Docket Nos. 50-390/391 EA 88-65

> Mr. S. A. White Senior Vice President, Nuclear Power Tennessee Valley Authority 6N 38A Lookout Place 1101 Market Street Chattanooga, Tennessee 37402-2801

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Dear Mr. White:

SUBJECT: ALLEGED HARASSMENT AND INTIMIDATION (H&I) OF AUTHORIZED NUCLEAR

INSPECTORS (ANIS) BY HARTFORD STEAM BOILER INSPECTION AND INSURANCE

COMPANY AT WATTS BAR NUCLEAR PLANTS (WBN)

This is in response to a TVA letter from R. Gridley to Stewart D. Ebneter (NRC) dated May 24, 1988 requesting copies of OI Investigation Reports (2-85-034 and 2-85-034S) on the issue of H&I of ANIs at the Watts Bar plant.

On July 15, 1988, you provided a chronology of your own investigation of the matter which the staff had requested during the Enforcement Conference on May 10, 1988. Accordingly, enclosed are copies of the reports of NRC's investigation.

Portions of the reports dealing with the personal privacy of individuals have been deleted pursuant to Exemption 6 of the Freedom of Information Act. These consisted of addresses in Exhibits 8 and 14.

We will now proceed to evaluate the matter for appropriate enforcement action. If you have any questions, please call your Project Manager, Rajender Auluck at (301) 492-0759.

Sincerely,

ORIGINAL SIGNED BY: JAMES G. PARTLOW

James G. Partlow, Director Office of Special Projects

Enclosure: As stated

cc w/o enclosure:
See next page

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NAME :NSImms : FAuluck:as : FBlack :SRichardson JAxelrad :JPartlow :

DATE :7/1/88 :7

Mr. S. A. White Tennessee Valley Authority

cc:
General Counsel
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400 West Summit Hill Drive
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Mr. R. L. Gridley Tennessee Valley Authority 5N 157B Lookout Place Chattanooga, Tennessee 37402-2801

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Honorable Dan Wade County Judge Rhea County Courthouse Dayton, Tennessee 37321 Watts Bar Nuclear Plant

Regional Administrator, Region II U.S. Nuclear Regulatory Commission 101 Marietta Street, N.W. Atlanta, Georgia 30323

Resident Inspector/Watts Bar NP c/o U.S. Nuclear Regulatory Commission Route 2, Box 300 Spring City, Tennessee 37381

Dr. Henry Myers, Science Advisor Committee on Interior and Insular Affairs U.S. House of Representatives Washington. D.C. 20515

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feel could affect the relationship between Hartford Steam Boiler and Tennessee Valley Authority.

- Q And that's in relationship to being contacted by any outside agency; is that correct?
 - A That's correct.
 - Q And you were the author of that memo?
 - A Yes, sir.

BY MR. WILLIAMSON:

- Q Mr. Robison, are you familiar with an incident wherein an ANI at Watts Bar was refused access to a Watts Bar construction open item list?
- A Yes, sir. And I don't know who the inspector was. The open items list was maintained by the N-5 unit on site and the inspector wanted to see that in regards to an N-5 data package that he was working on.
- Q was this an acceptable practice for an inspector to review an open items list?
 - A Yes, sir.
- O Okay. Did you ever hear -- did you ever make or hear the statement made that that inspector -- that anybody could have access to that list except that particular inspector?

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- A No, sir, I didn't.
- Q. Did you hear anyone make that statement?
 - A Not that I recall.
- O Do you know if the inspector ever received access to the open item list in question?
 - A I believe he did.
- Q Do you know if he has continued to receive those updated lists since --
- A we don't receive an updated list. If there's something he would like to check, the procedure was at the time I don't know what it is now because I haven't been on the site the procedure was at the time that if he wanted to review the open items list that he could go to the N-5 documentation unit and they could show it to him.
- Q Mr. Robison, was the issue of the flued head piping penetrations ever brought to your attention?
 - A Yes, sir, it was.
- Q Do you recall when that was first brought to your attention?
 - A The exact date, no, sir.

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	Q.	I guess	I'm reall	y concerned
speci	fical	ly with	the dispo	sition of TVA's NCR
5 6 0 9	for U	nits I a	and 6420 f.	or Unit II. Do you
recal	.l wha	t the d	isposition	of these two NCR's
was?				

- A No, sir, I don't.
- Q Okay. I'm going to -- for the record, I have TVA NCR 5609 and attached documentation, and also TVA NCR 6420 that is available for Mr. Robison's review.

Are you aware that NCR 5609 actually included some welds from Unit II?

A No, sir, I wasn't aware.

would you like to review — if you would, please, review 5609 and see if that looks familiar to you. I think that document was generated on April 27th, 1984. Do you recall how many welds were in question?

A No, sir, I don't.

BY MR. MURPHY:

Q Is it a significant number or one or two? I mean, are we talking about one or two welds or are we talking 40, 50? I mean, do you have any idea?

The total number of welds, I wouldn't

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have an idea. TVA would document the total number of welds on a continuation sheet.

- Q Is it documented there?
- A Yes, sir.
- Q Is that a significant number of welds or just -- are we talking about one or two?
- A It looks to me like there's probably about 25 or so.

BY MR. WILLIAMSON:

Q To the best of your knowledge, what was the issue with regards to 5609?

assemblies had a, what we call a guard pipe that goes from the flued head around the pipe in the system and there is a weld that's inside that guard pipe. And the question was did that weld have to be inspected during hydrostatic test.

And the question that was relayed to me was does it have to be inspected by an authorized inspector during the hydrostatic test.

- Q This is a TVA weld or a vendor weld?
- A It's a vendor weld.
- Q Had it been hydrostatically tested by the vendor?
 - A No, sir.

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It had not. Had the weld been Q: to NDE by the vendor? subjected

I'm not positive whether it had been subjected to any NDE.

Is there a requirement, ASME Code requirement that this weld be either subjected to hydrostatic testing and/or NDE examination?

Yes, sir. It would have to be subjected to a hydrostatic test and depending upon the class of the piping system it was used on, would depend on the NDE requirements.

If it's a Class 2 system what? would the NDE requirements be?

I would have to look.

Is it normally an RT requirement?

I couldn't tell you. I'd have to inspection requirements.

Is there a requirement that authorized -- a Code requirement that the ANI visually inspect 100 percent of the welds during hydrostatic testing?

answer to that question when it was posed to us was that no, he did not have to inspect 100 percent of the welds.

Is there a requirement that the ANI

- A Yes, sir.
- Q Is there a requirement that the ANI witness TVA's 100 percent inspection of these welds during hydrostatic testing?
 - A By witnessing --
 - Q Witnessing the QC inspector.
- A. For example, you making the inspection and me standing over your shoulder?
- Q Yes. Or being there during the hydrostatic testing.
- A The authorized inspector is required to be there during the hydrostatic test. Now, the piping systems could be a very short piece or it could be a great long section of piping.
- Q This was, I believe in most cases,
 Class 2 piping, some very large main steam
 piping, safety related piping. Would you agree
 that these particular vendor welds were
 inaccessible by virtue or having both insulation
 and a guard pipe around them?
 - A Yes, sir.
- Q That is true, so there was no way for them to be visually inspected by anyone, TVA or

the ANI?

A No, sir.

Okay. Does the ANI have a right to inspect any of these hydrostatic tests that he wants to? There is a requirement that he witness all -- 100 percent of hydrostatic testing, right?

A By 100 percent you mean all hydrostatic tests?

Q Yes.

A Yes.

Q Okay. Does he have the right to look at any weld he wants to look at?

A Yes, sir.

Q Okay. Why would you ever suggest as a disposition that 100 percent visual inspection of welds is not necessary after the ANI has already indicated there is some questions about some of the welds? And I'm referring to the disposition in part of 5609.

A Disposition stating that they didn't have to look at 100 percent of them?

Q Well, I think in -- there is a --

A Disposition on the NCR --

Q Well, there's a letter dated May, the lith, 1984 to Inspector Haston from H.L. Robison,

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Assistant Regional Manager, and the question posed to Atlanta Regional Office was can we, Hartford Steam Boiler, accept the hydrostatic test or the system when less than 100 percent of the welds has been inspected by the authorized nuclear inspector. And your answer is yes, there are no requirements in the ASME Code which requires that the authorized nuclear inspector witness or examine 100 percent of the welds during hydrostatic test.

A That's correct. And that information was via — give to Howard by myself after discussion with Mr. Higginbotham and Mr. Fiegel in our home office.

Mr. Higginbotham indicated that hydrostatic test has traditionally been performed to locate gross leakage in a system; is that correct?

- A That's correct.
- Q Do you agree with that?
- A Yes, sir.
- Q It appears that TVA and Hartford were looking for reasons not to do these visual inspections on this testing. The question is did the authorized nuclear inspector have to perform,

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and you say no. But someone had to inspect those welds?

- A That's correct.
- Q Were they inspected: Was there a 100 percent inspection on the welds of those flued head penetrations performed?
- A I couldn't tell you that with all certainty.
- Q Could they have been performed without removal of the guard rail or insulation?
- A Well, they couldn't remove the guard piping.
 - Q Couldn't remove the guard piping?
- A No, sir. That's welded to a piece of that head.
- Q Could they have inspected the welds without removing insulation?
- A Not having seen the actual penetrations, I couldn't answer that.
- Q Well, I mean knowing what you know at this juncture, would it be safe to say that the welds that were not examined because they were inaccessible, that the condition of those welds would be indeterminate?

A Yes, sir.

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O So there was no way of knowing what the condition of those welds was without looking at: them?

A That's true.

Q Okay. Is any amount of leakage permissible in a weld in a safety system?

A During the hydrostatic test under construction?

- Q During the hydrostatic test.
- A No, sir.
- Q None. Okay. Let me ask you another question. Why is there a different disposition on Unit II than on Unit I? We're basically talking about the same problems. This Unit II, 6420, has yet to be resolved; 5609 was resolved, and there's -- the same problem exists in one unit that exists in the other, but yet this one has not been resolved yet. Can you explain the difference?

A No, sir, I can't. But to the best of my knowledge it's under investigation by TVA.

Investigation might not be the right word. They are looking into it.

Q There was a meeting on January 28th, 1986 and I have a letter to the file from W.T.

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Higginbotham. It does not appear that you were in attendance or --

- A. No, sir.
- Q -- on distribution.
- A No, sir.

There's a statement in here that says the purpose of this meeting was to discuss flued heads and associated piping that was not examined in accordance with Section 3, Division 1 of ASME It was agreed to correct these nonconfor-Code. mances and bring them into compliance with the Code. It says it was also agreed that the existing nonconformance report, which was 6420, addressing these situations will be revised as HSB has found the resolution to the nonconfor-It should be noted that: mances unacceptable. upon submission of these nonconformance reports to the Office of Engineering in Knoxville, the Office of Engineering also found the resolution of these nonconformances unacceptable.

Okay. Do you know why or what the current status of 6420 is?

- A No, sir, I don't.
- Q You do not. Are you not involved with 6420?

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I'm not involved with TVA at all

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A I'm having a hard time finding the proposed disposition.

Q It might not be in here. Where is that -- do you have a better copy of this?

(Brief pause.)

This is a memo from J.C. Standifer,

Project Manager for Watts Bar Design Project to

Gunther Wadewitz, Project Manager, Watts Bar

Nuclear Plant dated May 17th, 1984, subject,

Watts Bar Nuclear Plant Nonconformance Report

5609. And this was the basis for their use-as-is

disposition. Are you familiar with that

document?

- A This should have been part of this.
- Q Yes.
- A Yes, sir. I'm aware of this one.
- Q Okay. Do you know why Hartford accepted that disposition of the NCR?
- A To the best of my knowledge, this question that was asked by Inspector Haston, dealt with the ANI's looking at 100 percent of the welds and was not addressing the TVA looking at 100 percent of the welds.
 - Q Okay. Did that issue not come up or

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did that not bother you that there was a weld, a Class 2 system, that could not be visually inspected?

A I don't believe the issue was brought to our attention until this other NCR came about which discussed that none of them had been inspected, which is 6420.

BY MR. MURPHY:

Q Let me ask, do you get copies of the daily inspection records?

A Yes, sir.

They're forwarded to you. I have infront of me, it's the daily inspection record from Howard Haston and it's dated 5-18-84 and I'd like to read a paragraph to you and then I'll show you the document. As you have referred several times that the question involved was whether the ANI reviewed the document. This is what Paragraph 5 says.

NCR 5609 revision 0. Contacted A.R.M.

Robison to discuss the TVA resolution to the uninspected welds on flued heads. TVA has stated that if we do not accept the disposition they would exclude them from the N-5. Vendors welds on Tube Turns penetrations assembly was not

hydroed by vendor and not inspected by TVA. And I repeated, not inspected by TVA, during hydrotest. Use-as-is.

Isn't that -- have I confused the question here or have you not seen this document? I'd like you to look at it because it seems to me like the question that you're saying he asked is really not the question that he addresses continuously in these documents, and I'll produce other documents.

- A Yes, sir. I'm aware of these.
- Q I mean, are we confused about what the real question is or --

A No, sir. The question that was put to us in the Atlanta Regional Office is whether the inspector had to witness 100 percent of the welds and that's the question I think that we addressed in the memo to Mr. Haston.

Q Is this what the document is stating? Maybe I misread it.

A I think this document came after my memo to Howard.

BY MR. WILLIAMSON:

Q Let me ask you another question regarding that. Here's a sequence of events

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starting with 3-9-84 which says, Haston ANI discusses MC welds performed by TVA with H.L. Robinson -- Robison. I guess that's you.

A That's me, yes, sir.

Q All right. 4-12-84, Haston identifies by 939 -- is that SIS report?

A Yes, sir.

Q -- to TVA lack of hydro on Tube Turns supplied penetrations and lack of inspections in insulation welds on subsequent TVA hydro test.

Okay. 4-20-84, discussion of hidden MC welds between Haston and Bresslar on lack of test. Okay. And then 4-27 a full -- about six weeks later, NCR 5609 is generated identifying Tube Turns' lack of hydro at factory, route caused, designed and not communicate their waiving of hydro. Okay?

A Uh-huh.

And then you wrote a letter -- we have here your letter to him which I'd like to show you and then he writes a letter back to you, I guess, on the 15th saying why he thinks these are important.

So this issue was discussed at some length prior to the initiation of this with you

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MR. WILLIAMSON: Okay. And what was the date of that document you had, the 18th?

MR. MURPHY: Yes, 5-18.

MR. WILLIAMSON: 5-18, which was communicated that TVA QC inspectors also did not review those welds; is that correct?

MR. MURPHY: Yes. And it reflects that he contacted Mr. Robison on that date and informed him that the welds were not hydroed by TVA.

MR. WILLIAMSON: Okay. And he also makes a notation on here. Okay.

BY MR. WILLIAMSON:

Q My next question is, did the ANI who signed off on 5609 support the decision of Hartford-Atlanta to accept the use-as-is disposition of this NCR?

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4 5 6 Georgia, H.D.H. 5-18-84. 9 41 Mariella Street, N.W., Atlanta, Georgia 30303 Okay. Q 10 11 12 13 duress? 14 15 agree with it. 16 17 disagreements? 18 Α 19 Sulte 027 — 20 accepted. 21 22 23 Yes, sir. Α 24 Q 25

A.	By	the	note	o n	this	NCR,	no,	h e	didn'	τ.

- Did you know that he was going that note on the NCR?
 - Wo, sir, I didn't.
 - What does that note say?
- The ANI's signature per written and verbal directions of H.L. Robison, Assistant Regional Manager, HSBI&I Company, Atlanta,
- So in your professional opinion does that -- is that personal comment there means -- does that mean that he accepted that disposition or that he was accepting it under some
- It means that he accepted it and didn't
- Is that a common way of notating
 - No, sir, it is not.
- I'm not -- I don't know if it's I don't recall seeing it on anything But you had had several discussions with Mr. Haston about this --
 - -- and it had gone up, you said, as far

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as the Bartford office and Mr. Fiegel?

A Yes, sir.

Q And it was a unanimous agreement, then, that this was the way that it would be handled, accept as-is?

- A This NCR?
- O Uh-huh.

A No, sir. The decision that we arrived at was that the inspectors did not have to witness 100 percent of the tests, the inspectors being our authorized nuclear inspectors, 100 percent of the welds in the test. I'm sorry.

BY MR. MURPHY:

Q Let me read one more document. This is a letter to A.R.M. Robison from H.D. Haston and it's dated 5-15-84. And the subject is hidden welds and hanger lugs. And it addresses your response.

It says, thank you for the response to the problem of welds on flued heads inside the penetration at Watts Bar. Per your response dated 5-11 this question answered was not the question asked. At issue is not whether the ANI's are required to perform 100 percent inspections of all welds during hydrostatic

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penetration assembly and covered by insulation by the penetration vendor be accepted as being tested in accordance with the Code.

I'd like you to look at that document and tell me if you've seen this, please.

- A I don't recall seeing this document.
- Q You've never seen that document, even though it was addressed to you?
 - A I don't recall seeing it.
- Q Oh, you don't recall seeing it. Was this issue in the minds was this issue ever addressed again at a later meeting by Mr. Haston? Did this come up again?
- A I don't recall it being discussed again.
- Q In August of 1985 there was a meeting held concerning the letter written by the Group.
 - A Yes, sir.
- Q Implying that if the inspectors weren't paid more money that they were going to blow the whistle on TVA. Did you attend the meeting concerning that particular letter held here in Atlanta on the 26th of '85, if you can recall?
 - A I was in some of the meetings that were

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held with some of the inspectors, yes, sir.

On you recall Mr. Haston being asked if there were any problems and him implying at that time that he was still not satisfied with the handling of the flued head problems on Unit I?

A I don't remember that being discussed, but in reviewing the documentation he submitted to us in regards to the letter from the Group, yes, he did mention that.

Q He did mention the fact that he was still not satisfied with the disposition?

A Yes, sir.

Did Hartford not take any action at that time to resolve this problem or did you consider it a dead issue even though earlier on you said that the issues must be resolved to the satisfaction of the ANI's on site. And from the records at least it would indicate that he was not satisfied with the disposition. Did Hartford take any action to go back and review that problem with Unit I to determine whether this was a proper letter of resolution or not?

A I'm not positive whether any follow-up action was completed or initiated.

Q I'd like to make one more point. On

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your letter to Mr. Robison dated May 4th, 1984 telling him that he could accept that thing, I just want to make - I'm not real clear in my The letter from you states this: question was discussed by the writer with W.T. Higginbotham, Senior Regional Manager, who agreed that there was no requirements for 100 percent examination during the weld. Mr. Higginbotham stated that hydrostatic testing has traditionally been to locate gross leakage in the system.

Surely we're not saying that a minor crack resulting in a very minor leak is acceptable here?

- No, sir, we're not.
- Are we accepting any kind of leak? Q
- No, sir.
- Is this a correct statement, then?
- The statement -- you'd have to ask A Higginbotham.
 - I mean, you
- My estimation of what the gross leakage is not gross leakage. Any leaks that is found during the hydrostatic test would be considered unacceptable by Code.
 - Are you agreeing with this statement?

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That we're testing for leakage?

No. It traditionally has been to

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responsible for the insulation of the system.

- Q So this would be a QC inspector?
- A Yes, sir.
- Q If that's not done, does the ANI have any responsibility to report that as a deviation from Code?

A If he knows that there is a weld back there, and the only way he would know that is by looking at the customer supplied drawing, then he should notify the QC inspectors.

Q Which Mr. Haston apparently had access to back in March when he discussed the welds in March and April. What I'm saying is, would it be a normal function of an ANI to report through SIS 939 or NCR -- I'm talking about if he knows that an inspector, QC inspector, is not looking at 100 percent of the welds, does he have a responsibility under the Code or to Hartford, is it instilled in these people to report this as a deviation from Code?

A He would report that — put report in like quotes — he would report that by not signing the hydrostatic test report which would cause TVA to question it. TVA would then look at the system to find out why he wouldn't sign it

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and he would tell them.

Q By the time this issue — by the time after six weeks, by the time 5609 was written, reviewed, discussed and was eventually signed off on on 5-18, basically three weeks, I guess, 21 days, was there any doubt in your mind that both TVA and Hartford Steam Boiler, Atlanta, and even corporate, Knoxville corporate, knew about these vendor welds which were inaccessible that had not been inspected during the hydrostatic testing?

- A I would say we knew about it, yes, sir.
- O There's a -- in a letter here from Mr. Standifer to Mr. Wadewitz that I mentioned earlier regarding the resolution -- let me find one I can read here. There's about 5,000 Xerox copies. I need an explanation from you regarding this thing.

In this letter that we referenced earlier, May 17th, 1984, J.C. Standifer to Gunther Wadewitz, Project Manager, it says that this Nonconformance 5609 was made significant for the sole purpose of documenting the use-as-is disposition if the ANI could not accept the disposition. This would require removing the aforementioned Tube Turns welds from the N-5

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program. If the ANI cannot accept the use-as-is disposition this will require no further action -- if the ANI can accept.

That says to me that if the ANI can't accept this disposition that we have offered, TVA has offered, we'll just take it off the N-5 program.

A Yes, sir.

Q And it won't be an issue any more. Is that routinely done? Is that acceptable by Code? Is that acceptable?

The N-5 lists the systems for the particular piping system. TVA's containment vessel is a non-Code vessel and the penetrations going through it were made as part of the vessel itself and they wanted to list all those penetrations separately on a separate N-5 because they were Code stamped items. And there was a great deal of discussion at the beginning of the N-5 program as to whether or not they would include the penetrations at all.

Q Did they have any option? I mean that's safety system, Class 2, some of it is main steam.

A They considered the penetrations to be

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part of the containment vessel, not the system.

Q Did Hartford have any concern with the potential of deleting this from the N=5 program to avoid having the ANI sign off on it?

A No, sir. TVA was the one that would determine the boundaries that would be included in their Code systems. TVA, I mean the owner.

Q But then the ANI or Hartford who was inspecting this plant to Code is required to see that the systems are, first, you know, fabricated and installed and inspected to Code; is that correct?

A That's correct.

Q So would that not be a deviation from the Code if they just arbitrarily take these out of the Code and if they did that, do they do that, just arbitrarily remove them or do they have to have some special permission to remove an item from the N-5 data package?

A By permission, whose permission would they have to get? That's my question.

Q That's my question.

A As I understand the Code, the owner,

TVA Power side, determines the Code boundaries,

et cetera, and they give those to TVA

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Q Let me ask you a personal question. As a former inspector -- you were an authorized nuclear inspector; is that correct?

A Yes, sir.

Q And as a supervisor, do you think that actions such as this is a deterrent to the ANI being vigilant in his inspection effort? I mean if I know that if I make an issue out of something, it doesn't really matter whether I sign off or not, they're going to remove it from the N-5 data package, so is it really worth the hassle of arguing with people about it? Do you think that's a deterrent?

A No, sir. I do not feel it's a deterrent.

BY MR. MURPHY:

Q Do you think a statement made like this as a suggested disposition of a nonconformance report is — can be viewed as a method of intimidating the ANI, inasmuch as we're saying you

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either do, you know, accept it or we'll take it out of your control? How do you view that professionally and personally?

A Professionally, the owner has the responsibility for defining the boundaries. If they came to me personally and presented that to me, if that's what they want to do with their system, that's fine. It wouldn't sit very well.

understand it, in their FSAR, to define
boundaries, which I think are defined in FSAR.

I'm not a Code expert, but as I understand it,
there's one or two things happen in these
instances. Either they're inspected as Code
requirement or somehow removed from the FSAR. Is
that a fairly accurate evaluation or not?

A The owner determines what has to be inspected by the rules of Section 3, ASME Code.

- Q And he commits to that, right?
- A He commits to that, yes, sir.
- Q If they didn't commit to something of this order, there wouldn't be an ANI up there to begin with.
 - A That's correct.
 - Q They wouldn't need them. So you have

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- A That's correct.
- Q Otherwise this problem wouldn't be a problem.
 - A That's correct.
- You wouldn't need to disposition Okay. thing away. And as a professional, it really doesn't make a whole lot of difference to you whether they are able to take these things out of — once they're committed to — whether they take it out of your control or not? You obviously have inspected, have found the problem, and one of their suggested dispositions is we'll just remove it from your control. That doesn't bother you as a professional? And it's an opinion, I'm asking for an opinion.

A The owner is the one that makes that determination, which is the TVA corporate people. And they've made some decisions, for example like that, if they wanted to remove it they could remove it. They've also made some decisions that they have installed some stuff under their non-Code activities that they've wanted to change to

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Code and they have gotten us involved with the removal of an entire system and putting it back in under Code compliance. So they do make decisions like that, yes, sir.

Q But there's a method for upgrading material; isn't that correct?

A Yes, sir.

Q Is this an acceptable method for -- I guess we're saying we're doing downgrading.

A What they would do is include that in the documentation for the containment vessel, which would then be presented to, I guess, the jurisdiction or the NRC.

BY MR. WILLIAMSON:

Q One more question here on this. Do you acknowledge that Inspector Haston did not agree with the disposition of 5609?

A Yes, sir. I do acknowledge that.

Q Were you aware of that at the time that he signed off on it?

A On this document?

Q Right.

A I was aware that he didn't have a good feeling about signing the document. I wasn't aware that he was going to put that statement on

the NCR.

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- Q: Have you ever seen this before?
- A Oh, yes, sir. I've seen it before.
- Q Okay. Now, it appears --
- A Excuse me.
- Q Yes, sir.
- A This is a TVA document and that's a Hartford statement.
 - Q Okay.

BY MR. MURPHY:

- Q Is that a routine statement?
- A No, sir, it's not.

BY MR. WILLIAMSON:

It appears that the disposition for 5609, use-as-is, and the disposition for 6420, use-as-is, is the same. However, the disposition on these two documents is not acceptable to Hartford. 5609 was acceptable and was signed off. 6420 has not been accepted and I think -- and it's been communicated to TVA that it's not acceptable to use as-is, that there's some other means that will have to be employed which I understand are fiber optics, moisture-sensitive tape and even the possibility of removing some insulation, a window at least in some insulation

to give access to these --

A Uh-huh.

Q -- welds. My question is, if it -- you know, if it's a problem in Unit II, why wasn't it a problem in Unit I?

A To the best of my knowledge, it's still a problem in Unit I and this disposition in this one is being reevaluated.

Q Okay. My next question is, was

Hartford under any pressure from TVA to accept
this disposition or resolution of this?

A No, sir.

Q That's a very important question.

A I have never been under any pressure from anyone at TVA to sign any documents. As far as I know, none of my inspectors that I supervise have been either.

Q Okay. You've never been threatened by TVA with termination of the contract for refusing to sign or to change a decision that you felt was right?

A No, sir.

Q Okay. Let me -- there's something that came up during our interviews and inquiries that specifically involved you, was in 1984 -- and I'm

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not exactly sure of the month — you were subbing as an ANI I think at Watts Bar for a short period of time. Do you recall that?

- A Yes, sir. I did that.
- Q Okay. And there was an instance where I think you refused to sign off on an N-5 data package from a vendor regarding a valve that had not been signed off on. It was my understanding that you were instructed by Mr. Higginbotham to send that documentation back to TVA and then subsequently told by Mr. Higginbotham to just not worry about, to go ahead and sign that off. Do you recall that?
 - A I don't recall that situation, no.
- O Do you know if Mr. Higginbotham was influenced by TVA in any way to --
- A While I was at the site I couldn't tell, you know, whether --
 - Q Do you recall this incident, though?
 - A I don't recall it specifically.
- Q It was related to me that you were kind of unhappy about, you know, about this former inspector who didn't sign off on this and there was some question as to whether it had been, you know, inspected properly at the vendor or why it

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hadn't been signed off on. And you had a little concern about that.

A I would have to review the documentation to refresh my memory on it.

Q Okay. Let me ask you this. You said that you thought this was being reviewed, 5609. When this was completed you signed off on an N-3 package for Unit I --

- A That's correct.
- Q -- which basically says everything there is as per ASME Code.
 - A That's correct.
 - Q Everything is acceptable.
 - A To the best of my knowledge.
- Q To the best of your knowledge, that you don't personally look at them but you look at -- I understand that -- for Unit I. You signed off on that. Well, now that this is being reevaluated and there's still questions unanswered about the flued head, what's the status of the N-3 package for Unit I?
 - A If --
- Q Is that a consideration? Have y'all said, what are we going to do about that? We'll recall it, we're going to --

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A We being TVA or ---

Q Hartford, Hartford. You, as a signer of those documents, as accepting that that work has been done and reviewed and inspected in accordance with ASME.

A I have not been involved with any of the discussions because that's -- Chuck is handling that now and Mr. Higginbotham. However, if they want me to go back up and review the documentation and everything is satisfactory, I would sign the document again.

BY MR. MURPHY:

Q With the same disposition? Is that what you're saying?

A If this document was reviewed and changed and it affected the N-3 and they had to revise the N-3 and wanted my signature on the revised N-3, yes, sir, I'd sign it.

Q Once it's --

A If they come up with something else not even reflected to that that they wanted to correct.

BY MR. WILLIAMSON:

Q Did you ever have any discussions with Walt Joest or Mark Bresslar of TVA's Codes and

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A I suspect that if through the course of that four weeks, five weeks, whatever, yes, sir, I probably was in contact with them.

Q I've been told that at least Mr.

Bresslar is somewhat of a Code expert and serves
on, I guess, the National Board or --

- A The ASME Code Committees, yes, sir.
- Q The ASME Code Committee. Have you found any pressure or influence from him to accept or change a decision made by you as a result of his position on that committee?
 - A No, sir.
- about the disposition of 5609, use-as-is, and 6420. Just for the record and once again for my clarification, what was the -- your justification for overriding the decision of the inspector which was, I think, obvious that he didn't agree with the TVA disposition or at least thought that there was more work needed to be done? What was your justification for overriding him in this particular case?
 - A The conversation held between myself

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and Mr. Higginbotham and Mr. Fiegel.

Q Okay. Would there have been any other way to resolve that issue?

A This problem? There's all kinds of ways.

Q How?

A Well, one of the ways, they could have rehydroed all the systems. The other way would have been to exclude them from the N-5, and I'm sure TVA could have come up with some other acceptable or unacceptable methods of doing things. But we haven't discussed any of those.

BY MR. MURPHY:

Q Just a couple of follow-up questions.

Was there a period of time that

Hartford here in Atlanta did not have a contract

with TVA? I mean that you were working on the

site and it wasn't like you terminated work, but

there was a period of time between contracts?

- A Between contracts?
- Q When you didn't have a written contract.
 - A I am not aware of that.
- Q You're not aware of earlier this year there was a period of time when a contract did

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 not -- a written contract did not exist?

A No, sir, I wasn't aware of that.

Q I'm not sure either, but someone has told -- we've been told by several grunces that there was a period of time when you were negotiating the contract and that you might have had an extension of the current contract, but that one contract had actually expired.

And you say that there is some specific document or authority that gives you the authority to override or change a decision of an ANI?

I don't mean in generalities that you're his supervisor, because I think the documents I've look at talk what the supervisor's job is with some specifics. Did you know of any specific that says yes, as a supervisor in an authorized nuclear agency I can override the decision of an ANI?

MR. LYONS: Can I comment. I thought there was earlier testimony that the ANI was Hartford Steam Boiler, the agency. I mean, that that was the decision. I thought that that had been discussed that Hartford Steam Boiler would be the agency that would be the decision --

BY MR. WILLIAMSON:

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Q: But you indicated that there was a provision for overriding; is that correct?

A I believe there is, yes, sir, in one of our handbooks.

BY MR. MURPHY:

Q Could you locate that for us, you know, after we complete this. We'd appreciate it.

I have one other question and I need some clarification, and I guess I'd like to remind you that we're doing this under oath.

Have you ever heard the statement made after the call from Walt Joest or any other time, that any ANI that causes us to lose the TVA contract will be fired?

A . No, sir, I have not heard that.

Q Never heard that statement. That's all I have.

BY MR. WILLIAMSON:

Q I've got two more questions. One is a clarification; you indicated that the discussions about 5609 were limited in scope to whether the ANI had to physically perform 100 percent visual inspection during hydrostatic testing.

A That's my recollection, yes, sir.

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Was it not a consideration Okay. Q between you, Mr. Bigginbotham, Mr. Ireland and all these other people who have a lot of years of inspection experience, was it not a consideration that each weld in a system that was being hydroed, a safety system, had to be inspected, visually inspected, not by Hartford but by QC inspectors and was that ever communicated to your ANI in the field?

I believe that it was communicated don't know whether it was written or verbal is the one responsible for that the client, TVA, looking at 100 percent of the welds. And as the documents show we communicated to our inspectors that we do not have to look at 100 percent of the welds.

Q And if this insulation was not Okay. I think, that the welds removed, you agreed, they could not be visually inspected, could be considered indeterminate?

Yes, sir, I would have to agree with that.

And there's a possibility that there's some documentation that was signed off by TVA saying these welds were inspected as part of

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the system, which was subsequently reviewed and accepted or verified by Hartford Steam Boiler personnel?

A That would be a true statement, yes, sir.

Q Do you feel any pressure now from either your management or from TVA's management that would affect any of the decisions that you've made regarding -- as a supervisor -- regarding disposition of ANI's or any other issues regarding ANI's in the field?

A No, sir.

Q Is there any influence, passively, overtly, any influence placed on you by either your boss or by TVA?

A No, sir.

Q Okay.

BY MR. MURPHY:

Q I have a couple more. There was a discussion, I think we talked about, with Charles Christopher about some processing of some N-5 packets.

A Yes, sir.

Q And a kind of a problem existed. Did either Charles Christopher or one of the ANI's at

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the site tell you that Christopher had looked into the possibility of having those ANI's removed from the site? Was this communicated either by Christopher or --

A To the best of my recollection I don't recall anything like that. But that -- I would have to also tell you that that's a standard thing that we hear from our clients, you know, they'll go somewhere else. We hear it all the time.

- Q And you don't view this as a threat?
- A No, sir, I don't view that as a threat.
- Q Okay. Is there a lot of other places they can go?

A You want an honest answer, no, there's not.

Q Okay. And there's one more last question. I guarantee it's my last.

There was a meeting — after the call from Mr. Joest and after — there was a meeting held either here in Atlanta or Sweetwater. Do you recall what that meeting was — the contents of that meeting was? We've addressed this memo previously, but what was the basis for bringing those people in here?

ome form of concern about them going to QTC.

When this happened the ANI's at the site were called here to Atlanta to attend the meeting. Do you recall that meeting?

about. I want to get my mind right. Mr.

Higginbotham and Mr. Ireland and myself went to

Knoxville and I believe this was after the letter

from the Group. We went to Knoxville and we met

with Clarence Roberts, Mark Bresslar and Walt

Joest in regards to the letter from the Group,

and I believe Mr. Higginbotham went to visit — I

don't remember the gentleman's name but it was

someone in the corporate offices that was dealing

with the contract. It might have been Mr. Kelly,

but I'm not positive of who he visited.

And the purpose of that meeting was to continue, I guess, our discussions with TVA about the memo from the Group and to assure them that we were going to do whatever necessary to continue the relationship that we had built up in the past. In order to alleviate some of the

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concerns, a decision was made that I would be relieved as the construction supervisor and that the entire TVA operation was going to be brought under Chuck Ireland. That had been bounced back and forth for many years and I was in the process of getting my in-service supervisor's endorsement so that I could take over the entire TVA account. So that was done just to give TVA a good feeling.

when we started to leave we asked if there was any other concerns and it was related to us that they were having a problem, what they saw as a problem, with the ANI's spending too much time with the Quality Technology Corporation group over there.

We went from the corporate offices to Sweetwater and we had the two ANI's that were at the Watts Bar site over and discussed with them that particular situation and it was discussed with them again when we gave them the guidelines that if they were going to discuss anything with them, we didn't want to deny them any access to either the NRC, any of the safety groups, QTC or anybody, but we wanted to know, first of all, what they were going to talk about to -- You know, so that we would be aware of it more than

anything else.

Q This wasn't designed to be a dressing down or straightening out of the ANI's at Watts Bar?

- A I wouldn't consider it that, no.
- Q During this meeting did Mr.

 Higginbotham raise his voice, let's say, and imply that these guys would straighten up and do what they're out there to do or he'd find somebody else to replace them?

A No, sir. I don't believe that was -- I think we all raised our voices a little bit, if you will, that's a fact. Because when you get five or six guys in a group and you're discussing the thing, you know, in order to get your point across I think you have to speak loudly sometimes. But as far as raising his voice and telling them he would get somebody else, I don't believe that was ever said.

Q Mr. Higginbotham wasn't disturbed then about them -- he didn't imply during the conversation he was disturbed about them going to QTC?

A I think he implied that he was disturbed in the manner in which it was being

Q I guess one of the things that QTC was doing was granting full confidentiality. In other words, that anyone going to them with any concerns was granted confidentiality. Was that subject ever broached?

newspaper that they publish the toll-free number, the local number and all that stuff and it says basically the same thing that you've related, that there's confidentially -- whatever -- was assured. That nobody would know who turned them in.

Q At that meeting in Knoxville was there any indication that TVA was giving any hard thought to replacing Hartford as their inspection agency?

A There was no outright voicing of that opinion, no.

Q Did you -- from the discussion, did you gain that impression?

A From the discussion at that meeting, no, sir.

Q: Any meeting?

A We have had discussions here in this. office that would indicate yes, that they were considering that. And I think that was only justifiable if Hartford was a member of their group. And that was of concern, you know, that we wanted to protect our reputation, that we hadn't been or weren't participating with that letter and the Group, and that's what we were trying to assure TVA.

Q And did, in fact, Mr. Ireland and you switch positions at that time?

- A The supervisory positions?
- Q: Y.e.s.
- A Yes, sir.

Q And there wasn't a time delay involved in that at all?

A No, sir. The only thing I'll have to add to that is that the — it was verbally committed to Mr. Bresslar, Mr. Joest and Mr. Roberts that if Chuck had a problem with the QC program — QA program, rather — that if he had any questions he could come to me and we all made that commitment to the TVA folks because I'd been working with it since '79, so I was familiar with

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Q Did Mr. Bresslar or Mr. Joest later call, to your knowledge, call Mr. Higginbotham and indicate that they wanted you to remain in that position as supervisor of the TVA?

A I think they had indicated that at the meeting and they indicated that again to Bill, I believe, but I'm not positive if they called.

But they did indicate that at the meeting we were at.

BY MR. WILLIAMSON:

Q There was a subsequent meeting in Sweetwater where the discussion centered around, I think, customer relations. Were you and Mr. Ireland asked to leave the room and the conversation between Mr. Higginbotham and the ANI's pursued? Do you recall that?

- A Yes, sir. We were asked.
- Q But you don't know what transpired in the room?
 - A No, sir, I do not.
- Q Okay. Was it communicated to you what was transpired -- what was communicated in the room after you left?
 - A Mr. Higginbotham indicated to us that

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- Q Did you overhear any of the conversation?
 - A No, sir, I didn't.
- Q Do you have any idea what that conversation might have been about?
 - A No. sir.
- Q Okay. Do you think it might have been a calibration session?
 - A Calibration session?
 - Q As Mr. Murphy said, a dressing down?
- A Not being privy to the conversation, I'm not sure what went on.
- Q Is there any additional information you'd like to add to the record regarding your testimony? Anything that you'd like to add or discuss in any greater detail or --
 - A I can't think of anything.
 - Q Okay.
- A I do have one question. If you'll give me the date of the that one incident that you talked about where I was subbing as the ANI, I'll see if I can find some documentation about what

that problem was.

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Q Okay. Mr. Robison, have I or any other NRC representative threatened you in any manner or offered you any reward for your testimony today?

- A No, sir.
- Q Have I have you given this statement freely and voluntarily?
 - A Yes, sir, I have.
- Q Is there anything else that you'd like to add to the record?
 - A No, sir.
- Q Once again, we thank you for your cooperation and agreeing to being interviewed by the Office of Investigations. This interview is concluded at 11:30 on May the 2nd, 1986.

(Proceedings concluded.)

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CERTIFICATE OF OFFICIAL REPORTER

This is to certify that the attached

before the UNITED STATES NUCLEAR REGULATORY

5 COMMISSION in the matter of:

OF HAROLD LEE ROBISON

Suite E-301, 1117 Perimeter Center West
Atlanta, Georgia
On May 2, 1986

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

GARY L. LONG, CCR-B-966 Official Reporter

AAA Reporting Company, Inc.

ORIGINAL

UNITED STATES NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF: ..

DOCKET NO:

INVESTIGATIVE INTERVIEW OF WILLIAM HIGGINBOTHAM

LOCATION:

ATLANTA, GEORGIA

'PAGES:

1 - 85 ,

DATE:

FRIDAY, MAY 2, 1986

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EXHIBIT 38

BEFORE THE NUCLEAR REGULATORY COMMISSION

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INVESTIGATIVE INTERVIEW
BEFORE THE OFFICE OF INVESTIGATIONS

MAY 2, 1986

1117 PERIMETER CENTER WEST, SUITE E-301 ATLANTA, GEORGIA

12:35 P.M.

BEFORE INVESTIGATOR E.L. WILLIAMSON

APPEARANCES:

DANIEL D. MURPHY, Investigator, U.S.N.R.C.

CHARLES M. LYONS, Assistant Counsel, H.S.B.I.&I.

WILLIAM THOMAS HIGGINBOTHAM, Regional Manager, H.S.B.I.&I.

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PROCEEDINGS

MR. WILLIAMSON: For the record, it is now 12:35. This is an interview of William Higginbotham who is employed by the Hartford Steam Boiler Inspection and Insurance Company. The location of this interview is 1117 Perimeter Center West, Suite E-301, Atlanta, Georgia.

