylene.

5 Q Does that include people who have been welding all
6 their lives?

7 A That includes most of the people at most of the
8 vocational schools that would do welding training.

9 Q You said this was the consensus of everyone in the
10 areas using the same certifying techniques as Husky I think was
11 the phrase you used. Do you remember that?

12 A I don't remember that particular phrase.

13 Q Did you talk to anybody other than vocational schools?

14 A Certainly we talked to Mr. Uhrig. We talked to Mr.
15 Spievack. We even talked to the editor of the welding magazine
16 and we talked with other welding people in the plant.

17 Q Aren't there any manufacturing companies here that
18 do welding other than Husky?

19 A Yes, sir.

20 Q And you talked to all of them?

21 A I didn't say we talked to all of them.

22 Q You said it was the consensus of everyone -- the
23 unanimous opinion of everyone.

24 A Of everyone that we talked with that we discussed the
25 problem with.

1 Q Okay. You called the trade schools and a magazine
2 editor?

3 A Yes, sir.

4 Q But you didn't talk to -- I don't know what all
5 might be available in this area -- you didn't talk to anybody
6 up at Wright Patterson about techniques used there?

7 A No, I didn't.

8 MR. FELDMAN: I'd like to object to that unless Mr.
9 Conner can show there were techniques used up there that would
10 have been useful.

11 MR. BARTH: Too late, Your Honor. The question has
12 been asked and answered.

13 MR. FELDMAN: He can strike the question.

14 MR. CONNER: I'm trying to save him a little time.

15 CHAIRMAN BECHTOSFER: I think the question and
16 answer can stay.

17 BY MR. CONNER:

18 Q I know it's already been answered. Mr. Witness, your
19 demonstration with the cardboard pieces there indicated what I
20 have learned is called a hat-shaped center section; is that
21 correct?

22 A Yes, sir.

23 Q For the bottom of a cable tray. Is that the type, to
24 your knowledge, that was used in the Zimmer cable trays?

25 A No, sir.

Q It was not the type?

1 A No.

2 Q So your model is inaccurate on that point?

3 A Right.

4 Q Are you familiar with the Kellum grip?

5 A No, sir.

6 Q Do you know what it's for?

7 A I have an idea but I'm not sure so I'd just say I
8 have no familiarity with it.

9 Q Has anybody ever told you that it is a device which
10 when used on vertical vaulting cables as used in Zimmer at some
11 places takes all the vertical weight of the cables such that
12 none of that vertical weight is seen by the upper section of the
13 cable tray which before that time was horizontal?

14 A I have seen something like I think what you have in
15 mind where you can support a cable like that. In other words,
16 like the old Chinese grip where you put it on your finger and
17 it will slip on and you can't slip it off. It will go in one
18 direction and won't go in the other. I do not see how in the
19 world you could put that, if you've got 300 cables in that
20 tray, how you could put 300 of these on 300 cables. That's what
21 I don't understand.

22 Q If you were shown that Kellum grips in fact take the
23 weight which would otherwise be there by gravity of cables in
24 the vertical position in Zimmer such that the curve shape arc
25 that you have described would not take any of that vertical

1 weight, would you still be as concerned as you have indicated
2 today?

3 A I would say the concern would be a little bit less
4 because the weight would be less.

5 Q You said you went to Zimmer to see the cable trays;
6 is that correct?

7 A Yes, sir.

8 Q Isn't it a fact that you asked Mr. Banta if you could
9 go with him because you had never seen installed cable trays
10 except at the Cincinnati ballpark?

11 A No, sir.

12 Q Why did you ask to go?

13 A I never asked to go.

14 Q Isn't it also a fact that you think you said you
15 spent three hours at Zimmer; is that correct?

16 A That was my best estimate.

17 Q Did you spend about two of those three hours in the
18 construction shack and only about one hour inside the building?

19 A We spent time in the construction shack and we spent
20 time in the building. I don't know what the time was. I
21 thought it was nearly equal.

22 Q In other words, it would be either a whole hour or
23 whole hour and a half.

24 A It could have been that, yes.

25 Q You said at one point -- and I'm not sure of your

1 answer here -- you were asked a question of reviewing records.

2 MR. FELDMAN: Your Honor, excuse me. It's getting
3 later and we are getting into a new area. I was wondering if we
4 might start to think about adjourning for the day.

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

326 305

1
last take

2
5david

3
vidl

CHAIRMAN BECHHOEFER: Well, Mr. Conner, do you
have a lot to --

4
MR. CONNER: Yes, we have quite a bit more.

5
CHAIRMAN BECHHOEFER: In any event, I want to get
out of here at 3:00 or adjourn at 4:00.

6
MR. CONNER: Well, I object to taking up hearing
7
time with evidence on a procedural matter, such as a subpoena.

8
CHAIRMAN BECHHOEFER: This will relate -- I think
9
relates to further witnesses on this particular contention.

10
MR. CONNER: Let me see, if the chairman is
11
not going to continue, let me just take a minute and see
12
if there's any more information, factual information, we
13
may want to work on over the weekend that we can get from
14
this witness.

