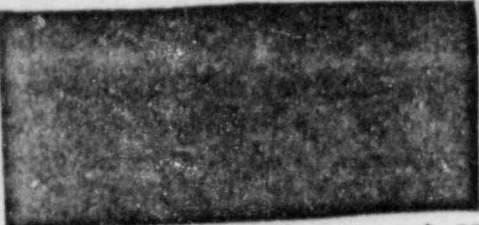


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As a result of a recent article in the Fort Worth Star-Telegram regarding construction practices at the nuclear plant at Comanche Peak, this office has been attempting to contact you.

We would request that you call this office collect (817) 860-8100 during our normal work day hours of Monday-Friday, 7:15 a.m. to 4:00 p.m. and ask for T. F. Westerman or me.

Your cooperation in contacting us would be greatly appreciated.

Sincerely,

Original signed by
G. L. Madsen, Chief
Reactor Project Branch 1

FOIA-85-59

(CI)

RPS-A
TWesterman/dsm
2/14/83

RPB1
GMadsen
2/14/83

DRRP&EP/RTV
JGagliardi
2/15/83

READING FILE COPY

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PDR FOIA
GARDEB5-59 PDR

1 MR. GRIFFIN: I may have to call you or we may
2 have to get one of the inspectors to call you, whoever
3 addresses some of these things that you have raised today.
4 We may have to ask you some more questions.

5 ~~_____~~ Okay. On this statement we
6 sent in there about the ~~torquing of the nuts and the~~
7 ~~member that designed the hanger intentionally wrong~~ so he
8 could see where they had been checking while he designed
9 the hangers, is there any way we can get him to show you
10 all these areas do you think?

11 MR. GRIFFIN: What is his name?

12 ~~_____~~ Well, I don't want to bring no
13 names up. He said he didn't want to go to no hearing, but
14 he would like to take you all down and show you. He would
15 like to have a showing. He says he knows about them
16 ~~standing on the and where they best place to use a sledge~~
17 ~~hammer and caved the side in on pipe more than half inch~~
18 and stuff like that.

19 MS. ELLIS: You can tell him off the record.

20 (Whereupon, a short recess was taken.)

21 MR. HERR: Back on the record.

22 ~~_____~~ All right, do you want to talk
23 about the concrete? I think you already looked at Mr.

24 ~~_____ statement about the concrete where they used reject~~
25 ~~material from the concrete pillars.~~

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FOIA-85-59
C/8

2a2

1 [REDACTED] e, [REDACTED] t, [REDACTED] n, and

2 [REDACTED]

3 A VOICE: [REDACTED]

4 JUDGE BLOCH: Excuse me.

5 [REDACTED]: First of all, for me, the reason
6 that I've been interested in this for about the last six
7 years is because --

8 JUDGE BLOCH: You actually may be more
9 comfortable sitting.

10 [REDACTED] I'm really nervous.

11 JUDGE BLOCH: You may relax if you sit a little
12 bit.

13 [REDACTED] Okay.

14 I have [REDACTED] children and being a [REDACTED]
15 always prompts me to do things for their future, and that
16 is why after the last five years I've been involved, and
17 I've read and I've studied but I'm not an expert. But I
18 believe that I counterbalance a lot of the experts, and
19 I believe that my cause is a just cause, and I may not
20 use professional terms. So pardon that.

21 It's like a lot of things I have to say have
22 been said and will probably be said again, and that is
23 why it amazes me, because it always is very repetitious,
24 because it is the same thing. People that care and
25 people that learn are going to say the same thing over

FOIA-85-59

(C14)

AC-35

1 and over again, and I've said it before, and I've sat here
2 in front of all these people before and I've said it, and
3 I've heard other people saying it.

4 I think we have to keep saying it: It is
5 really the only hope we have, and I'll say it some more.
6 All the same things, the construction faults.

7 I remember when the concrete pads were poured
8 and the papers were full of that. They were poured during
9 freezing weather and they were never done right. All
10 the way from fthat to the welds, to the cracked turbine,
11 everything, on and on and on. It does tend to make one
12 nervous.

13 And I know a lot of them will be fixed, or won't
14 be fixed, but it is such a compounding problem that it
15 is hard to believe that every little detail that we have
16 read about for years and years and years and years could
17 be fixed fine. I hope so. You know, I really do hope
18 so if it goes on line.

19 But it is such an amazingly dangerous thing to
20 try and contain anyway, radioactivity.

21 One of the byproducts of fission is plutonium,
22 and it's half life is 25,000 years. You know, that
23 is pretty astounding, to try, we as humans, to
24 contain something like that.

25 And the deadly waste -- I guess at this point,

AC-35

1 the last I know of, is to be stored on-site, because there
2 is no other place to store it. That means anywhere from
3 20 to 40 to 50 to 80 miles from our homes, this will just
4 build up and build up and build up on-site, and there is
5 no safe means of disposal, none. And I don't think
6 there ever will be.

7 So, we are going to have it in Texas now. At
8 this point we are a nuclear-free state. Texas really is
9 a growing state. Here we are. We are in the middle of
10 it. We are the next New York City, or the next Olivetti,
11 and we are on the brink rightnow. We are not nuclear.
12 We don't have to go nuclear. I know that we've got
13 millions and millions of dollars in it, but right now
14 we could stop. It is possible. We are not totally
15 made of money. That is not everything, is money. We
16 could stop right now.

17 You know, we could do like New England is doing
18 and try small hydro plants. We could do anything. We
19 have the engineering, we have the brains. Do we want to
20 go ahead with this?

21 All and all, I really feel like Comanche Peak
22 is an environmental and financial white elephant. The
23 electrical usage is down now. It is not like it was
24 when we started building years ago. And we are either
25 going to have to operate it under peak capacity or we are

AC-35:

1 going to have excess generating capacity, both of which
2 is a waste. The cost of maintaining of such a mammoth,
3 dangerous plant, let alone insurance costs, which is
4 questionable, decommissioning, which is a huge cost, and
5 storage of waste is so uneconomical in these days and
6 times that I and many others, a lot more than are here,
7 really feel that this plant should not go on line.

8 And another thing that I think we have failed
9 to look at is in the long run, and that is what we have
10 to think of, is in the long run. It is not just for right
11 now. Maybe it will work for right now. But in the
12 long run, that is our future. We can't just do the
13 short run. And in the long run, it would be safer if
14 Comanche Peak was not turned on.

15 I think if I was a shareholder, I would be
16 kind of nervous. But I'm not a shareholder. I'm just
17 a citizen. Maybe I don't have the same interest as a
18 shareholder or as an official in Texas Utilities. But
19 I have a big interest. [REDACTED] And that is a
20 big interest. I want to protect that, and I want to have
21 a say in that. And by not sitting up here and saying what
22 I need to say, then I'm condoning that.

23 That's about all I have to say.

24 JUDGE BLOCH: Thank you, [REDACTED].

25 I would just like to make a brief inquiry.

AC-35

AC-35

1 I hadn't heard about any concrete pours in frozen
2 weather. Is that something that happened? Is it something
3 to be concerned about? Does the Staff happen to know
4 anything about that?

5 A VOICE: Yes, it happened.

6 JUDGE BLOCH: I'm sorry. We have no evidence
7 on it. I don't believe we have evidence on it.

8 A VOICE: It was in the newspapers when it
9 happened.

10 A VOICE: There are IE reports on that. The
11 NRC wrote up a violation report.

12 JUDGE BLOCH: Is it in our records?

13 Thank you very much.

14 [REDACTED]: Thank you.

15 JUDGE BLOCH: [REDACTED]

16 Is that Mr. or Mrs.?

17 [REDACTED]

18 I want to first of all express my appreciation
19 to you for scheduling this meeting. I know that it is a
20 very busy week for you with the licensing hearings
21 going on, and what we are saying here tonight has
22 relatively little weight in whether or not that Comanche
23 Peak Nuclear Power Plant is licensed. But I also want to
24 express my frustration at the limited nature of
25 licensing hearings for nuclear power plants as a whole.

1 having. Then think of our children and their children and
2 their children's children. It is they who must live with
3 the consequences of our destructive short-sightedness. We
4 must stop licensing of the nuclear power plant, Comanche
5 Peak.

6 (Applause.)

7 JUDGE BLOCH: Thank you.

8 [REDACTED]
9 [REDACTED] My name is [REDACTED]
10 [REDACTED] and I live in southeast Forth Worth. We are
11 about 30 miles from the plant. And I, too, have two
12 children, and I came here tonight with a little something
13 prepared, but it has all been said before me, very eloquently.
14

15 All of my concerns, everything that I feel as
16 a mother and as a member of the human race has been
17 said, and I urge the Board to please deny the license
18 to operate Comanche Peak.

19 (Applause.)

20 JUDGE BLOCH: Thank you.

21 [REDACTED]
22 [REDACTED], before you speak, I would like
23 to list the following speakers so they can be available.
24 I hope you don't mind.

25 [REDACTED] [REDACTED], [REDACTED],
[REDACTED], [REDACTED] and

AC-35

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[redacted] in that order.

Please begin. If you do come up, please do it unostentatiously so that we don't interrupt the speaker.

[redacted] Thank you. My name is [redacted]
I am a resident of this community, [redacted]

[redacted] I'm also a member of Citizens for Fair Utility Regulation.

We were one of the original intervenors in this proceeding. We had to drop out because of a lack of funds. However, it is interesting to me that tonight just for one brief, shining moment, this Board was able to see the NRC at work. When you ask about the concrete that had been poured during freezing temperatures, and I believe that was in 1974 -- I could be wrong about the year -- however, when you requested an answer from the audience as to whether that had actually occurred, you got an answer from a member of the public. The NRC did not respond. They did not when you asked if there was an T&E report. But I think to me, having been in this process as long as I have, since 1978 or '79 -- I can't even remember now -- this has been our biggest problem, and this is why the citizens of this community are so frustrated, because the NRC has not done its job. I don't fault Texas Utilities nearly as much as I fault the NRC. But the evidence that will deny this

AC-35

1 plant a license is in the NRC records. It is there,
2 by their own hands, by their own inspectors. It is
3 in the I&E reports. And gentlemen, if you will
4 study, and I don't envy you that job -- it is a massive
5 mound of paper, and the records must be enormous. I
6 wouldn't even begin to guess how much paper work has been
7 generated by these hearings.

8 But if you will study the records, you cannot
9 issue this plant a license, not in good conscious and
10 not by the law. If you are going to follow the law -- then
11 the law has been violated so many times, and the NRC has
12 allowed those violations to go by so many times, that
13 any member of good conscious will deny this plant a
14 license.

15 You want specifics. I urge you to go back
16 to the original records of our group, along with Case and
17 Acorn, which was another group that had to drop out. Look
18 at CEFER's first document, where we listed our
19 contentions, and I ask you to read the contentions
20 that we wrote in our own hand before they were rewritten
21 by Mr. Reynolds and the NRC.

22 The issue of the concrete is there; the date
23 and the number, the I&E report number is in that document.
24 There are other specifics that I can give you, and I would
25 like to be able to -- by the way, I heard about this

AC-35

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~~84-7~~ 3/7/84 A-4
65

AC-25

1 [REDACTED] Okay, here is one here. This
2 is kind of funny. My foreman, [REDACTED], when he was
3 working on his tools like three or four years ago, he
4 loaned a pipe fitter a crowbar and the pipe fitter dropped
5 it down in a pipe in the reactor core. Well, I tried for
6 two years to get it out, and they always said well, we
7 will have a pipe journeyman down there and you show him
8 where it is at. I would get down there and well, [REDACTED] we
9 are really busy today, and this went on for a couple of
10 years.

11 So I finally told them, and they sent me to
12 Westinghouse and Westinghouse said well, in the end we are
13 going to send a little TV camera down in there and we are
14 going to look all around. So that solved that problem.

15 Okay, the stainless steel liner hollow places.
16 We was making a pour and I was down there making sure
17 nobody stepped on the embed, and this is around the
18 reactor core and the floor and everything and the
19 stainless steel liner. I had a hammer in my belt and I
20 just pulled it off and laid it up on the bracing, the
21 stiffeners in there and when it hit the wall it is real
22 hollow in there. So I tapped and they had already poured
23 the concrete above this area.

24 So I called [REDACTED] and told him we have got a
25 problem, that we have got a hollow place in the concrete

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FOIA-85-59

(C26)

1 wall. well, he brought I think [REDACTED] down there.
2 well, they send this colored guy, [REDACTED] down there, the
3 general foreman over concrete and he sends the foreman
4 down there. Well, they tell me you stay with them until
5 you get the problem solved, or if I can help them in any
6 way to do it.

7 So [REDACTED] tells this foreman, he says, now I
8 am going to go up there and we are going to vibrate this
9 area for 45 minutes and they are still pouring and it is
10 still wet and you don't say what it is. Just say either it
11 is there or it is not there.

12 So he goes and boy they vibrate and they
13 vibrate and they vibrate. So he says how is it, and he
14 says no, still there. So he says we are going to do it 45
15 more minutes. So this goes on again, and of course your
16 concrete, they are getting higher up and it is getting
17 harder.

18 So he hollers down there again now is it, and
19 he says no, it is still there. Well, he says we are going
20 to do it for an hour. So they did it for an hour. He
21 hollered down and said how is it? He said it is still
22 there. So he says well, it is that old Japanese metal,
23 that is what it is, you know. So that solved that problem.

24 MR. HERR: What year is this?

25 [REDACTED] You can look at the concrete

AC-25

1 pour. This is in Unit 1 I think, the liner, the year when
2 they made the next pour from the floor up I think it was.
3 You know, you made it up to a floor and you would let it
4 cure and then you made your next pour and then a next.

5 MS. ELLIS: This was Unit 1 around the reactor?

6 [REDACTED] I think it was Unit 1. I have
7 got the area here marked out where it was at.

8 (Pause while [REDACTED] looks through his
9 papers.)

10 [REDACTED] well, it was right over here
11 on the wall anyway. I guess it is probably six foot off
12 the floor. You can mark it right in this area here. Put
13 Unit 1. I am pretty sure it was Unit 1. You have got the
14 elevation. Well, I have got it marked right here.

15 See, you have got the little round end down
16 there. That is at a certain elevation. Then this is your
17 core area where your reactor sits down here. Then your
18 next drop down where like your lower internals go in here.
19 It is in that area, right up there on the wall. But you
20 can take a hammer and tap on the wall until you find a
21 hollow place. I am pretty sure that is the one it was.

22 MR. HERR: The elevation?

23 [REDACTED] It is 834 and add 8 to that,
24 842. Let's just go with 842 for the neck of it.