Present at this interview are Mr.

Charles M. Lyons, Assistant Counsel for Hartford Steam Boiler Inspection and Insurance Company, E. L. Williamson and Daniel D. Murphy, Investigators, U. S. Nuclear Regulatory Commission.

As agreed, this is being transcribed by a court reporter.

First of all I'd like to thank you,

Mr. Higginbotham, for taking this oppor
tunity to talk with us and agreeing to be

interviewed by the Office of Investigations.

Would you please stand and raise your right hand and I'll swear you in.

WILLIAM THOMAS HIGGINBOTHAM, being first duly sworn, was examined and testified as follows:

EXAMINATION

BY MR. WILLIAMSON:

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Q Mr. Higginbotham, for the record, would you please state your full name and your position?

A William Thomas Higginbotham, Regional Manager, Engineering Services Division, Hartford Steam Boiler, Atlanta.

Q Okay. And how log have you been in the employ of Hartford Steam Boiler?

- A Sixteen -- sixteen years one month.
- Q Prior to becoming the regional manager for the Hartford Steam Boiler Atlanta office, what was your position?
- A Assistant manager, Domestic, SIS Division, home office.
- Q And the home office is Hartford, Connecticut?
 - A Hartford, Connecticut.
- Q Prior to that, your tenure with the home office, where were you?
- A I was regional manager -- senior regional manager for Hartford Steam Boiler, Atlanta.
 - . Q Okay. And prior to that employment?

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Hartford	Steam	Boiler,	Los	Angeles	s .	

- Q Okay. And prior to that employment?
- A I was supervising inspector, Insurance Engineering, Los Angeles.
- Q Okay. And before coming to work for Hartford, who were you employed by?

A Immediately prior to coming to work for Hartford I was employed by San Diego Marine Construction Company, San Diego, California.

- Q In what position?
- A Foreman.
- Q Okay. Let me ask you a couple of questions about the authorized nuclear inspectors, hereafter referred to as ANI's. What is the purpose of the ANI on a nuclear plant site?

A To provide third-party inspection under the requirements of the American Society of Mechanical Engineers Code, to assure that to the best of his ability and knowledge the minimum requirements of the ASME Code are met prior to signing the manufacturer's data reports and prior to authorize the component or items to be stamped.

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A The American Society of Mechanical Engineers Code is the document that requires them to be present if the items are going to be certified to be in compliance with the ASME Code.

- Q Okay. In your opinion what is the relationship between Hartford Steam Boiler,
 Atlanta personnel and the ANI's in the field?
 - A Management personnel?
 - Q Uh-huh. And the field personnel.
 - A You mean our professional relationship?
 - Q Professional and personal.
- A Well, the professional relationship is a supervisor as required by the ASME Code. And the supervisor's function is to provide guidance and to answer the inspector's questions, to perform the audits that are required by the Code.

Collateral duties are administrative duties that must performed by the supervisor, such as performance appraisals, salary adjustments, salary administration and all those

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Q What about the personal relationship with these individuals?

A I think it's good.

All right. What is the relationship between HSB-Atlanta and site management personnel, TVA site management personnel?

A We interface with the site personnel. We also interface with the corporate personnel.

Q Who is the point of contact for you at the site?

A Today?

Q Today.

A I could not tell you.

Q Okay. Who has it been in the past? Is there a designee?

A Yeah, there is a designated contact but it's been -- it's been a long time since I did any work at the site other than attend meetings.

Q Okay. Would it be the Office of Construction project manager?

A I don't think so. I think that would be Knoxville. It may be the site project manager.

Q Yes, that's what I mean.

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	A :	Yeah,	yeah,	the	project	8	it	could	be,
o.r.	it cou	ld be	his des	signe	e.				

Q Well, I think that's a requirement the owner's responsibility, the project manager at each nuclear site.

Do you know what the QA Manual reflects as being your point of contact?

- I do not.
- Do you know what the relationship between, or can you elaborate on the relationship between HSB-Atlanta and TVA corporate and who you have the most contact with?
 - I personally have most contact with?
 - You or your office.
- My office has contact with Knoxville, primarily with Mark Bresslar or Walt Joest.
 - And what position do they hold?
- Mark's title is Codes and Standards, believe, and the Nuclear Design, and Walt is his assistant.
- What is the contractual or regulatory basis for this relationship that you have with the corporate people? I mean do you have a contract with TVA?
 - Yes, we have a contract.

					•
Q	Okay.	To what	extent is	that contra	c t
to what	extent	is it bo	inding on l	Hartford?	•
What does	it requ	ire of y	ou people	to do, your	
people?					e
A	It requ	ires us	to perfor	m the duties	as
required b	y the A	SME Code	and the	ANSI documen	ts.
Q	What's	the curi	ent statu	s of that	
contract?	I mean	is tha	t	•	
A .	It's ju	st rene	wed.	,	
Q %	Just re	newed.			
A	It expi	r.e.s. Mar	ch the 31s	t, 1987.	
Q	You tve	had: that	contract	continuousl	y
since when	1 ?				
A	177, I	believe	•	· '	
Q	And the	re's ne	ver been a	break in it	?
Has there	ever be	en a br	eak in it?	į	
A	Not to	my know	ledge. Th	ere's been a	1
hreak in t	the cont	ract, b	ut through	verbal	

A Not to my knowledge. There's been a break in the contract, but through verbal agreement we extended it. But to the best of my knowledge --

Q Who is the contract administrator for TVA in its dealings with Hartford?

A We have dealt with Asa Kelly in the past. I believe that the contract administrator today is Gerald Minton.

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Q	Okay.	Who	i s	the	administr	rator	for
Hartford	who in	terfa	c e s	for	Hartford	with	TVA
regarding	contr	act n	ego.	tiat	ions?		

- A Any one of us.
- O You?

have done it. I don't think Ireland's been involved in any of it.

Q Okay. We touched on this before, but specifically what are the ANI's on the site responsible for?

They're responsible to be involved in the construction, nuclear construction -- Code construction, I'll say -- to the extent that they deem necessary so that they will be in a position to certify the item meets the minimum requirements of the Code when it's been completed.

- Q And that have that latitude as they deem necessary?
 - A Yes.
- Q Must an ANI be satisfied from the point of view of his interpretation of the Code that an issue that he identifies as a Code violation is properly dispositioned?
 - A The ANI is not permitted to interpret

the Code.

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- Q . Who is permitted to interpret the Code?
- A The American Society of Mechanical Engineers.
 - O And that is where?
 - A New York.
- Q Okay. If an ANI disagrees with the disposition of the Code -- does he have to be satisfied with each and every disposition of an NCR or whatever the issue is, does he have to be satisfied with that?
- A If the ANI is solely the only one involved in that NCR, the answer to that is yes. But there may be many people involved with a nonconformance report, including this office.
- Q That's correct. Is there ever an occasion when only an ANI is involved?
- A Sure. Most of the time, as a matter of fact.
- Q But if he's unhappy or not satisfied with the disposition, then usually other people get involved?
- A Yes. His next recourse is to come to his immediate supervisor.
 - Q what -- in your opinion, what support

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does Hartford give the ANI's in the field relative to their making their independent decisions about the ASME Code problems and interpretations?

- A what support do we give them?
- Q. Uh huh.

If there's no one available in the Atlanta office, they have instructions to call home office. They have both office phone numbers and home phone numbers of several people both in Atlanta -- all of the guys in Atlanta and several code supervisors in Hartford.

Q Does Hartford -- HSB-Atlanta management personnel in your opinion fully support the views of the ANI's in the field?

A I can't say that 100 percent of the time, of course not.

- Q There are differences of opinion?
- A Absolutely.
- Q Then I guess the difference of opinion kind of matter is code interpretation and intent primarily?

A And again, we're not permitted to interpret the Code if there's a difference of

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opinion. Normally it's discussed among the people here. If we can't resolve it --

- Q. You say if you can't?
- A yeah. If we cannot resolve t, then we go to Codes and Standards, home office. Most of the time they are resolved in one way or the other. It is unusual to have to request an interpretation from the ASME.
- Q Everyone usually abides by that interpretation?
 - A You're obligated to abide by it:
- Does the field or regional supervision, regional meaning HSB-Atlanta, have the authority to override decisions made by an ANI in the field?
- A A supervisor has the authority to do it but when he does it he accepts responsibility for that decision.
- Q Well, where is this authority derived from? There's been some conflict in the information that's been provided in the past about exactly where this authority -- is this something that's written in the Code? Does the Code allow that or is it a matter of local procedure? Where does this authority come from?

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certi	ficat	e hol	der.	And	th	at's	i.nº	NS	I 626.0) .

Q If such a situation arises and the ANI disagrees with -- you know, this is referring to management -- he disagrees with his management, what recourse does he have?

- A The ANI?
- Q Yes.
- A If he disagrees with his immediate supervisor?
 - Q Uh-huh. And he disagrees with you.
 - A He came go to home office.
- Q And if he disagrees with the home office?
- A At some point in time he's going to have to bite the bullet and just pass the responsibility over to either me --
- Q Is there a provision for him going straight to the National Board and bypassing the --
- A No. No. He doesn't work for the National Board.

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Q Can he go to them requesting an interpretation?

A: The National Board cannot interpret the Code.

- Okay. Can be go to the ASME Committee?
- A Anybody can go to the Committee.
- Q Okay. If an ANI does not agree with the site or regional supervision and decides to pursue an issue to a higher authority such as ASME Committee or go to the National Board for some interpretation or reading, is he jeopardizing his position with Hartford Steam Boiler?

A His position, no. He'd probably make a bunch of people mad.

Q That's what I mean. Is it going to cause him any grief?

A I wouldn't think so. It probably would not go unmentioned, but I don't think -- it wouldn't jeopardize his position.

Q If it's not going to go unmentioned, you mean somebody is going to say something to him?

A I probably would. I probably would tell him not to do it again.

they have

Q But you say that provision is in place
that he can go
A To the ASME.
Q Yes, to the ASME.
A You said the National Board.
Q Okay, ASME. He could go to them.
A Anybody can go to the Society as a
private individual. If he does it on his own
time I have no problem with
Q Can he go to the National Board on his
own time?
A No. He doesn't work for the National
Board. He works for Hartford Steam Boiler.
Q Then you wouldn't approve of him going
to the National Board?
A No. I wouldn't like it.
Q But would you approve of him going to
ASME Committee?
A Sure. If he wants to write an inquiry
absolutely.
Q I mean bypassing
A Sure. I have no problem with that.
never have had it happen.

the freedom to discuss and offer

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And in writing.

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concern about someone doing that?

And do you have any

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instructio	ns,	i.f	they	can't	get	the	guys.	[hie rie:	~ ~

Well, I mean if they - if you disagree Q with that -- or they don't agree with your decision on an issue can they go to home office?

Are you saying would I have any problem A. with it?

Yes.

I think it would depend on the situation. I'm not going to condone every time that I disagree with an inspector that he calls home office. I'm not going to voluntarily condone that. If it's a significant problem and persists then he wouldn't have to go, we'd get the home office involved.

Are you aware of any ANI that's disagreed with HSB-Atlanta management and been directed to sign off on a document?

The only one I can think of is on the flued head problem on Number One Unit.

- Who is that?
- Haston, I believe.
- What were the circumstances surrounding that, do you recall?
 - This really came I recall part of it. A

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to light after the memorandum, infamous Group's memo. And it came to light because we had the mem in and asked them about problems and this came up at that time. If I remember the situation correctly, Howard Haston had written asking Robbie on weld examination on the hydrostatic test, and Robbie asked me. We researched the Code and in our opinion the ANI did not have to witness all of the -- have to examine all the welds while they were under hydro, which is an impossibility to start off with.

Robbie wrote a memorandum back and directed him to sign the — whatever the hell it was -- 937 or whatever document it was. That's the one I remember. There's been others, but that's the one that I think you're talking about.

Q Okay. Do you recall what others there have been?

A There have been numerous cases to where a guy calls in and he's got problems with signing a document or signing a data report. We disagree with him. I've said, go ahead and sign it, I'll send a memorandum accepting responsibility for it. And I've done that.

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Q with regards to that, when you are relieving someone of the responsibility in essence, I believe is what you said.

A That's correct.

Does that detract from the third-party independent inspector criteria that comes with an ANI?

A Does it detract from his authority, you mean?

Q Well, from that independence that he has as an ANI. I mean if he knows that he's not going to sign off — if he doesn't want to sign off on something and you're going to take responsibility for it, then is he really independent?

That's tough to answer because I think the basic concept that we have to go back to is we're a third-party authorized inspection agency. We maintain a staff of people to do that. Some people will just not be reasoned with. There has to be a solution to that individual that will not be reasoned with no matter what you show him. He chooses to be a biased reader and he reads it —no matter what you tell him. It probably detracts from that individual, but I think he's

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done it to himself.

In those instances where HSB-Atlanta.

has disagreed with a site ANI on an issue, what
is the basis for the final decision? Is that a
supervisorial one that you assume and make or is
it something that you get from home office, or is
that based on --

A If there is a -- there's no set way that we could do that. If it's something that I'm extremely familiar with and experienced in and have Code Committee on, I may make the decision. If it's something that we aren't familiar with, we'll get consultation.

- Q From where would you get consultation?
- A Home office.
- Q Home office. Do you ever go to TVA for consultation?
 - A For a Code problem?
 - Q Uh-huh.
 - A Not for resolution to it.
 - Q For any input?
 - A Sure.
 - Q who would you go to in that case?
- A I don't know who we've been to. I have personally been to Mark Bresslar.

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A No, because he's on the committees.

He's on the Code Committees. But we may discuss it with anybody. You know, if you were here we'd probably discuss it with you.

Q Let me ask you, on these decisions that you've made where they've been different than what the inspector felt like they should have been, did TVA, either from a site, site level, site manager level or corporate, Standards and Codes, have any impact on that decision that you have made?

A I'm not sure what decisions you're talking about the flued head problem, the answer to that is no.

Q Okay. We'll talk about flued -- any decision that's contrary to what the inspector makes.

- A I don't know that we've made that many.
- Q Okay.

A I don't know that we've been at odds with an inspector that many times.

Q Has anyone from TVA, either Knozville corporate or site, contacted you here or any of

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your people and attempted to influence a decision or a manner in which a situation or problem is: resolved?

- A Code decision?
- O Code decision.
- A I've discussed Code problems with Mark Bresslar.
- Q Did you feel any pressure from TVA, any suggestion to you that it's perhaps better to do something one way or the other?
- Well, I've discussed -- in discussions we've discussed the approach to the resolution of problems. And I don't profess to have the only approach.
- Q Has Gunther Wadewitz, Project Manager at Watts Bar, ever contacted either you or any of your people here concerning problems, a specific problem that he might have had with an ANI at Watts Bar, either personal or professional?
- A I'm not even sure I would know Gunther Wadewitz if he was to walk through the door. I know the name.
 - Q Okay. So your answer is --
 - A He hasn't talked to me.
 - Q Okay.

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site,	but	h e	hasn	't	talked	t o	me.				,

Q Have any subordinates of Wadewitz, Herb Fisher, John Self, Charles Christopher, any of these people contacted you about problems with ANI's at the site, about their refusal to sign off on something, about their performance or lack of, about their attitudes?

A John Self, I know I've met one time.

Herb Fisher, I'm not even sure I know him. Who is the other one?

- Q Charles Christopher.
- A It doesn't ring a bell.
- Q Any complaints about your ANI's performance?
 - A From any of those people?
- Q Lack of performance -- or from anybody on site.
 - A We -- boy that's a rough problem.
 - Q Directed to -- I mean --
- A I go way back. I mean I go back to
- Q First of all professionally and then personally I know there's some administrative things.

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A You bet. But I was here for a year in '78. I guess we had just taken the TVA contract and we had an old-timer up there by the name of --

Q McGraw.

with Mike McGraw and I was up there frequently with Roosevelt Russell and Elton somebody, another inspector. So, yeah, I've had complaints.

- Q About their performance?
- A Well, with performance, attitude.
- Q: Or lack of?
- A Yeah.
- Q Attitude?
- A Sure.
- O Okay. Has anyone, either at the site or from corporate, called you about any of your people, about performance, attitudes, or their reluctance to sign off on something or accept something or the delay they might be causing TVA, especially with regard to like the N-5 data packages?
- A Sure. Not holding them up. I've had numerous calls.

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- 1 What is your response to those calls? Q 2 Well, I say I'll look into it. 3 And look into it, what do you mean? 0 4: I call the guys and find out what is A 5 holdup, what's the problem, you know, why -what's going on. I always look into it or I have And I've even had Robbie somebody look into it. -7 go up there a couple of times. 8 9 Do you, in your opinion, exert any pressure on these people as a result of the calls 10 from TVA? 11 Yeah, we probably have. We probably 12
 - press them for a little more production and a little more time -- getting it on time, putting in a little more time at the site rather than at lunch hour, yeah.
 - Q Has anybody from Knoxville contacted you or anyone else in this office about a problem with ANI's at the site?
 - A Sure. Numerous times.
 - Q Okay. I'm thinking specifically about Walt Joest.
 - A Sure.
 - Q You recall one of the later calls from Mr. Joest when it was concerning --

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A I probably know the incident that you're talking about, with the QTC.

Q Yes.

A Yeah, sure.

What was his concern about that?

and only a QA guy or ANI would know about it, his contention was that before it was on the street QTC knew about it. So the implication was that our guys was going, as soon as they learned something, they were going and telling QTC.

That's the brunt of it. It went on for a half hour or so, the conversation.

Q He was upset about this?

A Sure he was upset.

Q Do you know where he got that information?

A No. I think -- I think he told me but I don't remember where he got it from.

Q It had to come from somebody on site, I assume, because --

A Yeah.

Q Do you know if these people were discussing personal issues or quality issues?

A I don't know that they were discussing

anything.

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Q Okay. Did you contact your people about this?

- A Had them in the office that month.
- Q Who was that?
- A George Deaton, Hank Best.
- Q These aren't the only two guys there, are they?
 - A At that point in time they were.
 - Q And you brought them in the office?
- A I had them leave the site that morning and come to the office.
- Q What action did you take relative to this complaint?
 - A None. We ironed it out.
 - Q And in what terms was this ironed out?
- A Well, they explained how some of these problems could be perceived, that their office was close to QTC and that their office could be observed by TVA people and that it was normal to do it. We also implimented a procedure where we developed a form that if they had a meeting they would document the meeting, who called the meeting, the subjects discussed. And this was Code we're talking about now. We're not trying

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to restrict their quality concerns.

- Q I understand.
- A Okay.
- Q In your opinion, does ANI's have the same rights as TVA employees with regard to employee concerns with QTC?
 - A Sure.
- Q Same. Was this ever addressed by Wadewitz or any of his associates or subordinates?
 - A Not to me.
- Q Did you ever make a statement or hear a statement -- primarily, did you ever make a statement that any ANI that did anything that resulted in cancellation of the TVA contract would be fired?
 - A Absolutely not.
- Q Did you ever say that to anybody at Watts Bar or anybody that has come into this office?
 - A No.
- Q Did you ever make a statement or hear a statement that you were going to fire ANI's for creating problems at Watts Bar, either in anger or frustration or haste or anything else?

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- A Not for creating problems. This statement came out of a different situation.
 - Q What was that situation?
- A Backing up to the previous subject, that if our guys were taking NCR's, documented Code problems immediately to QTC and if we couldn't put a stop to it, we would fire them.

 Yes, I made that statement.
- Q Okay. You were saying that because -- why, because that was the proper disposition that was to go to TVA for resolution?

A There's a quality assurance program in effect to address nonconformances. You know very well, you take a snapshot of any nuclear site at any point in time and you're going to have problems in that snapshot, I don't give a damn at what point in time it is, day one or the last day.

Q I think this other statement, the context was did you ever make a statement at any time that you were here or Hartford, and for Hartford to make a profit and anything that resulted in the cancellation of a contract with TVA or anybody would be fired?

A Did I make that statement? No.

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A If they're taking quality problems that are documented right straight from the office at the initiation of them, then they are not in compliance with the quality program and procedures.

BY MR. MURPHY:

- Q Who did you make that to? I mean who was present when that statement was made?
 - A. I don't know.
 - Q You don't have any idea?
- Robbie -- probably Robbie, because I think that's about the time we were turning over. Haston was here.
 - Q Haston was here also?
- A Yeah. Haston was here and probably Robbie. Don't hold me to that. Whoever I asked together in the office.

BY MR. WILLIAMSON:

- Q And that was when Best and Deaton came up?
 - A That's correct.

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- A (Witness nods affirmatively.)
- Do you recall --

BY MR. MURPHY:

You said that the comment -- you Q Yeah. said you talked with Joest for a half hour, so obviously it wasn't just one or two comments. I mean there must have been some discussion.

There was a lot of questioning on my A part.

Were you concerned about the Okay. fact that they were relating quality concerns to QTC that were not addressed by your office first or that they were spending too much time with QTC? And the reason I say that is there's a memo here from -- dated 4 November, 1985. It's to Best and Deaton from Harold Robison and you're on here, on the distribution list.

It states ANI, Quality Technology Corporation, TVA relationship. TVA voiced a

concern that authorized nuclear inspectors are spending too much time with the Quality

Technology Corporation.

I mean is that the concern or is it the concern that they're relating safety problems?

I'm confused a little bit.

A Either one. What I'm saying to you is we had a quality program in effect at Watts Bar. If they were taking an NCR as soon as it's presented to them and then taking it over to QTC and saying look what I found, then I have a problem with that.

when you get something like this, a memo like this, do you approve of this, because this, of course, has the criteria for reporting?

A No, I don't approve them. I'm on the distribution for everything that goes out of this office.

Q I understand, but this has some particular significance and I guess the paragraph underlined and, you know, highlighted, is what we're talking about. It seems like we're addressing two different problems.

A Okay. I'll try to answer your question if you'll put it to me again so that I understand

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Q Okay. It was a problem that they were spending too much time with QTC as this sentence would indicate or was there another problem?

A My concern, as I remember it, was just as I told you, that if they were taking documents that were presented to them in accordance with their quality program and taking that information to QTC, I have a problem. I had no problem with them talking to QTC at any time they wanted to talk to QTC or NSRS. But there has to be some orderly thing. They've got a job to do and there has to be some method, you have to give the quality system a chance to work.

Q Then might I suggest this memo doesn't identify the problem as you seen it.

A As I remember it, it does not. Okay.

I didn't read that second page. If that's the time we generated --

Q No -- yeah, that's it.

A Yeah. I have no problem with that.

method of controlling what these people -- what your subordinates in the field were doing or was this generated as a manner of intimidating,

preventing them from --

A No. The intent was to control what goes on at that site. I think the memo even tells you that. We had no problem with them going to QTC or addressing a quality concern.

BY MR. WILLIAMSON:

Q You folks had a meeting I think with TVA back in August where you probably called in all of your people from all the sites and from here and maybe went to Knoxville and had a meeting regarding this Group --

-A We called them in at different times. We went to them at different times, yeah.

Q And shortly after that you had a meeting in the Sweetwater -- in Sweetwater at the Quality Inn.

A We met with some of the inspectors to address that memo up there. See, we addressed the memo from two different points of view at two different times. The first round was addressing quality concerns. The second three weeks or four weeks or whatever we spent on it was an attempt to determine who wrote the memorandum.

Q Okay. This meeting that I was referring to was one that happened in September

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of '85 where you were addressing, at least, Inspector Best and Inspector Deaton about customer concerns.

Let's go off the record

(Whereupon, a brief recess was taken.)
BY MR. WILLIAMSON:

We were discussing about the September 26th, 1985 meeting between you and Inspector Best and Inspector Deaton at the Quality Inn Motel in Sweetwater, wherein you discussed customer relations in addition to flued head issues, water recertification which was an issue at that time, certification and recertification, which had been an issue at Watts Bar, and a review of some N-5 documents and various SIS forms.

It was related to us -- and there were several people present at that meeting; I think you, Mr. Best, Mr. Deaton, Mr. Robison and Mr. Ireland, at least that many were there.

- A Was Peter there?
- Q I don't have -- I don't think so. No,
 I don't have Peter. But during the course of
 this meeting there were several issues discussed
 and we understand there was a discussion between

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- A No. I remember the meeting with Best.
- Q Was it one-on-one?
- A One-on-one.
- Q Did anybody stand outside?
- A I don't know. I didn't look.
- Q Do you know if anybody was listening
 outside?
 - A I don't have any idea.

BY MR. MURPHY:

- Q Did you make any remark similar to that?
- A That anyone that caused them to lose their contract would be fired? No. I don't ever remember making that statement.
 - Q Did you mention him being fired for

anything?

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A I held Inspector Best back to talk to him on a one-to-one basis about two things; his appearance, his personal appearance and his attitude.

Q What was the problem with the personal appearance and attitude?

A He had on clothes that are below the company standards.

BY MR. WILLIAMSON:

Q And his attitude?

A His attitude had gotten pretty negative.

Q Did you ever imply -- state or imply to any of your inspectors that it would be better for them to quit than to stay on -- not just this situation, I'm talking about at any time?

A You know, I've been with the company 16 years and I've been in a management position for 16 years and I probably have said that at some time in the past. If we're talking about inspectors that are assigned to TVA, I don't ever remember making that statement or imply to them that it would be best that they leave.

BY MR. MURPHY:

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That's the attitude problem that we were talking about. He had -- I don't remember what prompted the review, but I had asked him to look -- if memory serves me right, I had asked him to look at all of the open items and address his concerns. And someone in TVA refused to give him the open item list. I remember the open item

Q Did you make that comment that anybody could have that open item list except him?

A I conveyed that impression that I had gotten from TVA that that was the fact, yes.

Q Or that anybody in TVA had brought this to your attention?

A Yes. I had, in a talk with Walt Joest, after the situation came up and after I found out that the open item list was not available to him, I tried to find out why. I don't know how to say this, because I don't want to put words in Walt Joest's mouth, but essentially that's what was

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You know, attitude is the problem and they said. would probably give it to anybody else except Hank Best, something like that, yes.

BY MR. WILLIAMSON:

So that was what was communicated to 1 **Q**3 you from Joest?

> A Yes.

BY MR. MURPHY:

And you communicated that basically to Best?

Sure, sure. Memory tells me that I this when I was talking about his attitude. BY MR. WILLIAMSON:

Do you know if he ever got a copy of Q the open item list?

I think he did. At least it didn't \mathbf{A} come up any more so I assume he did. He wasn't going to let it die.

When was the issue of the -- was the issue of the flued head piping penetrations ever brought to your attention?

I think the first real knowledge that I was aware of the problem was when we had the meeting as a result of the memorandum. the problem was there, all right? I think I

fully understood the scope of the problem when we had the guys to come in to talk about their quality concerns.

- Q When was that, do you recall?
- 'A No, I don't know.

BY MR. MURPHY:

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- Q Let me show you this is a memorandum from dated 27 August, 1985. It's to J.E.

 Stevens, First Vice President, Engineering and Planning Department, home office. It's from W.T. Higginbotham, Regional Manager, Engineering Services, Atlanta, and it says the meeting of the Atlanta branch, August 26th, 1985. Maybe this will give you some
 - A Is that the first meeting on the memo?
- Q Paragraph No. 2 might be of benefit to you.
- A Yeah. This was when we started -- that was the first time that I knew the scope, understood the full scope of the problem.
- Q Had this been brought to your attention prior to that?
- A As it turns out, it had, and we had answered, yes.
 - Q Did this result in any action taken

against - I mean to resolve the issue or did you just let it die at that point?

- A The issue is not resolved yet.
- Q Are we talking about for Unit I or Unit

Well, at that point in time I believe the N-3's and the N-5's had been assigned for Unit I, okay? The problem still exists to this day.

Q For Unit I and Unit II?

A Unit II is in the process of being resolved. The problem still exists at Unit I, if it is a problem, if it is a problem.

BY MR. WILLIAMSON:

Q The disposition of -- I have here TVA's NCR 5609 dated 4-27-84 and TVA NCR 6420 dated 10-28-85 for Mr. Higginbotham's review and while we're discussing these particular issues.

Both of these are marked use-as-is, however, the earlier NCR on Unit I, 5609, has been closed.

A Yes, it has.

Q Unit II, 6420, has not been closed, has not been dispositioned. Can you explain the difference or why there's a difference in the

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A Well, this 6420, NCR 6420 addresses

5609. I think the only difference in the two is

I don't think we understood the problem when this

5609 was closed.

Q Okay. What was it that you didn't understand?

A Okay. I believe that -- the question, as I understood it at the time, was does the authorized nuclear inspector have to witness all or examine all welds while they're under pressure test. Okay. That was part of the problem. And the answer to that, in my opinion, is no, he does not.

Q What does the Code say regarding visual inspection of all penetration welds?

A By the ANI?

Q By the ANI.

A It does not require him to examine all welds.

Q Okay. Does it require him to do a 100 percent inspection of all hydrostatic tests?

A He must witness all hydrosatic tests.

Q Must he witness the inspection of all

welds of hydrostatic test?

A No.

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Q Does he have to watch the QC, TVA QC personnel?

A No.

Q But he has to sign off on documentation that they signed verifying that they have inspected all of the welds?

A Not necessarily.

Q That's not part of the N-5 review?

A Not necessarily. I don't know what, right off the top of my head, what TVA's quality assurance program calls for. The Code doesn't call for that.

Q The Code doesn't require him to witness
QC inspectors?

A No.

Q It doesn't require that all joints for penetration welds be visually inspected during hydrostatic testing?

A The Code does. The Code requires that.

O Yes.

A It does not require the authorized nuclear inspector to do it nor to observe someone else do it.

Q There was a letter BY MR. MURPHY:

Q Let me read something. This is the lith of May, 1.84 to Inspector H. Haston, Atlanta from H. L. Robison, Assistant Manager, SIS Division, Atlanta, MC penetrating welds, TVA, watts Bar. And, Mr. Higginbotham, you're on distribution again for this particular item.

Let me ask you the first question. Is this how you understood the issue? The question posed to Atlanta Regional Office was can we, Hartford Steam Boiler, accept hydrostatic testing for a system when less than 100 percent of the welds have been inspected by the authorized nuclear inspector. Is that how you understood the first problem?

- A That's correct.
- Q And your answer, and I'll read it verbatim. It says, our answer is yes. There are no requirements in the ASME Code which requires that the authorized nuclear inspector witness or examine 100 percent of the welds during hydrostatic testing. Also there's no requirements in Hartford Steam Boiler Inspection and Insurance Company SIS Manual which require this. This

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question was discussed by the writer with W.T.

Higginbotham. Do you remember discussing this with --

A Yes.

requirement for 100 percent examination of welds during hydrostatic testing. Is that -- are we clear up to there?

A (Witness nods affirmatively.)

Mr. Higginbotham stated that hydrostatic testing is traditionally used to locate gross leakage in a system. Mr. Higginbotham recommended that the writer contact Mr. R.E. Fiegel, SIS Division home office, which he did. Mr. Fiegel concurred with our opinion.

- A Leakage is the wrong word.
- Q Gross leakage?

A It's the wrong word, gross leakage.

BY MR. WILLIAMSON:

- Q Is any leakage allowed?
- A No. Not at a weld.
- Q How would you ever know if there was any if it wasn't visually inspected?
 - A It's the certificate holder's

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responsibility, not Hartford Steam Boiler's. 2 But that's part of the system which was 3 being hydroed, which is the responsibility of 4. Hartford. 5 To witness the hydro. 6 To witness the hydro. If they had 7 discovered a leak in a weld during the hydro, 8 does Hartford have any responsibility to document that? 10 Sure. 11 They do have to document it? 12 Sure. Or to reject the hydro. 13 Or reject the hydro. These welds were vendor welds; is that correct? 14 That's correct. 15 Were they ever hydrostatically tested? 16 Α Not to my knowledge. 17 Were they ever subjected to NDE? 18 Were they ever hydrostatically tested? 19 Yes, they were. 20 Q By who? 21 By TVA. 22 BY MR. MURPHY: 23

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inspected during hydrostatic testing?

Let me clarify that. Were the welds

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A No, they were not. The welds in the penetration assembly, that's got the guard pipes over it?

- Q That's right.
- A At this point in time they have not.
- Q They have not.

BY MR. WILLIAMSON:

- Q To date they have not been?
- A They have not been.
- Q Were they ever subjected to NDE?
- A I don't know.
- Q Would you agree that since they're inaccessible, there's a guard pipe and insulation, that the condition of those welds is indeterminate?
 - A Yes.
- On 6420, and the documentation here is the result of a meeting that occurred on January 28th, 1986, a letter from you to the file stated the purpose of this meeting with Mark Bresslar, John Self, Perry Cantrell, John Balsam, C.A. Ireland, ANI Best, ANI Deaton and W.T. Higginbotham, the purpose of this meeting was to discuss flued heads and associated piping that was not examined in accordance with Section 3,

Division 1 of the ASME Code.

- A Now you're on Unit II.
- Q Unit II?
- A Yes.
- these nonconformances and bring them into compliance with ASME Code. You folks said that you were not going to accept these as they were and it was also agreed that the existing nonconformance report addressing these situations will be revised as Hartford Steam Boiler has found the resolution to the nonconformances unacceptable.
 - A That's correct.
- Q You were giving the instruction that they were not to sign off on 6420?
 - A That's right.
- Q All right. My question is, and I understand what you said, you knew more, and the scope was different. The difference between now, the difference between Unit I and Unit II, is there any difference between the piping penetrations in Unit I and Unit II with regard to flued heads?
 - A I don't think so, except Unit II right

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now is in the process of being examined.

Q Okay. Do you know how many actual welds are in question?

A I haven't the foggiest idea.
BY MR. MURPHY:

Q Are we talking about one or two or are we talking about 25 or 30 or what are we talking about? What are we closer to, 25 or 30 or --

A I don't know the quantity of them, but there's more than one or two. I think we're talking about 27 penetrations and how many welds exist on each one of them, I do not know.

BY MR. WILLIAMSON:

Q So you agree that those -- that the condition of those would be indeterminate?

A Yes.

Q Okay. I understand what you're saying, you say that the ASME Code does not require 100 percent visual inspection by the ANI during -- of welds during hydrostatic testing.

A Correct.

Q Does the ANI have a right to inspect any of these welds during hydrostatic testing?

A He has a right to inspect anything he wants to inspect.

No.

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Do you discourage him from doing that?

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there's some documentation that says that all of these welds have been examined by someone exists?

A I don't think so. In my opinion it's not -- does not exist today.

I mean would TVA be in possession of documentation wherein a QC inspector says that all these welds have been examined when, in fact, there are some that are inaccessible?

A I don't know.

BY MR. MURPHY:

Dest I can, because there's some conflict here. The question posed to you was does the ANI have to look at or, you know, be present during 100 percent of the hydrostatic testing on welds, right, that 100 percent of the welds have to be viewed --

A As I remember, that was the question posed to me.

Q Mr. Haston, in a letter to A.R.M.

Robison dated 5-15-84, which addresses hidden welds and hanger lugs, says — now this is after he's been directed to sign off on the NCR 5609, right, but he has not at this point done that.

He writes the letter and he says, thank you for

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A Subsequent to our meeting addressing the memorandum.

Q But wasn't addressed to you --

A I don't remember the question being addressed to me.

Q Or posed in --

A In that manner.

Q -- that manner. In a daily inspection record -- do you get these here?

A Yes.

Q Okay. In a daily inspection record, and this is the 18th, for the 18th, Mr. Howard Haston is writing, he says, Paragraph 5, NCR 5609 REV O, contacted A.R.M. Robison to discuss TVA

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resolution to uninspected welds on flued heads. TVA stated if we did not accept this position they would exclude them from the N-5. Vendor welds on Tube Turns penetration assemblies were not hydroed by vendor and not inspected by TVA systems hydro test. Use-as-is. Signed for initial acceptance per written and verbal direction of A.R.M. Robison.

Do you — have you reviewed this particular document?

- A I have now but I did not at the time.
- Q. You did not at the time.
- A No.
- Q Had any of these documents been brought to your attention, might there have been a different resolution to that nonconformance report?
- A Well, I think we probably would have excluded them from the N-5 data package.
- Q I guess that's our next question. How would you go about doing that?
- A The Code makes provisions and it says you shall not stamp anything that does not comply with the Code, nor shall you document it nor shall you imply that it's ASME. However, if

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there's a component or part that is not ASME Code, it shall be clearly identified. And that's And it's not an unusual the way we do it. practice, it's a common practice throughout the industry with nuclear as well as non-nuclear.

Well, I have a couple of questions. One, if TVA is committed to the Code in their FSAR and at that time established some boundaries on what must meet Code requirements and what does not, how do we just arbitrarily eliminate something from the Code?

That's between you and the certificate A We don't holder, NRC and the certificate holder. have any authorize to tell them what to do, you know, to tell them what to exclude. BY MR. WILLIAMSON:

This is Class 2 piping, some of it 32inch main steam.

I don't care if it's Class 1. have the authority to go to TVA and say you will do this.

You have no recourse when they want to delete something from N-5 review?

As long as it's clearly identified and Α we don't sign for it as meeting Code.

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- Q How do they get permission to do that?
- A Through the NRC.
- Q In the letter of May 17, 1984 from J.C. Standifer, Project Manager to Gunther Ladewitz, Project Manager Watts Bar addressing

 Nonconformance Report 5609, disposition, it says this nonconformance, 5609, was made significant for the sole purpose of documenting the use-as-is disposition. If the ANI cannot accept the disposition this would require removing the aforementioned Tube Turns welds from the N-5 program. I guess that's what they're talking about.
 - A That's correct.
- Q If the ANI can accept the use-as-is disposition, no further action is required, non-revision is not required. So what Mr. Standifer is saying here is if the ANI can't accept it we're just going to take it off the N-5 and you say that's a common practice?
 - A Common practice.
 - Q And acceptable?
 - A The Code --
 - Q The Code allows that?
 - A The Code says that if it's not ASME

Code it shall be clearly identified. And as long as you clearly identify it, and you guys do this every day on Section 11.

- Q Yeah, Section 11. And if it's not ASME

 Code --
 - A It shall be clearly identified as such.
- Q And if it is ASME Code, they can arbitrarily delete it from the N-5 review?
- A I it is ASME Code? I think we're hung up on our terminology.
 - Q Okay. Straighten me out.

A What I'm saying to you is if an item is in a system and the system is supposed to be code. Let's take a valve. Let's take a valve, for example, and let's say it's in the essential raw cooler water system and the system itself is code but the valve isn't. Then you've got to identify that valve as not being Code.

Q I understand. And there's other things that can be done to that valve; it can be upgraded, right? It can be -- the material certification on that can be checked? Do they just arbitrarily upgrade it and say - I mean except it from the Code or is there some additional things that have to be done?

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. A	No.	The	additi	ional things	I have no
control.	or know	led	ge of.	What they	lo to it to
exempt i	t is be	twee	n the	NRC and the	certificate
holder.	And al	.1 we	e care	about	

- Q And once again I have to ask if that doesn't impact on your independence?
- A No. We're not signing for it. If it's specifically excluded, I don't see how it impacts on our independence.
- Q But if they can't get you to agree to sign off on it they just exclude it then?
 - A That's between them and the NRC.
- Q And you don't think that impacts on your independence?

No. We don't have the authority to tell them what has to be Code. The owner's responsibility, the owner's, the in guy, it's his responsibility to tell us what's Code. He can stop a system anywhere he wants to in his design spec and say, from here on out it's B-31.1.

That's his responsibility.

BY MR. MURPHY:

Q Do you think that that type of statement in a letter of suggested disposition of

a nonconformance report is appropriate inasmuch

Q.

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A No, it's inappropriate.

It's inappropriate?

A Sure.

Do you think when you see this in such a letter which is being reviewed by the ANI, it's really -- and I'm asking your opinion -- it's really some form of mild intimidation inasmuch as, look, guys, if you don't take it we'll just take the darn thing out of the package. You know, if you don't think you're up to it, we'll remove it from the package, which is basically what they're saying.

A I don't perceive it as intimidation.

perceive it as recognizing that the ANI is not
going to sign for it. I don't perceive it as
intimidation.

Q In other words, what you're saying is that basically up front they're saying they don't think the ANI is going to buy off on that?

A Yes. And I don't perceive that as intimidation.

BY MR. WILLIAMSON:

Q Do you perceive that as impacting on their independence?

- A The ANI's independence?

 Q Yes.

 A No. I would think quite the contrary.
 - Q Let me ask you about NCA 6120, preparation for testing, hydrostatic testing.
 - A Okay. NCA?
 - Q Yes, sir.
 - A 6121, exposure of all joints, including welded joints, shall be left uninsulated and exposed for examination during test; is that correct?
 - A That's correct.
- What about NCA 6224, examination for leakage after application of pressure. All joints, connections and regions of high stress such as regions around openings and thickness transition sections shall be examined for leakage. Is that true?
- A Sure. If it's to be stamped. BY MR. MURPHY:
- Q Let me ask you a very common-sense question. Not being highly technical, having too much background in the technical aspect of this, a common-sense question, all right. TVA has proposed a disposition of 6420 some of the

MR. WILLIAMSON: Moisture sensitive.

BY AR. MURPHY:

remove all the insulation from these items, right? Let's do all these exotic things to ensure that we're going to get a visual inspection of these welds during hydrostatic testing.

If this was — I mean why would we do all this if it's such a simple thing to take them off the N-5? I mean, why are we going to do all these exotic — I mean, in essence they're doing it because Hartford is indirectly or directly forcing them to do it to satisfy the inspection requirements that you are saying must be met.

A If they're going to stamp it.