15
CHAIRMAN BECHHOEFER: Pause.

16
MR. BARTH: Mr. Chairman, can we take a four or
17
five minute break?

18
CHAIRMAN BECHHOEFER: Well, let's take a five
19
minute break.

20
(Brief recess.)

21
CHAIRMAN BECHHOEFER: Let's get rid of this
22
subpoena first. I'm not -- you're going to get a chance but
23
I would like to ask the applicants if they have any objection
24
to my signing the two subpoenas which I understand you have
25
seen.

david2

1 MR. CONNER: We have --

2 MS. KOSIK: There's a correction to be made,
3 if I may: on the day we'd like you to come in, it's June
4 27th at 9:00 o'clock.

5 MR. WETTERHAHN: I'm sorry. Let's identify the
6 subpoena. That's both?

7 MS. KOSIK: Both.

8 CHAIRMAN BECHHOEFER: June 27th at 9:00.

9 MS. KOSIK: Yes.

10 CHAIRMAN BECHHOEFER: Okay. So modified.

11 Do the applicants have any objection?

12 MR. WETTERHAHN: With regard to the subpoena
13 duces tecum, I don't think it's our place to object to a
14 request for documents from Gladstone Laboratories; that
15 institution may have some objection.

16 With regard to the subpoena to Randy Pratt,
17 prior to making a statement, I'd like to hear the statement
18 of Miami Valley Power Project as to the general
19 relevance of the subpoena to Mr. Pratt.

20 CHAIRMAN BECHHOEFER: All right.

21 MS. KOSIK: Mr. Pratt, as has been brought
22 out on testimony, worked with -- Mr. Pratt worked with
23 Mr. Hofstadter on the quality control program regarding
24 the qualification of welders, and we've been talking about
25 that all day, and all day yesterday.

And in rebuttal to the statements made by Mr. Banta,

david3

1 we believe that Mr. Pratt could make contradictory statements;
2 that's the relevance.

3 MR. WETTERHAHN: Mr. Chairman, there's been
4 absolutely no showing that he would make any kind of
5 statement which is contradictory to the statement of applicant's
6 witness in this proceeding. This is pure speculation,
7 a pure fishing expedition, and it could result in undue
8 delay.

9 I don't see what they're rebutting with this
10 testimony of Mr. Pratt.

11 CHAIRMAN BECHHOEFER: Can you identify any
12 specific testimony that you think Mr. Pratt could contradict
13 or --

14 MS. KOSIK: Well, Mr. Pratt helped out on the
15 May of 1978 retesting program, and he could substantiate
16 what was said as to the two welders who were already
17 certified and had failed the test.

18 MR. WETTERHAHN: Mr. Chairman, it's a question
19 of general relevance; again, back in 1973 that's one step
20 removed. The only proffer is: he could possibly make some
21 statement.

22 There's not one bit of evidence to say that he
23 would say anything which is contradictory to the direct case
24 of the applicant.

25 There is no statement whatsoever that he will

david4

testify as to any certain fact on the Zimmer cable tray.

2 MR. BARTH: Mr. Chairman, I would couch this in
3 more legal terms different from the power company. There
4 is no showing or no groundwork laid that Mr. Pratt would
5 impeach.

6 I could somehow understand if he does impeach
7 it may be relevant, but we have to have some kind of
8 groundwork. Has he previously made statements to Ms. Kosik.
9 Has he -- does she have notes from them? Has she interviewed
10 him?

11 We've got to have some kind of groundwork
12 laid to show that he might impeach. To say say that
13 he could is fine. I mean, I'm ready to impeach anybody, but
14 that's not groundwork.

15 CHAIRMAN BECHHOEFER: Mr. Pratt, I understand,
16 was at the two meetings that were talked about.

17 MR. BARTH: Sir, I'm aware --

18 CHAIRMAN BECHHOEFER: And we have a direct
19 conflict of testimony now, as I understand it, with respect --

20 MR. BARTH: I don't care what meeting s he was
21 at. I think you have to have someone state: I heard
22 Mr. Pratt state X, Y, Z.

23 MR. WOLIVER: I have to take exception to what
24 Mr. Barth has stated. In the interest of having a full
25 record -- and there does seem to be a real concern here, a

david5

1 real contradiction to what we heard in the last two days --
2 I think it would be worth our while to bring in Mr. Pratt. I
3 think potentially from what I've heard here, it could lend
4 a lot to this evidentiary proceeding.

5 (Board conferring.)