25 I was standing up on the bracing and I could

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AC-25

1 reach it. So when you are standing on the floor it should
2 be from the shoulder up, somewhere along that area. But
3 it is real nollow and you can find it.

4 [REDACTED] Exhibit [REDACTED] follows:)
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AC-25

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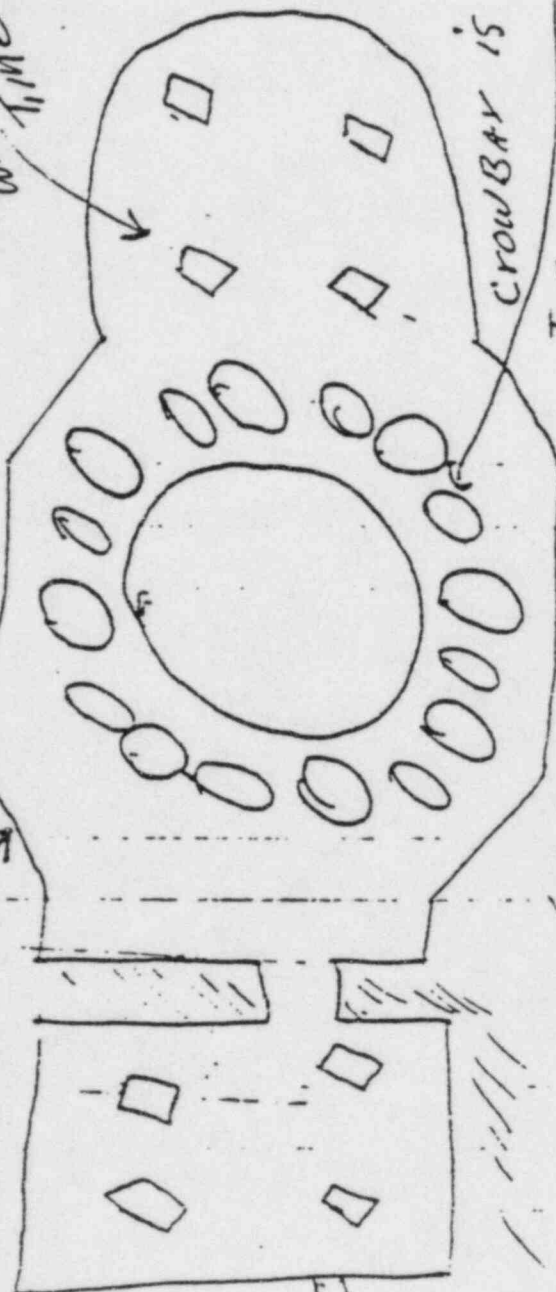
AC-25

stainless steel liner
Hollow

UNIT 1

concrete
NOT AROUND
WAS TO CURE
time

#1842



crowbar is in pipe

I try two years to get
some one to get it out
with NO EXCESS

Hollow in concrete
Behind stainless

steel
liner
wall

This is for Mr. [redacted]

April 10, 1979

0645 hrs

Subject: Interview With [redacted]

Place & Time:

Jose's Restaurant-Granbury, Texas

1835 hrs to 2000 hrs.

April 9, 1979

Interviewers:

W.A. Crossman

R.C. Stewart

R.G. Taylor



FOIA-85-59

(C67)

Preliminary Statement By Interviewee.

1. The reporter from the Star-Telegram had visited him in Nashville, Tenn. and has called several times since on specific points. The reporter promised not to use his name in print in any article growing out of the interviews. The interviewee stated that he has been ~~treated~~ ^{threatened} with bodily harm by unidentified persons.
2. The interviewee stated that he had ~~worked~~ ^{worked} for the R.W. Hunt Lab. at CPSES for 6 to 8 months [redacted]

Summary of Allegations;

1. The interviewee stated that equipment used to perform sodium sulfate test of aggregate was unused for several months but stated he had seen equipment used. He remembered the bad odor made by the test. He stated the he asked the "chemist" about not running the test and was told that he, the chemist, didn't often run the test because the results always came out the same. The interviewee stated that the records would make it appear that the test had been performed when it had not. Chemist was identified as [redacted].

THE INTERVIEWEE MARKED THE EQUIPMENT SO THAT HE COULD DETERMINE IF THE EQUIPMENT HAD BEEN USED. HE USED WAX AND STATED THAT IT WAS NOT USED FOR SEVERAL MONTHS (STAR ITEM #2 STATES 3 MONTHS IN EARLY 1976) HE ALSO STATED THAT HE DID THIS TO "GET SOMETHINGS ON R.W. HUNT" TO GET THEM TO INCREASE THE PAY SCALE

2. In regard to a placement of concrete in the Circulating Water Imake Structure, the interviewee stated that he and others had rejected concrete trucks for being over specification limit on time to discharge. [REDACTED] (the then and present B & R concrete superintendent) ordered his people to dump the concrete on the ground and shovel it into the formwork, which was done. Interviewee was aware the structure was not safety related.

3. The Hunt Lab cylinder curing ^{room} was poorly run in late 1976 through early 1977, primarily due to poor mainfenance. The cylinders were allowed to dry out.

4. A building area near the unit two containment structure was initially installed upside down due to the inability of the craft personnel to read the blueprints. He stated that there was a "master carpenter" hired who did not know which end of a hammer to use.

5. The unit one basemat was placed so fast that all of the required concrete test were not performed. (Stage item #6)

Additional Information Not Obtained From the Interviewee:

1. The on file records indicated that [REDACTED]

[REDACTED] records examined. [REDACTED]

No cause for termination is stated in

2. The unit 1 containment basement was placed on Feb. 21, 1976 and did consist of approximately 6,600 yrd³ of concrete.

4. FURTHER QUESTIONING REVEALED THAT HE WAS REFERRING TO REINFORCING STEEL INSTALLED IN WALLS UPSIDE DOWN. WHEN ASKED, HE STATED THAT THE PROBLEM WAS CORRECTED.

6. THE INTERVIEWEE WAS QUESTIONED REGARDING HIS EXPERIENCE WITH TESTING OF CONCRETE CYLINDERS. HE STATED THAT HE KNEW OF NO PROBLEMS IN THE CYLINDER TESTING ACTIVITIES.

1 work on site. Now that is what we are interested in
2 finding out.

3 Obviously after you went to Houston you had a
4 lot of difficulty with these people out there and they
5 gave you a hard time as you have already discussed.

6 [REDACTED] I just went into confinement.
7 It weren't a hard time. As a matter of fact, I enjoyed it.
8 I was drawing the same money.

9 MR. GRIFFIN: But what we are trying to find
10 out is who intimidated you or others out there that caused
11 them to perform improperly.

12 [REDACTED] we was pushed to a point where
13 we was not doing it correctly. They always wanted to do a
14 certain amount that is impossible to do, and they don't
15 care how you do it, but they want it done.

16 MR. HERR: Who is they?

17 [REDACTED] and I am sure [REDACTED]
18 [REDACTED] is the one that pushes [REDACTED] Just like QC, and I
19 can give you a real good example.

20 When I was first hired in there in 1974 or
21 1975 ~~we was doing some Q work on some sneer bars that goes~~
22 ~~around your containment.~~ It was '75. We was using rebar
23 and we was welding flat bar to it. Well, when the rebar
24 come in, and it is Q or QC, and ~~they go out there~~ and they
25 ~~check it and they verify the heat number and all that~~

FOIA-85-59

(C69)

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1 stuff. Well, when they get all the proper paperwork in and
2 get it documented, then they release it to us. How do we
3 know it is released? They go out and they paid a blue end
4 on it.

5 Well, we run out of rebar and here come a
6 truckload of rebar. It came in. ~~We started cutting it up~~
7 ~~and we starting using~~ it. So here come QC. QC and [REDACTED]
8 continuously had fights because [REDACTED] didn't want to go
9 by their book and they was always bumping heads on it.

10 Here come the QC. He just walks in there and
11 he puts red tags on all the stuff that is not right. Well,
12 [REDACTED] jumps in there and he just got on [REDACTED] butt. So
13 he called [REDACTED]. So here come [REDACTED]
14 down there, which is a little guy and this QC kid is real
15 big. So they started naving it out, and he told this QC
16 man, he said you ain't nothing but a goddamn overgrown
17 punk with too much responsibility, and he said I ought to
18 just knock your goddamn brains out and he draws back on
19 him and he pushed him around for 30 minutes cussing him
20 because the guy was just doing his work and he was the
21 superintendent. Now that is typical.

22 MR. GRIFFIN: Did the QC inspector pull those
23 tags?

24 [REDACTED] He had his people hurry up
25 with ~~what they had to do and they pulled the tags off.~~

1 however, ~~we did not stop working and we continued to work~~
2 on it.

3 MR. GRIFFIN: So the QC inspector signed off on
4 those, on the work?

5 Yes, eventually he signed it
6 off.

7 MR. HERR: That is after he finished his
8 inspection? He hurried up his inspection.

9 : Well, he was getting his ass
10 eat out. He had a whole bunch of people there painting the
11 ends of it. I don't know where he got them. We didn't even
12 stop. We just kept on working. We ~~was supposed to have~~
13 ~~stopped until they made sure we was using the right heat~~
14 ~~number and all that stuff.~~

15 MR. GRIFFIN: What about this work you were
16 talking about like the condenser box a while ago? Weren't
17 there QC people around to inspect your work on that?

18 : That is non-Q on this job, but
19 on other jobs it is Q like South Texas.

20 MR. GRIFFIN: Who was the QC inspector back in
21 '75?

22
23 MR. GRIFFIN: Is he still out there?

24 : No.

25 MS. ELLIS: You don't have any idea where he is

1 now?

2 [REDACTED] No. Another good example was
3 setting the condensers. The BOP inspector come down and
4 checked the welds on it. He rejected all the welds. We had
5 a rig hooked up. He even rejected the factor welds. [REDACTED]

6 [REDACTED] He said have you got a condenser in that hole
7 yet? I go no, I said it don't look like we are going to do
8 it either because a BOP inspector just turned down all the
9 welds. Boy he started cussing. He said I want that son of
10 a bitch's name and badge number.

11 So he started making calls. So I dropped back
12 to the guy and he just bought it off sitting in his
13 office. Well, as a matter of fact, it got to a point where
14 they wouldn't even come and look at none of the welds.
15 They would just buy them off.

16 MR. GRIFFIN: Who is this guy again that bought
17 it off?

18 [REDACTED] I don't know his name. He is
19 still out there. [REDACTED] I think it the last name.

20 MR. GRIFFIN: [REDACTED]

21 [REDACTED] Yes. He got run off of BOP and
22 I think he ended up in QC. I think he name was [REDACTED]

23 MR. HERR: What year was that?

24 [REDACTED] This was probably '79 or '80
25 when we was setting Unit 2 condensers. Condenser A was

AGC-1284-006 Testimony A-24

35

AGC-12
(AC-37)

1 work on site. Now that is what we are interested in
2 finding out.

3 Obviously after you went to Houston you had a
4 lot of difficulty with these people out there and they
5 gave you a hard time as you have already discussed.

6 [REDACTED]: I just went into confinement.
7 It weren't a hard time. As a matter of fact, I enjoyed it.
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18 [REDACTED] is the one that pushes [REDACTED]. Just like QC, and I
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20 When I was first hired in there in 1974 or
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22 around your containment. It was '75. We was using rebar
23 and we was welding flat bar to it. well, when the rebar
24 come in, and it is Q or QC, and they go out there and they
25 check it, and they verify the heat number and all this

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1 stuff. Well, when they get all the proper paperwork in and
2 get it documented, then they release it to us. How do we
3 know it is released? They go out and they paid a blue end
4 on it.

5 Well, we run out of rebar and here come a
6 truckload of rebar. It came in. We started cutting it up
7 and we starting using it. So here come QC. QC and [REDACTED]
8 continuously had fights because [REDACTED] didn't want to go
9 by their book and they was always bumping heads on it.

10 Here come the QC. He just walks in there and
11 ne puts red tags on all the stuff tnat is not right. Well,
12 [REDACTED] jumps in tthere and he just got on [REDACTED] butt. So
13 he called [REDACTED] So here come [REDACTED]
14 down there, which is a little guy and this QC kid is real
15 big. So they started naving it out, and ne told this QC
16 man, he said you ain't nothing but a goddamn overgrown
17 punk with too much responsibility, and he said I ought to
18 just knock your goddamn brains out and he draws back on
19 him and he pushed him around for 30 minutes cussing him
20 because the guy was just doing his work and he was the
21 superintendent. Now that is typical.

22 MR. GRIFFIN: Did the QC inspector pull those
23 tags?

24 [REDACTED] He had his people hurry up
25 with what they had to do and they pulled the tags off.

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1 However, we did not stop working and we continued to work
2 on it.

3 MR. GRIFFIN: So the QC inspector signed off on
4 those, on the work?

5 [REDACTED]: Yes, eventually he signed it
6 off.

7 MR. HERR: That is after he finished his
8 inspection? He hurried up his inspection.

9 [REDACTED] Well, he was getting his ass
10 eat out. He had a whole bunch of people there painting the
11 ends of it. I don't know where he got them. We didn't even
12 stop. We just kept on working. We was supposed to have
13 stopped until they made sure we was using the right heat
14 number and all that stuff.

15 MR. GRIFFIN: What about this work you were
16 talking about like the condenser box a while ago? Weren't
17 there QC people around to inspect your work on that?

18 [REDACTED] That is non-Q on this job, but
19 on other jobs it is Q like South Texas.

20 MR. GRIFFIN: Who was the QC inspector back in
21 '75?

22 [REDACTED] ?
23 MR. GRIFFIN: Is he still out there?

24 [REDACTED].

25 MS. ELLIS: You don't have any idea where he is

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A-7
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took place, this buttering?

[REDACTED] That is on one of the elbows I think.

MR. HERR: The elbows of reactor one?

[REDACTED] Reactor one. Reactor two was still bits and pieces when I was there.

MR. HERR: On how many elbows? We have a lot of elbows.

[REDACTED] I realize that. You are going to have to talk to the welder on that.

MR. GRIFFIN: Do you know who the welder was?

[REDACTED] I don't know his name, no. You need to start with Juanita Ellis.

[REDACTED]: If we could identify which elbow or which welder and he could identify which elbow then we could go look at this, not us, but somebody else could.

MR. HERR: Do you think Juanita Ellis would have his name?

[REDACTED] She could get ahold of [REDACTED] and they could eventually come up with it.

There was another guy that told me that he witnessed when Brown and Root overexcavated underneath the No. 1 containment. Did you hear about that? They dug the hole too deep. It was supposed to go down to a certain elevation before they poured the first concrete mat. They

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1 made it too deep. Oh, my gosh, it is too deep, you know.
2 So they just threw the rocks back in the hole and poured
3 concrete over it. So there is no telling what is under
4 that. You know, there could be a Carlsbad Cavern under
5 that thing.