Why would they do all those things if that sentence at the end says, well, we'll just take it off the N-5? Is that just something -- is that a garbage statement? Is this just some kind of veiled threat or is -- I mean to me logic tells me that if I could do that and it wasn't a

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A You'd have to ask TVA. I don't know why they made the statement.

T mean, does that make sense? I mean, why would we do it if it's such -- are you saying -- I mean it apparently looks like they can just do it and there's no big deal with taking it off, they do it all the time I think you said.

A What I'm saying to you when I say that is that it's the owner's responsibility to designate the Code boundaries. It's our responsibility to stamp the items that are designated as Code. Why are they doing it? I suspect because the NRC is involved.

I mean would you think, you know, after all these years' experience in the inspection field that such a simple matter to just remove from the N-5 package -- I'm asking for an opinion -- is a viable solution to that problem?

A To remove it?

Q Yes. By viable, I mean something that you, as an inspector who has witnessed this stuff for years and years and year can say, well, yeah, someone is going to buy off on that.

. .

- Q Yeah. Somebody is just going to buy off, and you think --
 - A We don't have any choice.
- Q I'm not asking you -- I'm saying do you think that -- obviously if it's taken out of your control it's not being N-stamped and you don't have a problem with that. Do you think that's a viable suggestion as far as resolving that problem?
- A I don't really know. I suppose it would depend on the circumstances. These penetration assemblies are all -- if they bought them from Tube Turns, which they probably did, then --
- Q That may be the case, but as I understand the situation, and I may have some material that you don't have -- there was a general mistake made by a TVA contractor, for whatever reason, not to have these things hydroed at the vendor. I mean, has that been stated to you? In other words, TVA has accepted them and have even probably amended their contract so that these things would not be hydroed at the vendor

A I hear what you're saying. A mistake being made by a contractor, I don't know what the contract says. I can say to you that piping sub-assemblies are not normally hydroed at the NPT certificate holder's shop. To the best of my knowledge they are not normally hydroed.

Q In other words, what you're saying is that we have a massive problem around the country?

A I'm not saying that at all. I'm saying to you that to the best of my knowledge piping sub-assemblies are not normally hydroed when the NPT items are stamped.

BY MR. WILLIAMSON:

- Q By the vendor, you're talking about?
- A By the vendor.
- Q But you are acknowledging -- you're aware that TVA waived that vendor requirement?
 - A. No, I'm not aware of that.
 - Q You've never heard that?
- A No, I have not. So maybe I'm -- maybe you think I'm trying to be evasive, but that's the first time I've heard that they waived that

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requirement.	I've heard the statement	that they
were not hydr	oed at the vendor's shop,	but I have
not heard unt	il today, until this this	minute,
that that req	uirement was waived.	

- Would it matter? 1 Q:
- Α Not to me.
- Did the ANI who signed off on this, do Q you think that he supported the decision of Hartford management to accept that as-is?
 - No, he didn't, obviously.
 - Why is it obvious?
- Because this asterisk, doesn't it take us over to the ANI's signature per written and verbal direction?
- So Mr. Haston, who signed 5609, did not agree to the disposition?
 - No.
 - And he was directed by H.L. Robison?
- I think -- again, I I think so. believe that the direction was because of not understanding the problem.
- Does this impact on ANI's independence in the field?
- Does this one situation impact Mis No, I don't think so. independence?

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A One time he's overruled, I don't think, impacts his independence for all the other decisions that's been accepted. No, I don't think so.

Q You mentioned earlier that 5609 was discussed at a later date in August of 1985. You do remember that? What was that, the August the 27th, '85 memo, so it was discussed after it was closed, is that --

A Oh, yeah, it was discussed. Yes, it was discussed at the first meeting that we --

Q And when 6420 was written, as I recall, you became quite adamant about that Hartford was not going to accept the disposition as it was written; is that correct? And that's because you think the scope was broadened or --

A I think we understood the problem better.

Q Understood the problem better. Was

Hartford management ever threatened by TVA with

the termination of their contract because of

these issues or any complaints against the ANI's?

A No.

Q You never felt any heat --

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A: I've never	felt	threatened.
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- Q By anybody from TVA, passively or otherwise or has it been intimated that they can get somebody else to do your --
 - A No.
 - Q -- contract?

BY MR. MURPHY:

- Q when the Group letter came out, right, shortly thereafter you also had a meeting with TVA management, right? Is that correct?
 - A In Knoxville, yes.
 - Q Yes, in Knoxville.
 - A Yes.
- Q And we've been told that the basis for this meeting is to assure TVA that you all were going to -- you know, that you weren't involved in this and that you're going to do everything you could to rectify the situation; is that correct?
 - A To rectify what situation?
- Q Well, find out, you know, if there was a problem with this letter, any of your people wrote the letter or whatever?
 - A And we did that.
 - Q Okay. During that meeting that took

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A There was some discussion and there was some discussion about the credibility of the company. I do not remember them threatening to cancel our contract.

Let's -- I mean I'm not so sure the Did they imply that word threat is very good. your contract might be terminated because of lack I don't think that of credibility at that point? we're talking about someone going out and saying, hey, we're going -- you know, if you don't get this mess straightened out we're going to I mean, that's not what terminate your contract. I'm talking about being I'm talking about. implied during conversation that there's a lessening of credibility in your organization and they may be looking elsewhere for -- was implied at all?

A No. The concept of lessening of credibility was mentioned. To the best of my memory they said that they board of directors

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would consider it -- would not consider it until after this matter was investigated. That's my memory of this.

- Q Wouldn't consider what:
- Renewal of the contract. But I did not detect any threat there. I did not detect any intimidation there. I just think it was a mutual desire to find out if we had quality problems.
- Q I mean, and you don't -- you didn't take this in any way to mean that they may not renew your contract?
- A I took it to mean that the board of directors might not renew the contract and I think they immediately appointed an investigative NSRS -- that's what I -- the safety review staff -- to investigate on their behalf, and we committed to investigate on our behalf. But I didn't find any intimidation there.
- Q Did you have a valid contract at that time, a valid written contract?
- A we have a contract, yes. We have a contract. We've never not had a contract with TVA. Now, what you have to understand is that TVA's money is appropriated from March 31st -- from April 1st to March 31st of each year. Okay?

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That's one element, getting paid. The other element is the contract. We've never not had a contract since we started in '77 or whenever it was. Their appropriation has run out. From their point of view they didn't have a contract, from their financial point of view. But there has never been a time that either company invoked the cancellation clause in the contract. Okay?

Q Each of these contracts that I've looked at has like a date where you initiate the contract, inasmuch as you sign the written document or you sign something.

A- Yeah.

Q And it usually appeared in the past that it occurred at about the same time each year.

A That's true. Yeah, yeah.

Q Did that same circumstance occur during last year?

A In '85 I believe it did. I think the contract -- '85 -- I believe it did. I believe it occurred last year.

I mean there wasn't this little break in time where it was a debate whether you had a contract or not?

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A: A	round	January,	February,	March of 185?
- Q' 3	čes.			ţ
A :	I don'	t. remember	one. We	had one we
had i discu	ıssion	about it	this year	and as a
matter of	fact,	we verball	y extended	the
contract.				÷ .
Q i	Maybe	that's	maybe I ha	ve the years
wrong.	•		-	-
	∩kav	We verbal	lu extende	d the
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contract: t)	his ye	ear. I got	a call, l	guess it was
the latter	part	of Decembe	er or the f	irst part of
January fro	om Ger	ald Minton	asking me	would I
verbally a	gree t	to extend t	he contrac	t through
March the	31st.	,		
Q	What u	was the bas	is for tha	+ ?
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A	Their	appropriat	ion, as I	understand / .
it.				
Q	No oth	her reason?	?	
A	No ot	her reason.	•	
Q .*	It had	d nothing t	to do with	TVA's
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that: I had	with	him, was	strictly ap	ppropriations.
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Q NCR 5609 was closed on or about May the 22nd or 23rd of 1984. It also was released as part of the N-5 -- N-3 package for Unit I and was signed off by Harold Robison.

A Uh-huh.

Q There appears to be questions that are still unanswered about the flued heads. What's going to be the status now of that N-3 package for Unit I?

A TVA has to make that decision.

Q So is that something that's going to be required a review by the ANI's or by Mr. Robison or will the ANI's or Hartford have any more input into that?

A I could only guess at that. I could only guess at what's going to happen and I'd rather not.

Q Okay. But if they're going to

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reinspect, then that's going to change the status of that N=3?

A It should. The status of the document itself, I can see several approaches they could take. I can only relate to other situations to where a vessel has gotten out of the shop and not been Code. Several things can happen.

- Q Are you satisfied with disposition on this thing?
 - A: 5609, no.
- Q Are you satisfied with the proposed disposition on 6420, which is, I'm not sure what?
 - A Not at this point in time we're not.
- Of I understand they're going to go fiber optics and moisture-sensitive tape, and the last thing I heard they were going to take out the insulation.
- A Right now, the last thing I heard, they're taking out the insulation and visually inspecting. I don't know. I haven't seen a final resolution yet.
- Q Did Walt Joest or Mark Bresslar contact you about the flued head penetration on either one of these issues and if so, what was the nature of the conversation?

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- A Mark Bresslar -- on Unit I?
- Q Unit I or II.
- A We've talked about -- we've met several times and talked about Unit II.
- Q Okay. You never felt any pressure from those folks to accept this?

A No.

BY MR. MURPHY:

Q We've been told during the course of our investigation that in the opinion of many people there is a loop that physically consists of an ANI indentifying the problem at the site, bringing it to the attention of the site compliance people, the site N-5 Review Group, and in turn this particular issue is then relayed to walt Joest or Mark Bresslar in Knoxville, who immediately get on the phone and call you concerning this issue.

A Call me?

Q Yes, or Mr. Robison -- or in this case today it might be Mr. Ireland, but at the time it was yourself or Mr. Robison. Who will, in turn, contact the site and who are told to accept almost whatever disposition.

A I don't believe that.

I mean whether it's true or not no one knows. I mean I don't know, I'll tell you that up front. Only in talking with a good many people. The individual who handles a portion of the N-5 package says that, as he recalls, that not one disposition that he had some problem with with the ANI, that he brought to the attention of Design in Knoxville, which is Mark Bresslar and Walt Joest, was ever changed.

In other words, what I'm saying is it would appear from this little bit of information that this maybe happened. And we're surely obligated to find out if it has ever happened, do you think it's going on? I mean could it be? I mean, I guess the question, has this ever happened, because the problem here is that there should be no pressure on your agency from Knoxville, as we view it, to sign off on any item that you determine is a deficiency.

A I've never experienced any pressure.

The loop, as you call it --

- Q Have you ever heard that discussed?
- A Well, I've heard portions of it discussed and, in truth, that's the way that it

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know, if the ANI doesn't notify should go. You us that he's got a problem and the N-5 guy calls Knoxville and talks with Walt Joest or Bresslar, who are Codes and Standards people, then I think they have every right to pick up the phone and say, what's going on. And when they pick up the phone and call Robbie and myself -honestly I don't think I've ever been involved in one of those situations where, addressing an NCR. It's possible but I don't remember any. Walt or Mark should the way that it should be. pick the phone up and say, we've got a problem. Tell them what it is, and then it's their supervisor's responsibility to get in and resolved it in accordance with the Code. That's -- there's nothing the matter with that. Now, the fact that none's ever been changed, You know, don't believe that for a minute. 18 : there's been numerous NCR's, as I remember over the years, that we would not accept as they were Robbie would have more intimate written. But as far as knowledge of that than I do. just bending over backwards and Walt calls, I hope we have never done that.

> Robison bring these calls to Does Mr.

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your attention? I mean do you require that he does? Do you just say it's your bag, you handle it, I mean, I have more important things to deal with, or what?

I don't have more important things No. . A But I don't deal with each Code to deal with. Hopefully I deal with the problem either. significant ones, and we have frequent meetings, There isn't a week that goes by my staff and I. that we don't sit down and talk, either And I encourage them individually or as a group. to go to home office whenever they have a we've got certain people question. You know, that are designated -- I won't use the term expert, but that have expertise in Section Section 2, Section 3, Section 8, Section 11 These are people that sit on home office. We encourage them to go to these subcommittees. they have a problem. So they may not people if go to me, they may go directly to Daryl Peaks. encourage them to go to Daryl Peaks if he's got problem on Section 9.

Q Have you ever been told by any of your subordinates or any of your supervisors or even some of your bosses that there's a perception of

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with a problem that you'll get all over their case? I mean that a confrontation with you is not an enjoyable process.

- A I'm sure it isn't.
 - O I mean is that --

never ignored a problem that I know of. If a guy calls and he's got a legitimate concern, we're going to pursue it. But if he calls just to tie up the phone for an hour, probably not going to pursue it.

I mean, do you view yourself as someone they could call, I mean, and discuss a problem on friendly terms as opposed to someone they would reluctantly call when no one else is available?

And I guess this is kind of a personal appraisal of yourself.

A I think, and demonstrated from past performance, if it's a significant problem I usually get the call.

BY MR. WILLIAMSON:

Q But do you get those calls on significant problems when you might not have been as attentive on what you consider the

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- A I don't see myself that way.
- Q I mean, if that's the perception that some of these people have, then it's a problem. They should feel -- once again, we're talking about impacting on their independence.
 - A well, each one has a supervisor.
 - Q Yes, I understand that.
- A That should be his first line of communication.
- Q Are you aware of any of these people not coming to you just to avoid a confrontation or an adversarial relationship?
 - A No.
 - Q Do you suspect that exists?
 - A I hope not.
- po you feel any pressure from any of your management in Hartford or any TVA management that would affect any of the decisions that you've made?
- A Absolutely not. My management has never been anything but supportive. I've never

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had any major confrontations with TVA.

BY MR. MURPHY:

orrect me if this information is wrong, because we don't have probably anything to document -- any documents, although I'm sure they're available, that the contracts for TVA used to be handled by your home office at one point in time; is this correct?

existed either. You see, all contract administration at one time was out of home office, Lydia Peterson. A change to the contract, we had to go to her. But her title is assistant manager, but in reality she just solves our problems for us. If we needed a new client number or data input or we had problems with an invoice or we've got to modify a contract or scratch out a paragraph --

Q Did the home off at one time do all that, do all the contracting as opposed -- we've been told that this contract is now handled locally, that it's been taken --

A I believe the TVA contract has always been local.

Q Do you know that for a fact or --

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	A	No.	I don't	k n o w	that	for a	fact.	To
the	best	of my	knowled	lge, i	t's a	lways	been lo	ocal.

- Do you have any personal concern about maintaining the TVA contract? Is it important to you that you maintain the TVA contract?
 - Absolutely not.
- In other words, you don't care if that contract goes by the wayside or not?
 - Oh, you mean of keeping the contract? A
 - Yes, sir.
- I want to keep the contract, Oh, sure. absolutely. I thought you meant keep administration of it in Atlanta.
 - No. no.
 - Sure, I'd like to keep the contract.
- Has this desire to keep the contract ever influenced any decision that you've made I mean does it have impact on related to TVA? decisions like disposition --
 - Oh, nonconformance reports?
- Or -- no, let me use some other Nonconformance reports, does it impact examples. on who you assign where, the various assignment Does it impact in regards to the TVA of ANI's? calling and saying, we're having a problem with

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this ANI I'd like to see you ship him to another site, or out of TVA. I mean has anything like that ever come up where the idea of maintaining the TVA contract has had an impact on --

- A we'd do that for any customer.
- Q Do what for any customer?

A we'd change an inspector out if we can.

If we can do it economically and still service
the customer, we'd do that for anybody, TVA or
anybody else.

Q One little bit of clarification. Do you change him because — what if we have an inspector who in his view and the view of other inspectors are doing a bang up job, but in the process of doing a bang up job, obviously creates problems for TVA. I mean, that's very, very possible. You see inspectors in today's marketplace that cause problems for licensees in construction —

A He's doing a bang up job and because he's doing his job it creates a problem?

Q In the view of, say, TVA or any other licensee, but TVA in this particular case. And now TVA thinks that he ought to be moved. Do you consider that when you move these people around?

Would that be a consideration in transferring -
MR. WILLIAMSON: In the maintenance of
the contract.

BY MR. MURPHY:

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Yes, in the maintenance of the contract.

have to go back and tell you the same thing I told you before. If we've got an inspector in anybody's shop that, the customer can't get along with and he can't get along with the customer, then we would try to solve the problem by putting another man in there. And that's as candid as I -- we would try to solve the problem.

- Q It's also been suggested that there's been a huge turnover in the ANI's at Watts Bar.
 - A That's not only Watts Bar.
 - Q Within TVA.
 - A Every nuclear site.
 - Q Why is that in your estimation?
- A Well, for a long time we'd send an ANI that was trained and our customer would hire them. There was a great demand for somebody that has the knowledge of the ASME Code at nuclear sites. That's one aspect of it. Another aspect

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Q Do you think it's equally prevalent at all the other sites as it is at Watts Bar.

Specifically at Watts Bar do you think you've had a larger turnover at Watts Bar than you've had at the other sites?

Me try to compare it to Hanford, okay. I think you would probably find the turnover at Hanford greater than we've had at Watts Bar. I don't know. I don't know the numbers. We have that as a constant problem and we don't have that problem right now because there's a large number of ANI's on the street. But at the time, anybody would snap up an ANI. We had that problem all over the country.

Q Does the fact that you are locally administrating the contract, let's say the TVA contract, okay, does that, in fact, have any

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Q I understand that. I'm asking you do you think that has any impact on your independence in your --

A I don't see how it would. You know, if you lose a contract you lose the money. It makes no difference who's administering the damn contract.

BY MR. WILLIAMSON:

Q That's another point, I guess. Do you profit financially by maintaining a contract with those folks?

A No, absolutely not. My salary is impacted by it?

Q Yes.

A No. sir.

Q Let me ask you a few final questions.

Is there any additional information you'd like to add to the record? Any changes you'd like to

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make or anything else --

A Well, I obviously don't know all I've said.

Q Well, I don't either.

It seems like there's a feeling that some kind of collusion exists between Hartford Steam Boiler and TVA and I can assure you that does not exist. We've never been threatened with cancellation of the contract. I've never received any threats from anybody at TVA, and concerning the two NCR's, if we had an opportunity to do things next year that we do this year, we may do them differently.

Q Mr. Higginbotham, have I or any other NRC representative threatened you in any manner or offered you any reward in return for your testimony?

A No.

Q Mr. Higginbotham, have you given this statement freely and voluntarily?

A Yes.

Q This interview is concluded at 2:35 p.m. on 2 May, '86.

(Proceedings concluded.)

CERTIFICATE OF OFFICIAL REPORTER

This is to certify that the attached proceedings before the UNITED STATES NUCLEAR REGULATORY COMMISSION in the matter of:

INVESTIGATIVE INTERVIEW

OF WILLIAM THOMAS HIGGINBOTHAM

Suite E-301, 1117 Perimeter Center West
Atlanta, Georgia
On May 2, 1986

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

GARY L. LONG, CCR-B-966 Official Reporter

AAA Reporting Company, Inc.

RESULTS OF INTERVIEW WITH DORWIN J. ETZLER AS PREPARED BY INVESTIGATOR E. L. WILLIAMSON

On May 13, 1986, Dorwin J. ETZLER, Metallurgical Engineer, Codes, Standards and Materials Group, Nuclear Engineer Branch, Division of Nuclear Engineering, Tennessee Valley Authority (TVA), Knoxville, TN, was interviewed in the TVA West Tower by NRC Investigators E. L. Williamson and Daniel D. Murphy and he provided the following information in substance:

ETZLER stated he has been employed by TVA for nine years and has always worked in the Welding and Non-Destructive Examination (NDE) groups. He said prior to his employment with TVA he was engaged in a family farming operation in Ohio for two years. He related that from 1971-1975 he worked at the Norfolk Naval Shipyard, as the Head Nuclear Welding Engineer. ETZLER stated that from 1966-1971 he attended Ohio State University, where he obtained a Bachelor of Science degree in Welding Engineering.

ETZLER was asked to comment on his knowledge of Non-conformance Condition Report (NCR) 5609, dated April 27, 1984 concerning a welding problem at the Watts Bar Nuclear Plant (WBN). He related that he was the engineer responsible for preparing the recommended disposition for NCR 5609, which dealt with Tube Turn vendor welds located inside a piping penetration. He said the main issue addressed by the NCR was that these vendor welds, which were located inside the piping penetration, had not been subjected to the required hydrostatic testing by the vendor prior to shipment to TVA. He explained that TVA construction personnel at WBN, were not aware that the vendor welds had not been hydrostatically tested prior to their arrival at ETZLER indicated that even though construction was not aware that these welds existed, the information was available to them on site through a review of the fabrication data package which accompanied each sub-assembly shipped by the vendor to the WBN. He said that after each of the penetration sub-assemblies were installed, a hydrostatic test was performed. According to ETZLER, the vendor welds were not subjected to the visual inspections required by the American Society of Mechanical Engineers (ASME) Code. ETZLER explained that the reason for these welds not being visually inspected during hydrostatic testing was that a guard pipe covering some of the welds was installed by the vendor while others were covered with insulation. ETZLER said that these conditions made the welds inaccessible for the visual inspections required by the ASME code during hydrostatic testing.

ETZLER stated that in dispositioning NCR 5609, he utilized a list of affected penetrations attached to the NCR and assumed that all the listed penetrations had been hydrostatically tested, and that the problem concerned the vendor welds which had not been visually examined during the test. He said he later learned that most of the vendor weld penetrations listed in the NCR had not been visually examined during hydrostatic testing and that he assumed all the vendor weld penetrations were in a non-conforming condition. He explained that the disposition was arrived at by determining first if there was a technical problem and then whether or not the ASME code requirements had been met. He said he personally reviewed some data packages to determine if the vendor had performed additional testing to satisfy or exceed the basic ASME code requirements. He said he

EXHIBIT 39
PAGE _____ OF ____ PAGE

did not recall finding anything that would satisfy or exceed the code requirements.

ETZLER stated that from a technical viewpoint he had no concern with the welds in question, in that he felt they would meet the requirements of their intended use. ETZLER added that he was not aware of any weld that had ever failed the hydrostatic testing requirements at WBN. He said the vendor welds were fabricated under an approved ASME program; were subjected to NDE by means of radiographic testing (RT); were subjected to inspection by both TVA and Authorized Nuclear Inspector (ANI) at the vendor; and the vendor had an approved quality assurance (QA) program.

ETZLER stated at the time he prepared the disposition it was apparent that every detail of the ASME code had not been met. He said even though TVA conducted the hydrostatic testing and there was no apparent leakage, the exact requirement of the code was not met. He reiterated that he did not personally have any concern about the adequacy of any of the vendor welds. He said the vendor had a QA program in place and had there been a problem with the welds, TVA would have relied on the vendor QA program to address and correct the situation.

ETZLER was asked to comment on the ANIs' concern about the inaccessible vendor welds. He said he personally felt the ANIs had a legitimate concern with regard to the ASME code requirement that the ANI witness the visual inspection of all welds during a hydrostatic test. ETZLER indicated that this concern was carefully considered by Marc BRESSLER in the Codes, Standards and Materials Group. He related that BRESSLER was instrumental in arriving at the disposition recommended for NCR 5609, explaining that several years ago, TVA elected to review all documentation packages for all of WBN. He said this review was to ensure that all welds were adequate, all welders were properly certified and, in general, that all required documentation was available and accurate. ETZLER added that this review surfaced numerous small problem areas that had to be resolved. ETZLER indicated in his recommended disposition that if the ANIs could not accept TVA's proposed disposition, the weld penetrations in question would be removed from the N-5 data package. He said in essence, this would relieve the ANIs of responsibility for the welds and they could then legitimately accept and approve the contents of the N-5 data package. ETZLER stated for this reason he identified the welds in question as being "significant." He said if the ANI could not accept the recommended disposition for NCR 5609 the welds would be removed from the N-5 data package and the NCR would serve as the required notification to the NRC of the proposed action by TVA. He pointed out that only those NCRs identified as being "significant" are forwarded to the NRC. ETZLER related however, that this was not necessary because the ANIs accepted the disposition recommended by TVA.

ETZLER was asked about the last paragraph on the disposition of NCR 5609, which stated in part that, "if the ANIs' could not accept the disposition they would have to delete them from the N-5 program." He said this statement was written by him and was never meant to be a threat, nor was it intended to threaten or intimidate the ANIs. ETZLER related that his remarks were meant to provide an alternative to the ANI. He said that since WBN was close to fuel loading and trying to get on line, he wanted to

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PAGE 2 OF 4

address and resolve the concerns as quickly as possible. He said he did not attempt to apply any pressure, or leverage on the ANIs, because there was no concern with the hardware and TVA felt confident the NRC would allow TVA to remove these welds from the N-5 data package. He recalled incidents, not specifically, when various items had been removed from the N-5 data package. He added that this was generally done when documentation for the item was not readily available, but there was however, an approved QA program in place and associated back-up documentation was available.

ETZLER stated that the practice of removing items from N-5 data packages was utilized in order to continue progressing with the work at the site and become operational. He stated that some of the plant systems have various restrictions on the number of hydrostatic tests that can be performed on a particular system and hydrostatic tests cannot be wasted on systems unnecessarily. He related that his statement about removing the Tube Turn welds from the N-5 data package was designed to let the craftsmen at the site have some relief in knowing they would not have to hydrostatic test these systems again.

ETZLER related that he originally received NCR 6420 in October 1985, because he was involved in the review and disposition of NCR 5609. He explained however, that his group had been reorganized and he was no longer responsible for hydrostatic testing. He said NCR 6420 addresses primarily hydrostatic testing and for this reason, Craig CANTRELL was assigned to address the NCR. He indicated that CANTRELL would be the best source of information if OI wanted to discuss NCR 6420. He added however, that when he saw NCR 6420, it was the first time he realized that some systems on NCR 5609 had not been hydrostatically tested as reflected on the list of welds that accompanied the NCR 5609. He said NCR 6420 was written to address those systems that had not been subjected to visual examination during hydrostatic testing and they were located in both Units 1 and 2.

ETZLER was asked if he discussed either NCR 5609 or NCR 6420 with an ANI and he indicated that he did not recall discussing the NCRs with any of the ANIs. He said he did have discussions with BRESSLER and related that BRESSLER had discussed the code issues in some detail with Hartford Steam Boiler Inspection and Insurance Company (HSBII) management. He averred that BRESSLER was an ASME Code expert and he relied on him for interpretation of the code. He said that during review of NCR 5609, TVA was approaching fuel load and start-up at WBN and were not interested in hydrostatically testing these systems again. ETZLER said he did not know that the Tube Turn welds had not been visually inspected during hydrostatic testing until he received NCR 5609. He said he felt that it was the Office of Construction's responsibility to identify all welds that needed to be visually examined during the tests.

ETZLER was asked why NCR 6420 was dispositioned differently than NCR 5609. He said it was a different time at TVA and during discussion between BRESSLER and HSBII it was decided that visual examination of all welds during hydrostatic testing would be performed. He said he could not be sure why the change in disposition, whether it was just cosmetic, different code committee review or just a different interpretation. ETZLER stated in conclusion that he personally feels the welds in question are technically

PAGE OF PAGE(S)

adequate; that they had been subjected to volumetric examination; and during hydrostatic testing on systems no leakage was observed. However, he said he was not sure that all ASME Code requirements were met. ETZLER did not provide any additional information pertinent to this investigation.

This Results of Interview was prepared on May 19, 1986.

E. L. Williamson, Investigator

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RESULTS OF INTERVIEW WITH CRAIG CANTRELL AS PREPARED BY INVESTIGATOR DANIEL D. MURPHY

On May 13, 1986, Craig CANTRELL, a Metallurgical Engineer with the Codes, Standards and Material Group, Nuclear Engineering Branch, Division of Nuclear Engineering, Tennessee Valley Authority (TVA), Knoxville, TN was interviewed by NRC Investigators Daniel D. Murphy and E. L. Williamson concerning his knowledge of the disposition of Watts Bar Nuclear Plant (WBN) Non-conforming Condition Report (NCR) 6420. CANTRELL stated substantially as follows:

CANTRELL stated that he was employed by TVA on January 30, 1983 as a metallurgical engineer after graduating from North Carolina State University with a Bachelor of Science degree in metallurgical engineering. CANTRELL said he has worked basically in the same position since his arrival at TVA.

CANTRELL indicated that NCR 6420 was assigned to him in October 1985 and was a follow up to NCR 5609. He stated that the NCR was related to penetration welds in Unit 2 at WBN which could not be visually examined for leakage during hydrostatic testing. CANTRELL said that the problem resulted from the vendor welding a guard pipe over some of the welds and covering the others with insulation. He stated that this created a situation wherein the vendor welds could not be visually inspected during hydrostatic testing. According to CANTRELL, NCR 6420 was generated when John SELF, the N-5 Packet Supervisor at WBN, disclovered that a portion of the vendor welds in Unit 2, which had allegedly been dispositioned in NCR 5609, had not been hydrostatically tested before NCR 5609 had been closed out. CANTRELL stated that Pete ETZLER prepared the disposition on NCR 5609 and that the recommended disposition had been accepted by the Authorized Nuclear Inspector (ANI). He said that more than likely ETZLER would have been given NCR 6420, but his (ETZLER's) section had been reorganized and responsibility for this type of NCR transferred to his (CANTRELL's) group.

CANTRELL related that he originally used the same recommendation for NCR 6420 as ETZLER used for NCR 5609. He said that when NCR 6420 reached the WBN site it was immediately rejected by the ANI. CANTRELL stated that it was his impression that the ANI and the Hartford Steam Boiler Inspection and Insurance Company (HSBII) objected to the disposition and indicated that in the future they (ANI and HSBII management) would require that these types of welds meet the American Society of Mechanical Engineers (ASME) Code requirements.

CANTRELL stated that when the NCR was returned to him for arriving at a disposition acceptable to the ANI and HSBII, he began to search for various ways to resolve the problem identified by the NCR. CANTRELL said that he went to Marcus BRESSLER, who is considered to be TVA's most knowledgeable person on ASME Code requirements. He indicated that he and BRESSLER worked for about a month on possible resolutions to the problem identified by NCR 6420 and met with HSBII representatives on January 24, 1986 to discuss their options. CANTRELL stated that they (TVA) suggested several ways to resolve the problem which included the use of fiber optics and/or moisture

PAGE ____ OF ___ PAGE(S)

sensitive tape. According to CANTRELL, the HSBII representatives felt that the fiber optics recommendation was more acceptable. He said that this recommendation was only for Unit 2 of WBN and he is not aware of any such proposals for Unit 1. CANTRELL implied that Unit 1 was covered by NCR 5609, which he had nothing to do with.

CANTRELL indicated that this whole problem resulted from a lack of communications between the vendor and whoever at TVA relieved the vendor of the responsibility for hydrostatically testing the welds in question. He said that in addition, someone in TVA should have informed the Office of Construction (OC) at WBN that the welds had not been hydrostatically tested. According to CANTRELL, if this information had been given to the OC at WBN, the welds could have been hydrostatically tested prior to installation. CANTRELL stated that in his opinion, the recommended disposition of NCR 6420 will resolve the problem for Unit 2. He reiterated that TVA is not currently addressing the situation in Unit 1 and that, basically. TVA thought this issue was dead.

When gueried about the different dispositions for NCR 6420 and NCR 5609, which basically dealt with the same issue, CANTRELL stated that he tried to use the same disposition for NCR 6420 (Unit 2) which was accepted for NCR 5609 (Units 1 and 2) but it was rejected by the ANI. CANTRELL stated that he thought he was addressing the same problem. He related that he cannot explain the different dispositions but does not believe that cost and schedule had anything to do with the disposition of NCR 5609. CANTRELL indicated that when he sent in the same recommended disposition for NCR 6420 and NCR 5609, he was confident that it would be accepted.

When asked if the comment on the disposition which implied that if the ANI could not accept the disposition of the NCR, the weld would be taken off the N-5 packet was a threat, CANTRELL replied "no." CANTRELL said he had not given any thought to this notion and did not view the comment as an ultimatum or threat to the ANIs.

CANTRELL was asked why the problem was identified as "significant" in NCR 5609 and "not significant" in NCR 6420, to which he replied that in his opinion, the problem did not meet the criteria of a "significant" classification as specified in TVA Procedure OEP-17, Conditions Adverse to Safety. CANTRELL indicated that he did not want to render an opinion on whether or not the disposition of NCR 5609 met ASME Code requirements and felt that this question could best be answered by BRESSLER. CANTRELL related that BRESSLER was upset about the lack of communications between TVA and the vendor but was very helpful in arriving at the disposition of NCR 6420. CANTRELL concluded by stating that in his opinion, NCR 6420 is being handled in a very acceptable manner.

This Results of Interview was prepared on May 28, 1986.

PAGE 2 OF 2 PAGE(S

ORIGINAL

UNITED STATES NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF:

DOCKET NO:

investigative interview ... P. Joest

LOCATION:

KNOXVILLE, TENNESSEE

PAGES:

- 7

DATE:

THURSDAY, MAY 22, 1986

ACE-FEDERAL REPORTERS, INC.

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Washington, D.C. 20001
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NATIONWIDE COVERAGE

PAGE OF 77 PAGE(S)

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2:	NUCLEAR REGULATORY COMMISSION
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6	INTERVIEW
7	OF
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9.	WALTER P. JOEST
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2	West Tower
L 3 :	Tennessee Valley Authority 400 W. Summit Hill Drive
1.4)	Knoxville, Tennessee 37902
L 5 .	Thursday, May 22, 1986
16	The interview commenced, pursuant to notice, at
17	8:45 a.m.
18	PRESENTE DE PROPERTOR DE LA COMPANIA DEL COMPANIA DEL COMPANIA DE LA COMPANIA DE
19	BEFORE:
20	E. L. WILLIAMSON, Senior Investigator DANIEL D. MURPHY, Senior Investigator
21	Office of Investigations Region II-Atlanta
22	Nuclear Regulatory Commission Suite 2900
23	101 Marietta Street Atlanta, Georgia 30323
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PROCEEDINGS

INVESTIGATOR WILLIAMSON: For the record, it is now 8:45. This is an interview of Walter P. Joest, who is employed by the Tennessee Valley Authority.

The location of this interview is the West Tower,
Tennessee Valley Authority, TVA, Knoxville, Tennessee.

Present at the interview are E. L. Williamson and Daniel D.

Murphy. As agreed, this is being transcribed by a court
reporter.

Whereupon,

WALTER PHILLIP JOEST

having been first duly sworn by Investigator Williamson, was examined and testified as follows:

INVESTIGATOR WILLIAMSON: Mr. Joest, for the record, would you provide your full name and position with TVA.

MR. JOEST: First, is it permissible for me to ask what you are investigating?

INVESTIGATOR WILLIAMSON: Yes. The questions that we will be asking you are concerning allegations that we have received regarding the allegations of coercion of the authorized nuclear inspectors by Hartford Steam Boiler and/or TVA at Watts Bar primarily.

MR. JOEST: Is that a violation of law or is there a specific thing that you are investigating?

1	INVESTIGATOR WILLIAMSON. Hell, No Will get 1to
2	that as we progress on.
3	MR. JOEST: Okay.
•	INVESTIGATOR WILLIAMSON: Would you please provide
5	your full name and position with TVA.
6	MR. JOEST: I am Walter Phillip Joest. I am a
7	metallurgical engineer with the TVA.
8	INVESTIGATOR WILLIAMSON: And what group are you
9	assigned to here?
10	MR. JOEST: I work for the Nuclear Engineering
1.1.	Branch in the Division of Nuclear Engineering.
12	INVESTIGATOR WILLIAMSON: How long have you been
13	employed with TVA?
14	MR. JOEST: Thirteen years, or twelve years.
1.5	INVESTIGATOR WILLIAMSON: Twelve years. Prior to
16	your training with TVA or employment with TVA, who were you
1.7	employed by?
18	MR. JOEST: I worked for the Union Carbide
19	Corporation and I worked for Esso Research and Engineering
20	Company.
21	INVESTIGATOR WILLIAMSON: In Tennessee?
2.2	MR. JOEST: Union Carbide in Tennessee. Esso was
23	not in Tennessee.
24	INVESTIGATOR WILLIAMSON: And prior to your
25	experiences or training with Esso what were you doing?

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2	INVESTIGATOR WILLIAMSON: Your education consile
3	of?
4	MR. JOEST: I have got a bachelor's degree and a
,5 :	master's degree.
6	INVESTIGATOR WILLIAMSON: In what fields?
7	MR. JOEST: I have got a bachelor's degree in
8	metallurgical engineering and a master's degree in
9	engineering administration.
1.0	INVESTIGATOR WILLIAMSON: Since being with TVA,
1.1.	what positions have you held?
1.2	MR. JOEST: I have been a metallurgical engineer
13	and for a short period of time I was in charge of the Code
14	Standards, and Materials Section.
15	INVESTIGATOR WILLIAMSON: And that is the section
16	you are now working in?
17	MR. JOEST: Yes.
18	INVESTIGATOR WILLIAMSON: Codes, Standards and
19	Materials Group.
20	MR. JOEST: Yes.
2.1.	INVESTIGATOR WILLIAMSON: In your view, what is
22	the purpose of the authorized nuclear inspectors on a
23	nuclear plant site?
24	MR. JOEST: I would have to go get the source
25	documents to show their exact purpose.

1 INVESTIGATOR WILLIAMSON: Do you have any idea of 2 what their responsibilities are? 3 MR. JOEST: Yes. INVESTIGATOR WILLIAMSON: What are those? 5 MR. JOEST: They are responsible for monitoring 6 compliance with our program for ASME Code Construction. 7. INVESTIGATOR WILLIAMSON: Is their presence 8 required by either the State or TVA or NRC or any other 9 agency? 10 MR. JOEST: I believe their presence is required 11 by law. 12 INVESTIGATOR WILLIAMSON: What is your 13 relationship with the ANI at the various nuclear plant 14 sites, and when I say ANI's, I am meaning both ANI's and 15 ANII's that work for Hartford Steam Boiler Inspection and 16 Insurance Company. What is your relationship between you 17 specifically and the ANI's at various TVA nuclear sites? 18 MR. JOEST: I don't really know what the answer to 19 that is. That is kind of a vague question. 20 INVESTIGATOR WILLIAMSON: Well, do you have daily 21 contact with these people or periodic contact? 22 MR. JOEST: Periodic contact. 23 INVESTIGATOR WILLIAMSON: Does your position with 24 TVA cause you to have any direct interface with the ANI's? 25

MR. JOEST: No.

1.	INVESTIGATOR WILLIAMSON: What about with Hartford
2	Steam Boiler?
3	MR. JOEST: Yes.
4	INVESTIGATOR WILLIAMSON: Would you say that that
5 :	was frequent contact?
6	MR. JOEST: What is frequent?
7	INVESTIGATOR WILLIAMSON: Frequent as opposed to
8	occasional or infrequent?
9.	MR. JOEST: I would pick frequent from that list.
10	INVESTIGATOR WILLIAMSON: Let me ask you, what is
11	the procedural basis for your relationship with the
12	Hartford managerial personnel? Is there a requirement that
13	you have this interface with them contractually or
14	otherwise?
15	MR. JOEST: There is a requirement within our
16	quality assurance program to have this interface.
17	INVESTIGATOR WILLIAMSON: And who is the point of
18	contact with Hartford?
19	MR. JOEST: Who the exact defined point of contact
20	is, I don't know. I would have to go get the manual and
21	read the exact
22	INVESTIGATOR WILLIAMSON: Is there someone you
23	have more contact with than others?
24.	MR. JOEST: Yes.
25	INVESTIGATOR WILLIAMSON: Who would that be?

INVESTIGATOR WILLIAMSON: Who would that be?

MR. JOEST: Right now it is Chuck Ireland.

14:

INVESTIGATOR WILLIAMSON: You mentioned having to get the manual. Are you familiar with the TVA, or I guess the Watts Bar QA Manual which reflects the line of communication between TVA and Hartford? Do you know who the point of contact with Hartford at Watts Bar would be?

MR. JOEST: I would have to get the manual to be exactly sure.

INVESTIGATOR WILLIAMSON: This is similar to the question asked earlier about the requirement of the ANI's on site. With Hartford being an authorized inspection agency, are they required, the AIA, is it required by TVA to be on site to provide third-party independent inspection?

MR. JOEST: Required by TVA?

INVESTIGATOR WILLIAMSON: Yes.

MR. JOEST: We have contracted to provide that service. So I guess we have required it.

INVESTIGATOR WILLIAMSON: I guess what I am trying to determine is is this a result of a commitment that TVA has made in their FSAR to the NRC, or is this a requirement that the State has imposed upon TVA with its construction?

MR. JOEST: I am not familiar with commitments to the State. I believe I remember the FSAR does make the ______

1	INVESTIGATOR WILLIAMSON: IN YOUR VIEW, WHAT IS
2	the Hartford responsibility under this contract agreement
3	with TVA?
4	MR. JOEST: I haven't read the contract in a long
5	number of years. It is not in my area of responsibility.
6	So I am not ramiliar with their responsibilities in the
7	contract.
8	INVESTIGATOR WILLIAMSON: But does it basically
9	provide the authorized nuclear inspectors for the various
10	sites?
11	MR. JOEST: Yes.
1:2	INVESTIGATOR WILLIAMSON: What is the status of
13	the current contract?
14	MR. JOEST: I don't know.
15	INVESTIGATOR WILLIAMSON: Do you know who the
16	contract administrator for TVA is?
17	MR. JOEST: No, I don't.
18	INVESTIGATOR WILLIAMSON: Did you have any role or
19	play any role in establishing the technical requirements
20	for the contract?
21	MR. JOEST: No, I did not.
22	INVESTIGATOR WILLIAMSON: Was there ever a period
23	that consideration was being given to not renewing the
24	Hartford contract with TVA?
25	MR. JOEST: I don't know.