6 MR. HEILE: Mr. Chairman, for the record, I'd
7 like to say that the city would sort of like to know
8 what Mr. Pratt has to say in light of the testimony heard
9 today.

10 CHAIRMAN BECHHOEFER: Does Miami Valley -- either
11 Ms. Kosik or its witness, Mr. Hofstadter -- know whether
12 Mr. Pratt has any knowledge or whether Mr. Pratt has
13 expressed any opinions about the two meetings, particularly
14 the two meetings to which he was -- to which reference was
15 made and about which considerable testimony has come in?

16 MS. KOSIK: I'm not sure what you're asking me.

17 CHAIRMAN BECHHOEFER: Well, I'm asking you,
18 are you or your witness, either one of you, your statement
19 of general relevance does not have to be made under oath; so --

20 MS. KOSIK: Mr. Hofstadter has not communicated
21 with Mr. Pratt about those particular meetings; since
22 then he's had no reason to.

23 However, it's also come out in testimony that
24 Mr. Pratt worked with Mr. Hofstadter for the entire time
25 Mr. Hofstadter was at Husky, and they wereworking on quality

326 310

david6

1 control programs regarding the qualification of welders,
2 again which is what we've been talking about for two days
3 now.

4 MR. WETTERHAHN: Mr. Chairman, this is not surprise
5 information to the Miami Valley Power Project. The witness
6 has been theirs for a number of months. Mr. Hofstadter
7 wrote the letter last year some time. If he wanted to
8 contact Mr. Pratt before this time, it's very
9 well and good, but we're now in the middle of a hearing, and
10 it takes some showing in order to get the subpoena issued
11 in the middle of this hearing.

12 I think that's the problem here. This is not
13 discovery. This shouldn't be permitted to be used as a
14 fishing expedition.

15 MS. KOSIK: We requested that Mr. Pratt come
16 in as a rebuttal witness as a result of what Mr. Banta
17 testified to yesterday.

18 (Board conferring.)

19 MR. WETTERHAHN: Mr. Chairman, to address that
20 last point, Mr. Banta didn't testify to any such meeting,
21 and I don't believe that was even brought up on cross
22 examination. It's a new matter here.

23 How can Mr. Pratt be now characterized as a
24 rebuttal witness?

25 (Board conferring.)

david7

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

CHAIRMAN BECHHOEFER: I'm not sure whether I would regard Mr. Pratt as a rebuttal witness, but I do think that a showing of general relevance has been made, and it does not appear that this will cause any undue delay. So

I believe the fact that Mr. Pratt -- discovery might have been sought by him and it would not be improper for us to deny bringing him in here.

I think a sufficient showing of general relevance has been made, and I will sign both subpoenas.

Now, Mr. Conner, what -- why don't you ask your four questions.

MR. CONNER: I want to note the time of these subpoenas. We are certainly going to object to calling somebody in as a pseudo-rebuttal witness and whatever, which would in any way interfere with getting in our evidence in chief from contentions 15 and 16 or keeping 14, if it drags on that long.

So I don't want anybody to think that having mentioned this time on the subpoena has made the applicant acquiescent on that schedule.

MR. FELDMAN: Your Honor, it was my impression that these rebuttal witnesses would come at the end of the presentation on contention 14 and not all the way until the end.

Of course --

326 312

david8

1 CHAIRMAN BECHHOEFER: That's certainly right. I
2 think Mr. Conner is worrying about the effects of adding other
3 witnesses, what that might do in the--

4 MR. FELDMAN: Thank you.

5 MR. CONNER: If the witness will take the stand,
6 I would be glad to ask the questions.

7 BY MR. CONNER:

8 Q Mr. Hofstadter, I'd appreciate it if you'd
9 get as close as you can. You're hard to hear. Thank you.

10 All right, now, Mr. Hofstadter, you stated in
11 terms of welders qualifying for tests -- I think you said
12 it averaged 30 man hours per man per test. Can you name
13 one welder who took 160 hours that you mentioned to qualify?

14 A Do you mean 160 hours to pass five tests, is that
15 what you're saying?

16 Q You said that -- well, specifically you were
17 talking about at that point taking the eight tests to be
18 fully certified, and you said that would take -- you said
19 somebody took 160 hours to qualify on that.

20 A I don't recall those figures, but go ahead.

21 Q Okay, are you saying that nobody took 160 hours
22 to qualify on all eight tests?

23 A Well, first, I don't think anybody will say --
24 as of the date I left there, nobody had passed all eight tests
25 to my knowledge.

david?

1 Q Then in other words, this is a hypothetical
2 situation.

3 A Right, and if I multiplied it, it would have
4 been 160 -- wouldn't have been 160. It would
5 have been eight times 30, which would be 240.