6 MR. GRIFFIN: Don't they do seismic studies
7 before they pour concrete?

8 [REDACTED] Before you say?

9 MR. GRIFFIN: Yes.

10 [REDACTED] Well, not if they know they are
11 going to flunk them they are not going to do any seismic
12 studies.

13 MR. GRIFFIN: I mean before they select the
14 site for a nuclear plant don't they do seismic studies?

15 [REDACTED] But this was a Carlsbad Cavern of
16 their own manufacture. You don't understand. You are
17 supposed to pour this on top of bedrock, but they dug down
18 too deep in the bedrock.

19 MR. GRIFFIN: Do you know how far too deep?

20 [REDACTED] Six or eight feet I think. They
21 just threw the crap back in the hole and brought it up to
22 the right elevation and then they poured the concrete on
23 top of it. That is no guarantee that the concrete is going
24 to go all the way to the bottom.

25 MR. GRIFFIN: I see.

SUBJECT: CONTACT WITH ALLEGER - CPSES

7-10-61

category B

On April 5, 1979, R. C. Stewart and R. E. Hall met with [REDACTED] in a restaurant in Arlington. [REDACTED] was a quoted source in the [REDACTED] article regarding concrete testing inadequacies at the CPSES construction site. [REDACTED] was an employee of R. W. Hunt, the concrete [REDACTED]

[REDACTED] He was dismissed by R. W. Hunt for alleged falsification of records; however, he contends that his dismissal was due to his attempt to pressure R. W. Hunt into a pay increase.

Allegations:

1. He substantiated the FWS-T article's allegation that for the first 3-4 weeks of his employment, while he was working the second shift under [REDACTED]' supervision, he was encouraged to "dry lab" the gradation tests to eliminate the time consuming oven drying process. He indicated that this had also been the practice of [REDACTED], his predecessor on this testing. After 3-4 weeks, [REDACTED] was replaced as foreman by [REDACTED], who insisted that the test be performed properly. This change occurred in about mid-February 1976 according to [REDACTED]. [REDACTED] indicated that it would not be apparent from records review which tests were performed and which were "dry labbed." These tests were aggregate tests of gradation performed on sample^s accumulated during the day shift and tested on the second shift. The^s samples included supplier source, production run and stockpile source and aggregate.

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2. From reports, and from one technician's personal observation (date unknown, [redacted] indicated that cylinders were being broken with the test machine brake (load rate limiter) bypassed. If break strengths were observed, they were recorded, if not, in tolerance entries were made. If broken cylinders yielded low strength results, rather than attempt to locate spare cylinders, the technician would enter an in-tolerance value. This practice reportedly was common from about April 1976, until early 1977 at which time [redacted] and [redacted] were assigned to break cylinders. [redacted] felt they did a conscientious job.

3. Overall morale of the R. W. Hunt QC technicians was reported to be very poor due to pay inequities. [redacted] felt that this resulted in lack of interest and slovenly work by the co-workers.

4. When he first reported to work he did not possess the education and experience for his job as defined by R. W. Hunt procedures. This has already been an NRC citation and has been resolved (per Stewart).

5. From hearsay [redacted] the reported acceptance of 4-1/4" slump concrete (vs. a 4" allowable) was done at the insistence of a foreman [redacted], to [redacted]. [redacted] was not directly involved.

6. In the summer of 1976, during an all night placement of a slab in the north part of the Auxiliary Building (estimated 3400 cu. yd. pour), R. W. Hunt technicians ([redacted] was included) stopped the placement due to out of tolerance slump and air. The concrete was referred to by [redacted] as "soup." [redacted] indicated that someone named [redacted] (presumably G&H engineer, [redacted]) countersigned the Hunt

rejections and authorized completion of the placement. He indicated that [REDACTED] was another Hunt QC inspector on the placement.

7. He had hearsay of a void in the first lift of the containment. Stewart was aware of the event and its proper disposition.
8. [REDACTED] was very critical of his supervisor, [REDACTED]. He classed him as a poor supervisor and was obviously upset because [REDACTED] had fired him.
9. [REDACTED] was referred to by [REDACTED] as a good, conscientious inspector who "got fed up" with Hunt practices and quit.
10. [REDACTED] also reported, but without details, that [REDACTED] was not performing Cadweld production test samples as required; but was simply reporting data. He thought this involved a timeframe from early spring 1976 till mid-summer 1976. After that time, others were trained for this testing and he wasn't aware of further problems.

AQC-51

APPENDIX

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-445/83-27

Docket: 50-445

Construction Permit: CPPR-126

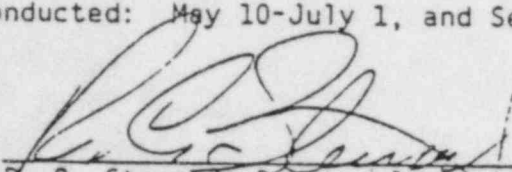
Licensee: Texas Utilities Generating Company (TUGCO)
2001 Bryan Tower
Dallas, Texas 75201

Facility Name: Comanche Peak, Unit 1

Inspection At: Comanche Peak, Unit 1, Glen Rose, Texas

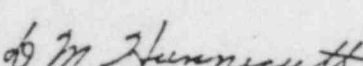
Inspection Conducted: May 10-July 1, and September 9-22, 1983

Inspector:


R. C. Stewart, Reactor Inspector
Reactor Project Section A

9-28-83
Date

Approved:


D. M. Hunnicutt, Chief
Reactor Project Section A

9-28-83
Date

FOIA-85-59

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Inspection Summary

Inspection Conducted May 10-July 1, and September 9-22, 1983
(Report 50-445/83-27)

Areas Inspected: Special, unannounced inspection of alleged improper construction practices expressed by Robert L. Messerly in an affidavit dated February 3, 1983, prepared for Citizens Association for Sound Energy (CASE) and in an interview conducted on April 14, 1983, by members of the NRC Office of Investigations Field Office, Region IV. The inspection involved 120 inspector-hours onsite by one NRC inspector.

Additional information was received from an individual, who requested confidentiality, that a former B&R millwright had drilled holes through rebar without the required engineering approvals. This supplemental inspection involved 10 inspector-hours onsite by one NRC inspector.

Results: Of the seven allegations regarding improper construction practices expressed by Mr. Messerly, five were found to be unsubstantiated. One allegation regarding improper documentation was found to be substantiated, however, the error was properly corrected by the licensee and appears to lack technical merit; and one allegation regarding the posting of NRC Form 3, could neither be refuted nor substantiated, however, it too appears to lack technical merit. No violations or deviations were identified.

Results of Supplemental Inspection

The allegation that unauthorized cutting of rebar during installation of "trolley tracks" in the fuel handling building is considered to be unsubstantiated. No violations or deviations were identified.

DetailsA. Persons ContactedTexas Utilities Services Incorporated (TUSI) Employees

B. G. Scott, Quality Engineering Supervisor
 G. Tanley, General Superintendent
 C. R. Hooton, Lead Civil Engineer
 R. M. Kissinger, Project Civil Engineer
 C. Fleming, Field Engineer

Brown & Root (B&R) Employees

W. Wright, Project Welding Engineer
 B. Hauser, Field Engineering Superintendent
 C. Osborn, Tool Crib Foreman

The NRC inspector also contacted other licensee and contractor employees during the course of the inspection.

Note: Prior to this inspection, separate and independent investigative interviews were conducted by members of the Office of Investigation Field Office, Region IV (see attached Report A4-83-005, dated May 20, 1983).

B. Alleged Improper Construction Practices

The NRC inspector, through an interpretative review of Mr. R. L. Messerly's affidavit, dated February 3, 1983, and his statements during his interview, April 14, 1983, determined that there were seven specifically alleged matters that required a detailed inspection effort to assess their technical merit and/or their potential impact on safety-related systems, component, and structures.

The seven areas of NRC concern which Mr. Messerly alleged to have occurred are summarized as follows:

1. That B&R employees drilled undocumented and unauthorized holes that cut through reinforcing steel and that such drilling and cutting was done at the direction of supervisors. Mr. Messerly provided a copy of a personal diary which, he alleged, reflected undocumented and unauthorized drilling.
2. That one of the main steam lines in Unit 1 was moved using the polar crane, thereby placing the section of pipe line in an unsafe stressed condition.
3. That he had cut through concrete reinforcing steel as directed by work instructions that were not in accordance with the approved method of documentation.

AC-40

4. That tubular hanger/support steel anchor bolt holes were enlarged with a burning torch which he said was unauthorized.
5. That (Richmond) anchor bolts were not perpendicular to concrete surface and, therefore, unacceptable.
6. That stainless steel pipe attachments were welded on piping without an inerting purge.
7. That NRC Form 3, "Notice to Employees" was not posted on three main bulletin boards.

C. Inspection Findings

Allegation 1

1. Discussion

AC-40
Mr. Messerly stated that during his assignment as foreman over the first crew responsible for drilling through concrete and reinforcing steel (rebar) during installation of cable tray and pipe hanger supports, he was ordered by his supervisors to loan out drill bits and/or drill undocumented and unauthorized holes through rebar.

To further support his allegation, Mr. Messerly named B&R employees responsible for the alleged improprieties and those who could substantiate his allegations. ^{1/}

In addition, Mr. Messerly provided the NRC staff a copy of his personal daily diary in which he logged drilling of holes for electric cable trays/hanger supports and rebar cutting details. He stated that this diary also identified holes he drilled, in or through, rebar and concrete without having documentation and authorization.

2. Chronological Findings 1978-1982

In order to determine the magnitude of implication and the resulting findings of Mr. Messerly's allegations.

^{1/} See attached "Assistance to Inspection Report," Report A4-83-005, dated May 20, 1983

inspector during his review of randomly selected "Core Drilling Request Forms" (1978 through 1982).

Construction records indicate that electrical cable tray, conduit hangers, and pipe hanger support installations were initially started in late 1978. This coincides with the formation of the steel fabrication department pipe hanger crew(s), special drilling crew (headed up by Mr. Messerly), and the requisition of the water cooled diamond core drills and motors by the steel fabrication department (of which Mr. Messerly was a member) on September 6, 1978. A record search indicated a Design Change/Design Deviation Authorization 2470, dated September 5, 1978, authorizing rebar cutting for Cable Tray Support No. 597. This was an initial rebar cut made on September 9, 1978, and identified by Mr. Messerly in his personal handwritten diary (see paragraph 6).

AC-40
The primary anchor and fasteners utilized at CPSES for the attachment of cable tray supports, conduit supports, pipe hanger supports, etc., to concrete surfaces are the "Hilti" drilled-in concrete expansion anchor and "Richmond" screw anchor. The Richmond screw anchor is positioned prior to concrete placement, whereas the Hilti requires concrete drilling and placement at the time of component installation (a licensee representative stated, that based on purchase orders, over one million Hilti bolts 1/2" to 1-1/4" in diameter, have been installed to date). Drilled-in expansion bolts are bolts having expansion wedges so arranged that, when placed in a drilled hole and the nut tightened, the wedges are expanded and the bolt is securely anchored.

The most predominant means of drilling holes into concrete for expansion bolts is the use of Hilti power drills, using Hilti carbide masonry bits of the same nominal size as the bolt. This form of drilling does not have the capability to drill through rebar.

In limited access areas where the Hilti power drills cannot be used, a flexible Drillco drive drill with drill press/vacuum base and Drillco water cooled carbide/diamond bits are used. This form of drilling has the capability of drilling through rebar and was restricted to the steel fabrication department special drilling crew (headed by Mr. Messerly from September 1978 through October 1979).

For these two methods of drilling, no authorization is required for Hilti bolt installations (other than an approved hanger support installation "traveler" with its accompanying location drawings). A design change authorization is only required if relocation is beyond the drawing tolerance limits, or if rebar is encountered and requires cutting. Construction quality programs of this nature rely heavily on each individuals personal integrity to adhere to prescribed procedure requirements.

an installed tubular hanger hole having been enlarged by a cutting torch.

Based on the lack of specificity by Mr. Messerly, the lack of corroborative testimony by Messerly's witnesses, interviews by the NRC inspector with cognizant site personnel, and the (limited) examinations of installed hangers, this allegation could not be substantiated.

There were no violations or deviations identified in this area of the inspection.

Allegation 5

1. Discussion

During the interview on April 14, 1983, Mr. Messerly stated that Richmond Insert anchor bolts installed between elevations 905' and 860' in the reactor containment building have not been installed perpendicular to the concrete surfaces and, therefore, are unacceptable. In addition, Mr. Messerly stated, ". . . whatever angle it is, we would drill it at that angle so that it would come through the tube (i.e., tubular steel) and when it comes out the other side of the tube, it comes out as close to center as we could get it."

Mr. Messerly also stated, "Just go out there and pull any . . . studded rod out of there, pull three of them and two of them is [sic] crooked."

2. Conclusion - Allegation 5

During the NRC inspector's onsite follow up of this matter, the inspector found that the B&R Procedure CP-CPM 9.10, "Fabrication of ASME-Related Component Supports," (original issue 12/28/78) is the primary construction installation procedure to be implemented and followed by the hanger installation crews. The "General Fabrication and Installation Requirements," Section 3.3.1.2 "Installation Tolerances," states in part,

"Field Fit Tolerances

"The tolerances discussed above shall be maintained for support fabrication activities. However, if during the installation, the support won't fit, the members may be "field fit" provided the piping and elevation tolerances shown below have been maintained. All other tolerances regarding axial location, alignment, and base plate attachments must be adhered to unless otherwise noted on the drawing."

In addition, Section 3.3.2, states in part,

" . . . Surfaces of bolted parts in contact with the bolt or nut shall have a slope of no more than 1:20 with respect to a plane normal to the bolt axis. Where the surface of a high strength bolted part has a slope or more than 1:20, a beveled washer shall be used to compensate for the lack of parallelism."

During discussions with the cognizant design engineers concerning the specific installation requirements relative to the limiting perpendicular angle of the anchor bolts (Richmond Inserts), the NRC inspector was informed that the limiting perpendicular angle of anchor bolts (Richmond Inserts) to the concrete surface is, aside from the requirements of Section 3.3.2, is handled on a case-by-case basis. No enlargement of the existing predrilled holes in the tubular steel is permitted without prior approval; however, numerous CMC's have been issued wherein offset holes have been authorized. The approval is generally accompanied by the requirement that the large square bolt washer be welded in place using a 1/4" fillet on 2 sides. The cognizant engineer further stated that the requirement above only applies to safety-related supports (ASME III, Subsection NF, Classes 1, 2, and 3 component supports). Enlargement of the predrilled holes in the tubular steel for nonsafety supports is permitted without prior engineering approval.