1 INVESTIGATOR WILLIAMSON: Was there ever a period that the contract had a verbal extension as opposed to a 2 written agreement? MR. JOEST: I don't know. INVESTIGATOR WILLIAMSON: You have no dealings 5 6 with the current contract? 7 MR. JOEST: No. sir. 8 INVESTIGATOR WILLIAMSON: Did you have any responsibility to review the contract at any time? 9 10 MR. JOEST: No. sir. INVESTIGATOR WILLIAMSON: Do you know who the TVA 1.1 contract administrator is for the Hartford contract? 12 13 MR. JOEST: No. sir. INVESTIGATOR WILLIAMSON: Let me ask you, Mr. 14 Joest, from the ASME Code standpoint, and you as I 15 understand spend a great deal of your time with the code 16 related problems; is that correct? 17 18 MR. JOEST: Yes, I do. INVESTIGATOR WILLIAMSON: From an ASME Code 19 standpoint, must the authorized nuclear inspector, from the 20 point of view of his interpretation of the Code with an 21 issue identified by the Code as a violation, must be 22 23 satisfied that it is properly dispositioned? MR. JOEST: I don't know. I would have to go and 24

read the Code. That is an area of the Code that I don't

14"	
1	deal with that much.
2	INVESTIGATOR WILLIAMSON: Do jou know what the
3	ANT's responsibility is regarding the disposition of
4	nonconforming condition reports?
5	MR. JOEST: Again, I would have to go and get the
6	Code and read the exact words.
7	INVESTIGATOR WILLIAMSON: In your dealings with
8:	Hartford, Atlanta, do you feel that they have supported the
9	ANT's in the field relative to their making independent
0	decisions?
1	MR. JOEST: I have got no basis to make a judgment
2	on that.
3:	INVESTIGATOR WILLIAMSON: What about their support
4	of the ANI's with regard to interpretation of codes?
5	MR. JOEST: Again, I have got no basis for the
6	dealings with Hartford.
7	INVESTIGATOR WILLIAMSON: Are you familiar with
8	the interface between the Hartford management personnel and
9:	the ANI's in the field?
20	MR. JOEST: I know that there must be an
21	interface, but I don't know any details of it.
22	INVESTIGATOR WILLIAMSON: Do you know if the
23	Hartford, Atlanta office has been fully supportive of the

likely to agree with the position taken by your office here

views of the ANI's in the field, or have they been more

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in Knoxville?

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MR. JOEST: I don't know.

INVESTIGATOR WILLIAMSON: Have you ever had contact with the Hartford management regarding a problem at a site that had some direct involvement with an ANI?

MR. JOEST: I must have.

INVESTIGATOR WILLIAMSON: You said you had contact with the Hartford people I guess frequently or occasionally. Was this contact to discuss any issues that involved the ANI's?

MR. JOEST: It was an issue that involved an ANI, yes. Everything involves the ANI I guess. So, yes.

INVESTIGATOR WILLIAMSON: And maybe a particular decision made by an ANI, would that be discussed with the Hartford management?

MR. JOEST: Sometimes, yes.

INVESTIGATOR WILLIAMSON: Do you know if the ASME Code gives a Field or a Regional Supervisor of an ANI the authority to override the decision made by the ANI in the field?

MR. JOEST: I don't know.

INVESTIGATOR WILLIAMSON: Are you familiar with any code requirements, either ANSI or ASME, that would allow a supervisor either of an authorized inspection agency or a plant site to override the decision that is

made by an ANI?

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MR. JOEST: I don't know, either allow or prohibit it. I am just not aware of anything at all within that area.

INVESTIGATOR WILLIAMSON: We agree for the purpose at least for the ANI's to be on site is to provide third-party independent inspection of Code requirements; is that correct?

MR. JOEST: Okay.

INVESTIGATOR WILLIAMSON: I mean do we agree on that, that that is part of their responsibility to provide a third-party independent inspection?

MR. JOEST: Again, their exact, I would have to go and read the exact requirements to either agree or disagree with the way you are stating it.

INVESTIGATOR WILLIAMSON: If there is a situation that arises and the ANI disagrees with the decision of his management, does the Code allow him to bypass his management and go to a higher authority for a decision?

MR. JOEST: I don't know.

INVESTIGATOR WILLIAMSON: Do you know if an ANI at Watts Bar or at any other plant sites have bypassed their management in seeking a decision from some higher authority?

MR. JOEST: I don't know.

1. INVESTIGATOR WILLIAMSON: You are not aware of 2 any? 37 MR. JOEST: No. INVESTIGATOR WILLIAMSON: Are you aware that if an 5 ANI does not agree and pursues a matter to a higher 6 authority whether he would be jeopardizing his position 7 with Hartford? 8 MR. JOEST: I don't know Hartford's policy. 9. INVESTIGATOR WILLIAMSON: From an ASME Code 10 standpoint, should the ANI's have the freedom to discuss 11 and offer any dissenting opinions on issues that they 1.2: disagree with their management on? 13 MR. JOEST: I don't know whether the Code 14 discusses that. 15 INVESTIGATOR WILLIAMSON: Do you know if there 16 have been any occasions on site where ANI's have pursued a 17 matter above the level of their supervision in Hartford? 18. MR. JOEST: Not that I am aware of. 19 INVESTIGATOR WILLIAMSON: You don't know if they 20 have gone to the Hartford home office or to the National 21 Committee or anything else? 22 MR. JOEST: Not that I am aware of. I assume 23 since I am here somebody has pursued something above their 24 management, but I am not aware of the situation.

INVESTIGATOR WILLIAMSON: Do you get diary

2 40939 documentation from Hartford personnel that is 3 generated on site? MR. JOEST: No. sir. INVESTIGATOR WILLIAMSON: You are not on 5 6 distribution for that? 7 MR. JOEST: No. sir. INVESTIGATOR WILLIAMSON: So routinely you would 9. never see any of the documentation? 10 MR. JOEST: Right. 11 INVESTIGATOR WILLIAMSON: Do you know of any cases 12 where an ANI has disagreed with management regarding an 13 issue such as the disposition of a nonconforming condition. 14 report and was directed to sign off on a document by his 15 management? 16 MR. JOEST: Not that I am aware of. 17 INVESTIGATOR WILLIAMSON: Are you aware of any circumstances wherein any ANI or ANII has disagreed with 18 19 the disposition of an NCR at Watts Bar and has not voluntarily signed off on the documentation? 20 21 MR. JOEST: Not that I am aware of. 22 INVESTIGATOR WILLIAMSON: To your knowledge, has 23 TVA, inside or corporate personnel, had any impact on the decision-making process with regards to the disposition of 24

reports, daily dairy reports, I think SIS documentation.

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NCR's by the ANI's, the acceptability of disposition of

NCR's by the ANI's? 1 2 MR. JOEST: Yes. 3: case that has taken place? 5 6 7 8 9 10

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INVESTIGATOR WILLIAMSON: Can you relate in what

MR. JOEST: I can't remember specific instances, but I know that over the past we have discussed with site personnel and the ANI's in conversations, you know, questions about dispositions of NCR's.

INVESTIGATOR WILLIAMSON: And was their position altered or changed as a result of your conversations?

MR. JOEST: As I remember, sometimes yes and sometimes no.

INVESTIGATOR WILLIAMSON: In those conditions when they weren't changed, what was the course of action that either the ANI or TVA could take?

MR. JOEST: I don't know what the ANI could take.

INVESTIGATOR WILLIAMSON: Is there a requirement then on that NCR that the ANI agree with the disposition? At least, as I understand, there is a place for the ANI to sign off on an NCR with regard to Code items.

MR. JOEST: The requirement that he sign off on the NCR is accepting the disposition, yes.

INVESTIGATOR WILLIAMSON: And if he refuses to sign off on it, can we assume that he disagrees with the disposition?

1 I don't know. MR. JOEST: 2 INVESTIGATUR WILLIAMSON: Have you had an occasion 3 where an ANI has refused to sign off and accept the disposition of an NCR? 5 MR. JOEST: I don't know. 6 INVESTIGATOR WILLIAMSON: Is there anyone from 7 TVA, either from Knoxville or from the sites in particular, 8 that contacted Hartford in Atlanta and attempted to 9 influence a decision or a matter in which a situation or 10 problem was resolved? 11 MR. JOEST: Must have, yes. 12 INVESTIGATOR WILLIAMSON: You say "must have." 13 Why would you say must have? 14 MR. JOEST: I remember doing it myself. 15 INVESTIGATOR WILLIAMSON: In what way have you 16 attempted to influence a decision? 17 MR. JOEST: I cannot recall specific conversations 18 or specific circumstances. 19 INVESTIGATOR WILLIAMSON: But you have had contact 20 with Hartford personnel regarding issues of concern to you? 21 MR. JOEST: Yes. 22 INVESTIGATOR WILLIAMSON: Let me ask you another 23 question. Is this flow of information or contact with 24 Hartford by you people, the Code, Standards and Materials

Group I assume, with Hartford management personnel, is that

1 2 point of contact someone on the site? 3: MR. JOEST: I don't know. 5 (Pause.) 7 8 Is this a QCI, 1.3? 9 MR. JOEST: I don't think so. 10 INVESTIGATOR WILLIAMSON: 11. 12 13. 14 15 16 17 18 19 20 21

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the appropriate way for dealing with these issues, or their

INVESTIGATOR WILLIAMSON: Well the reason I ask. and let's pause just a minute, if you will.

INVESTIGATOR WILLIAMSON: Back on the record.

It says in section 2.3.2 "The Office of Construction has a Project Manager at each nuclear power site and he or his designee shall establish and maintain contact with an authorized inspection agency concerning project items."

What my question was was the loop of contact, and from reading this, it appears that the contact should be from the site to the authorized inspection agency, and what you are saying is you have frequent contact with these people regarding matters, code matters regarding ANI's.

Is this loop that you are involved, from a site to Corporate to Hartford, is that an acceptable way of communicating with the authorized nuclear inspection agency?

I believe that you have misstated an MR. JOEST: earlier statement of mine. I believe I told you that I

have frequent contact with Hartford.INVESTIGATOR WILLIAMSON: Y

INVESTIGATOR WILLIAMSON: Yes. And my question is is that the way of communicating with Hartford? Is it done through Knoxville or through codes and standards, or is it done from the site to the authorized inspection agency?

MR. JOEST: My contact with Hartford is not done through the site.

INVESTIGATOR WILLIAMSON: Okay. Is there a provision that allows your contact with an authorized inspection agency to go through codes and standards vice going through the site?

MR. JOEST: Yes, sir.

INVESTIGATOR WILLIAMSON: And what is that?

MR. JOEST: As described within our Quality
Assurance Manual.

INVESTIGATOR WILLIAMSON: Do you recall exactly where that is located?

MR. JOEST: Well, I would have to go and find it.

INVESTIGATOR WILLIAMSON: But you could provide

MR. JOEST: Yes, sir.

INVESTIGATOR WILLIAMSON: Okay. We were talking, Mr. Joest, about your contact with Hartford in Atlanta and your frequent contact with them you said on occasions and your contact has been to influence a decision of a matter

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1	in which a situation has been resolved.
2	Once again, can you recall any specifics?
3	MR. JOEST: I don't believe I said my function was
4	to influence a decision that had been made.
5	INVESTIGATOR WILLIAMSON: I didn't say your
6	function. My question was has anyone TVA or anyone else
7	had any contact with Hartford and attempted to influence a
8	decision regarding how a situation was resolved, and you
9	indicated that you had.
10	MR. JOEST: Okay.
11	INVESTIGATOR WILLIAMSON: You have had contact
12	with them?
13	MR. JOEST: Yes.
14:	INVESTIGATOR WILLIAMSON: Can you recall
15	specifically any contact that you have had with them?
16	MR. JOEST: I can't specifically recall specific
1.7	instances.
18	INVESTIGATOR WILLIAMSON: Can you provide a
19	scenario wherein you might call them regarding an instance
20	or an event wherein you would have contact with them
21	concerning a matter?
22	MR. JOEST: I can provide what I will call a
23	typical situation.
24	INVESTIGATOR WILLIAMSON: Please do.
25	MR. JOEST: Using your example of a nonconforming

1 report and the situation where TVA believes we comply with the Code or given a nonconformance that was dispositioned 3 within the City of Knoxville by the Corporate staff, and there is discussion going on on site of whether or not it 5 does comply with the Code, and then try to talk with the 6 Hartford staff to see whether we are in agreement on what 7 the requirements of the Code are. 8 INVESTIGATOR WILLIAMSON: Do you ever go to the 9 ANI first and try to work this out, or do you go to 10 supervision?

MR. JOEST: I typically go work with the ANI first or typically try to work with both simultaneously.

INVESTIGATOR WILLIAMSON: And if you are unsuccessful in that, with the ANI, then you typically go to his management?

MR. JOEST: No.

INVESTIGATOR WILLIAMSON: You don't typically go to his management.

MR. JOEST: No.

INVESTIGATOR WILLIAMSON: But you have gone to their management in an effort to try to reach a decision regarding the acceptability?

MR. JOEST: Right, and I guess you have phrased it better than I have in saying in attempting to reach a decision, yes.

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INVESTIGATOR WILLIAMSON: Do you recall a situation, and I understand that you have many, many of these, and I don't know if they are daily occurrences or weekly, but over the years you have had many of these, but do you recall a specific circumstance or incident wherein an ANI has refused to accept the disposition on an NCR, flatly refused to accept the disposition on an NCR and you have gone to Hartford in an effort to convince them to convince the ANI to accept the disposition and your reasoning for that?

MR. JOEST: Well, one, it is not a daily or a weekly thing, you know. Just trying to remember back over the past years, it is a one every six months or once every year thing, and I don't remember an occurrence where the ANI has flatly refused to accept a nonconformance where this happened.

INVESTIGATOR WILLIAMSON: Are there other people, either at the site or here in Knoxville, that might get involved in the disposition of an NCR by the ANI or the acceptability of a disposition of an NCR by the ANI?

MR. JOEST: There would be a large number of people. There is a blank on the NRC that says referred to Knoxville for a disposition.

INVESTIGATOR WILLIAMSON: Has Guenter Wadewitz,
the Project Manager at Watts Bar Nuclear Plant, ever

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directly contacted you concerning the problem that he has had with an ANI at Watts Bar?

MR. JOEST: Not that I remember.

INVESTIGATOR WILLIAMSON: Has any subordinate of Mr. Wadewitz, such as John Self, Charles Christopher or Herb Fisher contacted you with a problem an ANI?

MR. JOEST: Yes.

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INVESTIGATOR WILLIAMSON: Who has contacted you?

MR. JOEST: Again now -- I know John Self has, but
I can't recall the specific occurrences. I know that I
have talked with John about various problems, and I am
certain that some of them involved the ANI.

INVESTIGATOR WILLIAMSON: Has anyone in this office, and this is a spin-off question, but has anyone in this office contacted Hartford in Atlanta about a specific problem with an ANI at the site, a specific ANI at the site?

MR. JOEST: I don't know. I don't remember. I don't doubt we have sometime, but I just can't remember.

INVESTIGATOR WILLIAMSON: Let me ask you a question, Mr. Joest, and see if you can recall last fall, 1985, contacting Hartford management in Atlanta concerning the ANI at Watts Bar spending too much time with QTC's representatives, and that is Quality Technology Company's representatives at Watts Bar? Do you recall discussing

this issue with Hartford management?

MR. JOEST: I recall discussing the relationship between -- relationship, or I don't know what it was -- between the ANI and QTC, yes.

INVESTIGATOR WILLIAMSON: Was your concern that the ANI was spending too much time talking with QTC?

MR. JOEST: I don't remember what my specific

concern was.

INVESTIGATOR WILLIAMSON: Do you know what action was taken by Hartford as a result of your concern?

MR. JOEST: As a result of my concern? I don't know what was done as a result of my concern.

INVESTIGATOR WILLIAMSON: Since you were not on site, and you don't normally work on the Watts Bar site; is that correct?

MR. JOEST: That is correct.

INVESTIGATOR WILLIAMSON: You were not on site, and yet you had knowledge of the ANI's visiting with QTC personnel. Who did you get this information from?

MR. JOEST: I think John Self.

INVESTIGATOR WILLIAMSON: Was the concern that the ANI's were spending too much time with QTC and away from their job, or was the concern that the ANI's were providing some information regarding quality problems at Watts Bar without bringing them first to TVA's attention?

MR. JOEST: If I remember correctly, my concern was that Hartford was providing TVA third-party inspection service and the concern that problems should be worked out wherever possible between the people who were trying to work them out without another third party involved.

INVESTIGATOR WILLIAMSON: And the other third party being QTC?

MR. JOEST: Yes.

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INVESTIGATOR WILLIAMSON: It is my understanding that once these people, the ANI's talked with QTC at Watts Bar that there were some changes made wherein I think: Hartford had required them to contact them if they were contacted by someone else other than I guess codes and standards people, certainly people from QTC or NSRS.

The thrust of your concern was that these people were spending too much time with the QTC people and not enough time addressing what they were being paid to do; is that correct?

MR. JOEST: No, sir.

INVESTIGATOR WILLIAMSON: What was the thrust of your concern?

MR. JOEST: I will try to rephrase what I said.

The thrust of my concern was that Hartford and TVA work together to resolve our problems or whatever was going on.

INVESTIGATOR WILLIAMSON: Do you know what the

ANI's were discussing with QTC?

MR. JOEST: No.

INVESTIGATOR WILLIAMSON: In your opinion, did the ANI's have the same rights as TVA employees to talk with QTC about concerns they had?

MR. JOEST: Yes, definitely.

INVESTIGATOR WILLIAMSON: Was this mentioned to Guenter Wadewitz or whoever called you, maybe John Self, that the ANI's had the same freedom to go to QTC if they felt they had a concern about the way in which TVA was addressing a problem?

MR. JOEST: Yes.

INVESTIGATOR WILLIAMSON: So you feel they had the same unlimited access to QTC?

MR. JOEST: Definitely.

INVESTIGATOR WILLIAMSON: At any time, to your knowledge, has a representative from TVA ever threatened, implied, suggested or given any indication verbally or in writing to Hartford Steam Boiler personnel in Atlanta that the contract between TVA and Hartford might not be renewed because TVA was not satisfied with the performance of the ANI?

MR. JOEST: Not that I am aware of.

INVESTIGATOR WILLIAMSON: Have you ever heard an individual from Hartford, Atlanta make the statement that

1	any ANI who did anything that resulted in cancellation of a
2	TVA contract would be fired?
3	MR. JOEST: I haven't heard that.
4	INVESTIGATOR WILLIAMSON: Do you recall an
5	incident at Watts Bar probably maybe last fall, 1985,
6	wherein an ANI was refused access to what is commonly
7	referred to as an open-items list?
8	MR. JOEST: I have heard about the incident.
9	INVESTIGATOR WILLIAMSON: Were you involved in
10	that incident?
11	MR. JOEST: No.
12	INVESTIGATOR WILLIAMSON: What did you hear about
13	the incident?
14	MR. JOEST: I heard he had been refused access to
15	it.
16	INVESTIGATOR WILLIAMSON: Did you support that
17	decision by the site personnel?
18	MR. JOEST: I don't know whether I either
19	supported it or rejected it.
20	INVESTIGATOR WILLIAMSON: Were you personally
21.	involved in the refusal by the site personnel to provide
22	the OIL
23	MR. JOEST: No.
24	INVESTIGATOR WILLIAMSON: to I believe it was
25	an ANI by the name of Hank Best?

1	MR. JOEST: I wasn't involved with the decision.
2	INVESTIGATOR WILLIAMSON: Did you encourage them
3	to withhold it or encourage them to provide it to the ANI?
4	MR. JOEST: I didn't do either thing. I heard
5	about it after the fact, as I remember.
6	INVESTIGATOR WILLIAMSON: Mr. Joest, was the issue
. 7	of the flued head weld penetrations in Unit 1 and Unit 2
8	every brought to your attention?
9	MR. JOEST: I am aware of it going on. So it was
10	obviously brought to my attention.
11	INVESTIGATOR WILLIAMSON: Were you directly
12	involved in either the disposition of NCR 5609 for Unit 1
13	and NRC 6420 for Unit 2?
14	MR. JOEST: Not that I remember.
15	INVESTIGATOR WILLIAMSON: You were not directly
16	involved in either one of those?
17	MR. JOEST: I don't believe so.
18	INVESTIGATOR WILLIAMSON: Do you routinely review
19	NCR's?
20	MR. JOEST: Routinely review NCR's? I see some,
21	yes.
22	INVESTIGATOR WILLIAMSON: What is the extent of
23	your input in the review process and/or the disposition of
24	an NCR?
25	MR. JOEST: Let me back up. If we limit the

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2	may simplify this matter.
3	INVESTIGATOR WILLIAMSON: Have you ever reviewed,
4	routinely reviewed NCR's generated at Watts Bar?
5	MR. JOEST: No.
6	INVESTIGATOR WILLIAMSON: Do you review NRC's
7	generated at other sites?
8:	MR. JOEST: I review NCR's generated at
9	Bellefonte.
10	INVESTIGATOR WILLIAMSON: Are you primarily
11	concerned with the construction at Bellefonte at this time
12	MR. JOEST: No.
13	INVESTIGATOR WILLIAMSON: You have other sites
14	that you are involved with?
15	MR. JOEST: Yes.
16	INVESTIGATOR WILLIAMSON: What are those other
1.7	sites?
18	MR. JOEST: Oh, we have got our Browns Ferry site
19	Sequoyah site, Watts Bar site and Bellefonte site.
20	INVESTIGATOR WILLIAMSON: But you had mentioned
21	that you had not had any review or been involved in the
22	disposition of any NCR's generated at Watts Bar?
23	MR. JOEST: No, sir. I said I do not routinely
24	review nonconformances generated at Watts Bar.
25	TNUPSTIGATOR WILLIAMSON. These two particular

1 NCR's, 5609 and 6420, which dealt with flued head weld penetrations in containment, do you know what the 3 disposition of these two NCR's were? MR. JOEST: No, sir. I would have to look at 5 them. 6 INVESTIGATOR WILLIAMSON: Why don't we take a 7 little break. 8 (Recess.) 9 INVESTIGATOR WILLIAMSON: We are back on the 10 record. 11 You have some questions, Dan. 12 INVESTIGATOR MURPHY: Yes, I have a couple. 13 Let me ask you a couple of follow-up questions. 14-You said earlier on that you were a Supervisor in the 15 Codes, Standards and Materials Branch. What position did 16 you occupy at that time? 17 MR. JOEST: That was my title at the time. 18 INVESTIGATOR MURPHY: What was your job? I mean 19 what did that mean that you were a Supervisor in that 20 section? What did you do as a Supervisor? 21 MR. JOEST: I had that job for three months, and 22 only three months, and I was administratively responsible 23 for the section. 24 INVESTIGATOR MURPHY: And what three-month period

was that? Do you remember the time frame?

1. MR. JOEST: '79 or '80, somewhere back in there. 2 INVESTIGATOR MURPHY: Can you tell is a little bit 3 about your training in the ASME Code, what specific training you had in the Code? MR. JOEST: It has been on-the-job training. INVESTIGATOR MURPHY: And for how many years have 7 you been dabbling with this? 8. MR. JOEST: Almost since I have been with the TVA 9 I guess, 12 years, 12 and a half years. 10 INVESTIGATOR MURPHY: Do you deal with the Code 11. every day? I mean does your job require that you ---12 MR. JOEST: Most days. 13 INVESTIGATOR MURPHY: --- I mean, you know, a high 14 percentage of your time is with dealing with the Code. 15 MR. JOEST: Yes. 16 INVESTIGATOR MURPHY: Early on you answered a 17 question like what is your contact with the Hartford people in Atlanta, and you described it as frequent, right? 19 MR. JOEST: Yes, frequent. 20 INVESTIGATOR MURPHY: What does frequent mean to 21. you? 22 MR. JOEST: Well, I believe at that time I asked 23 what frequent mean, and I got offered three choices, 24 occasionally, frequent and infrequent, and I selected 25 frequent. I have no idea what it means.

I mean is it daily contact? INVESTIGATOR MURPHY: 1 2 MR. JOEST: No. INVESTIGATOR MURPHY: Weekly contact? 3 In what period of time are we talking? MR. JOEST: INVESTIGATOR MURPHY: You determine what the 5 period of time is. Have you at any period of time that you 6 have been in this section had weekly contact with Hartford? 7 8 MR. JOEST: Yes. INVESTIGATOR MURPHY: So if we can describe 9: 10 frequent then during some particular times, and not always, but some particular times, it could be weekly? 11 12 MR. JOEST: Yes. 13 INVESTIGATOR MURPHY: And at other times it might 14 not be guite that ---MR. JOEST: It might be once every three months. 15 INVESTIGATOR MURPHY: And I hope this frequent 16 contact is in relationship, because the question was asked 17 about those times that you would contact Hartford, Atlanta 18 concerning a decision that TVA had some conflict with maybe 19 the ANI at the site, and you said that could happen maybe 20 once a year or once every six months. Is that an accurate 21 22 description? 23 MR. JOEST: I think so. INVESTIGATOR MURPHY: In other words, then, those 24

issues that seemed to surface where you think you might

1 have to contact Atlanta over a decision with ANI, once every six months, which I don't call frequent, you know, or once a year, that is not a frequent occasion. 3 MR. JOEST: Okay. 5 INVESTIGATOR MURPHY: Is that correct? 6 feel that way? 7 MR. JOEST: That is correct. 8 INVESTIGATOR MURPHY: Then there has not been a 9 large number of issues that you have had to contact ---10 MR. JOEST: No. You know, once every six months 11. or once a year. 12. INVESTIGATOR MURPHY: That is not frequent. I 13 want to clarify this because when we look at this 14 transcript you are going to see some discrepancies and I 15 want to straighten these things out. 16 You said that in your view that the ANI on the site has the same rights as a TVA employee to go to the 17 18 Quality Technology Corporation with a concern, right? 19 MR. JOEST: Absolutely. INVESTIGATOR MURPHY: You also said that in your 20 21 conversation you believe that John Self notified you about the ANI's going to QTC. That is what you said, you thought 22 23 that John ---

I think so, yes.

INVESTIGATOR MURPHY: And you also mentioned in

MR. JOEST:

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your conversation with Mr. Self that as far as you were concerned they had the right to go to QTC is they wanted to, right?

MR. JOEST: Right.

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INVESTIGATOR MURPHY: And you also said that you have no idea why the ANI went to the QTC. I mean you have no idea what their concerns were; is that correct?

MR. JOEST: I have got no idea what they discussed with QTC.

INVESTIGATOR MURPHY: Okay. Now let me clarify this. They have the same rights to go to QTC as a TVA employee, and you mentioned this to Mr. Self, and he was the person that contacted you, right, or you believe that he is the one?

MR. JOEST: Yes.

INVESTIGATOR MURPHY: You don't have _ny idea why the ANI's went to visit QTC, right?

MR. JOEST: Yes.

INVESTIGATOR MURPHY: But you did contact Hartford and tell then that there is a problem there; is that correct?

MR. JOEST: Let me back up. And again, I ammembering and I may be wrong, but I believe what I heard from Watts Bar is that QTC was coming to the ANI, and not as you said that the ANI is going to QTC.

I	INVESTIGATOR MURPHY: Okay.
2	MR. JOEST: I think that is what I understood.
3	INVESTIGATOR MURPHY: Who did you contact at
4	Hartford, do you remember?
5	MR. JOEST: I don't remember, but it is more than
6	likely that it was Harold Robeson at that time.
7	INVESTIGATOR MURPHY: Was he your point of contact
8	basically at Hartford? I mean was Harold Robeson the
9	Supervisor of the ANI's at Watts Bar at that time?
0	MR. JOEST: Yes.
1	INVESTIGATOR MURPHY: And he since has been
12	replaced by Chuck Ireland; is this correct?
1.3	MR. JOEST: Yes.
14	INVESTIGATOR MURPHY: Do you recall during your
15	conversation with Hartford, Atlanta concerning the ANI's
16	and the QTC issue talking with Mr. Higginbotham?
17	MR. JOEST: I don't know whether I talked with it
18	Higginbotham on this topic or not. I couldn't say either
19	way.
20	INVESTIGATOR MURPHY: I mean would that be a
21	normal way of conducting business with an issue like this?
22.	MR. JOEST: I normally would talk to Robbie,
23	Harold Robeson.
24	INVESTIGATOR MURPHY: And do you recall what you
25	evaraged to Pobeson what your concern was at that time?

1 MR. JOEST: As I recall, my concern was that, you 2 know, Hartford and TVA were not working out their problems. INVESTIGATOR MURPHY: But you have also said that 3 you don't have any idea why the ANI at the site or the 5 ANI's at the site were going to see QTC or QTC coming to 6 I mean it may have been a personal reason. 7 mean why do we have an issue with this thing? I guess I am 8 just trying to clarify this. 9 If we don't know why they went there, and we don't 10 know if they were discussing TVA problems at all, right ---11 MR. JOEST: Right. 12 INVESTIGATOR MURPHY: --- and you have told us you don't why they went to visit the ANI's -- I mean the 13 14 QTC or vice versa. How do we know there is a problem between TVA and the ANI's? I mean how do you arrive at 15 16 that decision? 17 MR. JOEST: I don't know. 18 INVESTIGATOR MURPHY: Do you know for sure you had 19 a problem? 20 MR'. JOEST: No. INVESTIGATOR MURPHY: It looks like you were 21 22 expressing a concern to Hartford, Atlanta about a problem

that may not even exist.

MR. JOEST:

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INVESTIGATOR MURPHY: Do you mean you don't know

I don't know.

I mean is that a safe assumption?

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whether that is a safe assumption? I am trying to determine why we go to Atlanta if we don't know that a problem exists.

MR. JOEST: I just don't remember exactly what occurred back then.

INVESTIGATOR WILLIAMSON: Do you recall being upset about this incident, this situation?

MR. JOEST: Hell, I don't know. I stay upset. I don't know. That's not a proper comment. I don't know whether I was upset or not.

INVESTIGATOR MURPHY: Do you recall raising your voice during the conversation with Mr. Robeson?

MR. JOEST: I have an extremely loud voice normally. So I have no doubt that I did.

INVESTIGATOR WILLIAMSON: Now part of the problem in pursuing this is to try to determine exactly what your concerns were with the ANI's talking to QTC, and in trying to determine to what extent this concerned you and why it was a concern to you and to someone in codes and standards, and was it because of something they were doing or they were spending too much time away from the job? These people have a contract with TVA to provide a service, ANI's under the contract with TVA to provide a service.

Really, that is what we are trying to determine, what your concern was with these people. It was relayed to

us, if I am not mistaken, by at least two people that you had called complaining about this to them and were upset 3 about the fact of the amount of time they were spending with these people.

Do you recall that?

MR. JOEST: I recall talking to Atlanta about it, ves. Hartford, Atlanta, yes.

INVESTIGATOR WILLIAMSON: Do you recall how that problem was resolved? Did it only take one phone call?

MR. JOEST: As I remember, it went on over a period of days.

INVESTIGATOR WILLIAMSON: Was Hartford receptive to your call? Did they say that is none of your business, or we will take care of it and don't worry about it? Do you recall?

I think Hartford said they would look MR. JOEST: into it and talk to their people to see what was going on or something. You know, I don't really remember exactly what was the resolution.

INVESTIGATOR MURPHY: I want to go back to this code experience one minute. Why don't you in your words describe what you consider your knowledge of the ASME Code I mean, are you well familiar with the Code and do you consider yourself a quasi -- I mean we have had people tell us that if they had Code problems that they would either

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call Mr. Bressler or Mr. Joest, and some folks have referred to you as "Code Guru."

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MR. JOEST: That is an interesting description.

INVESTIGATOR MURPHY: I know that is not probably the right terminology, but it would imply that you have a very, very good knowledge of the Code. Is that safe o assume?

MR. JOEST: The Code covers one book shelf and costs about \$3,000. There are portions of it which I am knowledgeable in and there are other portions of it that I am not knowledgeable in.

INVESTIGATOR MURPHY: What portion do you consider yourself most knowledgeable in?

MR. JOEST: I am knowledgeable in the areas of fabrication, examination and quality assurance.

INVESTIGATOR MURPHY: How about fabrication?

MR. JOEST: And materials.

INVESTIGATOR WILLIAMSON: I would like to ask you, if you would, please to -- we have two NCR's here. As you indicated before, you do not have a working knowledge of NCR 5609 or 6420 regarding the flued head piping penetrations at Watts Bar Units 1 and 2; is that correct?

MR. JOEST: I don't remember those two, no.

INVESTIGATOR WILLIAMSON: Let me show you first NCR 5609 dated 4/27/84. And I would ask you, if you would,

to look at it and tell me what appears to be the stated 1. problem with regard to this particular NCR. 2 (Pause.) MR. JOEST: Do you want me to read the 5 description? INVESTIGATOR WILLIAMSON: Well, can you summarize? 6 7 MR. JOEST: These penetrations were fabricated per 8 ASME Section 3 Class 2 requirements, but have at least one 9 internal process piping weld that was not tested in 10 accordance with NC-6000. INVESTIGATOR WILLIAMSON: Do you recall these 11 12 particular penetrations? 13 MR. JOEST: I recall the penetrations, yes. 14 INVESTIGATOR WILLIAMSON: These particular ones, 15 flued head ---MR. JOEST: I was aware of this problem going on. 16 So I am aware of them, you know, but I don't know whether 17 18 these particular ones or ---INVESTIGATOR WILLIAMSON: What is the normal 19 review cycle for an NCR? It is initiated normally where? 20 MR. JOEST: This is a Division of Construction 2.1 So it would have been initiated within the Division 22 NRC. 23 of Construction. INVESTIGATOR WILLIAMSON: And that is normally on 24 25

site?

1	MR. JOEST: Yes.
2	INVESTIGATOR WILLIAMSON: Then what happens to th
3	NCR?
45	MR. JOEST: Then it gets reviewed and approved on
5	site if it involves a site matter only. If it involves th
6	design organization, it comes to Knoxville for review and
7	approval. And then the last thing at the bottom is the
8:	acceptance of the authorized nuclear inspector.
9.	INVESTIGATOR WILLIAMSON: Does it appear from thi
10	NCR 5609 that the authorized nuclear inspector accepted th
11"	resolution or disposition of this NCR?
12:	MR. JOEST: Yes, it does.
13.	INVESTIGATOR WILLIAMSON: It is signed by the
14	authorized nuclear inspector?
15	MR. JOEST: Yes.
16	INVESTIGATOR WILLIAMSON: Are there any other
17	comments on here? There is that asterisk there.
18	MR. JOEST: Do you want me to read what is by the
19	asterisk?
2.0	INVESTIGATOR WILLIAMSON: Yes, please.
21	MR. JOEST: ANI signature per written and verbal
22	direction of H. L. Robeson, Assistant Regional Manager,
23	HSBI&I Company, Atlanta, Georgia.
24	INVESTIGATOR WILLIAMSON: Would it appear to you
25	that the ANT was eatisfied with the disposition of that

2	MR. JOEST: I don't know.
3	INVESTIGATOR WILLIAMSON: Is that a normal
4	notation found on NCR's?
5.	MR. JOEST: Not that I know of.
6	INVESTIGATOR WILLIAMSON: Is that a common
7	notation?
8	MR. JOEST: Not that I know of.
9.	INVESTIGATOR WILLIAMSON: Have you see that
0:-	notation before?
1	MR. JOEST: Not that I know of.
2	INVESTIGATOR WILLIAMSON: That specific notation?
. З.	MR. JOEST: Not that I know of.
4 :	INVESTIGATOR WILLIAMSON: If you would look there,
.5	it addresses some of the welds I think on the third page.
6	Are you able to determine if those welds are off of Unit 1
. 7	and Unit 2 or just Unit 1?
8	MR. JOEST: It just gives a penetration number. I
9.	don't know what unit they are from.
0	INVESTIGATOR WILLIAMSON: It does not identify the
1	unit there?
2 2 ·	MR. JOEST: No. It just gives the penetration
23	number, a long list of penetration numbers. Is this what I
4.	am supposed to look at?
25	INVESTIGATOR WILLIAMSON: Yes. We have another

NCR?

1 NCR, NCR 6420, which was generated on October 28th, 1985. I would like for you to look at that also. If you would 2 3 read that and tell me if that identifies the same problems of nonconforming conditions as does 5609. 5 (Pause.) 6 MR. JOEST: It describes the same general problem. 7 INVESTIGATOR WILLIAMSON: On 5609 can you tell me 8 what the disposition was? (Pause.) 10 MR. JOEST: No, sir, I can't. 11 INVESTIGATOR WILLIAMSON: Does it require any 12 changes or use as is? Can you determine that from the NCR 13 itself? 14 MR. JOEST: The recommendation on site was to use 15 as is. 16 INVESTIGATOR WILLIAMSON: In conjunction with 17 that, the concern seemed to be with some hidden penetration 18 welds, and using your expertise in the ASME Code 19 applications, can you tell me if there is a requirement 20 that the ANI certify a hundred percent visual inspection of 21 all welds during hydrostatic testing? 22 MR. JOEST: I don't know. 23 INVESTIGATOR WILLIAMSON: You don't know if the 24 Code requires that?

I would have to refer to the

MR. JOEST: No.

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Code.

INVESTIGATOR WILLIAMSON: Does the Code require that the ANI physically inspect all welds during hydrostatic testing?

MR. JOEST: I would have to look at the Code. I don't know.

INVESTIGATOR WILLIAMSON: Does the ANI have the right to inspect any welds that he wants to during the process of hydrostatic testing?

MR. JOEST: Yes.

INVESTIGATOR WILLIAMSON: Any welds that he wants to.

MR. JOEST: Yes.

INVESTIGATOR WILLIAMSON: If 5609, NCR 5609 indicates that there are a certain number of penetrations which have welds which are inaccessible, it would indicate that these welds could not be visually inspected during hydrostatic testing. Would you agree with that?

MR. JOEST: I don't know whether that means that or whether they are inaccessible to reach. I just don't know enough detail about that to really discuss it.

INVESTIGATOR WILLIAMSON: Are you familiar with any of the requirements or circumstances of how these particular subassemblies and penetrations were installed without being subject to hydrostatic testing by the vendor?

MR. JOEST: I have heard some things, but I am not 1 2 familiar enough to really tell you definitively. 3 INVESTIGATOR WILLIAMSON: Can you just relate what you heard? 5 MR. JOEST: I heard they were bought and 6 installed. 7 INVESTIGATOR WILLIAMSON: Bought? 8 MR. JOEST: They were bought from the vendor 9 without hydrostatic testing and were installed. 10 INVESTIGATOR WILLIAMSON: Is that a normal or 11 typical procedure, and by that I mean normally or commonly 12 are vendor welds subjected to both nondestructive 13 examination and hydrostatic testing at the vendor, or is a 14 common practice for those welds to be subject to NDE and 15 also hydrostatically tested by the owner? 15 MR. JOEST: It is done both ways. 17 INVESTIGATOR WILLIAMSON: Is there one practice 18 that is more common than the other? 19 MR. JOEST: I don't know. We do it both ways. 20 INVESTIGATOR WILLIAMSON: Do you have any idea why 21 these particular penetrations were not hydrostatically 22: tested by the vendor? 23 MR. JOEST: No, I don't. 24 INVESTIGATOR WILLIAMSON: But you heard that they 25 were not?

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1	MR. JOEST: Right.
2.	INVESTIGATOR WILLIAMSON: And they were installed
3	in Unit 1?
4	MR. JOEST: Yes.
5	INVESTIGATOR WILLIAMSON: Do you know if they were
6	hydrostatically tested while in Unit 1?
7	MR. JOEST: I think the NCR says they were not.
8	INVESTIGATOR WILLIAMSON: Does the NCR say they
9	were not hydrostatically tested or they were not inspected,
ıo	that the welds in question were not inspected?
11	MR. JOEST: I would have to read it in detail?
12	INVESTIGATOR WILLIAMSON: Why don't you look at it
13	one more time.
14	(Pause.)
15	MR. JOEST: It says they were not tested.
16	INVESTIGATOR WILLIAMSON: It didn't say anything
17	about them not being inspected?
18	MR. JOEST: They were not inspected at hydro
1.9	pressures by an ANI or TVA inspector. That is what it
20	says.
21	INVESTIGATOR WILLIAMSON: Does that mean they were
22	hydrostatically tested and not inspected, or they were not
23	hydrostatically tested?
24	MR. JOEST: As I read it, it says they were put at
25	pressure during the hydrostatic test, but they were not

inspected.

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INVESTIGATOR WILLIAMSON: In addition to the disposition provided on the NCR 5609, I have a letter dated May 17th, 1984 from J. C. Standerfer, Project Manager, Watts Bar Design Project to Guenter Wadewitz, Project Manager of Watts Bar Nuclear Plant - Construction, and the subject is Watts Bar Nuclear Plant Nonconformance Report, NCR 5609.

I would like for you to read this disposition, if you would, and then I have a couple of questions that I would like to ask you regarding the disposition.

Understanding that you weren't intimately involved in this, I would like to use your expertise in the ASME Code in the dispositioning of NCR's, if you will.

(Pause.)

One of my questions, Mr. Joest, regarding 5609 and the disposition of it is that TVA indicated that the NCR could be dispositioned as use as is because they give five examples or reasons why they feel like it can be used as is.