6 Q Didn't you say something about one man taking about
7 200 hours to qualify for the test?

8 A No, I didn't say that. I said one man one time
9 worked 40 straight hours, continuous straight hours to pass
10 one test.

11 Q Was he taking the test or was he practicing and
12 then taking the test?

13 A He was practicing and then taking the test and
14 then practicing and taking the test. You know, it was
15 a little of that all day long, day after day.

16 Q Is there anything wrong with that?

17 A Yes, sir. That's not the right way to do it.

18 Q Who was that man?

19 A That man was Marvin Brock.

20 Q And what test was he taking?

21 A It was a TIG test.

22 Q Isn't that the same person -- this was a TIG
23 test. You don't remember vertical or horizontal?

24 A No.

25 Q Was it on steel or aluminum?

david10

1 A The best I can recall, it was TIG steel.

2 Q All right, now you mentioned Mr. Uhrig; the
3 purport of your testimony in paragraph 10 indicates that
4 you called Mr. Uhrig before you called Mr. Spievack of
5 the trade school --

6 A I'm reasonably sure that is right, because I
7 think we got Mr. Spievack's name through Mr.
8 Uhrig.

9 Q Okay, in your examination by Mr. Woliver, I
10 think you said Mr. Uhrig came out to the plant?

11 A Yes, sir, he did.

12 Q So -- is that right?

13 A Yes, sir, he did.

14 Q Did he come out before or after Mr. Spievack?

15 A The best I can recall it, I think he came out
16 before -- he came out to the plant many times, and I would
17 think that he came out, we'll say, at our request before
18 Mr. Spievack came.

19 Q And then you have no idea how much time interval
20 there was between Mr. Uhrig's visit and Mr. Spievack's
21 visit regarding this -- your testimony --

22 A It would be a relatively short period of time;
23 we'll say within three days.

24 Q Were they there together?

25 A What?

326 315

davidll

1 Q Were they there together?

2 A No, sir. No, sir, Mr. Spievack was there by
3 himself.

4 Q You're sure Mr. Spievack -- Mr. Uhrig was there
5 before Mr. Spievack in 1974?

6 A Lick I told you, he came and he was in practically
7 every month.

8 Q With regard to the matter of your testimony here,
9 that's more or less about the Zimmer cable trays --

10 A To the best I can recall, Mr. Uhrig was in first
11 and Mr. Uhrig recommended that we contact Mr. Spievack which
12 we did and then Mr. Spievack came out.

13 MR. BARTH: Your Honor, we hate to intexrupt.
14 We've come through more than four questions, and the
15 airplanes will not wait.

16 MR. CONNER: Well, four areas.

17 CHAIRMAN BECHHOEFER: Well, we do have to get
18 going.

19 MR. CONNER: Sometimes one has to tug to
20 pull one tooth.

21 MR. WOLIVER: Your Honor, we also have some
22 other preliminary matters, procedural matters that should
23 be covered before we close.

24 CHAIRMAN BECHHOEFER: Well, I think we won't get
25 to them. They'll have to wait if they don't relate to

1
2 david12

this particular contention.

3 BY MR. CONNER:

4 Q Mr. Witness, you referred to the training of
5 inspectors; isn't it a fact that C. Duncan was hired as
6 a fully qualified QA engineer, formerly with GE, to handle
7 this job for Husky and has been charge of that training
8 program ever since 1974?

9 A That is right because in fact I was the one
10 who hired Mr. Duncan. I don't know how that would change
11 anything previous -- I don't remember that being asked
12 before.

13 Q All right, do the insides -- you talked about
14 the inside radius of three piece side rails used at Zimmer
15 being of 12 to 48 inches; is that correct?

16 A What? No, no, oh, no, I didn't say that.
17 The question -- somebody asked the question what range
18 of vertical fittings do we have on our -- and I said we
19 make them in the range of 12 inches to 48 inches.

20 Q Do you know --

21 A I didn't say that was what was at Zimmer.

22 Q Do you know what is at Zimmer?

23 A Not specifically, no.

24 Q One quick one. How does the three piece weld
25 of the type you are describing break?

A How does it break? It breaks the same as any

326 317

david13

1 other weld would break.

2 Q Is that true of the welds in such pieces at
3 Zimmer?

4 A It could be true.

5 Q Well, is it true for the welds at Zimmer, the
6 type of welds used at Zimmer?

7 A That they could break?

8 Q In the way you described.

9 A It could break, yes, sir.

10 MR. CONNER: We'll stop the cross examination
11 now and resume it on Tuesday morning.

12 MR. BARTH: 9:00 o'clock

13 CHAIRMAN BECHHOEFER: 9:00 o'clock, Tuesday.

14 (Whereupon, at 4:07 p.m., the hearing was recessed
15 to reconvene at 9:00 o'clock a.m., June 27, 1979.)
16
17
18
19
20
21
22
23
24
25

326 310