Since Mr. Messerly specifically referred to the 860' and 905' elevations in the reactor containment building in his testimony, it was assumed by the NRC inspector that his specific concern was in reference to the permitted angularity of the safety-related Richmond Insert anchor bolts. Mr. Messerly was apparently of the opinion that the anchor bolt should be precisely perpendicular to the concrete surface, which appears to be a misunderstanding on his part of the installation specification. Furthermore, Mr. Messerly's testimony reflected his awareness and knowledge of the procedural requirements, therefore, it must be assumed that Mr. Messerly did not ignore procedural requirements and did not indiscriminately enlarge predrilled tubular steel holes in safety-related supports. Further, that any offset or enlargement done by Mr. Messerly had prior engineering approval as required. As noted in Allegation 4, paragraph 2, the NRC inspector conducted a limited visual examination of approximately 60 hanger supports at the 905' and 860' elevations in the containment building. During the examination, the NRC inspector found no hole enlargements or anchor bolt angles (parallelism of bolt nut surface to washer surface) that appeared to violate the above installation specifications. It is concluded by the NRC inspector that this specific allegation appears to be more of a design concern by Mr. Messerly, than an improper installation construction practice having been implemented by him.

APPENDIX B

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

Report: 50-445/83-03
50-446/83-01

Dockets: 50-445; 50-446

Category: A2

Licensee: Texas Utilities Generating Company (TUGCO)
2001 Bryan Tower
Dallas, Texas 75201

Facility Name: Comanche Peak, Units 1 and 2

Inspection At: Comanche Peak Steam Electric Station (CPSES), Glen Rose, Texas

Inspection Conducted: October 1982 through February 1983

Inspector: *R. G. Taylor* 3/16/83
R. G. Taylor, Senior Resident Inspector-
Construction Date

Approver: *T. F. Westerman* 3/16/83
T. F. Westerman, Chief
Reactor Project Section A Date

Inspection Summary

Inspection Conducted October 1982 Through February 1983 (Report 50-445/83-03;
50-446/83-01)

Areas Inspected: Routine and special inspection, announced by the Senior Resident Inspector-Construction (SRIC) including facility tours, investigation of allegations, participation and assistance to the Construction Assessment Team Inspection, and other inspection related activities. The inspection involved 263 inspector-hours by one NRC inspector.

Results: Within the areas inspected, one violation was identified (failure to implement a QA program for fabrication and installation of underwater lighting poles.)

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(C57)

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Details1. Persons ContactedPrincipal Licensee Personnel

R. G. Tolson, Site Quality Assurance Supervisor
D. N. Chapman, Quality Assurance Manager
B. R. Clements, Vice-President, Nuclear
J. T. Merritt, Manager of Startup
J. B. George, Vice President and Project General Manager

Other Personnel

G. R. Purdy, Project Quality Assurance Manager, Brown & Root (B&R)
D. Frankum, Construction Project Manager, B&R

The SRIC also interviewed other licensee and contractor personnel during the inspection period.

2. Licensee Action on Previous Inspection Findings

(Closed) Unresolved Item (50-445/79-24) Quality of Unit 1 Reactor Building Dome Concrete. This item related to the need for additional assurance that a small amount of concrete placed on the Unit 1 reactor building dome during a rain storm without appropriate controls by quality control was adequate. An earlier evaluation of the in situ concrete by a proprietary testing program had indicated that the material was acceptable. The testing program was found to be unauditable and therefore, some additional assurance was judged to be required. The licensee has now completed the structural acceptance test of the Unit 1 reactor building with special attention directed to the repair area. The test was successful and no anomalies were identified in the repair area and therefore, it is judged that the concrete is of adequate quality.

(Closed) Unresolved Item (50-445/80-20; 50-446/80-20) Design of the AC Instrument Distribution Panels. This item involved a finding that the segregation of safety and nonsafety wiring in the panels was not in accordance with Regulatory Guide 1.75 but was in essential compliance with the panel design displayed by FSAR Figure 8.3-15. After discussions between the SRIC, NRR personnel and the licensee's electrical engineering group, a method of correcting the matter was developed. FSAR Figure 8.3-15 was revised by Amendment 27 to reflect the method of correction. The SRIC has examined the implementation of the change in two of the four panels involved and had no further questions.

(Closed) Unresolved Item (50-445/81-14; 50-446/81-14) Control of Stainless Weld Repairs. This item involved an observation that a previously well controlled program for the control of the number and extent of repairs

made to weld joints in stainless steel pipe had become less well controlled due to personnel changes. The licensee revised Construction Procedure CP-CPM-6.9D to reflect proper identification controls for craft and QC actions effective in January 1982. The engineering controls were promulgated effective with the issuance of Procedure CP-EP-10.0 in March 1982. The SRIC has not observed any instance where the procedures are not being complied with and therefore, has no further questions.

3. Action on Licensee Identified Design/Construction Deficiencies

(Closed) Over-Torqueing of Safety Relief Valves. On September 10, 1982, the licensee informed the SRIC that a potentially reportable condition under the purview of 10 CFR 50.55(e) had been identified. It was reported that the main steam safety relief valves had been over seated by excessive torqueing to stop leaks during the main steam hydrostatic test. It was found that the excessive tightening had damaged the valve seats in some instances and that some of the valves appeared to have the valve stems bent out of tolerance. By letter dated November 10, 1982, the licensee informed the NRC that after review, the matter was not considered formally reportable under the regulation. The SRIC has reviewed the documentation of the examination of the valves by the licensee. The examination did not reveal any significant damage had occurred to any of the valves that would have prevented the valves from lifting under pressure which would satisfy the safety function. Some of the valves may have leaked under operating conditions which would be undesirable but not a safety hazard. The SRIC had no further questions on this matter.

4. Allegations By Dennis K. Culton

On September 16, 1982, Mr. Dennis K. Culton made a limited public appearance before the Atomic Safety and Licensing Board hearing in the matter of TUGCO's application for an operating license for the CPSES. His statement during the appearance appears in the hearing transcript at 5551 through 5555. In addition, Mr. Culton furnished the Board with a written statement which appears in the record at 5556 through 5559. Based upon a review of the record, NRC Region IV determined that there were two areas of interest that should be evaluated for their validity and effect of safety of construction. The first area dealt with the potential misuse of a group of drawings referred to as BRHL while the second dealt with the alleged splicing of safety-related or "Q" electrical cables. The SRIC was assigned to make the evaluation.

5. Allegation Relative to BRHL's

Mr. Culton's concern in this area appears at Tr. 5552 through 5554 and 5557 through 5558. His concerns can be summarized as follows:

- (a) Based upon limited information, he was directed to generate isometric drawings giving support locations. He states at 5557 that he did not feel qualified to do this work in the manner directed.

- (b) The drawings that he and others in this group generated were released to the field unapproved and were used by the craft labor personnel to locate and install supports.

A BRHL is an isometric drawing made from a modified piping installation isometric drawing to identify the supports on the pipe and to provide locational information at an appropriate point in time. The drawing series has no unique title with the BRHL appearing only before the drawing number to distinguish it from the parent pipe isometric which carries the same number except for its unique prefix, BRP.

Discussions with various licensee personnel who are familiar with the history of the development of the BRHL's indicate that the need to generate the drawings became apparent when planning was initiated for the as-build verification program as required by NRC IE Bulletin 79-14. The very early phase of the work appears to have started at about the same time that Mr. Culton was assigned to the drafting department and it is understood that he and others were hired and/or recruited from the field labor forces specifically for the effort.

As an aid to further understanding this matter, it is also necessary to understand the type of information that appears on individual support drawings. These drawings, which carry a prefix BRH and an entirely different number scheme, provide, in addition to the design details of the support, information as to where the support was to have been installed. The plan type information is provided by a small square generally with four notations indicating building column lines. Within the square, there is usually a dimensional figure in feet and inches from one or more of the column lines. The support elevation information is furnished on the main face of the drawing where the elevation of the pipe and the building structure, as appropriate, are shown. The use of this system requires either a substantial degree of familiarity with the various buildings and their column line grids, or ready reference to a set of the architectural layout drawings which clearly show the column line grids.

It can no longer be established just exactly what information was given to Mr. Culton for his use in generating the drawings. An interview with the one remaining person still in the original group when Mr. Culton worked there, indicated that the package contained a piping isometric and the individual support drawings along with any of their outstanding change documentation (CMC) that changed the locational information. The pipe isometric was reproduced such that information relative to pipe installation was deleted. This would include deletion of weld joint data and the bill of materials. The remaining information was the isometric line detail, location data (again in the form of column lines and elevation) and reference to connecting isometrics. The modified isometrics were then annotated with a symbol that was to depict the approximate location of supports and a support number was assigned to each symbol. The location of a given support appears to have been estimated from the support drawing using the building column lines, elevations, and the piping isometric dimensions that still remained on the drawing after modification. The

early BRHL drawings did not give any dimensional information on the supports and the first issues were stamped "issued for hanger identification and accountability only" in the drawing approval block. Subsequent revisions, apparently beginning in early 1981, were updated and began to show dimensions for support locations. The final versions of the drawings provide verified support locations, at which time the individual support drawings are revised to delete the location information. According to the present supervisor of the central document control center, the BRHL drawings have never been routinely distributed to any of the possible user organizations such as the support installations crews. The drawings were only available on an individual requisition basis which would be stamped "For Information Only" when given to the requisitioner. The BRHL drawings were originally developed and updated periodically to facilitate the final as-built stress analysis. The only use of the BRHL by other than the stress analysis groups presently occurs when a support has to be modified after the initial as-built verification effort. This arises by reason of the deletion of the support location information on the individual support drawing which then makes the use of the BRHL vital in order to find the support in the facility. This situation only arises on a limited basis and is treated on a case basis by the support installation group and the document control center.

In regard to Mr. Culton's two major concerns in this area, the SRIC was able to locate a few of the early BRHL drawings which carry the initials "DKC" in either the draftsman identification block or in the checker block. A comparison of these drawings to those generated by other draftsmen indicate no significant differences. The SRIC can only conclude that Mr. Culton was as competent as the other people in the group. Given the non-use of the drawings at the time they were originally developed, this level of competency appears to have been adequate. Mr. Culton's statement that the drawings were released unapproved for use by the construction forces has been shown to be incorrect in two different ways. First, the original issues were provided to the document control center for filing with the note "issued for hanger identification and accountability only" on face of each drawing and were approved in the appropriate block on the drawing face. Secondly, the drawings, while on file in the document control center, were never subject to a routine distribution and were not readily available to the construction force who in fact had no need for them. In addition, numerous observations by the SRIC of the support installation process has indicated that the support location information on the support drawing was used to install and to inspect the supports and that any use of the BRHL for this purpose was so limited in frequency of occurrence that it was never detected. Mr. Culton's allegations regarding BRHL drawings is thus considered to be refuted.

6. Allegation Relative to the Splicing of Electrical Cables

At Tr. 5551 through 5552 and 5556 through 5557, Mr. Culton stated that he had observed that "Q" electrical cables had been spliced and that these splices were in the Unit 1 spread room. Following Mr. Culton's appearance

before the Atomic Safety and Licensing Board, Mr. Culton was interviewed in the NRC Region IV offices on November 8, 1982, in an attempt to obtain more information on the matter. The interview was tape recorded by a representative of the intervenor CASE in the proceedings. At Tr. 5552, Mr. Culton stated that he observed the splicing to have occurred two times and further that there were other instances for which he had some papers. During the interview, Mr. Culton also indicated that he had other drawings available to him that would pin-point the matter and promise to make them available to the NRC, or alternatively he would provide a sketch that would provide more detail. For the record, Mr. Culton has not yet made available to the NRC any of the documents to which he has alluded.

Based on the information in the hearing record and in a transcript of the interview referred to above, the SRIC initiated an investigation that attempted to determine what cables may have been involved when Mr. Culton made his observation. The following key statements were utilized in attempting to isolate the involved cables from the other estimated 6,000 "Q" cables in the Unit 1 spread room:

- a. At Tr. 5552 and 5556: The cables in question are 800 or more feet long.
- b. At Tr. 5556: Two cables were observed to have been spliced.
- c. At Tr. 5557: The cables were going to a relay panel.
- d. Interview Record, Page 3: The relay panel was the third one in from the aisle.

Using the above statements, the SRIC was able to narrow the number of possibilities down to two cables, presumably the same two as observed by Mr. Culton. The basis of the analysis was as follows:

- a. The applicant has a computerized listing of all cables for the entire facility. By arrangement with the computer operators, the SRIC was able to obtain a selected sort of the cables based on the "Q" identification and those in excess of 800 feet.
- b. The list was reviewed by the SRIC to eliminate those cables that were not routed to equipment in either the cable spread room or the control room. A total of 42 cables were then involved.
- c. Of the 42 cables, only 5 were shown by the routing records to be terminated in a relay panel, more correctly called relay racks.
- d. Of the seven relay racks, only one is the third one from an aisle and also has "Q" cables terminated in it, this being a cabinet identified as the "BOP Auxiliary Relay Rack 1" with Tag Number CP1-ECPRCR-03. Of the five cables terminated in relay panels, only two are terminated in this panel.

- e. The cable pulling records indicate that the two cables were originally identified as E0009231 and E0009240 which were pulled on January 14 and 15, 1980, respectively. Based on his employment records, these dates coincide with Mr. Culton's employment in the construction labor force as an electrician.
- f. Engineering changes subsequent to the pulls changed the designation of cable E0009231 to A0009231 and E0009240 to SP009240. The change from "E" to "A" signifies that a previously identified safety function had been downgraded to nonsafety with the cable still routed with safety grade cables. The change from "E" to "SP" indicates that the electrical circuit involved has been deemed to be no longer required and the cable has become a spare.

Specific findings relative to cables A0009231 and SP009240 are as follows:

- a. The SRIC, with the assistance of two other NRC inspectors, traced cable A0009231 through the spread room cable tray system from the point at which the cable entered the room until it left the tray to pass through a conduit into the relay rack. The only portion of the cable not examined was the approximately 17' of cable in the conduit. Of the estimated 50-60' of cable in the tray, there were no anomalies identified.
- b. The SRIC found that cable SP009240 had been removed from the tray system on or about November 23, 1982, in response to NCR E-82-01210 which stated that certain tray sections were overfilled. The engineering solution was to remove several cables that been spared by other design changes. The removal was through the tray system but left the cable in the conduit entrance to the relay rack, again approximately 17'. The SRIC located the removed portion of the cable in a storage yard and visually examined the entire 400' with no anomalies identified.