One of the problems that I have and in an area that I do not understand is the last paragraph here where it says "This nonconformance was made significant for the sole purpose of documenting the use as is disposition. If the ANI cannot accept the disposition, this would require

1. removing the aforementioned two current welds from the N-5 2 program. If the ANI can accept the use as is disposition, 3 this will require no further action." 4 My question to you is can TVA arbitrarily or 5 selectively remove items from the N-5 program? 6 MR. JOEST: Not that I am aware of. 7 INVESTIGATOR WILLIAMSON: And how would they 8 accomplish this? If ANI's could not accept the disposition 9 to use as is, how could they remove them from the N-5. 10 program? 11 MR. JOEST: I assume it takes the authorization of 12 the people that you work for. 13 INVESTIGATOR WILLIAMSON: From the NRC? 14 MR. JOEST: Yes. 15 INVESTIGATOR WILLIAMSON: Is this commonly done, 16 removing an item from the N-5 program? 17 MR. JOEST: Not that I am aware of. 18 INVESTIGATOR WILLIAMSON: Have you ever been 19. involved in the removal of an item from the N-5 program? 20 MR. JOEST: I don't remember an occurrence. 21 INVESTIGATOR WILLIAMSON: Would you consider this 22 statement to be intimidating to the ANI's? 23 MR. JOEST: I don't know how they would interpret 24 it. I can't speak for them. 25 INVESTIGATOR WILLIAMSON: As a layman, as it were,

1 it seems to me to be saying that if they can't accept it, 2 we will just delete it. Do you agree with that? 3 MR. JOEST: Yes. And as a layman it would seem 6 that it would take the pressure off because whether they 5 bought it or not, it didn't matter. INVESTIGATOR WILLIAMSON: Would that have an 7 impact on their independence as third-party inspectors? 8 It would make them more independent. MR. JOEST: 9 INVESTIGATOR WILLIAMSON: How do you think it 10 would make them more independent if they had less control 11 over what they were accepting or rejecting? 12 MR. JOEST: This is not less control over what 13 they are accepting or rejecting I don't think. 14 INVESTIGATOR WILLIAMSON: If they are removing 15 items from the N-5 package, why would the ANI have an 16 incentive to maintain that something didn't meet 17 requirements if he knew that if he didn't accept it that it 18 was going to be removed from the N-5 package? Do I make 19 myself clear? 20 MR. JOEST: Okay. We will go down your road. 21 INVESTIGATOR WILLIAMSON: I mean does that make 22 sense? 23 MR. JOEST: I will accept that. 24 INVESTIGATOR WILLIAMSON: You said it is not a

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common practice to remove items from an N-5 program.

2	INVESTIGATOR WILLIAMSON: And it has to be done
3	with NRR approval; is that correct?
4	MR. JOEST: I would assume it has to. I am not
5	that familiar with the process. I would think it would
6	have to.
7	INVESTIGATOR WILLIAMSON: If you would, using you
8	expertise in these areas, under what conditions could a
9	Code item be removed from the N-5 package?
0	MR. JOEST: I assume it would take a revision to
.1	our commitment to the Regulatory Commission.
2	INVESTIGATOR WILLIAMSON: There are instances, I
.3′_	understand, when you might have a non-Code item such as a
4	valve in a Code system, and through additional testing and
5	documentation this valve can either be upgraded to meet
6	requirements or can be deleted from the N- 5 program; is
7	that correct? Would that be an example of how an item
. 8	could be removed?
9	MR. JOEST: Okay.
20	INVESTIGATOR WILLIAMSON: Do you have a better
21	example?
22	MR. JOEST: No, I don't have any example at all.
23	INVESTIGATOR WILLIAMSON: Are you aware of
2 4:	anything ever being removed from an N-5?
25	MR. JOEST: I am not aware that anything either

MR. JOEST: Right.

has or has not been removed. I know there are some things that we started out with up front that were not going to be a part of the program. Now something that has been removed as you go along, I don't know.

INVESTIGATOR WILLIAMSON: Is this process of removing something from the N-5 package and going to the NRC, is this a laborious process of a revision of your commitment or change of commitment to the PSAR?

MR. JOEST: It is not the simplest process in the world. Anything to do with regulators is difficult.

INVESTIGATOR MURPHY: Let me clarify one thing. You have been working in that particular occupation job, that Division for some 12 years for TVA?

MR. JOEST: Yes.

INVESTIGATOR MURPHY: And you don't recall you ever being involved in the removal of an item from an N-5 package? I mean I am just asking you for a reason.

MR. JOEST: I am thinking that there were some things removed, but I am not certain. I can't definitively recall something that has been removed.

INVESTIGATOR MURPHY: It is surely not a common practice.

MR. JOEST: No.

INVESTIGATOR MURPHY: And this final statement that Mr. Williamson is referring to, again from a layman's

1	point of view, it seems to me like that is a take it or
2	leave it situation. I mean does that make sense to you?
3.	Would you think that that is the kind of language that is
4	there?
5	MR. JOEST: If you want to take it that way, fine.
6	INVESTIGATOR MURPHY: How do you take that? I
7	mean does it mean something different to you?
8	MR. JOEST: It means there are two acceptable
9.	alternative ways to handle this situation it appears.
0	INVESTIGATOR MURPHY: Let me take time to just go
.1	over the five specific it says " believes that the
.2:	construction of welds on this NCR can be used as is because
.3	* * * * * * * * * * * * * * * * * * *
.4.	The first one, the circumferential welds in
5	question were fabricated and inspected in accordance with
6	ASME 3, Division 1 with ANI involvement at Tube Turns .
7	What bearing does that have on that issue?
18	MR. JOEST: I don't know.
19	INVESTIGATOR MURPHY: I mean does it have any
20	bearing?
21	MR. JOEST: I don't know.
22	INVESTIGATOR MURPHY: Does that affect the fact
23	that these things should be hydrostatically tested or not
24	hydrostatic testing is required? Does that have any effect

on that requirement?

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MR. JOEST: No.

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INTESTIGATOR MURPHY: It says, point 2, hydrostatic test, ASME 3, ANSI 6000 was performed on all welds, installing and penetration assembly, and the piping systems were examined by TVA personnel and the ANI.

Does that have any effect on the requirement that either the ANI or TVA inspector examine those penetration welds under hydrostatic testing?

MR. JOEST: No.

INVESTIGATOR MURPHY: It says the pipe installed by tube turns are hydrostatically tested by the material manufacturer so that all longitudinal welds were pressure tested.

Does that statement have any effect at all on the requirement to hydrostatically test the welds in question?

MR. JOEST: No.

INVESTIGATOR MURPHY: None whatever. The addition of welds discussed in the first paragraph, the inaccessible welds are close to TVA welds which were inspected. It is reasonable to assume that leakage from these welds would have been detected during the inspection noted in item No. 2.

Does that relieve anybody of the requirement to do a visual test or to be able to examine those welds during hydrostatic testing.

* MR. JOEST: To relieve the requirement to visually examine during hydro, it seems to say that they were. Let metread it again.

INVESTIGATOR MURPHY: The addition of the welds discussed in this first paragraph and the inaccessible welds are so close to TVA welds which were inspected. TVA welds and not the vendor welds.

MR. JOEST: All right.

INVESTIGATOR MURPHY: . . . that it is reasonable to assume that leakage from these welds would have been detected during the inspection noted in item 2 above.

MR. JOEST: It seems to say it is reasonable to assume that the required inspections would have been done.

INVESTIGATOR MURPHY: If those welds are covered with insulation and are of a distance of some six feet, it is reasonable to assume that that statement is correct?

MR. JOEST: In the situation that you describe, probably not.

INVESTIGATOR MURPHY: And in response No. 5, it would require significant rework to remove the insulation installed by the manufacturer to expose those welds.

Is there any form of justification at all for not performing the required inspection?

MR. JOEST: No.

INVESTIGATOR MURPHY: From your obviously long

experience, and 12 years is a long time of experience in 1 dealing with the Code, do you think that those five 3 situations that we have just discussed would in any way relieve the required inspections of these particular welds? 5. MR. JOEST: Based on my cursory look at it, it 6 looks like explanation No. 4 is a reason to accept these 7 welds. 8 INVESTIGATOR MURPHY: That is of course assuming 9 that these welds are not covered with insulation and are in 10 proximity. What do you call proximity? Is six feet 11 proximity in your view? 12 MR. JOEST: Is six feet proximity for this 13 situation? 14 INVESTIGATOR MURPHY: Yes. 15 16

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MR. JOEST: Probably not, but I would have to look at the drawings and specifications to see.

INVESTIGATOR MURPHY: If in fact these welds, and I am going to make an assumption for you, are covered with insulation and are not obviously able to be visually inspected, would these five paragraphs, would it be fair to say that it is good reason to use as is, the disposition of this nonconformance report?

MR. JOEST: What kind of insulation do they have on them?

INVESTIGATOR MURPHY: What difference would that

make? You explain that to me.

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MR. JOEST: There are different kinds of insulation and different configurations.

INVESTIGATOR MURPHY: Give me some examples of why that would -- I am advised that it would require significant rework to remove insulation installed by the manufacturer to expose the welds. To me that means that these welds are not exposed. I mean you just can't see them.

MR. JOEST: Well, if you can't see them, you know, assuming that, then the basis doesn't exist.

INVESTIGATOR MURPHY: Okay. Thank you.

INVESTIGATOR WILLIAMSON: One question raised was whether the Code required the ANI to witness all welds during the hydrostatic testing.

MR. JOEST: Right.

INVESTIGATOR WILLIAMSON: Do you know the answer to that?

MR. JOEST: No. sir.

INVESTIGATOR WILLIAMSON: I don't think the Code requires the ANI to witness all the welds during inspection, physically witness.

I don't know, this might, and you are probably more familiar with that than I am. That is not a real good copy, by the way. I have provided a copy of article NC-

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2	However, it is my understanding that it does
3	require the ANI to witness the TVA QC inspector inspecting
4	all of the welds in hydrostatic testing. Is that correct
5.	MR. JOEST: I don't know.
6	INVESTIGATOR WILLIAMSON: Could you find out what
7	the witnessing for hydrostatic testing is?
8	MR. JOEST: For the authorized nuclear inspector
9	requirements for witnessing of hydrostatic testing?
10:	INVESTIGATOR WILLIAMSON: Yes. Can you do that
1.1	now?
12	MR. JOEST: Surely.
13	INVESTIGATOR WILLIAMSON: Whether he has to
14	witness it or he has to certify 100 percent inspection.
15	Will that take long?
16	MR. JOEST: It will take about 10 minutes.
17	INVESTIGATOR WILLIAMSON: You might even bring
18	your book if you want to bring it down here.
19	(Recess.)
20	INVESTIGATOR WILLIAMSON: Back on the record.
21	Mr. Joest has provided a copy of Section 3,
22	Subsection NCA 5280, Final Test. Is that correct, Mr.
23	Joest?
24	MR. JOEST: That is correct.

And what is the

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I	requirement for the inspector regarding the withessing of
2	hydrostatic testing?
3	MR. JOEST: The inspector shall witness final
4	hydrostatic, pneumatic or structural integrity tests
5	required by this section and examinations performed during
6	such test by the certificate-holder.
7	INVESTIGATOR WILLIAMSON: Does this require that
8	the ANI physically visually inspect all welds during
9.	hydrostatic testing?
0	MR. JOEST: No, it doesn't.
11	INVESTIGATOR WILLIAMSON: What does it require
1.2	that he do?
13	MR. JOEST: It requires that he witness final
14	hydrostatic, pneumatic or structural integrity tests
15	required by this section and examinations performed during
16	such tests by the certificate-holder.
17	INVESTIGATOR WILLIAMSON: Is there a requirement
18	that all welds be exposed for examination and visually
19	inspected during hydrostatic testing by anyone?
20.	MR. JOEST: I believe there is.
21	INVESTIGATOR WILLIAMSON: And who would be
2.2	responsible for conducting those examinations?
23	MR. JOEST: The certificate-holder.
24	INVESTIGATOR WILLIAMSON: And that would be?
25	MR TOFST: That would be TVA

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INVESTIGATOR WILLIAMSON: And the requirement that they be visually inspected, would that be a requirement levied upon the QA/QC inspector during hydrostatic testing?

INVESTIGATOR WILLIAMSON: Mr. Joest, in regards to the inspection of welds under hydrostatic testing, NCR 5609, and I did notice that is for Units 1 and 2. Do you agree with that?

MR. JOEST: Yes.

MR. JOEST: It would.

INVESTIGATOR WILLIAMSON: There are a number of penetrations that have vendor welds, inaccessible vendor welds. Let me ask you as an expert in welding, the fabrication, as you indicated, is the fact that a weld cannot be visually inspected during hydrostatic testing, would you consider the condition of that weld, the actual condition of that weld to be indeterminant?

MR. JOEST: Well, you said I am an expert in that area. I make no such claim. I would have to know more than what you described to know.

INVESTIGATOR WILLIAMSON: Okay. Let me ask the question a different way.

There are welds, vendor welds, penetration welds, containment penetration welds made by Tube Turns which are surrounded by insulation and guard pipe. These welds could not be observed, visually inspected by anyone after

2 these welds could not be visually inspected during 3 hydrostatic testing that the conditions of these welds would be indeterminant? 5: MR. JOEST: No. I couldn't say that. 6 INVESTIGATOR WILLIAMSON: Could you say that they 7 would be adequate? MR. JOEST: The memorandum you gave me previously 9: describes the situation where they would be adequate. 10 INVESTIGATOR WILLIAMSON: The point that I am 11 trying to make is since these cannot be visually inspected 12. during hydrostatic testing, can you say with 100 percent 13 certainty that the welds are adequate? 14 MR. JOEST: Even if they are visually present, I 15 can't say with 100 percent certainty that they are 16 adequate. 17 INVESTIGATOR WILLIAMSON: But you would be able to : 3 determine whether they were leaking if you were visually 19 inspecting them? 20 MR. JOEST: Yes. 21 INVESTIGATOR WILLIAMSON: What I am asking is 22 since they are not subject to visual inspection under 23 hydrostatic testing, can you say, can you determine what 24 the quality of the weld is?

fabrication. Could we say, or could you say that because

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MR. JOEST: Even if I can see it during

1	hydrostatic testing, I can't determine what the quality of
2	the weld is.
3.	INVESTIGATOR WILLIAMSON: Is any amount of leakage
4	acceptable in a weld during hydrostatic testing?
5:	MR. JOEST: I don't believe so.
6	INVESTIGATOR WILLIAMSON: And without seeing these
7.	welds you can't determine if there is any leakage; is that
8	correct?
9:	MR. JOEST: This memorandum describes the
10	situation where you could determine that. If they are very
11	close, you will detect it.
1 2 [.]	INVESTIGATOR MURPHY: That is assuming of course
13	that they are not covered with insulation, right, and that
14	you can visually inspect the welds, right?
15	MR. JOEST: No.
16:	INVESTIGATOR MURPHY: I mean if the welds are
17	covered with insulation under the conditions expressed in
18	paragraph 4 of the memorandum, would you be able to see
19	leakage if the weld is wrapped with insulation? Could you
20	see leakage? Tell me.
21	MR. JOEST: In some situations you could, yes.
22	INVESTIGATOR WILLIAMSON: Are there situations
23	where you couldn't see leakage?
24	MR. JOEST: Yes.

+	And Could Alegatia inspect the Meig' and can tead for age
2	whether the weld is a good weld or not, is that correct?
3	Even if you were able to look at the weld during
4 .	hydrostatic testing, you can't assume that it is a good
5	weld? Did I hear you right?
6	MR. JOEST: I don't think the word "good" was used
7	in the question.
8	INVESTIGATOR MURPHY: Tell me, what did you say?
9	MR. JOEST: I believe the question was could you
L O	determine whether it was I forget what the question was.
L 1.	INVESTIGATOR WILLIAMSON: Adequate.
12	INVESTIGATOR MURPHY: Adequate, acceptable.
1 3:	MR. JOEST: Adequate I think was the word.
1.4 ≋	INVESTIGATOR MURPHY: You say you can't determine
15	if the weld is adequate or not, right?
16	MR. JOEST: Right.
1.7	INVESTIGATOR MURPHY: Can you determine if it was
18	leaking?
19	MR. JOEST: Yes.
20	INVESTIGATOR MURPHY: Whether you can determine
21	whether it was adequate or not, does that relieve you in
22	some way of the responsibility for examining during
23	hydrostatic testing? I mean, you know, you say you can't
24	tell whether it is adequate or not, but is there still a

requirement that you visually inspect that thing during

hydrostatic testing?

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MR. LOEST: Yes.

INVESTIGATOR WILLIAMSON: Mr. Joest, did we determine how close you have to be to a weld for it to be inspected?

MR. JOEST: I don't know how close you have to be.

INVESTIGATOR WILLIAMSON: I was wondering because some of these welds, according to a document provided by a Mr. John Self, the N-5 package coordinator at Watts Bar listing the penetration numbers, the system, the type welds, the nominal pipe size, the guard pipe in inches, the distance to welds and design pressures, some of these welds, in at least a couple of systems, a couple of penetrations, a distant to weld is 24 foot 3 inches, 10 feet 7 inches, 23 feet 6 inches, 10 feet 6 inches, 10 feet 1 inch. A number of those welds are a number of feet from the end of the piping assembly to the weld.

Would you agree that those certainly couldn't be visually inspected from 20-something feet or 23 feet or 24 feet?

MR. JOEST: It would be difficult to do.

INVESTIGATOR WILLIAMSON: And would it also be difficult to determine if there was any leakage in that weld from that distance?

MR. JOEST: Yes.

INVESTIGATOR WILLIAMSON: I might also add that a majority of the welds are a distance of anywhere from about 16 inches to about 42 inches. So they are not all a distance way, but there are some that are.

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Another question that I would like to ask you, and once again calling on your expertise in these areas, if there is a requirement that the certificate-holder inspect these welds primarily by means of a QC inspector on site, and the requirement was for them to be visually inspected and that an ANI witness this final hydrostatic testing, witness inspection of these people, if this weld or these welds, these number of penetrations both in Units I and 2 are inaccessible and are not visually observable, what would the QC inspector do? Would there be a notation by him that these were there, or is there a possibility that he didn't know these welds existed.

MR. JOEST: I don't know the exact details of site procedure. Either thing could have occurred.

INVESTIGATOR WILLIAMSON: Let me ask you, continuing on, I have asked you to look at two NCR's, NCR 5609 and NCR 6420. They have different dispositions. Can you explain the difference in the dispositions of these NCR's?

MR. JOEST: I imagine if I studied them I could.

INVESTIGATOR WILLIAMSON: One is the disposition

of use as is, and the other disposition, 6420, has not disposition at this time. It is my understanding that the tube turn penetration welds, flued head weld penetrations in containment 2 are going to be addressed differently in Unit 2. Are you aware of how they are going to be addressed?

MR. JOEST: No, I am not.

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INVESTIGATOR WILLIAMSON: Have you had any involvement or any discussions in how these would be addressed?

MR. JOEST: No, I haven't.

INVESTIGATOR WILLIAMSON: Have you discussed it with Mr. Bressler or anyone else in your section the resolution to 6420?

MR. JOEST: No. I know that the NCR is in-house for disposition, but what is being done with it, I don't know.

INVESTIGATOR WILLIAMSON: With regard to 5609, we see the disposition that TVA placed on the NCR, to use as is, and then provided a memo to explain the final disposition or how that was arrived at.

Do you know, or can you speculate why Hartford accepted this disposition after apparently several discussions with TVA personnel of why they felt it didn't meet code?

MR. JOEST: I don't know.

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INVESTIGATOR WILLIAMSON: Is that something we should ask Hartford?

MR. JOEST: Ask anyone but me because I do not know the answer to the question.

INVESTIGATOR WILLIAMSON: Did you discuss the disposition of either 6420 or 5609 with Hartford at any time or any other inspectors?

MR. JOEST: I don't know. I know of the NCR's and I know they are around, but whether I have talked to Hartford or not, I just don't know.

INVESTIGATOR WILLIAMSON: I have copies of some diary entries regarding the sequence of events from the ANI's at Watts Bar, and one of the entries is a 10/23/85, and it involves NCR 6420. I think John Self initiated the NCR, and the inspector, the ANI I believe was George Deaton that was following the disposition of this particular one. There is a notation here on 10/23/85. Deaton indicates

John Self, the N-5 Supervisor, now understands his concerns over flued heads since many in Unit 2 hydros had not yet been done. Also Joest, and I guess that is you, the spelling is incorrect, indicates these welds cannot be excluded from Code.

Do you recall having a conversation with an ANI at
Watts Bar regarding these particular welds in 6420?

1 MR. JOEST: I don't know whether I did or not. 2 have talked with people about these NCR's, but who it is and what and when, you know. I am aware of the NCR's, but 3 I can't recall specifically who I talked with them. INVESTIGATOR WILLIAMSON: Do you know why you 6 might have indicated that these particular welds and the 7 penetrations cannot be excluded from the Code? 8 MR. JOEST: No. 9 INVESTIGATOR WILLIAMSON: Do you know now why they 10 could or could not be excluded from the Code? 11 MR. JOEST: Anything can be excluded from the Code 12 if you get agreement with whoever you have your license

INVESTIGATOR WILLIAMSON: Do you recall a conversation with anyone regarding these welds on Unit 2 primarily and whether they would have to be used as is or whether they could be deleted from the Code?

MR. JOEST: I don't specifically recall a conversation like that.

from, which in our case I think is the NRC.

INVESTIGATOR WILLIAMSON: Do you document your conversations or keep a log that tells what conversations you had?

MR. JOEST: No, sir.

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INVESTIGATOR WILLIAMSON: I asked you this before, and I will ask you one other time. Do you know why there

1.	is a difference in disposition between NCR 5609 and 6420?
2	MR. JOEST: No, sir.
3	INVESTIGATOR WILLIAMSON: We pursued an issue
4	earlier with regard to your contact with Hartford regarding
5	the ANI's contact or spending too much time with the QTC or
6	site.
7	Do you recall an incident wherein you contacted
8	Hartford complaining about the amount of time the ANI's
9.	were spending and taking to complete their review of N-5
1.0	data packages?
11	MR. JOEST: Yes, sir.
1.2	INVESTIGATOR WILLIAMSON: What were the
13	circumstances surrounding that?
14	MR. JOEST: I remember talking to Hartford about
15	that, and the details of what, why and when, I can't give
16	you specifics on it.
17	INVESTIGATOR WILLIAMSON: Your concern, as I
18	understand it, was that these people were not reviewing
19	these things.
20	MR. JOEST: As I remember and I have to tell you
21	it is as: I remember, my concern was that the time spent in
22	review had increased markedly.
23	INVESTIGATOR WILLIAMSON: Is that it?
24	MR. JOEST: Yes.
25	INVESTIGATOR MURPHY: Let me ask you, is that a

INVESTIGATOR MURPHY: Let me ask you, is that a

1 responsibility of yours to contact them concerning the amount of time an N-5 packet is being spent in review? 3 MR. JOEST: Not that I am aware of. INVESTIGATOR MURPHY: Well, why then would you be 5 the one contacting the ---6 MR. JOEST: Why? I don't know. 7 INVESTIGATOR WILLIAMSON: Someone apparently 8 complained to you about it. 9 MR. JOEST: Someone either claimed or talked with 10 me about it or something or another, yes. 11 INVESTIGATOR WILLIAMSON: Because there was an 12 incident in 1984 in the November or December time frame 13 which involved I think John Self and Charles Christopher, 14 and there was some concern that these ANI's were not 15 reviewing these quickly enough and that they were not 16 performing as expected. 17 MR. JOEST: As I remember, the concern was that 18. they were disappearing into a black hole without response. 19 INVESTIGATOR WILLIAMSON: I think, to follow up Mr. Murphy's question and his concern, was that your 20 21 responsibility to contact Hartford or was that the site's 22 responsibility, someone like Mr. Wadewitz or Sheldon 23 Johnson or Herb Fisher to contact them? 24 MR. JOEST: I don't know.

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INVESTIGATOR WILLIAMSON: Do you recall what you

related to Hartford and whom you spoke with?

MR. JOEST: Do remember who I spoke with and what I said exactly? No. I would assume I talked with Harold Robeson down there.

INVESTIGATOR WILLIAMSON: And could you also tell us what you think you might have said under these circumstances?

MR. JOEST: As I recall, I had heard that the N-5 packages were, like I said before, disappearing into a black hole, and we were looking for some response, either positive, negative, partial reviews, just something instead of the absence of anything.

INVESTIGATOR WILLIAMSON: What did you hope to accomplish by contacting the Hartford, Atlanta management?

MR. JOEST: I hoped for the Hartford, Atlanta management to talk to their people on site obviously.

INVESTIGATOR MURPHY: Do you feel because, you know, basically it looked like if that would be a site problem, and N-5 packets is really a site problem in this particular category, and they are not up here for review yet. They are at the site, and it seemed like a site problem.

MR. JOEST: Right.

INVESTIGATOR MURPHY: Do you think you can exercise any particular influence over the people in

Hartford to get the job done? " 1 2 MR. JOEST: No. INVESTIGATOR MURPHY: I mean do you think you have 3 a better relationship with them than the site people do? 5 MR. JOEST: No. 6 INVESTIGATOR MURPHY: Can you think of any reason 7 why then that you would be calling them rather than the 8: site? I mean is there some reason you do that or would do it in this instance? 10 MR. JOEST: I don't know why. 11 INVESTIGATOR WILLIAMSON: Did you in your position 12 think that you might get more done than the site people as 13 part of the Codes, Standards and Materials Group? 14 MR. JOEST: No. 15 INVESTIGATOR WILLIAMSON: Was this an effort on 16 your part to apply pressure on Hartford personnel 17 management people to apply pressure to the ANI's in the 18 field to get moving and get off dead center or whatever 19 your concern was with this? 20 MR. JOEST: No. 21 INVESTIGATOR WILLIAMSON: Passively, overtly or 22 any other wise, was this a means to provide pressure on 23 Hartford management to get their people moving? 24 MR. JOEST: Not that I know of.

INVESTIGATOR WILLIAMSON: Are you aware of TVA

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1 ever threatening -- or I might even be more specific. 2 you ever threatened Hartford personnel with the termination of their contract because of the complaints that you had received against the ANI's? MR. JOEST: No. 6 INVESTIGATOR WILLIAMSON: Would you be in a 7 position to do that? 8 MR. JOEST: No. 9 INVESTIGATOR WILLIAMSON: Would you have any 10 impact on the termination of the contract? 11 MR. JOEST: Not that I know of. 12 INVESTIGATOR MURPHY: Let me follow up on that 13 question just a little bit. As opposed to threatening, did 14 you ever imply to anybody down there that if the ANI's 15 don't perform in a particular fashion that their contract 16 may or will at least be under review? 17 MR. JOEST: Not that I am aware of, no. 18 Can we take a five-minute break? 19 INVESTIGATOR WILLIAMSON: 20 (Recess.) 21. INVESTIGATOR WILLIAMSON: Back on the record. 22

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Let me pursue one issue here. Obviously during the conduct of this investigation we have talked to a number of people, some of which you know and probably don't know, and I am not sure what information has been relayed

to you regarding what we have been doing.

But at least on one or two occasions there have been statements made on several occasions that your contact with the Hartford people was one of hostility and that you were very frustrated and that Bill Higginbotham, the Regional Manager, was chewed out by you regarding the performance of some ANI's on site, particularly at Watts Bar.

Do you remember these instances where you either out of frustration or anger had some words with Mr. Higginbotham regarding the performance of those ANI's?

MR. JOEST: I don't remember. I probably did, but I don't remember it.

INVESTIGATOR WILLIAMSON: Would that be unusual?

MR. JOEST: No, it wouldn't be unusual. I get
frustrated and angry with a lot of people. It wouldn't be
unusual.

INVESTIGATOR WILLIAMSON: Have you ever indicated to Mr. Higginbotham that it might be better for them if ____ they didn't have some of their ANI's on site and that they be replaced or terminated?

MR. JOEST: No, sir.

INVESTIGATOR WILLIAMSON: Have you ever indicated to him that you were displeased with the performance of some of the ANI's and/or even the decisions made by these

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ANI's?

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MR. JOEST: I don't know whether we have discussed decisions made by ANI's. I have discussed with various people I guess good ANI's, bad ANI's and grades of quality, you know, there are all different people. Specifically situations and exactly what I said about any one of them, I don't know.

INVESTIGATOR WILLIAMSON: Do you personally see a need for the ANI's in the construction of a nuclear power plant?

MR. JOEST: Yes, sir.

INVESTIGATOR WILLIAMSON: How do you see them serving a viable purpose?

MR. JOEST: They provide third-party inspection.

INVESTIGATOR WILLIAMSON: And you see that as being very important to both quality and safety?

MR. JOEST: Yes.

INVESTIGATOR WILLIAMSON: Let me ask you a couple other questions regarding the comment on 5609 which was generated in April 1984. This was dispositioned in approximately two weeks. Is that a normal disposition time for an NCR?

MR. JOEST: I don't know what the normal time is.

Some are short and some are long. It is not an unusual

time, let me put it that way.

1 INVESTIGATOR WILLIAMSON: 2 3 5. 6 impending fuel load or startup? 7 8 explain. 9. 10 11 1.2 13 14 15 16 one. 17 18 19 20 subjected to? 21 MR. JOEST: 22 describing. 23

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It is?

MR. JOEST: It is not an unusual time. I imagine you could find some sorter and some longer.

INVESTIGATOR WILLIAMSON: Did cost and scheduling ever have an effect on any dispositions of NCR's, or

MR. JOEST: The answer is yes, and I am going to

INVESTIGATOR WILLIAMSON: Please do.

MR. JOEST: We have had NCR's, and again I can't remember specifics, where the cost of either repairing or replacing was balanced. As far as I am aware, cost and scheduling have never gotten into a use as is disposition. They have gotten into what is the acceptable way to fix it, and it is cheaper to repair or is it cheaper to buy a new

INVESTIGATOR WILLIAMSON: Regarding the use as it, is there a requirement either from ASME, from the vendor or From design on how many hydrostatic tests the system can be

It depends on what system you are

INVESTIGATOR WILLIAMSON: Do some have limits and some not?

MR. JOEST: Some have limits, yes.

1	INVESTIGATOR WILLIAMSON: And in the case of when
2	those limits are exceeded, is there additional engineering
3	that has to be performed?
4	MR. JOEST: There is a minimal amount of it, yes.
5	INVESTIGATOR WILLIAMSON: In terms of what,
6	design?
7	MR. JOEST: There are other design calculations.
8	INVESTIGATOR WILLIAMSON: Would that ever be a
9.	consideration in rehydroing a system?
10	MR. JOEST: If you have got to perform the
11	calculations, you do it.
12	INVESTIGATOR WILLIAMSON: Is it something that can
13	be done within TVA or would it have to be done by the
14	designer of the system, say Westinghouse?
15	MR. JOEST: It could be done by either one.
1.6	INVESTIGATOR MURPHY: Would there be instances
17	where you would have to go back to the vendor to obtain
18	permission to rehydro a system that might have arrived at
19	the limit as far as hydrostatic testing is concerned?
20:	MR. JOEST: If the vendor still retains design
21	responsibility, you would go back and ask him for a
22	redesign.
23	INVESTIGATOR MURPHY: Do you know if that has
24	occurred? Do you recall?
25	MR. JOEST: I wouldn't be involved with it, and I

1. am not aware of it. 2: INVESTIGATOR WILLIAMSON: Let me as? you a 3 question in closing, Mr. Joest. Have you or are you aware of any pressure being 5 placed on Hartford management by TVA that would have 6 affected any decisions that they have made at Watts Bar? 7 MR. JOEST: Not that I know of. 8 INVESTIGATOR WILLIAMSON: Has there been any 9 pressure placed on you of either your supervision of other 10 offices, engineering and construction, et cetera, any 11 pressure placed on you to change or make decisions that 12 would affect the disposition of an NCR? 13 MR. JOEST: No. 14 INVESTIGATOR WILLIAMSON: Are you aware of any pressure being placed on the ANI's by TVA to accept work 15 16 that was not acceptable? 17 MR. JOEST: No pressure by the TVA that I am aware 18 of. 19 INVESTIGATOR WILLIAMSON: Are you aware of 20. Hartford management putting pressure directly or 21 indirectly, passively or covertly on their personnel, the 22 ANI's in the field to accept work that was unacceptable or

MR. JOEST: Not that I know of.

questionable?

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INVESTIGATOR WILLIAMSON: Do you have anything

else?

INVESTIGATOR MURPHY: No.

INVESTIGATOR WILLIAMSON: Mr. Joest, is there any additional information you would like to add to this testimony that you have provided?

MR. JOEST: No, sir.

INVESTIGATOR WILLIAMSON: Mr. Joest, in conclusion, have I or any other representative of the NRC threatened you in any manner or offered you any reward in return for your testimony?

MR. JOEST: Not even a cup of coffee. No, sir.

INVESTIGATOR WILLIAMSON: Have you given this statement freely and voluntarily?

MR. JOEST: Yes, sir.

INVESTIGATOR WILLIAMSON: I would like to take this opportunity to thank you for talking with us today, for agreeing to talk with us and for being interviewed.

This interview is concluded at 11 o'clock on 22 May '86.

(Whereupon, at 11:00 o'clock a.m., the interview of WALTER PHILLIP JOEST concluded.)

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ORIGINAL

UNITED STATES NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF:

DOCKET NO:

INVESTIGATIVE INTERVIEW

M. N. Bressler

LOCATION:

KNOXVILLE, TENNESSEE

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DATE:

THURSDAY, MAY 22, 1986

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INTERVIEW

OF

MARCUS N. BRESSLER

West Tower Tennessee Valley Authority 400 W. Summit Hill Drive Knoxville, Tennessee 37902

Thursday, May 22, 1986

The interview commenced, pursuant to notice, at

11:10 a.m.

BEFORE:

E. L. WILLIAMSON, Senior Investigator DANIEL D. MURPHY, Senior Investigator Office of Investigations Region II-Atlanta Nuclear Regulatory Commission Suite 2900 101 Marietta Street Atlanta, Georgia 30323

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INVESTIGATOR WILLIAMSON: For the record, it is now 11:10 on 22 May 1986.

This is an interview of Marcus Bressler who is employed by the Tennessee Valley Authority.

The location of this interview is the West Tower, the Tennessee Valley Authority, TVA, Knoxville, Tennessee.

Present at this interview are E. L. Williamson and Daniel E. Murphy, Investigators with the United States
Nuclear Regulatory Commission.

As agreed, this is being transcribed by a court reporter.

The subject matter of this interview concerns allegations of coercion of ANI's by the Hartford Steam Boiler Inspection and Insurance Company and by TVA management to accept work that was not acceptable at the Watts Bar nuclear site.

Whereupon,

MARCUS NATHAN BRESSLER

having been first duly sworn by Investigator Williamson, was examined an testified as follows:

INVESTIGATOR WILLIAMSON: Mr. Bressler, for the record, would you please state your full name and give your current position here with TVA.

MR. BRESSLER: I am Marcus Nathan Bressler. I am

an employee of the Tennessee Valley Authority. My title is Staff Specialist Codes and Materials.

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INVESTIGATOR WILLIAMSON: How long have you been in that position?

MR. BRESSLER: I have been in that position since August 1979.

INVESTIGATOR WILLIAMSON: What are the responsibilities of that position? What do they include, your responsibilities as a Staff Specialist?

MR. BRESSLER: Essentially a Staff Specialist in most other organizations would be called a consultant at many levels of advisory engineer or consulting engineer. I don't have administrative responsibilities. On occasion I may be assigned personnel to assist me in projects, and there I direct them, but I don't direct them administratively.

The duties of my position are to be available to my Branch or my Branch Chief, all the sections in our Branch, particularly the Codes Section and Materials Engineering Section, but the Nuclear Branch Chief, the Director to the Division of Nuclear Engineering and all other TVA Divisions and Branches who may have need of my expertise, which is basically materials engineering, codes, standards and in ancient days stress analysis and design.

INVESTIGATOR WILLIAMSON: How long have you been

employed by TVA?

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MR. BRESSLER: On June 15th I will complete 15 years.

INVESTIGATOR WILLIAMSON: And prior to your TVA employment, who were you employed with?

MR. BRESSLER: Immediately prior to TVA, I was employed by the Taylor Forge Division of the Gulf and Western Company. My employment with them began on August 1st, 1970 and terminated on June 11th, 1971. There was a four-day travel to arrive at Knoxville, and my employment with TVA began on June 16th.

INVESTIGATOR WILLIAMSON: What was your position in your previous employment?

MR. BRESSLER: My title was Manager, Product Design and Development.

Immediately prior to that I was employed by the Lenapee Forge Division of Gulf and Western, who is located in Weschester, Pennsylvania, from September 1966 until I was transferred to the Chicago office of Taylor Forge, the same corporation, in August 1970. At Linapee Forge I entered the company's employee as a design engineer, and after two years I became Manager of Design. I didn't have the title of Chief Engineer, but the duties were corresponding to that of a Chief Engineer.

Prior to that I spent nearly 11 and a half years

with the Babcock and Wilcox Company in Barberton, Ohio where I began in April of 1955 as a engineering draftsman designing tops of boilers, fossil-fired boilers, and then transferred to the steel group and did some steel design, again on the drawing board. And for a couple of months I worked in special assignments on new and far out boiler concepts.

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Then I was transferred to the Stress Analysis

Department where I began to do analytical work. From the

Stress Analysis Department I was loaned to the Atomic

Energy Division of Babcock and Wilcox and moved from

Barberton to Akron. They are next door to each other. So

it wasn't much of a move. There I performed design of

pressure vessels, particularly for both the Nuclear Navy

and the commercial atomic energy industry.

When the Atomic Energy Division moved from Akron on Lynchburg, I reverted to the Manufacturing Department and returned to the stress analysis activities.

In 1960 I was named as Boiler Division Materials

Engineer and began my period of expertise development in

the field of materials application. I still retained some

of my work in stress analysis, but I was primarily involved

in thermal stress analysis at that time.

And from '60 to '66 -- in 1963 I was promoted to ______
Technology Supervisor, Materials Application -- but during

the entire six years in materials engineering I was primarily involved in the selection of materials, in reviewing materials properties, establishing allowable stresses and determining company policy for the maximum temperature utilization range for these materials.

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I participated in the nuclear activities of the company but as a materials engineer and assigned to the Manufacturing Branch. I never again participated with the Atomic Energy Division as such.

So my 11 and a half years with B&W were essentially stress analysis, early drafting experience and materials engineering experience.

INVESTIGATOR WILLIAMSON: And prior to B&W?

MR. BRESSLER: I was in the Army for two years

from October 1952 to October 1954, and then I remained with

the Army for four months as a civilian, civil service,

until April '55 when I left employment with the Army

Environmental Health Laboratory in Edgewood, Maryland, the

Army Chemical Center, and then went from there to Babcock

and Wilcox. The Army was my first full assignment after

graduating from college.

But in between while waiting to go into the Army I worked for Niagara Mohawk Power and Light in the Gas

Construction crews. I couldn't get employment from anybody because my orders to report to active duty were less than

90 days, and if you couldn't give them 90 days they didn't want you. So I dug ditches with a college degree.

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INVESTIGATOR WILLIAMSON: So your degree was in what from ---

MR. BRESSLER: Bachelor of Mechanical Engineering, a five-year degree from Cornell University. That was granted in 1952.

INVESTIGATOR MURPHY: I have just one, your connection with the ASME Committees?

MR. BRESSLER: I had attended ASME Professional Society meetings prior to this, but when I was appointed Materials Engineer my assignment was to work for Mr. Paul Brister, who was the Chief Engineer, and very active in ASME and ASTM activities.

So in 1960 I started attending committee meetings with Mr. Brister. Naturally the reason was for me to do the leg work on any projects that he was involved in.

As a result of my developing expertise in materials, I was given the job to develop the stress tables for the Nuclear Code, which was being prepared by the special committee to review code stress basis.

During this time I became a member of my first committee in ASME at that time called the Subcommittee on Materials Engineering. I joined that committee as Secretary when I replaced Bill Leyda, W. E. Leyda, who was

also a Babcock and Wilcox employee.

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From that point on when the special committee terminated its initial work in developing the first edition of the Nuclear Vessels Code, which was published in 1963, we were all appointed to various subgroups of the Boiler Pressure Vessel Committee. I was moved over into the Pressure Vessel Committee, Section 8 and I participated in the Subgroup on Materials.

I was also appointed to the Subcommittee on Openings and Attachments due to my expertise in flange analysis and design of nozzles which I had developed while I was in the Stress Analysis Group at Babcock and Wilcox.

When I left B&W and went to work for Linapee, I retained those two assignments and also started to participate in the Subgroup on Materials Engineering of the Nuclear Power Committee. I became a member of that committee in 1971.

From that point on my committee assignments grew very quickly. I was appointed to the Subcommittee on Nuclear Power in 1971. I was made chairman of the Work Group on Valves of Subgroup on Design in 1973. After we got that portion of the code straightened out, I was transferred and given the Chairmanship of the Working Group on Component Supports, which I took over in April of 1977.

I had given up my Subgroup on Materials of Section

8 when I took over my assignment in the Subgroup on Materials of Section 3.

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In 1974 I started to attend meetings of the Subcommittee on Nuclear Certification as an alternate for R. H. Davidson of the Division on Nuclear Power, and when he found that he could no longer attend because of his duties there we switched and I became the member and he became the alternate.

In 1975 I became Vice Chairman of the committee when Ed Hensey became Chairman. So both Chair and Vice Chair were utility members, and I have retained the position of Vice Chairman from that point on. I am still a member of that committee.