General findings and considerations:

- a. Project Specification ES-100 "Electrical Erection" does not totally prohibit the splicing of safety-related cables as indicated by Mr. Culton. The specification allows splicing to be done based upon the engineer's direction and this has been done by the use of engineered junction boxes. It should be noted the industry standards (IEEE) do not prohibit field run splices provided they are properly qualified.
- b. There have been a number of instances where the cable jackets have been repaired when the jackets were damaged either in the process of manufacture or during installation. These repairs have been accomplished under a standard repair procedure, EEI-13, when directed by the site engineers. One of two repair measures are applicable within the procedure. One of the methods utilizes heat shrinkable plastic tubing when the damaged area is not prohibitively far from the end of

the cable and thus allows the tubing to slip down the cable. The other procedure which was much more generally used early in 1980 involved the use of a fire resistant tape wrapped in half-laps over the damaged area. The former procedure produces a very neat slim appearance while the latter procedure is relatively bulky and might well appear to be a splice. A number of both types of these repairs were identified during the examination of the specific cables discussed above and during an earlier more extensive examination of several tray runs in the spread room. All of these anomalies were judged by the NRC inspector to be jacket repairs.

- c. The SRIC believes that yet another consideration may well be relevant to this matter. The consideration involves a much earlier allegation that cables had been repaired in an unauthorized manner. The allegation was received by the SRIC sometime during February 1980 from an electrician assigned to the electrical cable pulling crew that had pulled the cable then in question and the two cables identified with Mr. Culton's allegation. All three cables were pulled during early to mid-January 1980. The SRIC's recollection of the person was that he was a journeyman electrician and assisted the foreman in the detail supervision of the crew of about 16 men, all of whom were classified as helpers except for the foreman and the journeyman. Since the electrician was sufficiently concerned to report a cable jacket repair involving the use of Scotch 33 tape rather than the approved tape, it seems to follow that he would have also reported an actual cable splice for which there is no approved repair. Given the electrician's position with the pulling crew, it also seems unlikely that he would not have been aware of an error of a magnitude that would have caused such splices to be made. (For more information about the 1980 allegation and the results of the subsequent investigation, see NRC Inspection Report 50-445/80-08; 50-446/80-08.)
- d. Since 17 feet of each of the identified cables were not inspected by the NRC during the course of this special inspection, it was not possible to conclude positively that the allegation is either confirmed or refuted. Notwithstanding, the inability to positively state that the allegation made by Mr. Culton is substantiated or refuted, the SRIC believes that no further action is warranted based on the following cumulative information as follows:
 - (1) Cable jacket repairs utilizing wrapping with a rubber tape were not and are not unusual.
 - (2) There has been no identified reason why the splices should have been necessary. The rubber-like jackets on the cable are relatively easy to cut with even a dull edge but the wire insulation material and the wire itself are relatively hard to cut.

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- (3) A jacket repair made with tape would be very difficult for the inexperienced person to distinguish from an actual splice. The splice generally would have a somewhat bulkier shape and would probably be somewhat lumpy rather than smooth.
- (4) The probability that the SRIC would have learned of such an unusual event as a splice being made to safety-related cable through contacts that had been established in the electrical crew involved.
- (5) Removal of the cable would probably cause damage to the nearly 30 cables in each of the conduits.
- (6) Neither of the two cables now have a safety-related function and there are no requirements that prohibit the splicing of nonsafety cables.

7. Allegations by [REDACTED]

An article appearing on page 13A of the Fort Worth Star-Telegram dated [REDACTED] 1983, stated that [REDACTED] had made allegations which were subsequently investigated first by personnel of B&R and later by personnel of TUGCO. The article stated that [REDACTED] was then charging that these investigations were a "cover-up" to hide safety hazards at the Comanche Peak nuclear power plant. The article stated that [REDACTED] had been employed at the construction site as a foreman and was laid off weeks after he made the allegations. The article also attributes three technical type allegations directly to [REDACTED]. In summary, the technical allegations appearing in the article were:

- (a) [REDACTED] apparently stated when interviewed by the writer of the article that rejected aggregate was mixed with concrete that was subsequently poured to form the base for the nuclear reactor. The article stated that a [REDACTED] was the B&R equipment operator who had apparent first hand knowledge of the matter. The article also stated that [REDACTED] could not be reached for comment.
- (b) A second allegation, that the article stated was never previously investigated, involved the construction of underwater lamps for the pools surrounding the reactor. [REDACTED] charged that he was prevented from cleaning out drill shavings from the lampposts and that these shaving could be washed into the reactor during refueling and could jam the fuel cells and could even fuse to the control rods.
- (c) The third allegation dealt with a contention that holes had been improperly drill through concrete walls and the interior reinforcing steel. The article attributes the information to another party identified as [REDACTED]

AC-17

AC-18

The SRIC assigned to the Comanche Peak station obtained both the B&R and TUGCO files pertaining to the investigations that were stated by the newspaper article to have occurred. The B&R file was found to contain an undated and unsigned letter addressed to Mr. Thomas Feehan, President of B&R. The letter is indicated in two different places to have been prepared by Arvil Dillingham, Jr. The letter is stated in a memorandum addressed to a group vice president of B&R from a vice president of the B&R division to have been hand delivered to Mr. Feehan by Mr. Dillingham on August 6, 1982. The memorandum was dated August 13, 1982. The undated letter to Mr. Feehan contained eight violations that the writer stated he had observed or had knowledge of that had occurred during his period of employment at the Comanche Peak station. Review of the letter addressed to Mr. Feehan indicated that only one of the eight violations correlated with the allegations appearing in the newspaper article, this being the item outlined in (c) above pertaining to the drilling of holes in the concrete walls. The B&R memorandum of August 13, 1982, which is a report of the internal B&R investigation of the eight violations, indicates that seven of the allegations were found to be either without a basis or were not substantiated. The remaining item was considered in effect to have been substantiated but the corrective measures were already taken. In each case, by what is assumed to be Mr. Dillingham's signature, Mr. Dillingham acknowledged his satisfaction with the B&R findings. The above memorandum indicates that a number of other people were interviewed by the B&R investigative group, one of whom was Mr. Witt. Mr. Witt apparently did not confirm Mr. Dillingham's allegations but made additional allegations related to his experiences during his past employment at CPSES. One of these allegations appears to be substantially the same as that appearing in the summarization of the news article as (a). Mr. Witt also charged that some personnel biased the operation of the concrete batch plant scales by leaning on the wires connecting the scales to the sensors. Additionally, Mr. Witt stated concerns about a possibly missed hold point during the welding of the fuel pool liner and that some welding had been done by an uncertified welder. In an internal B&R memorandum dated August 17, 1982, the B&R investigators summarized Mr. Witt's concerns and their findings relative to the concerns. The B&R memorandum indicates that the investigation relative to use of rejected aggregate was apparently partially substantiated but of no concern in that the aggregated pile, rather than actually being unacceptable, simply had not been tested prior to use as required. The matter was documented on Deficiency and Disposition Report C-446 dated December 9, 1976, which appears as attachment A to the memorandum. In the matter of the missed hold point for the fuel pool liner weld, attachment B to the memorandum documents that no hold point was missed. Regarding the two remaining Witt allegations, the memorandum states that the allegations were investigated and found to be without basis but provides no other information.

Personnel of TUGCO performed a separate investigation of Mr. Dillingham's allegations (the Feehan letter) during August of 1982. The results of that investigation were furnished to TUGCO management by memorandum dated September 2, 1982. This investigation found that two of eight items were substantiated with one of these being the same item that was substantiated

by the B&R investigation. Both of the substantiated allegations were found by the investigators to have been adequately documented and that corrective measures had been taken or were in progress.

In a separate memorandum dated December 10, 1982, one of the TUGCO investigators documented a phone call from [REDACTED] in which [REDACTED] apparently made yet additional allegations. One of these allegations regarded welding done by an uncertified welder on the turbine-generator pedestal (by implication). [REDACTED] also apparently further mentioned [REDACTED] who was supposed to know about a sensor that had broken off and was buried in the main dam. Also, [REDACTED] was alleged to have personally driven a front loader that returned dry and lumpy cement that had been rejected to the bin, that this cement had been subsequently used in the reactor core, and that this was why the cracks happened. The writer of the memorandum stated that he had encouraged [REDACTED] to take his concerns to the NRC. [REDACTED] in turn was reported as saying that he had intended on going to the newspapers and Congress instead.

It appears that [REDACTED] carried out his above stated intention in that the above referenced newspaper article has appeared and to the best of SRIC's knowledge, [REDACTED] has made no contact with any component of the NRC. NRC Region IV determined that the allegations in the news article should be investigated but that those made in the Feehan letter and in the telephone conversation with TUGCO should not. This decision was based on the premise that [REDACTED] has had his earlier concerns satisfied except for those appearing in the article.

Regarding the above summarized allegation (a), the SRIC established that [REDACTED] was no longer an employee at CPSES and further established that he had relocated from the Glen Rose, Texas, area to another state. NRC Region IV personnel made several attempts to contact [REDACTED] by telephone at his new address, to no avail. A registered letter, receipt requested, was then sent to [REDACTED] requesting that he contact Region IV as soon as possible. Receipt of the letter was acknowledged but as of this date, [REDACTED] has not contacted the region. It appears that Mr. Witt does not intend to assist the NRC in investigating allegations attributed to him. It should be noted that only the B&R investigative group has been able to establish contact with [REDACTED] all others have apparently failed.

Regarding summarized allegation (c), the SRIC, with assistance of another Region IV inspector, was able to establish that the underwater lighting standards were fabricated in such a manner as to leave drilling chips inside and had not been removed. It was also established that the lighting standards were fabricated completely outside the licensee's QA program which included various welding operations. There are no records of inspection or of the welders involved or of the weld procedures utilized. Review of the design drawings do not reflect that the A/E considered the lighting standards to be within the QA scope, yet should the standards physically fail during the seismic event, fuel could be damaged. Given the possibility of failure, the standards should have been classified as Seismic Category II (licensee's FSAR definition for

components which have no safety function but must not fail in a seismic event since such failure could jeopardize the functioning of a safety-related component) and should have been included in the QA program. This is considered to be a violation of Appendix B to 10 CFR 50. Regarding the premise that the drilling chips inside the standards could be swept into the reactor during refueling and cause an accident, the SRIC found six of the standards are normally located with their bottoms just about the floor level of the refueling pool and that the chips that might have worked their way out of the bottom of the standard could have carried into the reactor at the conclusion of the refueling process. The size of the chips that could work their way out through the 1/2" holes are not of a size that could be expected to plug a water channel through the reactor core and create a hot spot. Further, the idea that the chip could fuse to the control rods is equally remote in that far higher temperature would be required in the core to achieve such fusion than actually will exist there, the differential being 600° to 800°F. Thus, the safety significance of the chips is very small. The uncontrolled (no QA) problem with the standards is relatively more important since workmanship on the devices has not been established. Regarding summarized allegation (c), the allegation has been the subject of another allegation by a person who appears to have substantially more direct knowledge of the matter than indicated by [REDACTED]. Under these circumstances, the NRC has determined that it can address the issue in a more satisfactory manner by investigating and evaluating the second party's allegation rather than [REDACTED].

8. Posting of NRC Form 3 ;

10 CFR 50 was revised by 47 FR 30452 to add 10 CFR 50.7 "Employee Protection." The change was published July 14, 1982, and had an effective date of October 12, 1982. An important element of the change was that of a requirement to post NRC Form 3 at locations where the form can be readily viewed by employees on their way to or from their place of work. It has been alleged that the licensee did not post the form. The SRIC learned of the allegation during early January 1983 and found that the form was posted throughout the main construction administration building and on a bulletin board where most of craft labor force can readily see it, particularly when departing from the construction area. The SRIC has been informed by licensee employed personnel that they received and posted the forms in the administration building about the first of 1983. A senior B&R manager indicated that the forms were received, he believed from B&R's Houston office, sometime between Thanksgiving and Christmas and were posted on the craft labor bulletin board near the "brass alley" well before the first of the year. It is thus clear that the forms were not posted on the specified effective date of the change to 10 CFR 50 as alleged. It is much less clear as to when the forms were actually posted nor is it clear that most people would even have been aware of the posting. The "brass alley" bulletin board is a large board, perhaps 4' by 6' in size with many postings. The majority of the postings are required under various federal statutes or regulations. The posting of an additional form probably would not draw much attention from the average worker. As of the time of

inspection by the SRIC, the licensee and his principal site contractor were found to have the form posted and to be in compliance with the regulation.

9. Management Interviews

The SRIC held management interviews with one or more of the persons identified in paragraph 1 on a nearly daily basis throughout the inspection period to discuss NRC findings developed during various special inspections and investigations. The discussions also included the licensee's positions on the NRC findings.

U.S. NRC

100 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TEXAS 76010

APR 16 11:12

REPORT OF INQUIRY

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U.S. DEPARTMENT OF ENERGY
OFFICE OF INVESTIGATION
WASHINGTON, D.C.

APR 16 1984

FOIA-85-59

C181

SUBJECT:

COMANCHE PEAK STEAM ELECTRIC STATION:
ALLEGED IMPROPER CONSTRUCTION PRACTICES

REPORT NUMBER:

Q4-84-016

1. On February 28, 1984, the Region IV OI Field Office received a telephone call from [REDACTED] a former Brown & Root, Inc., [REDACTED] at Comanche Peak Steam Electric Station (CPSES). [REDACTED] claimed he was in possession of documents, photographs and tape recordings containing enough information to close down CPSES with regard to improper construction practices. [REDACTED] agreed to provide specific information during personal interview, and agreed to meet with Region IV OI Field Office on February 29, 1984. [REDACTED] related that he worked for Brown & Root for about [REDACTED]

2.

3. On February 29, 1984, [REDACTED] was interviewed by NRC Investigators [REDACTED]

A Results of Interview with [REDACTED] is included with this Report of Inquiry as Exhibit (2).

4. [REDACTED] provided the following information during his interview:

(a)

[REDACTED] first major concern related to the possible damage of stainless steel rods, approximately 15 feet in length and 2 1/2 inches in diameter, that are located in the upper internals behind a missile shield in the core of the nuclear reactor in the Reactor Building.

[REDACTED] claimed that two of the stainless steel bars had been bent out of shape approximately 1 foot from the ends during an accident with either a fork lift or a crane. [REDACTED] alleged that the bars had been pulled back into shape by placing a rope from the crane, and that the damage had never been properly reported or documented.

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(b)

[REDACTED] second concern involved cracks in the reactor pad at the bottom of the reactor core.

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46-44 (b) [REDACTED] stated [REDACTED] the possibility of cables in the cabinet under the reactor vessel in the Reactor Building.