In January 1979 I was appointed to the main committee of the Boiler and Pressure Vessel Code, and along the way I have given up membership as my other assignments increased. I gave up membership in the Subgroup on Strengths, Steel and High Temperature Alloys, which was the direct descendant of the original Subcommittee on Materials Engineering, and I have given up membership in the Subgroup on Materials because it meets at the same time as the Subgroup on Design of Section 3 which I have to attend as Chairman of Subsection F.

The broad spectrum of my code involvement includes ——design, design rules, materials and materials application.

In the area of quality assurance my involvement in the

Subcommittee on Nuclear Accreditation and my membership in

the Subcommittee on Nuclear Power have provided me with the

background to address those areas.

I am currently Editor of the Editorial Task Group

of Subcommittee 3, and throughout the years since 1973 on I

have participated in some capacity or another as one of the

editors of Section 3.

INVESTIGATOR MURPHY: Then is it safe for us to assume that you would be considered an expert in certain sections of the Code?

MR. BRESSLER: Yes.

INVESTIGATOR WILLIAMSON: Thank you for that background. It is very extensive.

Mr. Bressler, in your view, what is the purpose of the authorized nuclear inspectors located on the various nuclear plant sites for TVA?

MR. BRESSLER: Well, actually the location of the authorized nuclear inspector is not as important as the performance of his duties because the authorized nuclear inspector program is a direct outgrowth of the National Board of Boiler and Pressure Vessel Inspectors.

Certification of Third-Party Inspectors.

This program is much older than the nuclear program. Inspectors stereotypically in boiler shops and

pressure vessel shops were normally boilermakers and steamfitters with above average intelligence who were able to self-teach and learn the portions of the code that addressed inspection and nondestructive examination.

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They generally had the journeyman knowledge of welding, and by their sagacity were able to take additional training and then pass the tests required, written tests required for commissioning as an authorized inspector. All authorized nuclear inspectors must go through this first.

After they have had experience in a shop and the company for which they work, which is normally called an authorized inspection agency, it recognizes that they may have capabilities in the nuclear field. The inspector would then be assigned to a nuclear shop or field position at a nuclear plant where he would understudy an authorized nuclear inspector, a resident authorized nuclear inspector and also be responsible to the authorized nuclear inspector inspection supervisor.

With at least one year of experience and sufficient training in the nuclear code, the ASME code for nuclear power plant components, he takes a five-part examination. He must pass each part separately. When he takes a test and he doesn't pass at least three parts of the five, he must take all five over again on his retest.

But if he passes three or more of the five, he gets credit

for all those that he has passed. So say he passes four, he only has to take over the one part that he might not have passed on his first examination, and that continues as he retests.

Therefore, it indicates that he has a fairly thorough knowledge of the portions of the code in which he would be involved. The ASME code absolves the inspectors from any responsibility for design, and he is not required to verify any aspects of design. But once a design drawing as a document is issued for construction, then that is his guide for whatever inspections he deems necessary to perform.

INVESTIGATOR WILLIAMSON: Is the ANI required, his presence required by the Code, by in this case the State of Tennessee or by TVA's commitment to their PSAR?

MR. BRESSLER: That is an interesting question.

First, it is not required by the State of Tennessee because TVA if a federal corporation. We are not subject to the laws of the State of Tennessee. Therefore, the State of Tennessee although having some relations with us and participating in the surveys of our various certificate holders within TVA does not have any functions within our power plants. They have access, and we have always had good relations with the State of Tennessee or any of the States in which our plants are located, but technically,

legally I should say, there are no State overviews on the TVA fossil or nuclear programs.

The requirement for authorized nuclear inspection is due solely and primarily to the TVA management decision to go with an ASME program, which I helped convince management in 1973. I proposed that such an approach be made. It was not unique to TVA. TVA had already received a certificate, an assembler's certificate for its work at Cumberland Steam Plant. But prior to that we had done no formal work under the ASME code.

We followed the code. We bought equipment to the code. Our vendors met the code, but TVA proper did not follow the code even under the fact that we did our own construction.

With the onset of the nuclear plant construction and seeing what I had seen in Browns Ferry and Sequoyah, which were too far along at the time. I came to work at TVA in 1971. I felt that we would gain credibility with the Nuclear Regulatory Commission, who was basically our only code designated authority if we took on voluntarily the function of the third-party inspector or the authorized inspection agency function.

Although there were some managers that kept on questioning why are we doing this, in the long run and without really too much opposition, we were able to

convince our senior management to approve going into a formal ASME program with the participation of the third-party inspectors.

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We wrote a quality assurance manual and went into contract with Lumbermens Mutual, a Division of Kemper.

They provided us with our initial ANI services at Watts

Bar. Watts Bar was our first code plant, totally code plant.

Bellefonte was a little later in getting started, and I would have to go back in my files to recall whether Kemper had any major impact on Bellefonte. They did participate during part of the startup welding, but it was so limited that I think we can say that Bellefonte's tenure was almost exclusively Hartford.

Watts Bar had nearly three years of Lumbermens, and we had a transition period when Lumbermens opted under their contract clause to get out of their contract with us and Hartford won the invitation to bid. There was a period of about four to six months of transition. Hartford hired two inspectors from Lumbermens. So even though we transitioned from one authorized inspection agency to the other, we had continuity with our ANI's.

I didn't finish with the ANI involvement. You asked me what his duties were. Under the ASME code the authorized nuclear inspector at any fabrication or

installation site or manufacturing facility has responsibility for the fabrication, inspection and testing aspects of the code and performs some additional requirements like verifying that certain design documents which must be in his possession have been prepared and properly certified and available to him.

Those documents normally are the design specification and the design report which is prepared on the stress analysis of any of the systems components for which the company that he is working for takes over all responsibility.

Much of the equipment at a nuclear plant has been certified by an authorized nuclear inspector that is not in the employ of TVA. Again, that is a loose phase, that is not in the employ of the authorized inspection agency which has a contract with TVA.

That authorized nuclear inspector, say at Babcock and Wilcox, and I believe Babcock has Hartford, that authorized nuclear inspector would have certified the data report forms for any vessels that they had gotten from Babock and Wilcox.

An authorized nuclear inspector working for Anchor Darling through a contract with his authorized inspection agency would have certified the data report forms for those valves or conceivably pumps or any other piece of equipment

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that came onto the plant site.

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The work that the authorized nuclear inspector at TVA is expected to oversee under the third-party inspection contract is TVA's own design activities to extent needed for him to have the proper documents to perform his field work. Any parts fabrication that TVA would do at the site and the installation activities that TVA does at the sites installing not only the parts that TVA fabricated but any parts, appurtenances and components that have come onto the site from other organizations.

As our work grew, our resident inspector numbers grew. We eventually peaked at about 13 on five sites. The largest number of resident inspectors at Watts Bar reached four and then it dropped to three. At one time we had seven inspectors at Watts Bar when we were doing the hydrostatic testing of most of the systems, and I would have to guess, but the time was about four years ago and maybe five years ago.

INVESTIGATOR WILLIAMSON: How would you characterize you and your office's relationship with the site ANI's?

MR. BRESSLER: Well my office resides within the end certificate holder's organization. Knoxville Engineering by various names is the end certificate holder and also the owner's designee, the owner being the TVA

corporate organization.

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The sites take the functions of installers and of course fabricators if they do any parts fabrication. We have authorized nuclear inspectors employed by Hartford presently working at each of the sites in which the code program exists, and they are working on the Office of Construction, now the Office of Nuclear Construction, and it is going to have a new name soon activities at each of those sites. Therefore they are performing third-party inspection to the TVA NA and NPT certificates.

The ANI for the end certificate holder is also the authorized nuclear inspector supervisor to the ANI's at the sites, and I have a feeling that that is part of the confusion that has led to this investigation, but that is my personal feeling.

So the ANIS at Watts Bar and Bellefonte designs
ANI. Our relation through the various delegations that are
documented in the Nuclear Code Manual and Nuclear
Construction Manual, the NCM, which is a quality assurance
manual for nuclear construction of the Office of
Engineering, Design and Construction, with some changes in
title, is to represent TVA in its relationships with ASME.
In other words, the Chief Nuclear Engineer receives the
correspondence from the ASME accreditation program.

The section which I used to supervise and which I

now provide services to handles the requesting of surveys and the contact work with ASME staff. To keep everything together, we have also handled the requesting of surveys and all other activities of that type on behalf of the Office of Construction.

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Except for a period of about three years, we have also been responsible for preparing and coordinating preparation when others have been requested to prepare portions of the manual, revising when required, arranging for the typing services, controlling the distribution of the drafts for comments, coordination of the comments, meeting of the NCM Procedure Reviews Committee, which has representatives from each of the sites, the staff from welding, engineering and construction, quality assurance organizations and my section which I chair, and where the final comments are thrashed out, whatever can't be done by telephone, we clear up in a committee meeting.

Then after the committee agrees to the final draft, which has also had input from the Hartford regional office where the ANIS resides, we send them a copy of the first draft and he comments on it and subsequent drafts to it.

We then put together the final draft which is then hand carried to each organization for initialing by the cognizant person and signing off by the responsible

person. At present we only have three signatures on the manual of approval, and that is the Office of Engineering, now called the Office of Nuclear Engineering, pardon me, now called the Division of Nuclear Engineering, the Office of Construction, which is now called the Division of Nuclear Quality Assurance, but prior to that the Office of Quality Assurance. Those are the only three approval signatures.

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So we handle the preparation of all the revisions and then we turn it over to the Procedures Control Branch and they run off the copies, distribute the revision copies, receive the returned documentation and maintain the documentation and actually maintain the manual. So basically our portion is the active revision of the manual. When I say we, I am talking about the Codes, Standards and Materials Section.

INVESTIGATOR WILLIAMSON: Does your group, you or your office have a routine contact with the site ANI?

MR. BRESSLER: Yes. Not as much recently, and in the last few months not at all because we are under essentially a restraining order while this investigation is going on.

MR. BRESSLER: The answer is yes, through my position in TVA and also unofficially when they use my expertise.

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INVESTIGATOR WILLIAMSON: Are you familiar with -let me find it -- I guess under owner's responsibilities,
Revision 18 under No. 2.3.2, the Office of Construction has
a Project Manager at each nuclear power site and he or his
designee shall, one, establish and maintain contact with
the authorized nuclear inspection agency concerning project
items.

MR. BRESSLER: That is not the function that we perform. That function is performed, and again the organizations are changing with this new item, but let's say the existing organization as shown in the manual, this function was covered by the Assistant Construction Engineer (Quality Control).

INVESTIGATOR WILLIAMSON: And that would have been the ---

MR. BRESSLER: That is a different function. So he would handle the day-to-day interface between the authorized nuclear inspector at the site and their management. Any problems at the site, the ANI has access through that person to the Project Manager.

INVESTIGATOR WILLIAMSON: Was that always handled that way?

MR. BRESSLER: To the best of my knowledge.

INVESTIGATOR WILLIAMSON: Did these people ever come to you instead of going to Hartford?

MR. BRESSLER: The ANI's?

INVESTIGATOR WILLIAMSON: No, sir. The liaison, the point of contact from the site.

MR. BRESSLER: I believe that this is a true statement in its entirely. We are contacted by the site when they have a conflict of opinion with the ANI. That is when we first enter into the picture.

INVESTIGATOR WILLIAMSON: Is that the way you understand that that loop should run? Should they be contacting codes and standards people, or should they be contacting Hartford management people to deal with this?

MR. BRESSLER: If you go to the portion of the manual that describes the engineering organization's responsibility, the loop is for them to contact us because we contact Hartford regional in any appeals process.

INVESTIGATOR WILLIAMSON: Okay.

MR. BRESSLER: I think at this point I ought to interject a little explanation. The ASME code provides for this type of appeal process. The authorized nuclear inspector obviously reads the code as he sees it and he is guided by interpretations that are written in the National Board bulletin which he gets as part of his commission as

an authorized nuclear inspector and under his own knowledge and expertise within the code.

Most of the field inspectors, however, do not have any committee activities. They are on the line of action and have to depend on their organization to give them the recent interpretations that affect their work.

The authorized nuclear inspector has access to the regional management when he runs into problems with the Project Manager, or I should say the project and what he is requesting be done is not done, or if a condition that he cannot accept is not attended to, he addresses his supervisor in Atlanta.

Atlanta to us to resolve problems that the ANI's were having with our construction people. And more frequently than not after the problem was described to me and in reviewing the code coverage, I would side with the ANI's and I would notify the site, either Bellefonte or Watts Bar or any of the other sites that in my interpretation the authorized nuclear inspector had a proper position and that they had several things that they could do, one of which was to correct the work in accordance with the ANI's desires. There were other means of approach that are covered by the code, due process and appeal structure.

On occasion, particularly in the early days when I

was a supervisor and I was more closely involved with the sites, the ANI's from Lumbermens, Tom Williams and Mr.

McGraw and some of the early ANI's from Hartford used to call me direct to discuss a problem and at that point I would provide them "consulting services" as a code person.

I would not talk to them as a TVA position.

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I have always encouraged them that if they had problems with a particular aspect of the code that they should call me. To the best of my knowledge, Hartford has never stopped them from doing that.

When they would call I would either point to a paragraph that they may not have been cognizant of or they might have forgotten or that had been changed in the code. And most of the time we could resolve problems at that level.

As we became more distanced from the size, and as our organizations grew and only certain people could attend exit meetings and only certain people could do this and we started to get more and more distanced from the project management, I would only become involved when the two organizations, the site construction manager's organization and the ANI's could not come to a resolution of their differences.

Walt Joest, who is our principal codes person and the person who handles the revisions to the Nuclear Code

Manual, would have more daily contact with both the TVA party that was involved in a resolution of a -- let's call it a discrepancy at this point, because this was during the formative phases before we determined that an NCR, a nonconformance report had to be issued.

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The ANI's, some ANI's had a telephone report with Mr. Joest, too, but for the most part in the later years we started to go through the channels that the site would contact me while I was still supervisor or later on Walt or Bob Jesse who replaced me as supervisor.

agreed with the ANI's, it generally never went beyond that. If I didn't agree with the ANI's, then I went through my assigned duties in the Nuclear Manual and I would make contact with Hartford regional, describe the problem as I saw it and has been relayed to me and then they would get on the phone with their ANI's, get the problem described to them from their ANI's and then we would get back on the phone and now we both had the two separate stories and frequently the two separate stories looked like we were talking about two different problems altogether.

When I saw what the ANI's concerns were, I probably would have, if it was a valid concern, I more than likely would tell Hartford region to forget it and we will

handle it back at our level, and we tried to resolve what was going on.

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If I agreed with our site that the TVA action was in accordance with the requirements of the code or the provisions of the code, then I would discuss it with the Hartford people, and generally Harold Robeson, and later on Bill Higginbotham, and if we could come to a resolution at that point, we would come to an agreement of what action to take. I would report back to the site people or Walter would report back to the site people if he was in the conversation, and the ANIS would report their decision to the ANI's.

Most of the time it would result in agreeing to write an NCR and an agreed upon resolution of the NCR which then would go to the NRC resident inspector.

If at that level I could not get resolution, and the resolution was not necessarily our way or their way, but frequently the resolution could be something in between, then my next appeal route would be to the Hartford home office in Hartford, Connecticut where the same process would begin.

At that place I would be talking originally with Don Young and more recently with Howie Dobel. And if we could come to a resolution, then it would be fed back again through the two channels and back to the site for the

agreed resolution. If we could not come to a resolution, then I had to move for TVA into a different path. I could send in an inquiry and try to get a favorable response with our position, or if I knew that our position did not exactly meet the code, but was an acceptable and safe engineering position, I would write a proposed code case, and if we got it approved through the committee structure, then we reference that code case as the reason for our doing what we were doing.

We have never had to go beyond that.

Interpretations in code cases have, to the best of my knowledge, resolved anything that we had.

INVESTIGATOR WILLIAMSON: How many times have you ever had to write or get a code interpretation to resolve a problem between TVA and the ANI's approximately?

MR. BRESSLER: Somewheres, and I don't keep track, and I can show you my book of interpretations that I keep that I have generated for TVA, a number more than 10 and less than 50, in that range.

INVESTIGATOR WILLIAMSON: And that is in how many years?

MR. BRESSLER: Fifteen years.

INVESTIGATOR MURPHY: And how long does this take?

MR. BRESSLER: It varies. The contact with the regional office, Atlanta, three days. Contact with

Hartford, home office, maybe a week. Contact with the code committees, it depends on the cycle because the committee used to meet six times a year. The Interpretation Task Group would meet on Wednesday night of code week. If you were just in front of one of those meetings, you could conceivably get an interpretation in as little as two or three months. That would be the official typewritten reply back to you. It can take as long as a year and a half.

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Code cases generally take, again in accordance with the cycle of the committee meeting and your ability to run a code case through the committee, if a code case can be handle by successive committees on Monday, Tuesday, Wednesday and Thursday, it can go as an item of new business to the main committee and be approved if there are no negative votes, which would be the quickest way in which a code case could be issued, we are talking about a minimum of four months. But again, for the most part, as much as 18 months, and some code cases have taken up to three years to get out.

So there is no set answer, but the quickest code case, four to five months, and the quickest interpretation, two to four months.

INVESTIGATOR MURPHY: Thank you.

MR. BRESSLER: Now there are levels of appeal beyond that but, as I said, we have never had to go that

way. Levels of appeals would be, first, to the main 1 committee -- pardon me, to the Subcommittee 3 meeting as a 2 committee of the whole because the Interpretation Task 3 Group is a part of the committee and not the full 5 committee. 6 The next level of appeal would be the main 7 committee of the Boiler Pressure Vessel Code. 8 The next level of appeal would be the Board on 9. Nuclear Codes and Standards. 1.0

And the next level of appeal would be the Board on Hearings and Appeals.

INVESTIGATOR MURPHY: This would have to be a fairly significant case before you went through that process, right?

MR. BRESSLER: In my interpretation, sometimes punting in agreement is the least cost action, and I tried to use my expertise and my 31-plus years of experience in determining when something is worth fighting for. Timing is most important.

As I said, I really feel, and I am a little embarrassed by this situation because professionally I believe that I have tried to be as objective and as impartial as possible in our relationships with the third-party inspectors, certainly my relationships with them.

Now separate from those, we have our direct

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contact with the authorized nuclear inspection supervisor because we need to talk to him about manual changes. He is our ANI and also responsible for any revisions to the manual.

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So we do have frequent contact, and when I received a letter from Mr. Whitt saying that we should not talk to Hartford, I immediately objected because again my interpretation of what we were talking about was Watts Bar only. I said, I can understand Watts Bar, if that is being questioned, but we have to talk on behalf of Bellefonte and we have to talk on behalf of the end certificate holder. And a letter was issued which I help prepare that gave us guidelines.

When we talked to Hartford on something that has to do with Watts Bar, we called John Self, or if he is not there, some other member of the project management group and had them on a three-way conversation. So we are meeting that portion of it. If it is a direct Bellefonte question, we can go to Atlanta direct or to Hartford, and of course I feel that my code contacts with Howie Dobel, who is on many of the committees that I am on, and Bill Higginbotham, who is on some of the committees that feed into the Subcommittee on Nuclear Power, but he is not on any committee that I am personally on. We frequently have to talk about code items, and I considered that separate of

my TVA responsibilities.

INVESTIGATOR WILLIAMSON: What is the status of the current contract between TVA and Hartford?

MR. BRESSLER: I am giving you third-party information, if that is acceptable to you.

INVESTIGATOR WILLIAMSON: Sure.

MR. BRESSLER: I will give you what I consider the status to be because nobody talks to me. We had two contracts with Hartford in the past and technically we should have had three, a contract between construction and Hartford, which construction administered, and Mr. Asa Kelley was the administrator, and a contract between design and construction for the end certificate activities, and a contract between nuclear power and Hartford for the authorized nuclear in-service inspector.

Our work in the and certificate activities with our ANI is very limited because, as I mentioned earlier, the authorized nuclear inspector does not get involved with the day-to-day activities of design. And what Hartford opted to do is during their semi-annual, twice a year audits of their authorized nuclear inspectors, they also audit Knoxville and all our other sites.

Our other contact with Hartford regional is when we are handling revisions to the manual and of course when we have meetings to resolve some of our interfaces, problem

interfaces.

So the charges that are attributable to the end certificate evaluation really do not merit a separate contract and separate administrator, and the Office of Construction was willing to take on our costs, but officially we just charged all our time — not our time, but the ANI's time and the ANIS's time to a construction contract. So then we only had two contracts, the inservice inspection and the construction contract.

INVESTIGATOR WILLIAMSON: Was there ever a period of time where there was consideration being given to not renewing the contract with Hartford?

MR. BRESSLER: Hartford?

INVESTIGATOR WILLIAMSON: Yes.

MR. BRESSLER: Again, I am giving you my observations. The Hartford contract continued and was renewed every two years I think without any problems. We only had one contractual problem, and that was, and I mentioned we had seven ANI's, we were charged for one AI at the ANI rate and another ANI we were charged who we knew had not been at the site who was sitting at the bar at the motel. So we got all of that straightened out.

But outside of that, there were never any conflicts or any problems in the contract administration because I think that Mr. Kelley would have called me in if

they had anything to do with the ASME interfaces.

I still have not seen this so-called "L" letter, but in the newspapers there was a description of a letter which was considered, I don't want to use the term blackmail, but that kind of an inference, signed by what appeared to be the group, I think that was the signature, and to the best of my knowledge, the letter was on Hartford's stationary. But I have never seen the letter or a copy thereof. I did see a copy of the typewritten copy that TVA made available to the Hartford office originally.

This letter tried to put pressure on TVA management to force the Hartford Company to raise the salaries of the site ANI's, and I think the figure I recall is \$30,000 a year, or else the group would reveal areas of nonconformance with the code that had been glossed over and things like that. I have only read that letter once and I can't quote the words directly.

As a result of that letter, and I am still searching for the word that has been used, our management contacted Hartford management and indicated there had been a loss of confidence in the Hartford organization. This occurred during the period of time that we were working on the preparation of the contract renewal, and within time-wise we are talking two months and maybe three months before it came before the Board, and these sequences are

what I have picked up from the newspapers, from hearsay and from talking to people who were involved and from our lawyer, Mr. Mason.

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The date came for recommending the contract to the Board of Directors of TVA, and the legal office, although the contract had been fully prepared, the legal office asked construction to withdraw it at the Board meeting, and that contract elapsed before it could be renewed.

The contract with Chattanooga and ISI was still active and by mutual agreement since we have to have third-party inspection at Watts Bar, we agreed to permit Hartford to bill us through the ISI contract and the activities were paid for through that contract, but using the terms and conditions of the original contract.

The investigation, and I am very hesitant on this because again it is only back-room discussions that give me this background, the investigation was assigned to the nuclear safety review staff. I think it was Mr. Giddy who was given that investigation, it proceeded for about five months, that I am aware of, and Mr. Giddy never contacted me at all. So I have no knowledge of what he was doing or who he was seeing or anything, but I do know that I kept on calling Mr. Mason in the Office of General Counsel, and on the few occasions that he got back to me, I was told that the present arrangement was satisfactory and that they did

not want to renew the contract at the present time until this question was cleared up.

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The ISI contract was due to expire December 31st of '85, and again because the investigation wasn't finished, it was decided to extend the contract for three months to March 31st, and then I understand that that contract has been renewed. So we are still billing through that contract.

So with that very broad description, the narrow answer to your question is yes, there was a period of time that TVA was considering cancelling the Hartford contract. It was directly related to the extortion -- that's the word -- the extortion letter, and to the best of my knowledge, had nothing to do with TVA's disappointment or feeling of lack of performance on behalf of the Hartford organization or the Hartford ANI's.

When you say that TVA INVESTIGATOR MURPHY: management contacted Hartford management concerning this expression of lack of confidence ---

MR. BRESSLER: Yes. Mr. Mason I believe -- and again remember I have no direct knowledge.

> INVESTIGATOR MURPHY: That's okay.

MR. BRESSLER: I think that Mr. Mason contacted the attorney for Hartford, and then that attorney contacted the Vice President in charge of the inspection program, who

then contacted the Assistant Vice Presidents, Howie Dobel, who then called me because we are friends besides our other relationships. Howie and I used to work for B&W together. 3. He goes back to the SAVANNAH, the steamship SAVANNA. wanted to know what was going on, and that was the first I heard of the letter. I tried to find a copy of it, but nobody had it, not on this side. So that is the extent of what I have perceived was 9 the reason for the desire to possibly cancel the contract.

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INVESTIGATOR MURPHY: Have you ever expressed this idea of lack of confidence as maybe resulting in at least a review of the contract with Mr. Higginbotham or Mr. Robeson in Atlanta?

MR. BRESSLER: I wouldn't have been involved in that at all. You see, to review the contract would be outside of my responsibility ever.

INVESTIGATOR MURPHY: I am not asking the right question. Have you ever expressed to them, TVA, that there was a perception among somebody in TVA that there was a lack of confidence, you know, and that the contract might be in jeopardy?

MR. BRESSLER: When Hartford regional called me during the period of days of my contact with Howie Dobel, by then I had been in touch with Mr. Mason, and Mr. Mason had given me the words that you just phrased, that there

was an appearance of lack of confidence, and I felt that
because of our relationship always being on the level, I
made that statement to Mr. Higginbotham.

But, again, that was a third-party reporter to you what I heard from Mr. Mason. From that point on I made it, or from that day on I made it a practice to whenever something came up involving either -- well, actually the employee concerns issue because I never really thought that there was an ANI problem. I thought the extortion letter was a prank. That is how naive I am. I made it a point to immediately contact our legal counsel and tell them what was said on the other side of the line, what I replied and asking their advice as to what to do next.

INVESTIGATOR MURPHY: Did you make any written record of this yourself?

MR. BRESSLER: No. I am a notorious procrastinator. That is one reason I am not a manager. I am not a putter-downer that at 10:15 I spoke to my wife and she gave me the usual hell, you know.

(Laughter.)

I only make written notes when I feel that my management needs to be informed and I can't get them on the telephone. I will write what we call a 45-D. Sometimes my 45-D's are five, six or seven pages long. If it is something that I feel is interoffice, then I will prepare a

memo from my supervisor to the project manager.

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INVESTIGATOR MURPHY: What was your perception of Mr. Higginbotham's feelings towards the conversation over lack of confidence.

MR. BRESSLER: He was crushed, and I was, too. I know that this has no value in the realistic world, but I feel, and I still feel and I know they did, too, that our three organizations, ourselves, Hartford, either of the two locations, and our sites have behaved totally professionally with each other. The confidence of the ANI's has only been questioned on the few occasions that we had an intemperance problem, and that was Mr. McGraw, who is now dead, and that is documented.

When that intemperance started to affect his work and of course our work, his relationships with us, that is one time when we put pressure on Hartford to either get him dried out or replace him. We never questioned his technical competence. He was good, but he was having marital problems, he was away from his wife and he turned to the bottle.

Outside of that, we have had good, and by using the grading system, we have had good ANI's, outstanding ANI's and exemptable ANI's. We have had some ANI's that didn't report when they were supposed to but billed, and those we have raised, and we have only had to raise that

question once to the home office and it was taken care of.

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That is why I say our relationship with the Hartford home office and the Hartford regional office has always been aboveboard and from the codes and standards point of view very highly professional. We all feel branded somewhat by the fact that we have to make this sit with an investigation.

Outside of that, I don't get involved in rating the ANI's. That is the Hartford office. And I have not knowledge of how they are rated or how they are evaluated. I have no knowledge of their salaries or any of the administrative duties. I don't want to know.

when Mr. Kelley, Asa Kelley would contact me about any of the terms of the contract and I could be of help to him, I would give him some advice or suggestions, but outside of that I stayed clean out of all commercial aspects, not only in the ANI contract, but all other contracts that TVA has because I felt it gave the the opportunity to be an arbiter between our customers, our vendors and TVA itself when it came to interpretation questions.

Actually, I have been very proud of the fact that both our vendors and my company would accept my mediation and the resolutions were generally either all the way if there was a mistake on one side or the other or some

compromise that was acceptable to both parties. 1 INVESTIGATOR WILLIAMSON: Let me ask you, Mr. 2 Bressler, from the ASME code standpoint must an ANI be 3 satisfied from the viewpoint of his interpretation of the 5 code of an issue identified by the ANI that the code violation is properly dispositioned? 6 MR. BRESSLER: Yes. 7 INVESTIGATOR WILLIAMSON: He must be satisfied? R MR. BRESSLER: That is right. INVESTIGATOR WILLIAMSON: In your dealings with 10 the Hartford, Atlanta people do you feel that they 11 supported the ANI's in the field? 12 MR. BRESSLER: Whenever the felt that the ANI was 13 14 absolutely correct, yes. INVESTIGATOR WILLIAMSON: Okay. When they didn't 15 feel that they were absolutely correct? 16 MR. BRESSLER: Then we would have some of the 17 relationships that I talked about. They would either call 18 us, and if we were not satisfied, we would call them. 19 think what I have to establish here is that the ANI is not 20 infallible. He is the closest to the work, and I will 21 support the ANI's position that unless he is satisfied with 22 the disposition, he has a right to demand more work.

satisfied with the performance of a welder or an NDE

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The code says that if for any reason the ANI isn't

person, he can demand that they be requalified. If there is any reason for him to question the code compliance, it is a decision to be resolved.

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So he has an absolute right to raise a question, and the reason that I support his absolute right, and it is his signature that is going on that data report form. Now if the man does not have all his facts together, some of the things that in engineering we may have taken advantage of a later edition or addenda that permitted the activity, that is the reason that we would get together through either direct interface with the ANI or direct interface with the Atlanta office or direct interface with the Hartford office to present our side of the story and why we felt that the TVA position met the code.

And then we expected that if Hartford, at whatever level we appealed, agree with us, that they would take care of resolving it with their ANI's, because I could not in my position directly interface with the ANI and tell him you have got to change your mind.

I mean the best I could do if he called me, and on occasion they did call me, is read them the paragraphs and give them the paragraph numbers and tell them our interpretation and how we read that paragraph because the English language is a very difficult technical language, and you can read the same sentence and put the emphasis on

the wrong syllable and it reads entirely different.

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INVESTIGATOR WILLIAMSON: Has it been your experience that when an interpretation arose that the Bartford management was more likely to side with the ANI's in trying to resolve the interpretation problem or with the position taken by your office in Knoxville?

MR. BRESSLER: I didn't keep score, but I had to mentally keep score, I think if we had gotten to the level of Hartford, Atlanta, because I tried to resolve all the problems at the lowest level, but if we got to the level of Hartford, Atlanta, it was almost even-steven.

INVESTIGATOR WILLIAMSON: Let me tell you why I asked that question. I asked that question because in some of our conversations there was some inference that the Hartford people were intimidated by Codes and Standards people because of their knowledge and experience and expertise in the code issues.

MR. BRESSLER: But they had access to equal experts. They had access to Howie Dobel who ---

INVESTIGATOR WILLIAMSON: Did you sense this intimidation at all?

MR. BRESSLER: No. As I say, our relationship has always been amicable. When the job was done, say when we were on a survey and the job was done, we would go and have drinks together like any other working people would.

INVESTIGATOR WILLIAMSON: Excuse me for interrupting. Do you feel that the Hartford management personnel that you dealt with, and primarily Mr. Higginbotham, Mr. Robeson and Mr. Ireland, had the technical expertise and also the knowledge of the codes to make those decisions regarding the interpretation of the code?

MR. BRESSLER: Prior to Mr. Robeson we had a gentleman called John Hansen, also again a boilermaker background, but a man I had absolute confidence in. He really knew the ASME code. He, both as an ANI, which is where he started and as an ANIS, had the expertise to make that decision.

Robeson is very knowledgeable. He is a more laid back type of individual than Mr. Hansen. Mr. Hansen was very formal. Robeson is more laid back. Higginbotham is more office trained than field trained. Robeson, to the best of my knowledge, has never been at a committee meeting. Higginbotham participates in committee

So I would feel that Higginbotham might have more expertise than Robeson. Robeson had excellent knowledge of the code. But both of them, and the three of them, including Hansen, had direct contact with the Hartford home office who had many experts in their home office, Darrel

Petes, Gene Feigel, Roco Sinisi and all the Hartford home office personnel, Don Young before that, that had all been very active in the code committees, fabrication and examination, and therefore they had the expertise to provide support to the Atlanta office and if needed to the ANI's.

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INVESTIGATOR MURPHY: Let me ask you a question about that. Earlier on you said that there were many cases where both the ANI at the site and the Hartford people would call and talk with you about code interpretations and they were basing this not on your position with TVA ---

MR. BRESSLER: On my position as a code person.

INVESTIGATOR MURPHY: --- but your position as a code person and your vast knowledge. Why would you think they would not first go someone within their organization?

MR. BRESSLER: It is possible that the person they went to was not available or suggested that they talk to me.

INVESTIGATOR MURPHY: Okay. Is it also possible that by them going to their home office they might create a sense of some weakness on their ---

MR. BRESSLER: No, I don't think so. Again, I am giving you impressions and not facts. I have been told that I intimidate because I am generally very convinced of what I am saying.

INVESTIGATOR WILLIAMSON: The intimidation is not so much a physical one, but by your knowledge and expertise.

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MR. BRESSLER: It is not an attempt to intimate, and I am generally very quick to recognize when I have made a mistake and in fact it is embarrassing, but I do make mistakes. I can't recall every page of the code any more. It has gotten too big.

I would think that the areas that we dealt in they would have had sufficient confidence in themselves to argue with TVA at the lower levels. The only time that I used my code knowledge to provide an outlet for my firm was being up to date with the most recent changes to the code and what was proceeding through the code which gave me a preferential position from which to fight.

When I would give them the chapters and verses and they would look them up, if you want to call it capitulation, then that would occur, but only when they saw it in black and white and they could interpret it the same way that I interpreted it.

And if we couldn't, and I know many times that Don Young and I, we would start on the telephone and we would finish in a code committee meeting and we would argue into the wee hours of the morning until we came to a agreement and said, you know, you are right, if you read it this way

your interpretation is correct, and if you read it my way my interpretation is correct, and let's ask the question.

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And then we would frequently cooperate on an inquiry that I would send in, or often Howie or Don Young would send in an interpretation, Howard Dobel, on a request for an inquiry and interpretation from the other side of the fence.

INVESTIGATOR WILLIAMSON: I think, if I recall, the Hartford personnel indicated they did not have the authority to interpret the code; is that correct?

MR. BRESSLER: They cannot, no. They feel that they cannot.

INVESTIGATOR WILLIAMSON: Do you agree with that?

MR. BRESSLER: The ANI is interpreting the code
when he makes a decision. What do you call interpret?

INVESTIGATOR MURPHY: You are talking about a

MR. BRESSLER: What do you call interpret? The authorized nuclear inspector reads a paragraph, and I will give you a perfect example. The 1971 code taken right out of the B-31-7, Class 3 Piping. Nozzle connections and branches in piping over four-inch size must be magnetic particle or liquid penetrant inspected. The entire industry interpreted that to mean that if the run was less

four inches that none of the branches had to be inspected.

point that we are concerned about.

But if it was over four inches you had to do mag particle.

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But if you read it, pipe branch connections in piping four inches nominal size or greater need to be inspected, then regardless of the run, a four-inch branch or larger had to be, the weld had to be inspected.

So there is a perfect example that the entire industry read one way and an NRC inspector read a different way, and we had to have a round-robin on it until we went back to the original words and we found out what it was. That is when we came to an agreement with the NRC and we dropped a four-inch size to a two-inch size, because whatever happened, two inch was something that we could live with on a break.

So now you put yourself in the place of an ANI, and, please. I am not denigrating the authorized inspector. He has generally for the most part a high school diploma or an equivalency and good knowledge of the book he is working with and good hands on NDE and probably many years of welding experience. He knows workmanship and he knows the basics of inspection.

But when he reads that sentence how is he going to interpret it? If he reads it with the accent on the half of the sentence, regardless of branch size, any pipe run four inches and under, there had to be no NDE on the branches. But if he took the harsh approach and said it

the other way, then he would be insisting on liquid penetrant or mag particle examination.

Is he absolutely correct? No, and possibly yes. That is when we go into the level of appeals, and on that particular one three insurance companies could not agree among themselves and four certificate holders could not agree on this. So we went to the committee and it was a very difficult road until we finally agreed with the intent was and we changed it.

INVESTIGATOR WILLIAMSON: Does the code allow for an ANI's supervisors, field or regional supervisors to override any decision made by the ANI?

MR. BRESSLER: I would have to go back and read the documents that would apply, which would be NCA 5000 and general requirements and N-626.0,

The way in which I teach my courses when I teach quality assurance requirements in nuclear power plant components, I teach that this method of appeal with the possibility of ensuing overriding is permitted by the code.

Don't forget that the author on nuclear specs, the supervisor must first be an ANI and is required to have "X" number of years of experience before he can be promoted to a supervisor or to inspection specialist.

INVESTIGATOR WILLIAMSON: If there is a difference of opinion between the ANI and his management, what

2.	MR. BRESSLER: He can appeal to the National
3:	Board.
4:	INVESTIGATOR WILLIAMSON: The National Board?
5	MR. BRESSLER: Yes. See, he has got a commission
6	from the National Board. He can also appeal to the ASME
7	code as an individual. I should have mentioned that, too.
8	INVESTIGATOR WILLIAMSON: But he can go to the
9	National Board?
10	MR. BRESSLER: He could go to the National Board
11	and seek the National Board to plead his case for him. I
12	don't think he would normally. But again being practical,
13	if a guy works for a company, he is going to work within
14	the company rather than
15	INVESTIGATOR WILLIAMSON: I was going to say if he
16	did that, if he pursued it outside the boundaries of his
17	company, do you think he would be jeopardizing his position
18	with the company?
19	MR. BRESSLER: Ten years ago I would have said
20	yes. Today I don't think anybody jeopardizes anything when
21	he goes outside of his company. In fact, he guarantees
22	himself a perpetual job.
23	(Laughter.)
24	INVESTIGATOR WILLIAMSON: From an ASME code

recourse does that ANI have?

standpoint should an ANI, in your opinion, have the freedom

to discuss and offer dissenting opinions, and we have been talking about this I guess in generalities, on issues that may disagree with their management ---

MR. BRESSLER: Yes.

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INVESTIGATOR WILLIAMSON: --- and not feel any fear of recrimination or anything?

MR. BRESSLER: No. And that is why I said I have offered my services to the ANI's as a code person because I think that I am objective enough that I can put the different hat on. Now there have been instances and questions that have led me to write letters to ASME for entering official requests for code changes. So, yes, I support their right to dissent.

INVESTIGATOR WILLIAMSON: Do you know if there are any occasions when an ANI has chosen to pursue an issue beyond the level of his immediate supervision, and in this case Atlanta, and say go to Hartford with a concern?

MR. BRESSLER: Again, I have no access to Hartford's files, and I don't know what has happened there, but from my side I felt that the question on accepting the inaccessible welds on penetration assemblies went beyond the Atlanta level and into their home office.

Readily I can't think of any other things because we really haven't had that many items of disagreement.

When you think of the number of sites and the number of

ANI's and number of welds, we have had an outstanding record.

INVESTIGATOR WILLIAMSON: Do you know of any cases where an ANI has disagreed with his immediate management, and when I say immediate management I mean either site supervision or Hartford, Atlanta, and was directed to sign off on a document in any what whether it was an NCR or N-5 package or anything else?

MR. BRESSLER: I am not aware of any that I have heard the statement made. I am not physically aware of any situation where that occurred. You know, there is also the possibility of communication gaps. If the agreement achieved at a higher level meets code requirements in the opinion of the senior people, if they ANI receiving notice that his side has not been upheld is not fully told why the opinions were arrived at, I could conceive that he would feel that he was being forced to sign. But to the best of my knowledge, I don't believe that there were any instances that we had to resort to anything like that because we normally came to agreements by virtue of using either existing code positions or seeking code positions that took care of the problem.

INVESTIGATOR MURPHY: Would you condone an activity whereby a supervisor directed an ANI at the site to sign off on something that he may have considered

acceptable?

MR. BRESSLER: I could not because I believe that the basis of the third-party inspection program is the integrity of the ANI.

Again, as I teach in my courses, I tell the people, look, he is a human being and we get out of the bed on the wrong side at times and you have got to learn to live with him. Remember, he is the only guy who job is on the line because he puts his name and his commission number on that dotted line.

Other than the people he works for, the National Board has the right to bring him before a jury of his peers and he can lose his commission and without his commission he cannot work.

So that is probably why I feel so strongly about supporting the authorized nuclear inspector's position, and I try when I am involved directly with them when I am objecting to their position to show them the portions of the code that I am basing my position on.

INVESTIGATOR WILLIAMSON: Mr. Bressler, let me ask you, have you personally or are you aware of anyone from TVA that has been in contact with Hartford, either regionally or nationally at Hartford, Connecticut who ever attempted to influence a decision made by Hartford with regard to the resolution of a disposition or problem that

you were having with an ANI?

MR. BRESSLER: Speaking for myself, no.

INVESTIGATOR WILLIAMSON: Are you aware of anyone who has?

MR. BRESSLER: Speaking for the people who have worked for me or are now associated with me here in Knoxville, I am not aware of any, and I know nothing about what might have occurred from the site people.

Normally my involvement was when the site people would call me. Well, you know, I can give you the example of this particular, what I thought was the main subject of the investigation, the inaccessible welds.

For Unit 2 we were approached to disposition welds that had been hydrostatically tested already in Unit 2 and approved on the basis that that is the way they had been approved in Unit 1, and they had to scrape me off the wall because I specifically said, and we wrote in the NRC for Unit 1 that this relief was for Unit 1 only.

And when site went ahead and did it again, I refused to help out. In fact, I was getting ready to order them to cut out the guard pipes and expose the welds, but when I cooled down I came up with a much better technical solution.