(c) [REDACTED] third concern dealt with the polar crane located on top of the reactor vessel. [REDACTED] was concerned that when the polar crane turned it would hit into hangers that were located in that area. [REDACTED] also related that festune cables located on the polar crane were defective because they contained broken internal wiring.

[REDACTED] was unable to furnish detailed information involving names, dates or places. [REDACTED] information was only of a general nature. [REDACTED] had previously indicated he had obtained documents, photographs and tape recordings that could close CPSES down. [REDACTED] however, refused release any documents, photographs or tape recordings to investigators. [REDACTED] contended that he was in possession of such evidence; however, he refused to turn any evidence over to the Office of Investigations or reveal the hidden location of the evidence.

END OF RESULTS OF INTERVIEW WITH [REDACTED] ON FEBRUARY 23, 1984.

SIGNATURE:

W. C. E. Frost

W. C. E. Frost, Investigator
of Field Office

(c) [REDACTED] [REDACTED] [REDACTED] related to problems with the polar crane located on top of the reactor vessel. When the polar crane rotates, it would hit various ladders that were located in the Reactor Building. [REDACTED] [REDACTED] related that testone cables on the polar crane were defective, as they had broken internal electrical wiring.

5. On March 1, 1984, the three technical issues steaming from [REDACTED] interview were turned over to Region IV for evaluation. Region IV informed the OI Field Office that problems with the polar crane and the problems with cracking in the concrete below the reactor vessel were old issues that the NRC had addressed previously in inspection reports. Region IV however did request an immediate inspection of the possibility of having damaged stainless steel bars located in the upper internals of the reactor vessel. Subsequently, an inspection was performed by Region IV personnel to determine if any damage existed. A visual inspection resulted in no damage being observed, and information received from the resident site inspectors indicated that this also had been an old issue that the NRC had previously addressed. An incident involving damage to the upper internals had previously been reported by the utility and properly repaired and dispositioned. Findings of the inspection conducted by Region IV personnel are located in the Monthly Regional Inspector's Report for the month of March 1984. Due to the fact that the three technical allegations steaming from the [REDACTED] interview have been properly addressed by Region IV, this inquiry is CLOSED.

Exhibit (1) Results of Interview with [REDACTED]
Exhibit (2) Results of Interview with [REDACTED]

2-29-84
2-29-84

REPORTED BY:

Wendel E. Frost
Wendel E. Frost, Investigator
OI Field Office
Region IV

APPROVED BY:

Richard K. Herr
Richard K. Herr, Director
OI Field Office
Region IV

cc: E. C. Gilbert ✓ w/exhibits
J. T. Collins w/exhibits
T. F. Westerman w/o exhibits

DO NOT DISCLOSE

RESULTS OF INTERVIEW WITH [REDACTED]
AS RECORDED BY THE INTERVIEWER WENDEL E. FROST
ON FEBRUARY 29, 1994

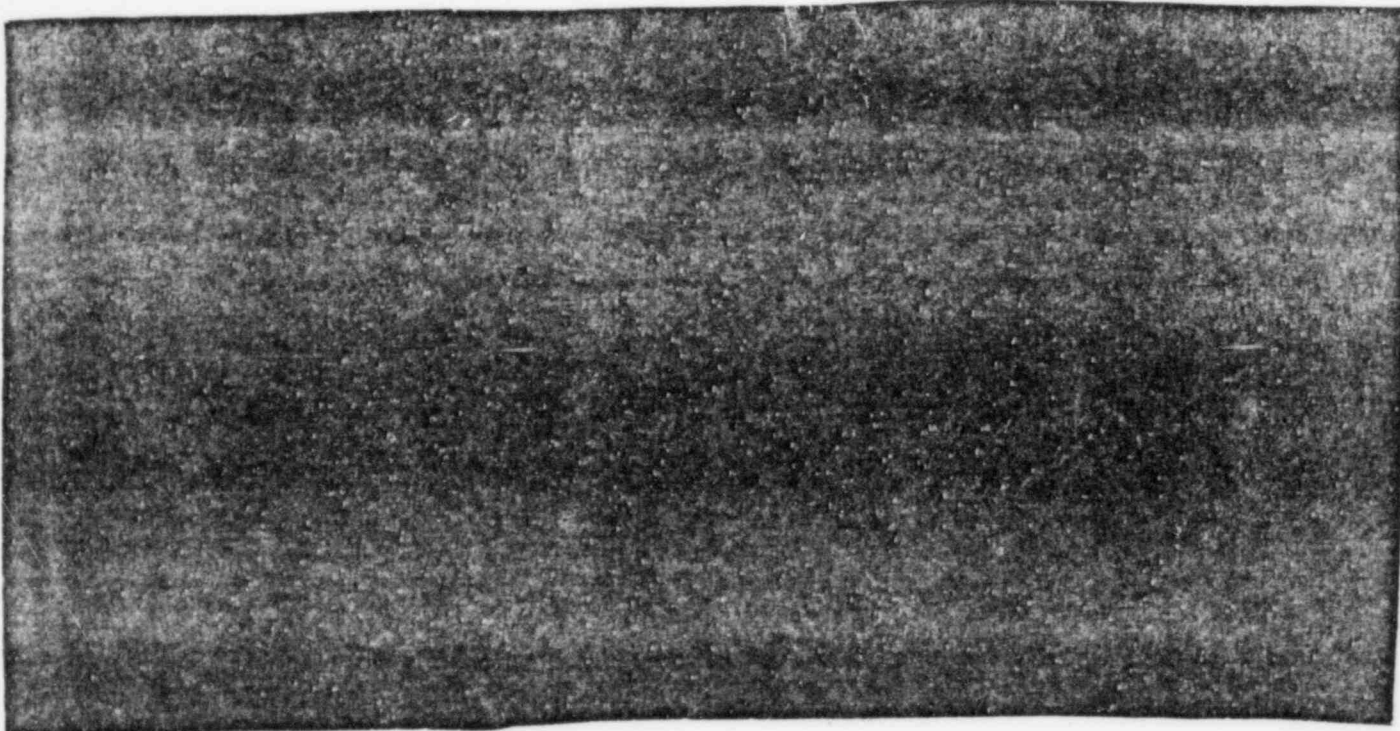
On February 29, 1994, [REDACTED] a former [REDACTED] electrician employed by Brown & Root, Inc., at Comanche Peak Steam Electric Station (CPSES), was interviewed by [REDACTED] by FBI investigators Richard M. HEFF and Wendel E. FROST. [REDACTED] related that he had been employed as [REDACTED] for Brown & Root at CPSES for about 4 years and was terminated on [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] main technical concerns involved the following three areas:

- (a) [REDACTED] first major concern related to damage to 15 foot long, 2 1/2 inch stainless steel bars located in the upper internals in the reactor vessel located in the Reactor Building. [REDACTED] was concerned that two of the stainless steel bars have been bent 1 foot from the top with either a fork lift or crane. [REDACTED] contended that a rope had been placed on the stainless steel bars and pulled by the crane in order to straighten it. [REDACTED] related that no documentation was ever completed in order to show that the damage had been fixed.



END OF RESULTS OF INTERVIEW WITH ~~REDACTED~~ ~~REDACTED~~ ON FEBRUARY 29, 1984.

SIGNATURE:

Wendel E. Frost

Wendel E. Frost, Investigator
CI Field Office

EXHIBIT (1)

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- (3) A jacket repair made with tape would be very difficult for the inexperienced person to distinguish from an actual splice. The splice generally would have a somewhat bulkier shape and would probably be somewhat lumpy rather than smooth.
- (4) The probability that the SRIC would have learned of such an unusual event as a splice being made to safety-related cable through contacts that had been established in the electrical crew involved.
- (5) Removal of the cable would probably cause damage to the nearly 30 cables in each of the conduits.
- (6) Neither of the two cables now have a safety-related function and there are no requirements that prohibit the splicing of nonsafety cables.

7. Allegations by [REDACTED]

An article appearing on page 13A of the Fort Worth Star-Telegram dated [REDACTED] 1983, stated that [REDACTED] had made allegations which were subsequently investigated first by personnel of B&R and later by personnel of TUGCO. The article stated that [REDACTED] was then charging that these investigations were a "cover-up" to hide safety hazards at the Comanche Peak nuclear power plant. The article stated that [REDACTED] had been employed at the construction site as a foreman and was laid off weeks after he made the allegations. The article also attributes three technical type allegations directly to [REDACTED]. In summary, the technical allegations appearing in the article were:

- (a) [REDACTED] apparently stated when interviewed by the writer of the article that rejected aggregate was mixed with concrete that was subsequently poured to form the base for the nuclear reactor. The article stated that a [REDACTED] was the B&R equipment operator who had apparent first hand knowledge of the matter. The article also stated that [REDACTED] could not be reached for comment.
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- (c) The third allegation dealt with a contention that holes had been improperly drill through concrete walls and the interior reinforcing steel. The article attributes the information to another party identified as [REDACTED]

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The SRIC assigned to the Comanche Peak station obtained both the B&R and TUGCO files pertaining to the investigations that were stated by the newspaper article to have occurred. The B&R file was found to contain an undated and unsigned letter addressed to Mr. Thomas Feehan, President of B&R. The letter is indicated in two different places to have been prepared by [REDACTED]. The letter is stated in a memorandum addressed to a group vice president of B&R from a vice president of the B&R division to have been hand delivered to Mr. Feehan by [REDACTED] on August 6, 1982. The memorandum was dated August 13, 1982. The undated letter to Mr. Feehan contained eight violations that the writer stated he had observed or had knowledge of that had occurred during his period of employment at the Comanche Peak station. Review of the letter addressed to Mr. Feehan indicated that only one of the eight violations correlated with the allegations appearing in the newspaper article, this being the item outlined in (c) above pertaining to the drilling of holes in the concrete walls. The B&R memorandum of August 13, 1982, which is a report of the internal B&R investigation of the eight violations, indicates that seven of the allegations were found to be either without a basis or were not substantiated. The remaining item was considered in effect to have been substantiated but the corrective measures were already taken. In each case, by what is assumed to be [REDACTED] signature, [REDACTED] acknowledged his satisfaction with the B&R findings. The above memorandum indicates that a number of other people were interviewed by the B&R investigative group, one of whom was [REDACTED] apparently did not confirm [REDACTED] allegations but made additional allegations related to his experiences during his past employment at CPSES. One of these allegations appears to be substantially the same as that appearing in the summarization of the news article as (a). [REDACTED] also charged that some personnel biased the operation of the concrete batch plant scales by leaning on the wires connecting the scales to the sensors. Additionally, [REDACTED] stated concerns about a possibly missed hold point during the welding of the fuel pool liner and that some welding had been done by an uncertified welder. In an internal B&R memorandum dated August 17, 1982, the B&R investigators summarized Mr. Witt's concerns and their findings relative to the concerns. The B&R memorandum indicates that the investigation relative to use of rejected aggregate was apparently partially substantiated but of no concern in that the aggregated pile, rather than actually being unacceptable, simply had not been tested prior to use as required. The matter was documented on Deficiency and Disposition Report C-446 dated December 9, 1976, which appears as attachment A to the memorandum. In the matter of the missed hold point for the fuel pool liner weld, attachment B to the memorandum documents that no hold point was missed. Regarding the two remaining [REDACTED] allegations, the memorandum states that the allegations were investigated and found to be without basis but provides no other information.

Personnel of TUGCO performed a separate investigation of [REDACTED] allegations (the Feehan letter) during August of 1982. The results of that investigation were furnished to TUGCO management by memorandum dated September 2, 1982. This investigation found that two of eight items were substantiated with one of these being the same item that was substantiated

components which have no safety function but must not fail in a seismic event since such failure could jeopardize the functioning of a safety-related component) and should have been included in the QA program. This is considered to be a violation of Appendix B to 10 CFR 50. Regarding the premise that the drilling chips inside the standards could be swept into the reactor during refueling and cause an accident, the SRIC found six of the standards are normally located with their bottoms just about the floor level of the refueling pool and that the chips that might have worked their way out of the bottom of the standard could have carried into the reactor at the conclusion of the refueling process. The size of the chips that could work their way out through the 1/2" holes are not of a size that could be expected to plug a water channel through the reactor core and create a hot spot. Further, the idea that the chip could fuse to the control rods is equally remote in that far higher temperature would be required in the core to achieve such fusion than actually will exist there, the differential being 600° to 800°F. Thus, the safety significance of the chips is very small. The uncontrolled (no QA) problem with the standards is relatively more important since workmanship on the devices has not been established. Regarding summarized allegation (c), the allegation has been the subject of another allegation by a person who appears to have substantially more direct knowledge of the matter than indicated by [REDACTED]. Under these circumstances, the NRC has determined that it can address the issue in a more satisfactory manner by investigating and evaluating the second party's allegation rather than [REDACTED].

8. Posting of NRC Form 3

10 CFR 50 was revised by 47 FR 30452 to add 10 CFR 50.7 "Employee Protection." The change was published July 14, 1982, and had an effective date of October 12, 1982. An important element of the change was that of a requirement to post NRC Form 3 at locations where the form can be readily viewed by employees on their way to or from their place of work. It has been alleged that the licensee did not post the form. The SRIC learned of the allegation during early January 1983 and found that the form was posted throughout the main construction administration building and on a bulletin board where most of craft labor force can readily see it, particularly when departing from the construction area. The SRIC has been informed by licensee employed personnel that they received and posted the forms in the administration building about the first of 1983. A senior B&R manager indicated that the forms were received, he believed from B&R's Houston office, sometime between Thanksgiving and Christmas and were posted on the craft labor bulletin board near the "brass alley" well before the first of the year. It is thus clear that the forms were not posted on the specified effective date of the change to 10 CFR 50 as alleged. It is much less clear as to when the forms were actually posted nor is it clear that most people would even have been aware of the posting. The "brass alley" bulletin board is a large board, perhaps 4' by 6' in size with many postings. The majority of the postings are required under various federal statutes or regulations. The posting of an additional form probably would not draw much attention from the average worker. As of the time of

A-19

1

IN THE MATTER OF:

SWORN STATEMENT OF [REDACTED]

PRESENT AT THE TAKING OF STATEMENT:
[REDACTED] Witness;

MR. E. BROOKS GRIFFIN;

MR. RICHARD K. HERR, Interrogators;

MS. JUANITA ELLIS

MR. DAVID COGBURN, Court Reporter,

SWORN ORAL STATEMENT IN QUESTION AND ANSWER
FORM of [REDACTED] taken before David Cogburn,
a Court Reporter in and for the State of Texas at
the United States Federal Courthouse in the City
of Fort Worth, County of Tarrant on the 14th day
of April, 1983 at 2:00 p.m., at which time the
following proceedings were had:

FOIA-85-59

(C197)

SPECIALLY CONFIDENTIAL

AC-40
RIV-85-A-0015

Testimony
Present
March 8
5/20/83
Rpt No. A4-83

COPY

1 as such do what an attorney, I should say,
2 would do for CASE. And so to that extent I
3 guess sort of a quasi representative status.