When I heard about it, I contacted Hartford and I told them point blank, I told them I am calling you because

I am supposed to call you, but I am not in favor of

continuing the Unit 1 relief for Unit 2. And they said, we

are glad, because we were going to operate that way. So

there is an example there was absolutely no way in which I

INVESTIGATOR WILLIAMSON: Since you have mentioned those, we will get into them. I have in front of me NCR 5609 for Units 1 and 2 written on April 27th, 1984. As I understand in reading the nonconformance description and apparent cause there was some concern over some vendor welds that had not been subjected to hydrostatic testing by the vendor and were inaccessible for visual inspection once installed in containment.

was going to agree to continue to permit this oversight.

Is that correct?

MR. BRESSLER: What question are you asking? What is correct?

INVESTIGATOR WILLIAMSON: Is the description of that that concerns vendor welds that had not been subjected to hydrostatic testing were now in place and were not accessible for visual inspection during hydrostatic testing correct?

MR. BRESSLER: If I can modify your words "visual inspection," it is an examination for leakage. It is not an inspection. They had been inspected. Pardon me. They were radiographically examined, and for those welds that

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covered Class 1 piping going through the penetration assembly they were radiographically examined in the area of one-half inch on either side of the weld, mag particle or liquid penetrant examined.

So the welds had been fully NDE'ed, but had not been hydrostatically tested by the manufacturer who used a provision of the code that said hydrostatic testing may be postponed for the system hydrostatic test.

INVESTIGATOR WILLIAMSON: Because that was a subassembly?

MR. BRESSLER: It was a subassembly, and the words in the code state that. But the contract administrator who had accepted the waiving of the hydro, which we had done for many piping subassemblies, didn't realize that we would now have welds that we could not look at for leakage.

This is the first time that I have noticed that this said Units 1 and 2, because the listing that we received we assumed were the penetrations that had already been hydrostatically tested at the time of this NCR.

Now the action by the vendor was correct. The action by TVA was probably naive.

INVESTIGATOR WILLIAMSON: Naive?

MR. BRESSLER: Yes. We should have insisted that the vendor hydrostatically test the process pipe after the welds to the what they called the flued head fitting had

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been performed and then put on the guard pipe.

INVESTIGATOR WILLIAMSON: Was this an effort to save money?

MR. BRESSLER: No, not by us. In fact, we probably gave money because we probably didn't give them any credit for the hydro.

We were very lucky in that we used Mr. O'Toole from Tube Turns as a consultant on some bellows repairs that we sponsored because we had many nicks and gouges and blow-throughs on our existing bellows that we could not have replaced easily because, one, they were already in a very difficult access area or, two, the field of NPT bellows manufacturers was shrinking drastically.

Mr. O'Toole, who was Tube Turns bellows expert, had the opportunity to go into the company that he used to work in and look up the file and he reported to us that in truth these welds had never been hydrostatically tested and that was in conjunction with this NCR.

It is not a singular TVA problem. All of the penetration assemblies that were supplied by many of the manufacturers were supplied in the same manner. Some companies provided an approach to the problem by making hand holes in the guard pipe to permit insertion of devices of look at the welds, mirrors and things like that.

When we became aware that the penetrations that we

had on hand had not been hydroed, we started to look at it from an engineering point of view rather than the direct approach which was to cut some access in the guard pipe to permit us to look and redo the hydro which would have been very damaging from the point of view of the number of hydros permitted for the steam generator.

We tried to use engineering logic, and if I remember correctly, we said that other welds that had been made by Tube Turns could be seen when we looked at the TVA welds because they were near the TVA welds.

We had several actions that we could take with this thing. The problem was not fear of the welds because during the hydrostatic testing if the welds had failed or were bad we probably would have seen water running out from the open end of the guard pipe.

INVESTIGATOR WILLIAMSON: I have got a bunch of questions. So bear with me.

You said you probably would have seen it. That was included in part of the disposition there for 5609, ____ that No. 4. In addition to welds discussed in the first paragraph, and then accessible welds were so close to TVA welds which were inspected that it is reasonable to assume that leakage from these welds would have been detected during inspection noted in item No. 2.

MR. BRESSLER: That is a different weld than what

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1.	we are talking about.
2	In this sketch here, this is a Tube Turns weld.
3	Right next to it is a TVA weld, say here, because we had
4:	spools.
5	INVESTIGATOR WILLIAMSON: I was under the
6	impression that this was the weld.
7	MR. BRESSLER: But so is this one.
8	INVESTIGATOR WILLIAMSON: So these two welds.
9	This one can't be seen and this one
10	MR. BRESSLER: This one can be seen.
1.1	INVESTIGATOR WILLIAMSON: But this one can't be
12	seen.
13	MR. BRESSLER: This one cannot.
1.4	INVESTIGATOR WILLIAMSON: Is this a full
15	penetration weld?
16	MR. BRESSLER: Yes, and radiographed. We have the
17	radiographs.
18	INVESTIGATOR WILLIAMSON: But it couldn't be
19	MR. BRESSLER: It couldn't be witnessed for
20	leakage.
21.	INVESTIGATOR WILLIAMSON: During hydrostatic
22	testing.
23	MR. BRESSLER: During hydro. It had been fully
24	examined and we reviewed the radiographs. There was
25	nothing in the radiographs that would cause us to be

concerned.

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This weld was made at the same time that this weld was made. That was when they were putting both parts of the process back. Then there would be a TVA weld here to the TVA field piping.

Now this paragraph 4 addresses this weld which we didn't document had been looked at during hydro because we were looking at this weld. The TVA NI was only responsible to look here, but my position here was that if there had been any leakage on this one six to eight inches away, he would have noticed it.

INVESTIGATOR WILLIAMSON: What about on this one?

MR. BRESSLER: There was no way he could see that,
but if there was a major flaw, water would have come out
and run out of the downhill end of the ---

INVESTIGATOR WILLIAMSON: What if it was in excess of 10 or 15 feet?

MR. BRESSLER: It would depend on the quantity of leakage. There were fiber insulations and not the metallic insulations, and there would be a certain amount of absorption, but eventually, since most of these hydros take a tremendous amount of time because we must maintain the inspection pressure until all the welds have been walked through, there is a possibility that if there was a leak of significant proportions that it would have eventually

1. dribbled through on the downhill side of the penetration 2 assembly. 3 INVESTIGATOR WILLIAMSON: Is any leakage 4: acceptable? 5 MR. BRESSLER: Not from a weld, no. 6 INVESTIGATOR WILLIAMSON: What about 6121 that 7 indicates that all joints, including welds, shall be left 8 uninsulated and exposed for examination during the test? g, MR. BRESSLER: But it doesn't say that every joint 10 shall be required to be examined for leakage. It says all 11 shall be exposed, and that is a deviation. 12: Now the code violation is that this weld was not 13 left exposed. Now what I said earlier, had it been hydroed. 14. in the shop, previously hydroed, it wouldn't have to be 15 looked at again. 16 INVESTIGATOR WILLIAMSON: So you don't deny that. 17 MR. BRESSLER: No, no, no. I never have. 18. INVESTIGATOR WILLIAMSON: What I am looking for is 19 a entry in the ANI diary. I believe on the 20th of April 20 1984 a gentleman by the name of Hasten had a conversation 21 with you that was some seven days before that NCR was 22. initiated. 23. I think it is Howard Hasten that MR. BRESSLER: 24 raised the question.

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INVESTIGATOR WILLIAMSON: He indicated that you

expressed some interest in this problem.

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MR. BRESSLER: I have got some stuff here from the SIS inspection, but I don't know which one you are talking about.

INVESTIGATOR WILLIAMSON: I have it here. This is an SIS daily inspection record. It says contacted by M. Bressler regarding hidden weld on penetration, and this is dated 4/20/84, and lack of test of Class MC welds. Courtesy call. He is researching current cases, et cetera, and may want to perform pressure maintenance test at operating versus 1.25 design for hidden weld. Likely there was no ANI involvement in containment pressure test. Nothing definite yet.

So you were aware of that?

MR. BRESSLER: Oh, I know what he is talking about there. Yes. See, the containment pressure test that he is talking about is the Chicago Bridge and Iron containment vessel which they installed, and that was not a stamped vessel. Therefore, there probably was not an ANI involved in the containment pressure test. But that would not have had to do with anything on this. I think he mixed two things ---

INVESTIGATOR WILLIAMSON: I think you are talking about two things.

MR. BRESSLER: Yes, that is a different thing.

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This one is where I said we have code case, and it was 1540 and later became N-33 I believe.

No, the code case I have is much older. It was code case 1540 or 1541 and then became N-32 in the '77 code. That is where we had provisions for verifying embedded piping, which I can extrapolate to be inaccessible piping, with a maintenance of pressure test, which is now in the code. That code case has been eliminated and we put those words in the code.

What he couldn't know is that after I spoke to him, I contacted our people at the site and said are the inboard and outboard floatation valves tight enough that we can hold pressure for one hour, or whatever the code case calls for, I think one hour per inch of diameter, and look at the actual pressure, and obviously if there is no drop in pressure in the amount of time, then the weld is good.

The specific area where we used that code case was when we monitored the emergency service water and the new welds were not easily accessible and so we used a maintenance pressure test, and we found a couple of places where we couldn't document the hydro. So we did the hydro again using the maintenance pressure test, but this was field piping.

What I was doing there was responding to the problem and trying to find out what the ANI would accept

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from our side. The specific weld that we were talking about, the one that you pointed out, is the one on the inside of the penetration assembly that then gets covered, this weld here.

INVESTIGATOR WILLIAMSON: Yes.

MR. BRESSLER: Now sometimes the forge fitting would have an extension and this weld would move down to here somewheres. And in doing the Unit 2 we have found various approaches that are much more logical.

INVESTIGATOR WILLIAMSON: That was regarding Unit 2 and the proximity of some of the welds, the TVA welds to the vendor welds. Now some of these appear to be quite a distance from those welds, 10 feet 6 inches and some of them up to 20-something feet. This is a distance to weld.

MR. BRESSLER: Yes, from the open end of a guard pipe.

INVESTIGATOR WILLIAMSON: From 10 feet up to I guess 24 feet 3 inches and 26 feet 6 inches.

MR. BRESSLER: That is 24/6.

INVESTIGATOR WILLIAMSON: 24/6, yes. That would certainly eliminate any visual examination.

MR. BRESSLER: No. You know -- what is it -necessity is the motherhood of invention. Because I took
such a strong position that I was not going to have this in
Unit 2, we met on two occasions with Lenny Johnson from

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Watts Bar and John Self and other people in their organizations and we started to look at other methods, one, the maintenance of pressure test, which has to be discarded because they couldn't guarantee leak tightness on the valves, and if the valve leaked one or two cc's, it would immediately affect the readout.

If we could monitor the amount of leakage, then we could have done calculations to show that the leakage was through the valve seats and not through the weld.

The second approach, we were going to go into acoustic commission and use sensors close to the weld which would detect sounds of leakage from the weld. It is a very complicated approach and you have got to run the system and get the background on the leakage past other portions of the system and find out where that sound is emanating from and then, finally, when you are running your maintenance of pressure, if only those sounds exist and no new sounds show up, you can assume that no leakage occurs through say a capillary hole in the hidden weld.

A third approach was like in the old days they used to use stethoscopes to try to hear leakage. We discarded that very quickly.

And, finally, we said well let's use fiber optics, and we came up with an idea of cataloging the welds, and I think that is where this list came from. There are many

1 welds that are near the end of the guard pipe. Those we are going to pull the insulation back and visually observe 3 them during the hydro. Then there are a bunch that are half way, in the range of 4 to 8 feet or 4 to 12 feet. 5 Those we have no problems with. We have come up with a 6 fiber optics technique that we can insert a fiber optic probe and locate it right under the weld, and using the 8 ability to transmit light through the fiberscope and see 9 through the fiberscope. 10

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Craig Kantrell who works for Codes, Standards and Materials, has just been amazed at the clarity of the picture that we get on the other end.

We discussed this with the ANI's on Atlanta and had a meeting after we had come to the agreement, and we knew that we could do it, and they agreed that that approach would provide them with the confidence that; the hidden welds in Unit 2 were examined for leakage.

There was a fourth method which we still are keeping in reserve which we will have to use if there is any problem. That method is more expensive. It is using a moisture sensitive tape, and the contractor who is going to work for us is going to design a probe.

We can put it in a tube and push the tube through the insulation and approach the weld with the tube, and then poke whatever insulation the tube bites as it is

ľ	coming through, poke it back out with a rod, and then
2	insert this moisture sensitive device and position it unde
3	the weld. This device is so sensitive that even moisture
4.	from dew point or condensate would be detected. So we
5	would have to calibrate it and all that, and calibrate it
6	before the test to ensure that we were getting increases i
7	moisture rather than detecting condensation moisture.
8	INVESTIGATOR WILLIAMSON: During that particular
9	time frame that 5609
10	MR. BRESSLER: No. This that I am talking about
11	is 1086 time.
12	INVESTIGATOR WILLIAMSON: But during the
1.3	particular time frame that 5609 was written and
14	dispositioned, there was some concern on the ANI's part
15.	about the disposition to use as is. Do you recall his
16	reluctance to sign off on that?
17	MR. BRESSLER: That is why wrote this in the NCR.
18	INVESTIGATOR WILLIAMSON: Is that a common or
19	acceptable way?
20	MR. BRESSLER: No, but Mr. Hansen is a very
21	uncommon individual. He is eons above in intelligence of
22.	the average individual.
23	INVESTIGATOR WILLIAMSON: Did you understand his
24	concern?
25	MR BRESSLER. Oh was

Oh, yes.

MR. BRESSLER:

INVESTIGATOR WILLIAMSON: What was it, as you recall his concern, about these?

MR. BRESSLER: His concern was that those welds had not been witnessed for leakage and he could not accept them.

INVESTIGATOR WILLIAMSON: Was that an accurate assessment?

MR. BRESSLER: Within the constraints of his position, I would think so.

INVESTIGATOR WILLIAMSON: But within the constraints of the ASME code?

MR. BRESSLER: No.

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INVESTIGATOR WILLIAMSON: And why was that not?

MR. BRESSLER: Because the code has issued interpretations and a Board of Nuclear Codes and Standards position that states that this code cannot cover all situations that may occur during the construction of a nuclear power plant. When such an occurrence exists which cannot be resolved within the code, or for which the code makes no specific provisions, that it behooves the parties involved, and it mentions the four parties that are normally involved, which would be the jurisdiction, the regulatory, the authorized inspection agency and the licensee -- and the certificate holder -- there are actually five positions, but in our case it is three, to

come to an agreement on the existing condition and to 2: determine that it is acceptable for use in the as is 3 condition. I have a copy of that interpretation if you need 5 it, if you don't have it here. It was issued in the 6 September 1984 Mechanical Engineering magazine. 7 INVESTIGATOR MURPHY: September '84? When was 8 this thing dispositioned? 9 MR. BRESSLER: He signed off on May '84. 10. INVESTIGATOR WILLIAMSON: Then we have another, 11 the disposition ---12 MR. BRESSLER: Don't forget, the September '84 13 edition of Mechanical Engineering, that article was 14 probably was probably written a couple of months after the 15 Board made the decision. The article says when the Board 16 issued the decision. 17 INVESTIGATOR MURPHY: I agree, and I would be 18 interested ---MR. BRESSLER: I have a copy for 19 you. I just didn't bring it in. This was May 17, '84. By 20 the way, you know, we made the nonconformance significant. 21 INVESTIGATOR WILLIAMSON: Yes. I saw on that one 22 that it was nonsignificant, but on 6420 it hasn't been made 23 I assume. 24 MR. BRESSLER: 6420, that is the new one in Unit 2 25 and we haven't dispositioned that one yet. We have just

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issued our technical position on it, and I had to check with Craig Kantrell to see where we stand on that one.

INVESTIGATOR WILLIAMSON: Is there a code requirement for the ANI to witness a final hydrostatic testing of the system?

MR. BRESSLER: The NCND-6000 states that the ANI shall witness the final hydrostatic test, but that is the extent of the words. It doesn't say the ANI shall witness 100 percent of the welds. The code requires that 100 percent of the welds be accessible, and we never tell the ANI in the code -- and now I am putting my code hat on -- we never tell the ANI to what extent he must perform his inspections.

Mr. Hasten is the type of ANI that considers 100 percent a minimum acceptable figure. As I said, he is extremely capable and a very good man. But under the current climate I think people are going way beyond what they would have done with the same knowledge five years ago or four years ago.

INVESTIGATOR WILLIAMSON: If the ANI is not required to witness the 100 percent inspection, but ---

MR. BRESSLER: He is not even required to witness a hundred percent of the tests. See, in 6114 of the '74 code there was a provision where hydrostatic tests of pumps and valves, four-inch pipe size, could be done by review of

the records. You didn't even have to be there.

INVESTIGATOR MURPHY: But let me ask you one question. If there any prohibition against him saying I would like to look at 100 percent of "X" number ---

MR. BRESSLER: Oh, no. I said that earlier.

INVESTIGATOR MURPHY: I mean if he wants to look at 100 percent, I mean it is kind of up to him.

INVESTIGATOR WILLIAMSON: I guess what I was going to, and as I understand what you are saying, they are not required to witness 100 percent of the welds, but you said that 100 percent of the welds are to be available during hydrostatic testing.

MR. BRESSLER: Yes.

INVESTIGATOR WILLIAMSON: Is there a requirement for TVA under its QA program to have all welds inspected by a QC inspector during hydrostatic testing?

MR. BRESSLER: I would have to check with the Office of Construction.

INVESTIGATOR WILLIAMSON: And then the ANI verify that there was 100 percent inspection of all available welds during hydrostatic testing.

MR. BRESSLER: I don't think so, but again I don't have access to those detailed instructions. Those were issued by Construction and not subject to our review and approval. So I can't tell you yes or no. I don't think

2 can't vouch for it because I haven't read those detailed 3 instructions. INVESTIGATOR WILLIAMSON: NCA-5820, the final 5 test, what does that say? 6 MR. BRESSLER: That says the inspector shall 7 witness final hydrostatic, pneumatic or structural integrity tests required by this section. 9 INVESTIGATOR WILLIAMSON: And does that require 10 him to physically witness the hydrostatic test? 11 MR. BRESSLER: No. It says witness the 12. hydrostatic test. It doesn't say shall examine for leakage 13 every weld during the hydrostatic test. I am trying to be 14 very specific. He shall witness the final hydrostatic test 15 to the extent that he deems necessary. 16 INVESTIGATOR WILLIAMSON: Because he has to sign 17 off on that. 18 MR. BRESSLER: Right. Then I point out the basis 19 for my saying that the code doesn't require 100 percent is 20 that we even exempt certain components from having to be 21 witnessed during hydro by the ANI. 22 INVESTIGATOR WILLIAMSON: Let me ask you another 23 question with regard to that. We have a vendor weld that 24 has been subjected to volumetric testing, and that is 25 surface ---

that we would have committed to anything like that, but I

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1	MR. BRESSLER: If it is Class 1. Only volumetric
2	is Class 2.
3	INVESTIGATOR WILLIAMSON: Okay. But not subjected
4	to hydrostatic testing.
5	MR. BRESSLER: Not subjected to hydrostatic
6	testing by the vendor.
7	INVESTIGATOR WILLIAMSON: By the vendor, okay.
8	And it is in place in the field, and during the hydrostatic
9.	testing in the field, because of its inaccessibility, it
10	cannot be examined
11	MR. BRESSLER: It cannot be examined for leakage.
12	INVESTIGATOR WILLIAMSON: Okay. Can you say that
13:	the condition of that weld is adequate or would you say
14	that it was indeterminant?
15	MR. BRESSLER: If the term that you are asking me
16	to use is "adequate," I can say that the weld is adequate.
17	If you are asking me to say that the weld is leak free, I
1.8	can't say that.
19	INVESTIGATOR WILLIAMSON: Does that concern you?
20	MR. BRESSLER: Not really.
21	INVESTIGATOR WILLIAMSON: From a safety
22	standpoint.
23	MR. BRESSLER: No.
24	INVESTIGATOR WILLIAMSON: And we have how many of
25	these in each unit?

1 MR. BRESSLER: You have an inventory. I can't 2 tell you the number. 3 INVESTIGATOR WILLIAMSON: Approximately how many? INVESTIGATOR MURPHY: Fifty-seven. 5 INVESTIGATOR WILLIAMSON: Approximately 57. 6 So the actual condition of the weld under 7 hydrostatic test conditions is unknown. 8 MR. BRESSLER: Yes, I have to make that statement 9 because although the radiograph showed the weld to be 10 adequate in the past code, the sensitivity of the 11 radiograph would now show a capillary flow path. 12 INVESTIGATOR WILLIAMSON: Off the record. 13 (Discussion off the record.) 14 (Whereupon, at 1:15 p.m., the interview recessed, 15 to reconvene at 2:30 p.m., the same day.) 16. 17 18 19 20

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AFTERNOON SESSION

(2:40 p.m.)

INVESTIGATOR WILLIAMSON: We will go back on the record.

If you can explain what you have there, if you will.

MR. BRESSLER: I don't know if you have this article in your files of paper, so I took the liberty to duplicate it so that you can complete your item.

The interpretation of intent that we use to justify the use as is of these welds was a question that was raised at the December 1983 meeting of the ASME Board on Nuclear Codes and Standards.

The issue of construction turnovers and other related problems of a local nature were considered.

Subsequently the Board formulated the following position statement which has been accepted by the ASME Boiler and Pressure Vessel Committee and by the ASME Council.

The Board on Nuclear Codes and Standards recognizes the boiler pressure vessel code Section 3 does not nor is it intended to address all situations which might arise during site construction, such as the transfer of code work prior to completion or specific corrective action on nonconformances resulting from work performed.

It is the sentiment of the Board on Nuclear Codes

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and Standards that in these situations the determination of how to satisfy code requirements is best resolved through the interaction and agreement between the parties involved, taking into account the specific conditions of the situation.

Such agreements would include, but not necessarily be limited to, the owner, the applicable certificate holders, their respective authorized inspection agencies and appropriate jurisdictional and/or regulatory bodies.

And then an interpretation is given, Roman number III-1-83-161, subject Section 3, Division 1, NA-8000.

Knowing about this interpretation and recognizing that the corrective action on a unit that already was ready for, or essentially ready for fuel loading, you know, requests for licensing and fuel loading, we did an engineering evaluation to justify to ourselves that on the basis of the other welds that we were able to detect that had been made by Tube Turns, the review of the radiographs, which gave us confidence that the welds themselves were sound structurally, and the general experience that we had with Tube Turns in their welding program, that we felt that it was not a safety problem involved with accepting these welds as is, which was missing only the overview for leakage.

See, all other requirements of the code had been

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1 met by these welds except the ability to be seen. Had the 2 welds been available, there is no guarantee that the ANI 3. would have wanted to look at them. This ANI, maybe. Other ANI's we don't know. Mr. Hasten, although he is no longer 5: with Hartford, was a very detailed worker. I consider him 6 one of the best ANI's I have ever worked with technically. 7 And I can understand his position. 8 He asked us to remove the welds in question from 9

He asked us to remove the welds in question from the N-5 program. He was not concerned, when I asked him, he was not concerned with the safety of the welds. He was concerned with the fact that the welds did not completely meet the requirements of the code.

So with this interpretation we felt that if we could all get together and discuss it, we would be able to accept the welds as is. All parties involved did agree to our position and I don't know what prompted Howard to sign with this note on it. But when I asked the question I was told that he asked his supervisor if he would be permitted to put this on and his supervisor said yes, and as you can see it did show up on the ---

INVESTIGATOR WILLIAMSON: And who was his supervisor?

MR. BRESSLER: Robeson at that time, Harold Robeson.

Now I do also want to state for the record that it

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was my understanding that all the penetration assemblies

listed on this list had been hydrostatically tested at the

time that the NRC was sent to us. We have since found out

that that was not the case, and that has also helped us in

taking the position, the strict position that we have taken

for physical witnessing of at least a portion of the weld,

the bottom part that we can see, with our proposed fiber

optics or visual approach.

From the point of view of engineering, you asked me did I feel, and I think the last question before we broke was did I feel the welds were adequate, and I mentioned that from structural review yes. The material was the right material and the radiographs looked good.

From the safety point of view, I mentioned some of them just a few minutes ago talking about the confidence level that we have in this vendor, Tube Turns.

And then, finally, the approach that we are taking on the same penetration assembly welds in Unit 2 will give us a history of performance on those welds for Unit 2. It will now raise the confidence level to a 50 percent population because we are going to be looking at all of them in Unit 2, and if there are any problems detected, we intend to go back to Unit 1 during startup.

Now remember all of these have already seen their 1.25 hydro during which they are not inspected, that being

a safety consideration. So if there is any weld where a crack is propagating, we don't want anybody looking at that weld should it go bad. So we hold the hydro pressure for 10 minutes and then reduce it to three-quarters of the test pressure or the design pressure, whichever is least. So it is always at design pressure.

Then at that pressure where we don't expect any further structural damage to occur, we inspect the welds.

Further to your question of adequacy. I was a service engineer with the Babcock and Wilcox Company and attended many fossil boilers where the welds were in pipes about the same diameter and thickness, wall thickness as these.

As a student engineer I was given the responsibility of walking around with the authorized nuclear inspector looking at all the boiler welds. In the three boilers that I participated in during hydrostatic testing, in all my experience since then and with TVA the incidence of leaks on pressure boundary piping welds is infinitesimal.

If I said one percent, I would be overstating probably by a factor of five -- well certainly two but maybe even five when you count all the welds that don't leak.

So again from an engineering judgment with the

materials involved, P-1 carbon steel materials and P-8 stainless steel materials and materials that TVA and Tube Turns have been welding on from time immemorial I can make the statement that I don't believe that we will find any leakers.

INVESTIGATOR WILLIAMSON: Then from a safety standpoint or a technical standpoint you don't feel that there is a problem with these particular welds?

MR. BRESSLER: Right.

INVESTIGATOR WILLIAMSON: Do you think it violates the code requirements?

MR. BRESSLER: It violates the code requirements that they should have been uncovered and available for examination for leakage.

INVESTIGATOR WILLIAMSON: Does it impact at all on the QA program?

MR. BRESSLER: I don't think so, because remember that this is an NPT stamped item and came to TVA has an NPT stamped item. What we are seeing here is a lack of communication where the field didn't know that the welds had not been hydroed. Some people in engineering new that the hydro waiver had been granted.

To the best of my knowledge, Codes, Standards and Materials personnel did not know that the hydro was granted, but I cannot make that statement totally

conclusive because I don't have all the information available.

INVESTIGATOR WILLIAMSON: Now once you became aware that TVA had waived the hydrostatic tests and requirements and that these Tube Turns penetrations were in place and had welds that could not be observed during hydrostatic testing, was it your position that this was merely a violation of code requirements and, if so, what was the extent of your concern about that? Was this something that you had considered as far as reporting? Did you ever consider reporting this as a 50.55(e) or a Part 21 violation?

MR. BRESSLER: When I became aware of the problem I approached it in essentially the mental check list way in which I approach any of these problems.

First, since it was a vendor action, I went to the contracting engineer and we made contact with Tube Turns to determine what the status of the welds were when they shipped. They could not give us the answer immediately but, as I mentioned earlier this morning, Mr. O'Toole, P. J. O'Toole, who used to work for the company and still is a consultant to them, was also a consultant to us on a different matter, the weld repair of bellows.

Mr. O'Toole was in my office when we were talking to Tube Turns and he said that he would see what he could

do, and when he went back home he went to the plant and he looked through the records and called us back two days later to tell us that no, that those welds had not been -- that the process pipe had not been hydroed.

INVESTIGATOR WILLIAMSON: Do you know if this was a contractual requirement that they be hydroed before being shipped to TVA?

MR. BRESSLER: I would have to go back to the specs. I would have said yes, because if we worked on this specification we would have made it a contractual requirement, and when I say "we," Codes, Standards and Materials because we were aware of this problem. This was not the first time this came out.

The question of inaccessible welds in penetration assemblies, I became aware of that in 1970 when I was working for Taylor Forge designing the flued head fittings and the fact that we were trying to get into the business of supplying penetration assemblies.

In fact, we supplied penetration assemblies to TVA for Sequoyah through Pathway Bellows. Pathway Bellows bid with our fittings and we bid ourselves, and Pathway Bellows was \$600 under so they gave it to Pathway Bellows, but we had to do all the work on the stress analysis and investigation.

It was our position at Taylor Forge that we had no

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problems, because being pipe fabricators Taylor Force had hydrostatic facilities, hydrostatic test stands that could be used to test. So we at no time at Taylor had any desire to waive the hydrostatic test.

I don't know why Tube Turns waived, except for the possibility that some of the large penetration assemblies would have required facilities that they didn't have. That should not have prevented them from doing the small ones. But instead they got a blanket waiver, and again I think, and I am getting so old that I have to put caveats in my positive statements, I can't believe that I would have waived hydros on all penetration assemblies if it had come to me for review.

INVESTIGATOR WILLIAMSON: Who do you think was responsible for that?

MR. BRESSLER: Well, the system at TVA is that we have a contracting engineer, and this contract would have been in the Mechanical Engineering Branch, and the contracting engineer might have looked up the -- in fact, they might have called us and asked the question can hydrostatic testing be waived for the systems test, and not tell us the specific application, and "us" meaning Codes, Standards and Materials. And the answer to that question would have been yes, and we would have referenced paragraph NC-80-233.9, which specifically makes that provision in the

code of record for these plants.

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But their statement might have been made for piping subassembly, which is what the code says, but the question might have been asked on a subassembly that included a guard pipe, and we wouldn't have know about it over the telephone.

It might even be that we actually agreed to the waiver, but not knowing what we had agreed to in engineering. So who is at fault? Again, probably a non-rigid documentable quality assurance program. We didn't have a rigid documentable quality assurance program. We had a quality assurance program which in the period of '73 through '77 was not as sophisticated as we would make it if we started with it today. We know a lot more about what will be expected in the future today than what we did in '70 through '75.

INVESTIGATOR WILLIAMSON: Let me ask you, you gave us this ASME Codes and Standards' interpretation; is that correct?

MR. BRESSLER: Well, there, the article that you have there talks about a position from the Board on Nuclear Codes and Standards, which is the senior Board to the Boiler and Pressure Vessel Committee and which represents the ASME Council on Nuclear technical items.

INVESTIGATOR WILLIAMSON: Did you know about the

results of this when the disposition for 5609 was rendered?

MR. BRESSLER: Yes, because we got that
interpretation prior to our January meeting of 1984.

INVESTIGATOR WILLIAMSON: Then why wasn't this reflected in the disposition of 5609? I mean it looks like we went through a lot of trouble in trying to explain the use as is here when it could have been done ---

MR. BRESSLER: Probably if we had done it and if we had given Howard a copy of it, it might have been -- by the way, Howard, from what I recall, wasn't worried about the welds themselves. He was worried about just stating that to the best of his ability they met the code.

I haven't seen this package here. So I can't tell you whether he has got it in any of his. But I did mention it at one of the meetings where we all got together. I didn't have this obviously, but I had the typewritten copy that we acted on at our main committee meeting, and I can get that for you from my files, the typewritten copy.

INVESTIGATOR WILLIAMSON: I want to ask you about something, and I have had several explanations of this.

This last paragraph here in this letter of May 17th, 1984 from J. C. Standerfer to Guenter Wadewitz.

This says this nonconformance -- referring to 5609 -- was made ---

MR. BRESSLER: --- significant for the sole

purpose of documenting the use as is disposition if the ANI could not accept the disposition. This would require removing the aforementioned Tube Turns welds from the N-5 program. If the ANI can accept the use as is disposition, this will require no further action and formal revision is not required.

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INVESTIGATOR WILLIAMSON: Is that a statement of threat or intimidation to you?

MR. BRESSLER: Oh, no, no. I put it there -- in fact, those are my words.

INVESTIGATOR WILLIAMSON: Those are your words?

MR. BRESSLER: Yes. I put that there to give

Howard the option of not signing. I knew that within his

narrow interpretation he might have difficulty signing. So

I said I have got no problem with these welds, I, Mark

Bressler as TVA's codes and standards expert. I am willing

to go to the NRC, because if we take it out of the N-5

program, then I have got to sell it to the NRC because we

have got an ASME void in our piping.

I said if he can sign, no further work is needed.

If he cannot sign, I made it significant so that it wasn't reportable. In other words, we were not trying to keep this from the NRC in anyway. And if he couldn't sign, then our next step would have been to make a presentation to the NRC and make the same statements that we made before, and

if Region II accepted it, then those welds would not have been listed in our N-5 data report form, but would have been accepted for the licensing effort.

That was my approach and, believe me, again the English language can be read any way you want it. When I put those words there that was my safety net to Howard, because the little I knew him at that time, he had impressed me with his knowledge and with his integrity.

INVESTIGATOR WILLIAMSON: When I read that, it looks to me like an either/or proposition.

MR. BRESSLER: Yes, that is exactly what is there.

INVESTIGATOR WILLIAMSON: Either you sign it or if you don't sign it, we are going to take it off the N-5 package and it doesn't matter whether you sign it.

MR. BRESSLER: Oh, no. As a Cuban boy speaking English, those words said can you sign it. If you can sign it, hey, you guys, we don't any any further work. If you can't sign it, hey, you guys, we have got to take this out of the N-5 program.

So there are two inflections in this sentence.

There is the inflection that addresses the ANI and his concerns, and there is the inflection where I am trying to report to TVA what we have to do one way or the other. I put that phrase in myself in this letter.

INVESTIGATOR WILLIAMSON: And you as codes and

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 standards people, do you routinely delete code items from N-5 packages?

MR. BRESSLER: No.

INVESTIGATOR WILLIAMSON: That is not done very often, is it?

MR. BRESSLER: No. The only other one that I remember recently was again Howard found a weld that was buried in concrete that we could not come up with documentation on. In our documentation retrieval there was no way we could document it. To get to the weld we would have had to destroy a whole portion of the building. It was a Class 3 weld and it was really in a non-primary safety related item.

It was an ASME 3 weld, Class 3, and we all discussed it at great length and we tried to figure out a way of drilling through the base plate so that we could see the bottom of the weld and then pressurize it, and then we finally decided that the amount of effort for this weld, that if it leaked it wouldn't affect anything and it is a system that is seldom pressurized anyway. So we decided to delete that weld from the system, and Howard signed that one without the note.

So we were very sensitive to his needs and, as I said, this man had an iron-clad vest. I mean there was no question that if he wasn't happy with what he was signing,

1 he wouldn't. In fact, he eventually was offered a 2 promotion. He was promoted to Assistant Regional -- I 3 forget what the title is, Higginbotham's title, Assistant. INVESTIGATOR WILLIAMSON: Assistant Regional 5 Manager? 6 MR. BRESSLER: Right, Manager. But the way I 7 understand it, he had already made a commitment to go 8: elsewhere. 9 So those words in no way were intended to force. 10 In fact, they are the exact opposite. They were there as a 11 safety valve. 12 INVESTIGATOR WILLIAMSON: In your opinion, with 13 your vast amount of experience, would you have been able to 14 sell that to the NRC? 15 MR. BRESSLER: Oh, yes. We had done stress 16 analysis review and we had looked at our stresses. 17 welds were not in a stress condition. When I was with 18 Taylor Forge I commissioned a three-dimensional finite 19 element analysis that showed that the failure would not 20 occur in the pipe, while the failure would occur in the hub 21 of the forging. 22 So from my background I knew that even if the weld 23 had a leaker, it would not be cause for structural failure. 24 INVESTIGATOR WILLIAMSON: Can you tell me why NCR

6420 was written?

MR. BRESSLER: I would have to check where this fits on the Unit 2 system, and I can do that with a quick phone call, but the date of October '85 is prior to the date that we started having meetings on this.

I went to Watts Bar in December. I know that because I didn't put it in on my December travel report, and I have got to put it in now. I am still behind.

And Craig Kantrell, a young man that works with us, went with me to the meeting and that is where we were working on the details on how we could physically observe

But one of the meetings was December and I think at that meeting this NCR was rewritten. You know, we decided to rewrite this NCR. Do you have a Rev. 1 to this

This as when John contacted us first to try to get -- is this the one that says reference to the original NCR? (Pause.)

INVESTIGATOR WILLIAMSON: I am not aware of there being a Rev. 1.

MR. BRESSLER: Okay. This one replaced the one that first came out.

INVESTIGATOR WILLIAMSON: I thought that was the first one initiated by John Self.

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MR. BRESSLER: Or did we get called? I am hazy on this because during this period of time I was looking at an awful lot of NCR's. From memory I think we were contacted to see if we would accept dispositioning in accordance with the way we did in Unit 1, and I said no, and particularly when I found out that some of the so-called ones that we had dispositioned before had not yet been pressure tested. Personally I felt betrayed.

Craig then got together with John. He went down by himself to Watts Bar, and I think this NCR came out of our telling them to NCR the condition and this describes what was hydroed already and what had not been hydroed and that we were looking at methods of resolving it.

Now in the period of time between the end of October and the end of December is when we made contact with the firm that had the moisture sensitive tape. We met with that party. He did some research work for us and came back with a proposal which Craig Kantrell handled. He had contacted Hoffa to discuss with them about using acoustic emission leak detection, and we were going all over the place to see what we could do to physically verify that low leakage existed.

At the December meeting, which I think was before we went on vacation, about December 19th of thereabouts, is when we came to the agreement that we would start working

with fiber optics.

In January Craig made two trips to Watts Bar, and they used a short fiber optic instrument that they had there and it worked out fine which gave them a lot of confidence. Then the did the next test using a tube to go through the insulation and they were able to reach a much deeper penetration. I think we had a 12 foot and we were able to reach a 10 foot, a weld that was 10 feet away.

We have located an 18 foot at Browns Ferry, and for the deep ones we are going to have to use either — in fact, the proposal that we have sent back to Construction on the ways to approach this review, we offered them either purchasing a 25-foot long fiber optics or cutting a clam shell from the guard pipe between the two walls which would then reduce the length to the weld and going in there with the fiberscope and examining the weld during pressure, pressurization of the system and when the weld is acceptable withdrawing and reducing the pressure and then putting the clam shell back on, welding it and verifying soundness of the clam shall with something like a vacuum leak detection because that is not a pressure retaining weld.

I don't have that letter, but you may have it already or we can make it available.

INVESTIGATOR WILLIAMSON: I have one here.

2 That is the one. This is the resolution and it is 3 addressing 6420. Is that the one we are looking at? INVESTIGATOR WILLIAMSON: Yes. MR. BRESSLER: Okay. 6420 was written when we · 6. found out that some of the welds that were listed here had 7 not yet been ---8 INVESTIGATOR WILLIAMSON: I guess, Mr. Bressler, 9 the obvious question to me is why is the resolution, the 10 disposition of 6420 different than 5609? 11 MR. BRESSLER: Time. 12. INVESTIGATOR WILLIAMSON: The conditions hadn't 13 changed. The welds are the same. It came from the same 14 vendor. It was installed the same way. What has time 1.5 changed? 16 MR. BRESSLER: We were under the pressures of a 17 plant that had been way overextended beyond its original 18 schedule. We had great company team effort to get the unit 19 ready for low-power licensing, you know, fuel loading. 20 INVESTIGATOR WILLIAMSON: Was that an actual or 21 perceived pressure? 22 MR. BRESSLER: Well, it depends on what you call 23 actual or perceived. If you get a letter and it says April 24 15th, 1984 is fuel loading, and only the most absolute 25 nondiscussable items will be considered. I guess that I

MR. BRESSLER: That is not the right date.

would perceive it as saying we are going to try our hardest to load fuel, unless it is a safety question. And this particular item did not imply to me to include a safety question.

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INVESTIGATOR WILLIAMSON: And under the circumstances since you didn't consider it a safety issue, then you didn't feel that it needed the same examination that Unit 2 was getting?

MR. BRESSLER: No. The schedule that I perceived that we needed to meet, not examining those welds was not a safety problem because as part of my investigation I asked Hartford to make available to me the inspector's handbook, and I reviewed the inspector's handbook to determine whether Hartford required 100 percent review of every -- you know, witnessing for leakage of every weld, and they don't.

On that basis I said well, since some percentage can be missed because neither the code nor the the Hartford manual requires a hundred percent ANI viewing of every weld, I felt that on the basis of the information that we had gathered and the very good radiographs that we had a sound basis for engineering judgment, and that starting -- well, it took us about April back to early October, and we are talking about seven months to come up with a procedure.

At that time a seven-months' delay in fuel loading

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for this examination would have been a tremendous impact. We would have done it without question if there was a safety issue involved, such as we found -- there are many things that I can point to during our years with TVA where we have taken an adamant position that we would not permit an item to proceed in the as is condition.

But my personal relation and the relation of others on there wells was that there was not a safety issue and therefore go ahead in this case for these welds, but do not plan to do this again. Plan to review the other welds as they come up for hydrostatic testing. Now when it came up again, as I said, my reaction was violent.

INVESTIGATOR MURPHY: Let me ask you, because it is not very clear in my mind. Early on we talk about, as you view the code, that that ANI has to be completely satisfied, and if he thinks he has got a problem, you know, he can identify it. He should be satisfied, right?

MR. BRESSLER: No. If he has a problem, he should bring it to the attention of ---

INVESTIGATOR MURPHY: Oh, I understand. We have Mr. Hasner here who says I have a problem with these welds not being inspected during hydrostatic testing, right?

MR. BRESSLER: Right.