4 Q All right. Our purpose here today is to
5 ask [REDACTED] questions concerning an earlier
6 statement that I believe he made to you in which he
7 identified a number of issues that are of concern to
8 the NRC, and we would like to find out more specific
9 details about these issues. So my questions will be
10 directed to you, [REDACTED]

11 A Okay.

12 Q The first issue I would like to go into
13 is the use of a rebar drill or a drill at Comanche
14 Peak that I believe you have indicated was used,
15 that you used in your job and was also used to drill
16 through cement and rebar; is that correct?

17 A That's correct.

18 Q Would you mind telling me in more detail
19 what this drill is?

20 A Well, it's like it says. They call it a
21 rebar eater, it's made by Drilco manufacturer who is
22 out of Miami, Florida and it's a -- well, they have
23 a diamond tip on them or they have a real hard steel
24 tip on them that cuts through other steel, concrete,
25 anything else that gets in its way. And they are

1 operated by anywhere from a half to a three-quarter
2 horse electric motor.

3 Q Okay. And did you use this machine in
4 your capacity as an employee of Brown & Root?

5 A Well, I was foreman over the crew that
6 used this machine.

7 Q All right. Did the use of this machine
8 require documentation from --

9 A It did.

10 Q -- from engineers?

11 A It did.

12 Q And these were Brown & Root engineers?

13 A Right. Not Brown & Root, they were Gibbs
14 and Hill. They are the ones that first started it
15 when they first come on the job.

16 Q All right.

17 A A guy named [REDACTED] is the one if
18 you want his name.

19 Q He was the one that issued --

20 A He was the one that started out with me
21 on the rebar drilling, and later it changed into
22 fourteen different people if you want to know the
23 truth about it.

24 Q What was his last name?

25 A [REDACTED] He is still with Gibbs and

1 Hill and he is out of the Dallas office now.

2 MS. ELLIS: I believe that's

3 [REDACTED] I have seen his name.

4 THE WITNESS: Do you know who I'm
5 talking about?

6 Q During the time that members of your crew
7 used rebar eater, did they make sure they had this
8 documentation?

9 A Most of the time yes, but there are times
10 that I was ordered by my superiors, a guy named [REDACTED]
11 [REDACTED] to order or go out the gate, as I stated in
12 my affidavit before.

13 Q Are you saying he asked you or told you
14 or ordered you to drill holes or use this drill in
15 the manner in which it was to be used without
16 documentation as required by procedure?

17 A I am saying that.

18 Q How many instances did this occur?

19 A I wouldn't -- I mean, just to give you a
20 number, I couldn't do it. Many times.

21 Q Okay --

22 A As far as number, you're going to say
23 more than this or less than this, I can't give you a
24 number. I won't give you a number because I don't
25 have that much -- well, how can I say it, I'm just

1 not there. The drill -- I was ordered to loan the
2 drill out at times. I was ordered to loan a guy a
3 drill bit that he would go get a motor, a drill
4 motor out of the tool room and I'd never see these
5 three, four, five, six bits again. Now, how many
6 holes were drilled with it there's no telling how
7 much rebar was cut.

8 A man comes up and says, I want you to
9 give so and so six drills, he's got a pipe hanger
10 that has to go down or a cable tray that has to go
11 down - a cable tray support - and we have got three
12 holes in it and we need the fourth one bad. And I
13 went to my general foreman at that time who was [REDACTED]
14 [REDACTED] and I told [REDACTED], I said [REDACTED] keeps
15 giving me these orders to get this drill out, loan
16 it out to drill holes that are not authorized. I
17 haven't got the paperwork from [REDACTED] I
18 said, what can I do? He said, man, he's my boss,
19 what do you want me to do?

20 Q Do you know for sure that the people that
21 you loaned this drill to did not acquire the
22 documentation that they needed to stay within
23 procedure and use this drill?

24 A I'm positive they did not get the
25 procedure, because any time the procedure paperwork

1 came through it came directly to me from [REDACTED]
2 [REDACTED] and I handed it to my men and seen that
3 the job was done. Because there were areas out
4 there that there was -- strictly was illegal at all
5 to drill any kind of rebar or cut any kind of rebar,
6 Reactor One was one of them. No rebar of any kind
7 was allowed to be cut in that building anywhere.

8 Q Is this the containment building?

9 A Containment building, Reactor One.

10 Q What the NRC would like to know in this
11 instance is the specific locations where holes were
12 drilled without proper documentation. Is there any
13 way that this information or these locations can be
14 determined, reconstructed or anyplace we can go,
15 anybody we can go talk to to find out specific
16 locations?

17 A Let's see, [REDACTED] borrowed it
18 several times to drill holes. He's still working
19 out there. Other than getting ahold of [REDACTED]
20 [REDACTED] is the only one I can think of.
21 And as far as sitting here and telling you
22 locations, evidently you haven't been out to that
23 plant.

24 Q I have, yes.

25 A Well, I had access to every building on

1 that place. I have been in every building. I have
2 cut rebar in every building but containment one,
3 except the dam. Now, does that tell you anything?
4 Now, to go tell you to go to a certain wall and see
5 if the rebar is cut is impossible.

6 Q. You understand what we're trying to do
7 with the information. We're trying to find out
8 specific locations --

9 A Right.

10 Q -- so that we can verify what you're
11 saying. Let me ask you, in your statement that you
12 made to Ms. Ellis, you identified a diary that you
13 have kept and in this diary -- it's my understanding
14 in this diary you logged in instances or times when
15 this rebar eater was used to drill holes when you
16 did not have the proper documentation; is that
17 correct?

18 A No. This is --

19 Q Was this just a work --

20 A This goes from 9-7-78 to 10-17-79. [REDACTED]

21 [REDACTED]
22 [REDACTED] And this documentation, there's some of them
23 most of them have documentation. It also has the
24 CMC number, and like at the beginning it was a DCDDA
25 or something. I got it wrote on there someplace.

1 DCDDA is what they started drilling rebar with.
2 Then they find out this was not the right
3 documentation. Then they changed it to a CMC, but
4 when they first got it they were doing it on
5 three-part memos.

6 Q But --

7 A And this is every hole that I drilled,
8 legal and illegal, and except for the ones where my
9 equipment -- I was ordered to loan my equipment out.

10 Q All right.

11 MS. ELLIS: Just for the record, we
12 probably should mention that ~~REDACTED~~ is
13 referring to a -- looks like a twenty-four page
14 listing which he had prepared of these
15 different items and he will be giving that to
16 you.

17 Q Is this a complete rendering of this
18 diary --

19 A Uh-huh (affirmative).

20 Q So --

21 A It is in complete form.

22 MR. HERR: Is it marked? You said
23 legal and illegal. Have you got the illegal
24 stuff marked on it?

25 THE WITNESS: No, I really haven't

1 but if it doesn't -- it's going to have to be
2 interpreted by me, which I'll try to explain to
3 you or I can tear off a page and y'all can look
4 at a page --

5 MR. HERR: Perhaps take a blue pen or
6 a red pen and we'll mark the illegal stuff.

7 THE WITNESS: No, I won't do that. I
8 can't do that because I didn't keep that much
9 of it. I mean, you can take a look and flip
10 through it to see what it's talking about. I
11 didn't do that -- as far as that, if I had kept
12 that kind of a record, it would have been a
13 separate record or something like that.

14 Q Would any of these entries in this
15 document lead us to the locations of where holes
16 were drilled without authorization?

17 A It's very possible. It is very possible.

18 MS. ELLIS: If I can call your
19 attention to this third column here, it says
20 "rebar cut" -- it's upside down. But in this
21 column, this is where specific rebar was cut
22 apparently and --

23 THE WITNESS: Yeah, what I did was, I
24 marked down -- this was my own deal and my own
25 idea, because there were certain areas that you

1 were supposed to take out a percentage of the
2 rebar. If you cut a hole in the rebar it
3 should have been reported and thus and so
4 forth.

5 Q In those instances, did you report it?

6 A Yes, I'm legal. So is this thing.

7 Q Okay.

8 A But it gives the direction of the rebar,
9 which way it was running, north, south, east, west.
10 It gives the depth that I cut the rebar and it also
11 gives the percentage of rebar, just me looking at a
12 piece of rebar and saying I cut fifty percent, ten
13 percent or if I just nicked it, just whatever after
14 the hole was drilled.

15 Q But on each of those entries, does it
16 tell the location on the site out there?

17 A It tells you the location, what building,
18 what print number it was taken off of or the hanger
19 number itself. So all you got to do is look up that
20 hanger number and it will give you the area and
21 exact location of this particular hanger.

22 Q All right. So any -- which column shows
23 the authorization?

24 A This one here.

25 Q Okay. So if that column is left blank,

1 then that would be an example?

2 A Not necessarily blank. I don't know how
3 in the hell to put that without sounding silly.

4 Q We are going to need to identify -- we're
5 not interested in the ones that were done properly.
6 We're only -- we want to look at the ones that were
7 done without documentation as required by procedure.

8 MS. ELLIS: We're referring to the
9 fifth column now on the far right.

10 A No, there's really not no way of telling,
11 not without looking up the hanger number and find
12 out what was done on the hanger. You will just have
13 to go over each individual hanger and check the CMC
14 and see what was legal to cut and what was not legal
15 to cut.

16 MS. ELLIS: You might mention, too,
17 in this column the ones on the front page all
18 seem to have items by them, but on several of
19 them throughout the listing there were none.
20 So it's not -- each one of these items, in
21 other words, doesn't have rebar cut
22 necessarily. It's just as indicated on there.

23 Q At this point I was just trying to limit
24 it to holes drilled without proper authorization,
25 regardless of whether rebar was cut or just

1 concrete. If the drill was used improperly, we're
2 trying to identify those instances.

3 Can you think of any way with this
4 document or any other documents you may know exist
5 that would lead NRC inspectors to specific locations
6 where holes were drilled without proper
7 authorization? Do you see what we're trying to get?

8 A I see exactly what you're trying to do.
9 You're trying to make your job real easy and there's
10 no easy way way to do it. I'm serious as hell
11 there's just no easy way to go to it because you
12 have so many things out there that's been like this,
13 and for me to pinpoint and give you an exact area by
14 this or any other means -- I might be able to walk
15 out there and show you things if I walk with you and
16 say, this was done here and this was done here. But
17 you're asking me to remember back three, four years,
18 too, and if you have ever been in that area, if you
19 go in there a week later it's all different.

20 Q I understand what you're saying. Can you
21 think of any way that I can transmit this
22 information to an inspector or to a group of
23 inspectors where we might be able to identify these?
24 You're right, we are trying to make it easier in
25 that we can't reinspect all the holes drilled at

1 Comanche Peak since its beginning, since the
2 foundation was poured.

3 A This rebar didn't come in until this date
4 here.

5 Q In other words, we want to address this
6 potential problem.

7 A I can't think of the guy's name. There's
8 one area down in the tunnel what they call the
9 tunnel area, and he was foreman over it when he
10 borrowed that drill. He cut a bunch of rebar down
11 in there and it would be a damn good place to start.

12 Q If we talked to this man, do you think he
13 would be willing to tell us?

14 A I can't think of his name. Yeah, I do.
15 I really do. I'm trying to think of his name; I
16 can't think of it.

17 Q If you cannot remember his name today
18 would you mind giving us that name when you do
19 remember it?

20 A He's still working out there. He got
21 fired and he was -- he went into the pipe department
22 at Green Hat now. He's a welder.

23 Q Do you think you will remember the name
24 eventually?

25 A If I don't I've got it at home I would

1 call you, but he might testify. And if you could
2 get ahold of a [REDACTED] (phonetic), he was a
3 man --

4 MS. ELLIS: Do you know how to spell

5 that?

6 A [REDACTED] something like that. It's
7 pronounced [REDACTED] but [REDACTED] in [REDACTED] now, I'll
8 tell you that much.

9 Q Now?

10 A Yes. Well, [REDACTED] married [REDACTED] in the
11 service is the only reason -- well, [REDACTED] was a year
12 ago. [REDACTED] might be back over here, now but [REDACTED]
13 married to [REDACTED] in the service.

14 Q Okay.

15 A But [REDACTED] worked and drilled a lot of holes
16 illegally.

17 Q Now, these illegal holes that you are
18 referring to that [REDACTED] drilled, this was when the
19 rebar was, or the rebar eater was on loan?

20 A No, [REDACTED] worked for [REDACTED] But [REDACTED] was also
21 around and could be a character witness to what [REDACTED] am
22 stating as to when [REDACTED] was ordered to do this. And if
23 you could pin that [REDACTED] down,
24 [REDACTED] used to work for me, too. And if you
25 put [REDACTED] on a stand and square [REDACTED] in, [REDACTED] will either

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... Rice 141-4567

1 perjure [redacted] or tell you about holes [redacted] drilled
2 when [redacted] was working for me and now [redacted] is in charge
3 of that operation.

4 If you could pin [redacted] down, but that
5 company has got [redacted] sewed down tight. [redacted] a
6 puppet.

7 Q : First of all, let me tell you, I'm not an
8 engineer. I have an engineering or technical
9 background, but let me see if I can phrase this.

10 In the holes that were drilled by your
11 crew members without proper documentation, can you
12 remember any instances or did you witness any
13 instances where damage was done to containment or
14 any of these other areas where the drill was used
15 that would constitute a safety or health hazard or
16 possible weakening of the structure?

17 A Well --

18 Q I know that's detailed.

19 A I'm not an engineer either. I have been
20 in steel, I have been in supervision, I have been
21 out there working. And when an engineer designs
22 something, [redacted] designs it for that particular thing,
23 for that particular strength. All right. If
24 somebody comes in there and cuts part of that out
25 without documentation, there's your answer. But I

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1 not an engineer.

2 Q So you're saying, if I understand you
3 correctly, you're saying that if it's done, then who
4 knows what the effect will be?

5 A Well, the engineer knows, the engineer
6 that designed it. If [redacted] puts in fourteen rebars
7 there and you cut out seven of them, then you have
8 weakened half of them, what [redacted] designed it to hold.
9 And I have went down walls in that ~~particular engine~~
10 that I was talking about and we were putting up to
11 hold thirty-two inch lines down there. I wasn't,
12 this [redacted] was if I could think of [redacted] name. And we
13 had to cut a bunch of rebar down in there.

*cutting out
rebar further*

14 This was, I'm -- well, quote me if you
15 want to, I think, I'm not sure, but I think this was
16 an area that wasn't supposed to have any rebar cut
17 out of it.

18 Q All right. Let me ask you one more time
19 because you have accused me of looking for the easy
20 way. I would like to be able to walk out of this
21 room today and go find examples or instances of
22 holes drilled down there without proper
23 authorization. I hope there's some way we can
24 figure out how that can be done because we would
25 like to follow up on this.

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A If I could just think of one exact hole that I could remember. I know ~~of a change on the turbine deck, but it'll be a long time before I can remember what area.~~ There's another deal where I would have to go out and it's completely changed over now, and it would be a spot check between three or four hangers.

Q All right.

A In fact, out of the three or four, I think you will find a Hilti-bolt welded on the back side because they couldn't get a hole in the ground.

Q What would it take to refresh your memory as to a possible location?

A I have no idea. The documents you could get is -- now, this would be Turbine One area which would cut it down quite a bit. It's around them tanks that they covered with the aluminum siding and insulation. I don't know what tanks, what they are called, them big long tanks up on the turbine deck. And it was right alongside one of them tanks there that three holes rebar was cut in without documentation.

Q Was there anybody else present that might be able to further identify, help us identify this location?

1 A There was [REDACTED] I should have
2 brought my time books with me. I'm not really sure
3 if [REDACTED] was there or not.

4 Q Is it your personal belief that [REDACTED]
5 could identify locations?

6 A Yeah, I think [REDACTED] could, but I doubt if
7 you will get [REDACTED] to do it.

8 Q Is [REDACTED] still employed by them?

9 A Yes, [REDACTED] very much employed.

10 Q All right. Well, I'll tell you, let's
11 move on. We have got several other --

12 MS. ELLIS: Perhaps if you had [REDACTED]
13 [REDACTED] appear under these circumstances, you
14 know, sworn with a stenographer and so forth,
15 maybe it might enable [REDACTED] to say things that [REDACTED]
16 might not feel comfortable saying not under
17 oath.

18 A I seriously think [REDACTED] would. I have
19 known [REDACTED] for quite a few years. I went through a
20 divorce with [REDACTED] and everything else when [REDACTED] was
21 working for me. But right now that company has got
22 [REDACTED] bought and paid for.

23 Q I can assure you the NRC is not bashful
24 about going and asking, so we will --

25 MR. HERR: I have one question I

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1 would like to ask. Did you see any of these
2 people using the drill improperly? I know you
3 said you loaned them the drill out, but did you
4 ever see them use it?

5 THE WITNESS: Oh, yeah.

6 MR. HERR: And that was during the
7 time frame --

8 THE WITNESS: That was during this
9 time frame that this covers.

10 MR. HERR: Okay. That's the only
11 question I have.

12 Q Will that document that you are providing
13 us, will examination of this document, say, by an
14 engineer, would it lead to any locations where such
15 holes were drilled? Seems this fifth column seems
16 to be filled in.

17 A What I would do if I was you, I would go
18 pull these CMC's and DCDDA all through it with an
19 engineer, bump it against the number of the hanger
20 and see what was authorized to cut and what was not
21 authorized to cut, and then come back and bump it
22 against this, ~~like a hundred percent cut out and if~~
23 ~~that was really legal in that area to cut out a~~
24 ~~hundred percent.~~

25 Q ~~Do you think, then, a random sampling~~

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1 done like that is going to reveal instances of holes
2 cut without authorization?

3 A Uh-huh (affirmative). I really do.

4 MS. ELLIS: It would seem to me on
5 that third column there where it shows the
6 amount that was cut out, that it would be
7 prudent at least to check all the ones where it
8 says a hundred percent or maybe as much as
9 fifty percent have been cut out.

10 A Because the way I understand that, on the
11 first part, all this -- these DCDDA's and all that
12 and the three parts were all illegal.

13 Q You mean where it says DCDDA?

14 A Yes.

15 Q Those are illegal cuts?

16 A At the beginning they were, and then they
17 changed it to a CMC. Now, if they went back and
18 covered their butts on that DCDDA I don't know.

19 Q If we checked all the ones that -- the
20 DCDDA and checked that number it might lead us to
21 locations?

22 A I would try that first and find out if
23 this was a legal document, because according to [REDACTED]
24 [REDACTED] the engineer, that was all wrong until he
25 come up with the CMC -- talk [REDACTED] -- CMC idea that

1 had to be wrote by a specific engineer.

2 Q As I flip through here, I only see that
3 DCDDA recorded twice. Are some of these other items
4 also that type of number?

5 A All right. Here's one that was wrote on
6 an RFIC. That was illegal, too. And a DCDDA --

7 MS. ELLIS: Are all of these numbers
8 here, are those all --

9 THE WITNESS: They could be CHC's and
10 they could be DCDDA's. I'm not real sure about
11 which they were. God, that's been, '78?

12 Q Right.

13 A I really need to sit down -- I haven't
14 looked at this other than a couple of days ago since
15 I have been out of it, and I could probably sit down
16 with somebody, and be glad to, to try to more or
17 less interpret exactly how it was wrote and what it
18 is.

19 Q Okay. We would greatly appreciate that.

20 A I would. I will; I'll be glad to do it.

21 MR. GRIFFIN: Do you have any more
22 questions, Dick?

23 MR. HERR: No.

24 Q Tell me now, you say, if I understand
25 correctly that this unauthorized use of this rebar

1 eater, is it true you were threatened with
2 termination if you failed to loan it out --

3 A If I failed to do anything that this man
4 said as far as that rebar eater loan-out or drill
5 bits or the whole operation or failed to drill
6 something myself and my crew, I was told that I
7 would be terminated if I didn't do it.

8 Q Tell me what his name is again.

9 A [REDACTED] You have to understand out
10 there exactly what the deal was. At that time [REDACTED]
11 [REDACTED] was the superintendent. [REDACTED] was, I
12 guess, [REDACTED] and had
13 never done any kind of work like that in his life
14 and he was [REDACTED] as a
15 [REDACTED] And [REDACTED] had
16 one thing out of his mouth, and that was production.
17 He didn't come out and say it, but he didn't give a
18 damn how you got it --

19 Q Okay.

20 A -- as long as it showed up on paper. He
21 wanted production, he wanted pipe hangers up, he
22 wanted cable tray supports up and he wanted them on
23 the wall and completed and bought off. He didn't
24 give a damn how they were put up, and this is what
25 [REDACTED] did. And in doing so, if they ran into

1 a problem, you've got to figure some holes were
2 drilled, a hundred and something holes for one
3 hanger to try and find a decent spot to hang it
4 without hitting rebar. This brings on frustration
5 on the men, they go to their foreman, the foreman
6 goes to [REDACTED] says go down and
7 see [REDACTED] and drill the damn thing and put it up.

8 Q I understand. Let's move on. You stated
9 in your affidavit to CASE that you observed or
10 witnessed the use of the polar (phonetic) crane to
11 pull up a piece of thirty-two inch pipe; is that
12 correct?

13 A That is absolutely correct.

14 Q I'm not an engineer; I don't understand
15 the significance of this. Could you explain it to
16 me, please?

17 A All right. What it amounts to is the
18 main steam pipe has a condensation joint like for --
19 expansion joint is what it's called. It's a huge
20 horseshoe type shape, and this thing is coming out
21 of the turbine building. All right. This
22 thirty-two inch main steam pipe, it's coming out --
23 it's anchored in concrete all the way around it,
24 it's a fixed object, you can't move it, right? It
25 comes into this expansion joint, makes huge

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF INVESTIGATIONS FIELD OFFICE, REGION IV
611 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TEXAS 76011

Dup 1001

ASSISTANCE TO INSPECTION REPORT

May 20, 1983

SUBJECT: *COMANCHE PEAK
ALLEGED IMPROPER CONSTRUCTION PRACTICES

REPORT NUMBER: A4-83-005

1. On February 3, 1983, [REDACTED] provided an affidavit to the Citizens Association for Sound Energy (CASE), an intervenor that included three allegations regarding improper construction practices by Brown & Root personnel at the Comanche Peak Steam Electric Station. [REDACTED] alleged the following:
 - a. That Brown & Root employees drilled undocumented unauthorized holes through rebar, and such cutting of rebar was done at the direction of supervisors.
 - b. That the main steam line pipe in Unit I was moved using the polar crane, thereby placing the pipe under unsafe tension.
 - c. That a Brown & Root employee used a cutting torch on hanger material in violation of procedure.
2. On April 6, 1983, [REDACTED] was contacted by the reporting investigator, and a meeting was arranged with [REDACTED] for the following day. [REDACTED] contacted reporting investigator on April 7, 1983, and requested the meeting be changed to April 8, 1983.
3. On April 8, 1983, NRC OIFO Director R.K. HERR and the reporting investigator met [REDACTED] at a restaurant in Fort Worth, Texas. [REDACTED] was accompanied by Ms. Juanita ELLIS, a CASE representative, and Ms. ELLIS' husband. Ms. ELLIS wished to record the meeting; however, OIFO:RIV was not previously informed of her intended presence nor of her desire to record the interview. OIFO did not have a recorder, and in accordance with OI's policy, the meeting was rescheduled. On April 10, 1983, arrangements were made to use a room at the U. S. Attorney's office, Fort Worth, Texas, and for a court reporter to transcribe the interview of [REDACTED].
4. On April 14, 1983, [REDACTED] was interviewed at the U.S. Attorney's office with Ms. ELLIS present. [REDACTED] testimony was taken under oath, Attachment (1), and Ms. ELLIS made her own personal recording of the interview. In his testimony, [REDACTED] expanded in detail on his original allegations. [REDACTED] named Brown & Root employees responsible for the alleged improprieties and those who could substantiate his allegations. [REDACTED] also identified numerous employees by title, and agreed to later provide the corresponding names when he was able to refresh his memory with his personal records located at his residence. [REDACTED] also provided the NRC with a copy of a log. [REDACTED] explained that he maintained this log to document the cutting of rebar at Comanche Peak. (Note: [REDACTED] did not allege that all the entries in the log documented unauthorized cuts through rebar, but rather that some of the entries in the log may have been for holes drilled through rebar that may not have had the appropriate accompanying authorizations.) During this interview, [REDACTED] made a fourth allegation regarding instances of

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Brown & Root welders failing to purge stainless steel pipes during welding.

5. On April 21, 1983, a copy of the recorded testimony was mailed to [REDACTED] at his residence. On April 27, 1983, [REDACTED] was contacted by HERR, and acknowledged receipt of the transcript, but postponed giving the names of the Brown & Root employees he had identified by title in the transcript. [REDACTED] stated he had not as yet had an opportunity to read his entire testimony. On April 29, 1983, [REDACTED] was again contacted by HERR, but he again postponed providing the names, explaining he was very busy. On May 1, 1983, the reporting investigator telephoned [REDACTED] at his residence, and [REDACTED] provided twelve, additional names of Brown & Root employees at Comanche Peak he alleged had knowledge of unauthorized cuts through rebar.
6. On May 3, 1983, interviews were initiated at the Comanche Peak site addressing the four allegations. [REDACTED] identified 38 individuals allegedly responsible for, or having knowledge of, the allegations. Review of employment records determined that eighteen individuals were no longer employed at Comanche Peak.
7. Between May 3, 1983 and May 10, 1983, 19 Brown & Root employees and 1 Dravo Constructors Inc. employee (formerly employed by Gibbs & Hill) named by [REDACTED] were interviewed, and signed, sworn statements were taken from 19 of them. One Brown and Root employee interviewed left on vacation before a signed, sworn statement was obtained from him, and his testimony was recorded in the form of a Results of Interview. One Piping Design Services Inc. engineer was identified by the reporting investigator as responsible for the movement of the main steam line. This engineer was interviewed, and executed a signed, sworn statement.
8. Nine individuals alleged to have knowledge of improper, unauthorized cutting of rebar were interviewed and provided sworn statements. These individuals denied having knowledge of rebar that was cut without proper authorization. A 10th individual responsible for issuing the Component Modification Cards (CMC), authorizing cuts through rebar, was interviewed and provided a signed, sworn statement denying knowledge of any procedural violations. Testimony identified instances where rebar was accidentally cut, but this testimony also established that in these instances, CMC's were obtained after the cuts were reported to the engineers. There was no testimony received indicating that holes were drilled or rebar was cut without proper documentation, and no evidence was found to contradict the testimony of these individuals.
9. Three Brown & Root employees alleged to have knowledge concerning the use of the polar crane to move a portion of the main steam line in Unit 1 were interviewed and provided signed, sworn statements. A Piping Design Services Inc. engineer responsible for relocating the steam line, provided testimony of his evaluation and direction of the relocation of the line. The testimony taken from these four witnesses indicated that the relocation of the main steam line was done under the direction of engineers, and was accomplished to remove stress on the line and to return it to its designed location. No testimony was received to indicate that the line was "cold sprung" or installed under stress.

10. Eight Brown & Root employees alleged to have knowledge concerning the improper use of cutting torches on hanger material were interviewed. Two witnesses stated they remembered an instance during the redesign of a hanger in which a piece of tube steel was discovered to have had the bolt holes enlarged using a torch, which was a procedural violation. The testimony of the two witnesses indicated that this hanger was scrapped because of the procedural violation, and was replaced with new material. The other six had no knowledge of improper use of cutting torches or hangers.
11. Two Brown & Root employees were interviewed concerning their alleged knowledge of lugs improperly welded onto stainless steel pipe without purging the pipe. Both executed signed, sworn statements, and indicated that they did not know of any instances where welding was done on stainless steel pipe which required purging by procedure unless a "purge deletion" was received from the engineers.
12. All of the employees mentioned by [REDACTED] in his affidavit who were still employed or available for interview denied the allegations made by [REDACTED]. No evidence was uncovered during these inquiries which indicated deception on the part of the witnesses. The witnesses ranged from pipe fitter helpers to Brown & Root superintendents. A Piping Design Services Inc. engineer and the Dravo Constructors Inc. project manager also provided testimony which contradicted the allegations.
13. The signed, sworn statements are maintained in OI FO:RIV. No further inquiries are anticipated unless staff inspections identify additional pertinent information that would tend to substantiate the allegations or discredit the interviewees.

Attachments:

- (1) Testimony [REDACTED] - dated 4-14-83
- (2) List of Interviewees
- (3) List of terminated employees identified in Attachment (1)

REPORTED BY:

H. Brooks Griffin
H. Brooks Griffin, Investigator
OI Field Office, Region IV

APPROVED BY:

Richard K. Herr
Richard K. Herr, Director
OI Field Office, Region IV

cc: W. Ward, OI:DFO - w/attachments
J. Collins, RIV - w/attachments
E. Johnson, RIV - w/o attachments