INVESTIGATOR MURPHY: He apparently is not willing to accept the fact that even though, right, we are saying

100 percent of the welds don't have to be inspected, he also has the prerogative, as I understood it during our discussion here, to inspect any weld he wants to, right? MR. BRESSLER: Right. INVESTIGATOR MURPHY: He is saying, as I understand it, that I don't think those welds are acceptable because I haven't seen them, right? I mean they have not been visually inspected during hydrostatic testing and therefore ---MR. BRESSLER: He never said that they weren't acceptable. INVESTIGATOR MURPHY: That is probably true. said they didn't meet the code, right, in his estimation? MR. BRESSLER: They didn't completely meet the

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INVESTIGATOR MURPHY: So why is it important for you, let's say, to go and determine that Hartford says that you don't have to do 100 percent? I mean what difference does it make whether whether it says you have to do 100 percent or not if the ANI says I would like to do it?

MR. BRESSLER: I wanted to know if there was any chance for coming to this type of a resolution. If it was a Hartford Company requirement, then there was nothing that I could do. I knew there wasn't a code requirement and therefore I could get a variance, and if Hartford Company

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didn't require a hundred percent, then the second party to the tripartite might be willing to accept as is.

INVESTIGATOR MURPHY: And that is?

MR. BRESSLER: That would be the authorized inspection agency. Now the words that I put in the letter were specifically in my mind, and I haven't even remembered those words until you showed me the letter, when I wrote those words it was strictly to provide the authorized inspector an out, because I know that in his interpretation of the code he could say I am not satisfied, and we could not make him deviate from that.

Now as far as forcing him to sign, I had no way of knowing that that was being done, nor was it my intent to have him forced to sign the certificate, and I think it is obvious from the words that that was not my intent. It is not what he did. He perceived, to use your words, pressure from his management to sign, and to protect himself because he knew that they were welds that he had not examined for leakage, he said this, and he asked Robeson to give him written discussion.

Now in any company rank has its privilege, and with rank you have responsibility. And this is where I have problems with these employee concerns as an individual, and that is that if I perceive an item over which I have responsibility as not being a safety issue, I

can overrule the concern of an employee of mine, but then I take responsibility for that item.

INVESTIGATOR MURPHY: How do you do that?

MR. BRESSLER: I would sign of the item. But remember, I have nothing to do with this.

INVESTIGATOR MURPHY: But would it not have been proper if Mr. Robeson thought that it was not a safety issue that Mr. Robeson sign?

MR. BRESSLER: In retrospect, since we are all brilliant in retrospect, what we should have done here is taken those welds out of Mr. Hasner's purview. He then would have been able to sign for everything but those welds, and then we would have gotten a secondary N-5 for those welds if Mr. Robeson felt that they were acceptable to the code. He could have signed for those because he also carries an ANI license.

Yes, you are absolutely right. In retrospect that is probably what we should have done. But I still stand firm on the fact that throughout our deliberations we were trying to maintain Hasner's right for his decision, we,

TVA, our side, and we never attempted to force the signing of that form because I think the letter that we sent -- I don't now if this letter went to Hartford.

Can I have that letter?
(Laughter.)

1	INVESTIGATOR WILLIAMSON: This is the May 17th,
2	1984 letter?
3	MR. BRESSLER: Yes. We are referring to the May
4	17th letter, nonconformance report, NCR 5609, NAB-84-0517-
5	258. I cannot see official distribution to Hartford. Now
6	we may have made a copy of this available.
7	INVESTIGATOR WILLIAMSON: Would that have been
8	verbally communicated to someone at Hartford?
9	MR. BRESSLER: We had to because we came to these
10	agreements when we got together at the meeting.
11	INVESTIGATOR MURPHY: I have a question a little
12	bit about that distribution. On the nonconformance report,
13	5609, the NRC is listed on the distribution I believe.
14	MR. BRESSLER: You get all of our significants,
15	don't you?
16	INVESTIGATOR MURPHY: They are on the
17	distribution.
18	MR. BRESSLER: Yes.
19	INVESTIGATOR MURPHY: Whereas on the letter here
20	the NRC is on the distribution, and does that make any
2.1~	difference?
22	MR. BRESSLER: No. The moment that we would open
23	up a 50.55 we would have to start making reports to you.
24	INVESTIGATOR MURPHY: Okay. Let me ask you a
25	question.

MR. BRESSLER: Oh, by the way, since we are talking about that reportability, you mentioned Part 21 and how does Part 21 apply.

INVESTIGATOR WILLIAMSON: I was asking if that was a consideration.

MR. BRESSLER: It couldn't apply. The vendor did everything that the code permitted him to do. And when the licensee takes responsibility for the part, we are not covered by Part 21. We are covered by 10 CFR 50.55. So I think that item can be put to bed, that part of it.

INVESTIGATOR MURPHY: Mr. Joest has worked for you; is that correct?

MR. BRESSLER: For and with.

INVESTIGATOR MURPHY: For how long?

MR. BRESSLER: I came to TVA in June of '71. Walt came in '72 I think.

INVESTIGATOR MURPHY: Have you been closely associated then during all this period? I mean you both worked on the same program ---

MR. BRESSLER: He has either been a subordinate to either Robert Harris, who then reported to me, or he reported to me directly or he reported to Bob Jesse, who reported to me during the period of time that I was Supervisor of the Codes, Standards and Materials Section.

And since I became Staff Specialist, he works with me on

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the various assignments we do together.

INVESTIGATOR MURPHY: Do you consider Mr. Joest competent in his knowledge of the ASME code?

MR. BRESSLER: Yes.

INVESTIGATOR MURPHY: Highly competent or how do you rate him?

MR. BRESSLER: High.

INVESTIGATOR MURPHY: We are not here to play cames.

MR. BRESSLER: I know that, and I hope that by now you realize that I don't want to play games.

INVESTIGATOR MURPHY: Good. We went over the five points here that led to the accept as is standard, and the basic question that we asked Mr. Joest is what bearing does any of this have on the issue, and I would like if you would to go over those five items and tell us what bearing that had on the code requirement to visually inspect these welds during hydrostatic testing and how that justifies the use as is. I know that you may or may not have written that.

MR. BRESSLER: Well, Pete -- and again, you have to remember that since I became a staff specialist, I am a consultant to the people. When they have an NCR that they want me to work with them, just walk into my office and we start. So I work with them.

INVESTIGATOR WILLIAMSON: I think Pete Ensler indicated that you had quite a bit of input on this particular disposition.

MR. BRESSLER: Yes. This one, because of my experience as a forging manufacturing with penetration assembles and other things, the guys would come to me. Now on a welding issue they probably wouldn't talk to me.

INVESTIGATOR MURPHY: Okay. Could we cover those five particular items and you tell me your opinion of how they ---

MR. BRESSLER: Item 1 is circumferential welds that were fabricated and inspected in accordance with ASME 3, Division 1 with ANI involvement at Tube Turns just to establish the fact that the welds were, to the extent that Tube Turns worked on them, met the code. They were radiographically examined and the Class 1 welds were inspected in accordance with the code.

INVESTIGATOR MURPHY: And does that relieve you of the code requirement?

MR. BRESSLER: No. If the final question -- and I mean we can save a lot of time.

INVESTIGATOR MURPHY: Sure.

MR. BRESSLER: If the final question is does that relieve us of not meeting the requirement that the weld should be uncovered, the answer is no. I have said that

several times. I don't play games.

INVESTIGATOR MURPHY: All right. That's fine.

MR. BRESSLER: These are the reasons for justification of my engineering evaluation. I have never once said we were right. I said we were wrong, but. Is that clearly understood.

INVESTIGATOR MURPHY: Sure.

MR. BRESSLER: And if we had to do it over again, we would not be wrong, because it would have been done right the second time. So, please, don't try to trap me because ---

INVESTIGATOR MURPHY: Oh, no, we are not trying to trap you. We are trying to get some clarification.

MR. BRESSLER: I'm here to tell you where I stand and where I stood to the best of my recollection. In making an engineering evaluation for use as is I have to use my experience, my judgment, my knowledge and my capabilities.

INVESTIGATOR MURPHY: First, let me tell you something. We fully understand that and we respect that. That is why I am asking when you ask a person at the site what does this mean to you, and someone tells you well, this is the justification for the use as is, you know, and the acceptance of this thing. And you talk with the guy a little longer and you say ---

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1 MR. BRESSLER: You are absolutely right,
2 individually they don't absolve the basic question of why
3 weren't these welds uncovered. Now, unfortunately, we
4 don't connect the guard pipe with zippers. If we did we
5 wouldn't have had this problem.

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If we had known in advance in sufficient time that we had a problem, we could have taken care of the problem, like we are taking care of it for Unit 2. It is not a safety problem. It is a performance problem. That is why on Unit 2 where I know we have got time and we are not impacting anybody's schedule, we are costing money, but we are not impacting schedule, we are going to do it right.

And if we find something wrong in Unit 2, you may rest assured that we won't let Unit 1 start until we do the same thing to Unit 1, and that is our position. And I think management certainly will support that.

In the engineering evaluation, which is what these points are here for, one, the welds had been properly inspected and had met another ANI's evaluation. Remember, he did not see hydro. Item one doesn't absolve the problem.

The hydrostatic test was performed on all welds that had been hydroed and they didn't fail. There was no gross structural failure. A good point on the side of the welds.

INVESTIGATOR MURPHY: On the side of the TVA welds.

MR. BRESSLER: Of keeping the welds. The TVA welds didn't leak. The Tube Turn welds didn't fail. So that means there were no gross flaws in those welds.

The pipe installed by Tube Turns was hydrostatically tested, the pipe itself now. The pipe itself had gone through hydro.

This additional welds discussed in the first paragraph and the inaccessible welds -- well that is not the way that should have read. The additional welds discussed in the first paragraph which were visible were so close to TVA welds, and I am talking about the ones that were outside the guard pipe on the process pipe. The TVA welds which were inspected, it is reasonable to assume that leakage from these welds would have been detected during the inspection noted in Item 2.

Now what I said is even though we didn't document that the Tube Turns welds which were open, the ANI didn't note it on his log and TVA QC didn't note it because they were not TVA welds. We were only looking at TVA welds.

My position is that if you have got a weld that is this far apart, a bubble of water in one of the welds can be readily seen, particularly to a trained eye of a QC inspector or an ANI.

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So on that basis I absolved the outside welds which had been made by Tube Turns, the ones that were not covered up by the guard pipe. I see now that that doesn't read right. It should have said other than the inaccessible welds.

INVESTIGATOR MURPHY: Okay.

MR. BRESSLER: And then it would require significant rework to remove the insulation installed by the manufacturer to expose the welds.

Well, that item addresses the portion of the study that we did. We investigated to find out if this weld package was the type of welds that come in canisters and can be buckled and slid in, because if that was the case, we were going to yank them out, fish out all the insulation and redo the hydro.

But then we found out that it was I think Owens
Corning or something like that fiberglass type of
insulation and had been in there so long that if we tried
to pull it in any way we would destroy it, and now with a
completed plant we wouldn't have proper access to push this
type of flexible insulation back in in these 20 or 24-foot
lengths specifically.

The final product would have been worse. We might have known that the welds didn't leak, but the insulation aspect would have been worse, and that to me would have

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 been a more significant condition because we would have started impacting concrete temperatures.

So with all these concepts, the fact that the welds that we could see hadn't leaked, subconsciously, although I wasn't thinking in terms of a sampling plan, what I was saying is we know that many of the welds were visible and didn't leak, that they had passed the required volumetric examination and had been acceptable to the code for use with the code at that point and that they had successfully taken the one and a quarter hydro without failure, I felt there was no benefit to be gained from the safety point of view to try to complete that last requirement based on that aspect of the interpretation.

So, one, I didn't think it was a safety problem; two, I felt that correcting the problem would have resulted in a less overall safe condition or functional condition; and, three, from my engineering judgment I didn't think that it warranted -- and I just continue to say that probably I was looking over my shoulder at the schedule, and that has to have influenced my decision-making.

Today I don't have that schedule, and therefore I can make an even better engineering position, and that is what we are doing.

INVESTIGATOR WILLIAMSON: Because you don't have that schedule, has there been any consideration of going.

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back in Unit 1? I understood there was going to be a sample program or something in Unit 1. Is that not going to happen?

MR. BRESSLER: I have asked Craig to work with John Self and Lenny Johnson's people. If time continues to be available in Unit 1, and I haven't committed to this in writing, but I have asked that if there is time available in Unit 1, and if the employee concerns program still gives us additional time, after we work out our procedure in Unit 2 welds and become good at it, there are systems that have to be pressurized even during our maintenance mode, and what I have asked Craig is to investigate whether we can pressurize them to design pressure, because we don't have to go to one and a quarter again, to bring them back up to design pressure, hold it at design pressure for a half hour and thereby hoping that if there is any capillary failure which could result in a moisture type leak, you know, a bubble type leak, the half hour should be sufficient to get pressurized water through any flaw of that type, and then do the inspection for those systems to become available during our constraint, again to try to build confidence on the other welds.

From the point of view of general confidence, there are utilities that did do additional work to get inside the penetration assemblies and look at those welds,

and to the best of my knowledge, not one of them reported a leaker.

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So, again, I still feel very confident that even if we can to do any of this work in Unit 1, we have a non-safety problem.

INVESTIGATOR WILLIAMSON: Is there anything that you have to do as an end certificate holder when you are unable to comply with the code, is there anything that you have to do?

MR. BRESSLER: Issue a nonconformance report and get resolution and either get a code interpretation, a code case, a revision to the code, or go through that exercise there.

If in any one of those you can't resolve your problem, then get out the jackhammers and start, but in this case it would be a terrible waste of good, sound welds. I have no technical reason to consider that these welds have any problems with them.

Again, part of the experience factor is that Tube
Turns is an older company and the welders that they use
have been in that shop forever -- not now any more because
they have really cut down, but these were welders who could
weld 16th inch thick type 321 bellows, and then go from
that and weld a two-inch thick pipe. As I say, I have been
there, and if you had been there you would have the

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confidence level that I have.

INVESTIGATOR MURPHY: Let me just ask you. There was a meeting on I think January 24th and it might have been at the site with yourself and Higginbotham and Ireland and Robeson and the ANI's concerning ---

MR. BRESSLER: Right. That is the meeting after we had come to an agreement that we presented it to them, and we did it at the site to meet the what we called the gag order. It meant our ability to talk about a Watts Bar item. So we met at the site and talked about the various approaches that we had thought about, and that is when we finally decided that we were going to investigate the moisture sensitive tape, acoustic emission detection and visual optic.

After that the activity falls back into

Knoxville. Craig Kantrell runs the process through. We
get a vendor ready to work on a moisture sensitive tape and
we started working on a contract. We then made one more
try with the fiber optics, and that worked so well that we
decided this is the way to do it, because all he was going
to do was look visually, and the image was so clear and the
would see as much or better than if he were actually
viewing the weld itself.

So we scraped the other approaches, which were high tech, but would have required getting the NRC in and

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showing them a demonstration and satisfying them that this pseudo visual or substitute visual was doing the same as a visual examination.

So that meeting was really to tell them that we weren't going to handle Unit 2 the way we did Unit 1 because they had expressed concerns.

INVESTIGATOR MURPHY: Okay. Let me ask you a question. This is an SIS daily record duplicate from the NI files, we picked up several, and it is 86-16 is the number, and it says Mr. Higginbotham also stated that the ASME does not address the resolution methods of resolving nonconformances, and what he is referring to is the fiber optics.

MR. BRESSLER: That is a correct statement.

INVESTIGATOR MURPHY: He also stated that the ANI doesn't have to witness every weld. However, it might be a good idea to witness all of these.

And I will tell you why we ask this question. We have told by several folks that the reason why this statement was made is that there had been some indication that an investigation was being conducted in this matter.

Do you have any idea ---

MR. BRESSLER: You are asking me to conjecture on something I don't know.

INVESTIGATOR MURPHY: Do you know if that

statement was made?

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MR. BRESSLER: I have never seen that thing. Oh, Higginbotham made the statement, and in the context where he made it it was a very correct statement, which was there is no requirement to look at every weld. As I mentioned, I paraphrased one of the paragraphs from there, the item that again doesn't say, that doesn't require that the ANI look at every weld.

By the way, conversely, they require the ANI to look at every radiograph. So again we can prove that when Hartford wants a hundred percent, they specify it. My reaction would be that Higginbotham was probably aware, because the letter had already come out, right, at that time and the contract had died, the construction contract. I would think that he was probably sensitized and made this statement to say, hey, we are in a situation where we cannot have any appearance of not meeting the code in its entirety. Even though the code permits us latitude, let's not do it with these. That would be my interpretation.

INVESTIGATOR WILLIAMSON: I am going to move on to another area in the few minutes that we have left.

MR. BRESSLER: Okay.

INVESTIGATOR WILLIAMSON: Have you ever had anyone, and primarily Guenter Wadewitz, or any of his people contact you directly from the site and complain of

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the performance of ANI's?

MR. BRESSLER: Guenter Wadewitz, never.

INVESTIGATOR WILLIAMSON: Anyone else, John Self, Charles Christopher or Herb Fisher?

MR. BRESSLER: Let me rephrase the statement.

INVESTIGATOR WILLIAMSON: Okay.

MR. BRESSLER: Contacting me directly, no.

Contacting Walt directly, yes, and Walt coming to me, yes, and me going back to request a hearing with the region, yes.

INVESTIGATOR WILLIAMSON: Do you recall the circumstances?

MR. BRESSLER: There have been several circumstances. The first one was McGraw and his drinking problem. The second one, and I don't know these names, but we can find them, an ANI at Phips Bend was coming in at 10:30 obviously with a hangover. He was not an alcoholic, but he had long nights, and departing earlier and showing eight hours at work.

This behavior was reported to us by a TVA employee. I had a dilemma. What do I do? I do not control that ANI, TVA does not control that ANI, and when the ANI knew that his supervisor was coming he was punctual.

So in that case Walt and I got on the phone with Robeson and at the next meeting that we had with Robeson, not in writing, we notified him of the party and some circumstances that could be verified. They took action and warned the individual and everything worked out fine for a period of time, and then I don't recall whether he decided to leave or he started slipping off again, but eventually he left the site.

The third incidence -- now you are asking specifically performance. There were comments about the nit-picking of Hansen, and I say, hey, that is personalities and you learn to live with a guy like that.

The last one was the new man who came from Bellefonte.

INVESTIGATOR WILLIAMSON: Henry Best.

MR. BRESSLER: Best. And Walt came into my office to pass on a message that Best had appeared at the site saying that he was going to show Watts Bar how things were done and a few other comments.

Again, I felt that since those comments were being made to TVA employees that I had to notify his manager so that they could work this out. Again, I don't think we had any problems with Best's technical performance, and I reported to Robeson on the telephone about what Walt told me.

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can't recall any. There was one direct call on McGraw's 3 drunkenness. INVESTIGATOR WILLIAMSON: Do you recall being 5 contacted by someone on site concerned about the amount of 6 time the ANI's were spending with QTC personnel? 7 MR. BRESSLER: I was surprised that the ANI's 8 could spend any time with QTC personnel since they weren't 9 TVA employees. 10 INVESTIGATOR WILLIAMSON: Did you receive that 11 call or were you just informed of it? MR. BRESSLER: I was informed. I don't remember a 12 13 Nobody would have complained to me about that. call. 14 INVESTIGATOR WILLIAMSON: I think Mr. Joest might 15 have received the call and relayed his concerns about that 16 to Mr. Higginbotham. 17 MR. BRESSLER: It is possible. I know that Walt 18 mentioned it to me. That is when I made the statement, howcan QTC be interviewing our ANI's since their contract is 19 20 to take TVA employee concerns, and that question was never 21 answered. INVESTIGATOR WILLIAMSON: My next question is do 22 23 you feel like the ANI's have the same rights as TVA employees to render concerns, quality concerns and what-24 25 not?

But in direct answer to you, no. Direct to me I

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MR. BRESSLER: If you are asking me as a human being in my bull-of-the-woods approach to things, my answer is no. The ANI has his path of concerns and he should have contacted his management. Technically he doesn't work for TVA.

If I wanted to really get into the legality of the thing, I would say the moment he starts to complain to QTC he violates his third-party independence. There are very strict paths for him to go and for us to go and, as I have described today, there is a very elaborate appeals and rehearing process.

So I was very surprised. I shrugged my shoulders because by now nothing surprises me. It drives me insane, but it doesn't surprise me. I just can't -- I am starting to feel like a dinosaur in this era, and I am getting ready to become extinct.

I have never felt harassed by my management, and I have stood up to my management. People have told me, when I made that statement, well, you can get away with it. And then when I step back I say, yes, I guess they are right. I am in a unique situation. If my management tries to lean on me, I just tell them to lay off.

INVESTIGATOR WILLIAMSON: Do you feel harassed by your management?

MR. BRESSLER: No. Pressures of scheduling would

1 be the only thing that I could say bothered me. When five 2 priority one items have to be answered by 2 o'clock the 3 same day, that is when I feel harassed, but that is not the harassment we are talking about. INVESTIGATOR WILLIAMSON: Are you aware of at any 6 time that you or any other representative of TVA has ever 7 threatened or implied or suggested or given any indication 8. verbally or in writing to Hartford, Atlanta, that the 9 contract between TVA and Hartford might not be renewed 10 because TVA was not satisfied with the performance of their 11 ANI's? 12 MR. BRESSLER: Not on our side of the fence at 13 all. 14 15 16

INVESTIGATOR WILLIAMSON: Have you ever heard an individual from Hartford make the statement that any ANI who did anything that resulted in the cancellation of a TVA contract would be fired?

MR. BRESSLER: No, sir.

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INVESTIGATOR WILLIAMSON: Are you aware of an ANI being refused access to an open-items list at Watts Bar?

MR. BRESSLER: By TVA?

INVESTIGATOR WILLIAMSON: Yes.

MR. BRESSLER: That is a no-no. No, I am not aware of it, to answer your question, and, two, I am appalled because the code clearly states free access to the

1	ANI. No, sir. And if I had become aware of it, there is
2'.	another case where I would have been there in front of the
3	ANI demanding entry.
6	INVESTIGATOR WILLIAMSON: There was at least one.
5.	MR. BRESSLER: I am sorry to hear it. I am very
6	embarrassed. That should not have happened at TVA. I
7	think we are smarter than that.
8	INVESTIGATOR WILLIAMSON: We have talked to a
9	number of people over the months.
10	MR. BRESSLER: I have been wondering why you
11	hadn't gotten to me sooner.
12	INVESTIGATOR WILLIAMSON: Well, we have been
13	involved in several things.
14	MR. BRESSLER: In fact, I started to feel that I
15	was the designated hit person and that you were just
16	getting all your nuts in a row.
17	INVESTIGATOR WILLIAMSON: No.
18	(Laughter.)
19	It had been, and not to use names, but it had been
20	expressed to us by one of the individuals we interviewed
21	that you had either or intimated to Higginbotham that he,
22	this particular ANI, may be the cause of Hartford losing
23	their contract with TVA.
24	MR. BRESSLER: Not me.
25	INVESTIGATOR WILLIAMSON: Let me finish. And this

individual further stated that you considered him to be the most incompetent, unreliable and unprofessional inspector that you had ever dealt with. Do you recall making those comments about an ANI?

MR. BRESSLER: Not to my mind. I have never even met Mr. Best.

INVESTIGATOR WILLIAMSON: Have you ever been that concerned about an particular ANI where you would make a statement such as that?

MR. BRESSLER: No. My only comments of any nature like that would have been when McGraw was having problems with our people. It was getting to be a personality clash every morning. I did say that if he cannot get straightened out, then I want him off our site. He is not an acceptable ANI to us because of his problem.

With Best, up to the meeting in January I had never met Best, and my only contact with Best's situation was through Walt. If I made those statements, there was no basis for me to make them on, and they would have had to have been made in a fit of anger. I don't remember making them.

INVESTIGATOR WILLIAMSON: Let me ask you something in conjunction with the NCR's. Once the N-5 package is completed and signed off by the end certificate holder, we have what I think is referred to as an N-3.

- 1	MR. BRESSLER: All R=3 lorm.
2	INVESTIGATOR WILLIAMSON: An N-3 form which is
3	signed off by the ANIS.
4	MR. BRESSLER: Well, in our case it would be the
5	ANIS because, as I mentioned, the ANIS is our ANI. The
6	reason that we were involved, Knoxville Engineering, is
7	that we were the end certificate holder and we signed at
8	the bottom of each N-5, but then putting that hat aside, we
9	now took on the owner's designee hat and we handled N-3
10	data report form.
11	INVESTIGATOR WILLIAMSON: My question is in
12	retrospect what is the status of the N-3 now with the
13	MR. BRESSLER: It was signed by Robeson, who was
14	our ANI.
15	INVESTIGATOR WILLIAMSON: It was signed by Robeson
16	who was your ANI, but now with the change in attitude
17	towards the disposition of 6420, does that have any impact
18	upon
19	MR. BRESSLER: No. 6420 is Unit 2.
20	INVESTIGATOR WILLIAMSON: That's right.
21	MR. BRESSLER: And the N-3 that we signed is Unit
22	1, and we will have another Unit 2 N-3.
23	INVESTIGATOR WILLIAMSON: I understand that, but
24	does that affect the status of that?
25.	MR BRESSLER. No

1 INVESTIGATOR WILLIAMSON: It doesn't. 2 MR. BRESSLER: Why? 3 INVESTIGATOR WILLIAMSON: Because you are handling these others differently. 5. MR. BRESSLER: It's a different unit. 6 INVESTIGATOR WILLIAMSON: But with the same 7 problems. R MR. BRESSLER: The ASME code has tunnel vision. 9. Unit 1 is a job. Unit 2 is a job. We have an owner's 10 certificate for Unit 1 and we have an owner's certificate 11 for Unit 2. 12 INVESTIGATOR WILLIAMSON: But we have the same 13 problems in both units. 14 MR. BRESSLER: Because they are identical units 15 Now we will handle Unit 2 -- no, Unit 1 was dispositioned , 16 and Unit 1 is complete. Going back into the N-5 program 17 now is probably code-wise incorrect. Anything that we 18 should be doing now should be done under a Section 11 19 program. 20 INVESTIGATOR WILLIAMSON: Because it has been 21 turned over? 22 MR. BRESSLER: Because it has been turned over, 23 yes. Unit 2 is still a Section 3 plant completely. And, 24 in fact, I am going to have to be very careful in what I

said earlier about going back to as many Unit 1's. I am

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going to have to be careful. I may have to do those under a work package rather than little Construction do it directly. I am probably going to have to get Power to gives us a work package and then Construction can do to Unit 3.

INVESTIGATOR WILLIAMSON: Unit 1.

MR. BRESSLER: Yes. Section 11 permits work to be done using Section 3 work. Since we are on a Section 11 mode in Unit 1, to do any of the work that we are doing on Unit 2 on available Unit 1 penetrations will probably need a Section 11 work package before Construction can go back to those Unit 1 penetrations and redo the visual examination procedures, and I had better remember to tell Self about that.

(Pause.)

INVESTIGATOR WILLIAMSON: Do you have anything else?

INVESTIGATOR MURPHY: No.

INVESTIGATOR WILLIAMSON: Mr. Bressler, I have only one more question for you. Have you personally or are you aware of anyone who has placed any pressure either internally or externally on Hartford management or have you been pressured by your management to do anything that would affect the decisions that have been made by Hartford or you with regard to the construction of Watts Bar?

MR. BRESSLER: My management has never pressured me on anything that would affect safety. There was one confrontation having to do with the N-5 program, by the way, when we first instituted the N-5 program, with Mr. Ralph Pierce. And I said, Mr. Pierce, you are the boss. What you want done I will do, but if it doesn't meet code, I will write a memorandum to files putting my position on the record. And a day later he called me up and said do it your way.

And that is what I have always had from my management. If you are forthright in what you believe in, it may take them a little while, but they come around and support you.

INVESTIGATOR WILLIAMSON: One other question. Are you aware or have you ever contacted Hartford to complain about the amount of time the ANI's were spending on reviewing N-5 data packages?

MR. BRESSLER: No, sir.

INVESTIGATOR WILLIAMSON: Are you aware of anyone else doing that?

MR. BRESSLER: Not under my control.

INVESTIGATOR WILLIAMSON: Okay. And once again to answer in full, have you ever placed any pressure on Hartford to place pressure on an ANI to accept work that would be ---

MR. BRESSLER: In fact, I was going through my piles, and as you might have noticed if you went past my office, I file by pile, and in cleaning out one of my piles, I came up with meeting notes I had handwritten where Hartford and John Pulson and myself went down to Hartford, Atlanta to discuss needs for ANI's, and, if anything, we were pressuring Hartford to give us more ANI's.

So that is why I am just really -- I go home and, like they say, I get upset and kick the dog and beat up my wife because I just don't understand what is coming off.

I really feel strongly, in summarizing my position, that we have done the best we could with the knowledge we have. In some cases that knowledge has been better than other utilities and we have been able to do things that other utilities weren't to where they could do. It is not subterfuge or an attempt to evade the code. I call it code lawyering, and my company pays me well and supports my travel to code committee meetings. I am up to date and thus I can service them best.

But what may appear to someone else as TVA placing - itself above the code, because I have heard those words, absolutely not. The code is my bible -- second bible, and I feel very strongly about it. And that is why I feel so strongly about the ANI's and their positions.

I am upset that the one time that I have been

•	questioned has to do with an ANI item.
2	INVESTIGATOR WILLIAMSON: Do you have any other
3	questions, Mr. Murphy?
♣.	INVESTIGATOR MURPHY: No.
.5	INVESTIGATOR WILLIAMSON: Do you have any
6	additional information you would like to add?
7	MR. BRESSLER: No. I just wanted to let you know
8	that you have my card and I am available when I am in town
9	both here and at home, and if you need additional things,
10	you can put me back on the record if you want to if there
11	is anything else you want to follow-up.
12	I would like to get this thing finished. I feel
13	totally estranged from the people, and I would like to get
14:	back to work.
15.	INVESTIGATOR WILLIAMSON: Mr. Bressler, have I or
16	any other NRC representative threatened you in any manner
17 ⁻	or offered you any reward in return for your testimony.
18	MR. BRESSLER: Absolutely not.
19	INVESTIGATOR WILLIAMSON: Mr. Bressler, have you
20	given this statement freely and voluntarily?
21	MR. BRESSLER: Yes, sir.
22	INVESTIGATOR WILLIAMSON: We would like to also
23	take this opportunity to thank you for your time, your
24	cooperation and your patience and for agreeing to be

interviewed by the Office of Investigations.

MR. BRESSLER: I appreciate that I had the opportunity to present whatever I could add to this situation.

INVESTIGATOR WILLIAMSON: This interview was concluded at 1600 on 22 May 1986.

(Whereupon, at 4:00 o'clock p.m., the interview of MARCUS NATHAN BRESSLER concluded.)

* \$ * \$ \$



345 East 47th Street New York, MY 10017

May 19, 1986

Subject:

Section III, Division 1, NCA-5210 General Inspection Duties, 1983 Edition with Winter 1985 Addenda

Item:

N186-013

Reference: Your letter dated January 24, 1986

Dear Sir:

Our understanding of the question in your inquiry, and our reply, are as follows:

Question: Does NCA-5210(a) require that an ANI inspect every component and piping Support used in a nuclear power plant?

Reply: No. The Code does not require the ANI to inspect all Code activities.

Yery truly yours,

Assistant Secretary, Boiler and

Pressure Vessel Committee

KE/ci

bcc:

2-85-034

ATTROPHENT & EXHIBIT.

3.4.11 FINAL INSPECTION

The ANI shall make a final examination of the nuclear item to assure 100% compliance with all requirements. The ANI shall writies all final hydrostatic or presumatic testing and assure that these tests are being performed in accordance with an approved procedure.

EXHIBIT 2

EXHIBIT 43

PAGE 2 OF L PAGE(S)

Interpretation III-1-83-83R

Subject:

Section III, Division 1, Interpretation III-80-164 Qualification Procedure; NX-

5521(c)(4) Personnel Qualification, Certification, and Verification

Date Issued:

April 29, 1983

File:

NI82-067°

Question (1): Does Interpretation III-80-164 apply to the examination of a candidate who intends to qualify for four methods and will be examined for them in the same week?

Reply (1): Yes.

Question (2): Can the Parinaud Number 1.5 letters be applied in lieu of Jaeger Number 1 letters specified in NX-5521(c)(4)?

Reply (2): Yes, provided a near distance equivalence of a Snellen fraction 20/20 is established.

Interpretation III-1-83-84

Subject:

Section III, Division 1, NE-5211.2 Examination of Inaccessible Welds; NE-5250

Examination of Inaccessible Welds

Date Issued:

February 18, 1983

File:

NI82-145

Question (1): Is it permissible to perform the gas medium test as provided in NE-5211, through S81 Addenda, after a weld is covered (made inaccessible for visual examination) but accessible for performing a gas medium test which can be demonstrated to be sufficiently sensitive to detect a leak under the actual conditions?

Reply (1): Yes.

Question (2): Do NE-5211.2 and NE-5250 apply to those weld joints in penetration assemblies that are part of the containment system, as well as to the containment vessel proper?

Reply (2): Yes.

EXHIBIT 43

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ATTACHNEIST 3

Section III - Interpretations No. 16

Interpretation: III-1-83-261

Subject:

Section III, Division 1, NX-4360 Essential Variables for Automatic and

Semiautomatic Welding (1983 Edition With Winter 1983 Addenda)

Date Issued:

July 26, 1984

File:

NI84-059

Question: If A-No. 8 material is buttered onto P-No. 1 base metal and machined to provide a special configuration to allow for a specially designed seal weld, is the A-No. 8 material considered to be preplaced filler metal?

Reply: No.

Interpretation: III-1-83-262

Subject:

Section III, Division 1, NB-4360 Qualification Requirements for Welding

Specially Designed Welded Seals (1983 Edition With Summer 1984 Addenda)

Date Issued:

August 8, 1984

File:

NI84-071

Question: When a manual method is used to make a weld repair to an omega-type seal welded by an automatic method, is it required that the requirements of NB-4336.2 be applied to the repair welding procedure?

Reply: No. A manual weld repair procedure using the essential variables of Section IX and NB-4363 and examined in accordance with NB-4367 is acceptable.

Interpretation: III-1-83-263

Subject:

Section III, Division 1, NB/NC/ND-6215 Examination for Leakage After

Application of Pressure (1974 Edition With Winter 1976 Addenda)

Date Issued:

October 9, 1984

File:

NI84-051

Question: Does NB/NC/ND-6215 require that a full 360 deg. visual examination be performed during the system hydrostatic test?

Reply: The Code does not specify 360 deg. visual examination; however, it is the intent that welded joints be examined to the extent necessary to assure there is no leakage.

RITHCHMEINT L EXHIBIT 43 207
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Current Books

Recent Additions to the Library

Robot Technology (Modeling and Control.) (Interaction with the Environment.) By Philippe Coiffel Prentice Half, Box 500, Englewood Ciffs, NJ 07632 1983. Volumes, 1 & 2, \$44,00.

This first volume in the series is based onpart of a course taught by the author. It was concerned with the design and control of stationary, articulated robots operating asnonfeedback systems. This book (which is, devoted to the statement and understanding; of problems rather than their solution) presents a review of some of the work, started in-1972, of the team involved with robotics and biomechanics at the Automation Laboratory at Montpellier, in association with the French National Center for Scientific Research.

The second volume describes the present state of the knowledge of robotic systems, which are able to perceive the environment,

to a greater or lesser extent, and to react appropriately. Such robots will be able to perform the function required of them, in spite of unpredictable, limited changes in the environment.

The third volume will deal with teleoperations. The fourth volume will be concerned with technological components of robots, and further volumes will discuss robotic languages and programming methods, decision autonomy and artificial intelligence and, finally, the computer-aided design of robots.

Laser Processing and Analysis of Materials. By W. W. Duley. Plenum-Pub Corp., 233 Spring St., New York, N.Y. 10013. 1983. 463 pp. \$59.50.

The rapid development of laser technology over the past dozen years has led to the

availability of reliable, industrially rated laser sources with a wide variety of output characteristics. This, in turn, has resulted in new applications as the laser becomes a familiar processing and analytical tool.

The text surveys recent developments made in the field of materials processing and analysis by means of lasers. Examples are drawn from chemical, metallurgical, and semiconductor processing, while the use of lasers as analytical tools in the laboratory and in industry is thoroughly examined. An introductory chapter provides a comprehensive overview of lasers and laser systems and their

Scientists, engineers, researchers, and atudents involved with laser applications will find this volume a valuable source of current information.

ASME Codes & Standards

ASME Nuclear Code—Construction Turnover and Local Site Issues

Reger F. Reedy and William H. Miller Members of the ASME Board on Nuclear Codes, and Standards 1

The use of ASME Codes and Standards: has produced an outstanding safety record for pressure-retaining equipment. To provide maximum benefits and safety, the manufacturer must follow all the requirements of ASME Codes and Standards as they relate to the design and construction of equipment.

The ASME Code for Nuclear Components (Section III of the Boiler and Pressure Vessel Code) is used at nuclear construction sites for the design and construction of pressure-retaining components, including piping systems and their supports. The process for demonstrating Code compliance of piping systems is often more complicated than for items manufactured by a single organization. The design, fabrication, and installation of piping systems often involve multiple-certificate holders, design organizations, authorized inspection agencies, and the owner. The interaction among these organizations can become complicated, and if proper controls are lacking, construction and installation times may be extended.

Situations may arise at a site that werenever envisioned at the time the Code rules were written. As a group, Code committees usually assume that design and construction will be straightforward and that all involved parties will perform their work according to the original contractual arrangements. However, at some nuclear sites it has been necessary to transfer Code work from one contractor to another prior to completion. While the Code contains specific partial data reports such as forms N-2 and NF-2, and

permits the use of an N-5 form to document work partially completed and performed prior to construction turnover,² it does not provide for all turnover situations and no details are given in the Code for turning over partial work which is not documented on partial data report forms. In some construction turnovers, time did not permit completion of Code partial data reports and other forms of documentation were used.

The foreword to the ASME Boiler and Pressure Vessel Code states:

It should be pointed out that the state or municipality where the Boiler and Pressure Vessel Code has been made effective has definite jurisdiction over any particular installation. Inquiries dealing with problems of local character should be directed to the proper authority of such state or municipality. Such authority may, if there is any question or doubt as to the proper interpretation, refer the question to the Boiler and Pressure Vessel Committee.

At the December 1983 meeting of the ASME Board on Nuclear Codes and Standards, the issue of construction turnovers and other related problems of a local nature were considered. Subsequently the Board formulated the following position statement, which has been accepted by the ASME Boiler and Pressure Vessel Committee and by the ASME Council:

The Board on Nuclear Codes and Standards recognizes that the Boiler and Pressure Vessel Code, Section III, does not, nor is it intended to, address all situations which

might arise during site construction, such as the transfer of Code work prior to completion or specific corrective action on nonconformances resulting from work performed. It is the sentiment of the Board on Nuclear Codes and Standards that, in these situations, the determination of how to satisfy Code requirements is best resolved through interaction and agreement between the parties involved, taking into account the specific conditions of the situation. Such agreements would include but not necessarily be limited to the Owner, applicable Certificate Holders, their respective Authorized Inspection Agencies, and appropriate jurisdictional and/or regulatory bodies.

The ASME position statement reiterates the necessity for work performed to meet Code requirements. This means that the equipment must meet the provisions of the Code with regard to materials, design, fabrication, examination, and inspection. The fact that these provisions of the Code have been met must be verified and documented. At the conclusion of construction, the responsible ASME certificate holders and their authorized nuclear inspectors must sign documents attesting that the work meets the requirements of the Code.

The position statement cannot be used to waive any required nondestructive examinations, inspections, or testa. What then do the words in the position statement,"... work prior to completion or specific corrective action on nonconformances resulting from work performed" mean? This phrase pertains to

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we know the sine for which will write the contract of the cont

Nonconformance is defined in NCA-9000 of Section III, General Requirements, as a "deficiency in a characteristic, documentation, or procedure that renders an item or activity unacceptable or indeterminate. This definition of nonconformance can conceivably encompass a wide range of possibilities, both in variety and level of significance to safety and adequacy of the equipment. The position statement simply states that the best approach in deciding what needs to be done to verify Code compliance when a reported deficiency makes the quality of the item questionable, or to correct a known deficiency, is to have the responsible parties agree on the plan of action to ensure that the equipment meets the Code.

The specific details of resolution of non-

Act to wear any and more time maney. Admit a certificate holders for the work involved, their authorized nuclear inspectors, the NRC representative, and representative of the jurisdictional authority in which the site is located when that jurisdiction has a law regulating the construction of nuclear plants that requires conformance to the Code. After resolution has been agreed upon by the responsible parties, the ASME certificate holders must document the resolution in a plan to assure that all parties, including: ASME survey teams, understand the implementation. One obvious benefit of approving the plan in accordance with the ASME position statement is that it provides the opportunity for all responsible parties to be involved in the resolution at the appropriate time.

The position statement formulated by the

Boiler and Pressure Vessel Code to specifically address nuclear power site construction. The purpose of this article is to expand public awareness. It is hoped that this policy statement will be used appropriately and as necessary to resolve concerns arising at nuclear sites.

- 1. The Board on Nuclear Codes and Standards supervises the nuclear codes, standards, and related accreditation activities of the Society.
- 2. ASME Boiler and Pressure Vessel Code Interpretations, Volume 14, Interpretation III-1-83-161:

Subject: Section III, Division 1, NA-8000,

C & S Meetings Calendar

The following meetings are open to the concerned public, as well as to interested members of the engineering community.

• PRESSURE TECHNOLOGY CODES: AND STANDARDS DEPARTMENT

The following are the various B31 Code Committee meetings scheduled for 1984 and 1985 for the purpose of maintenance of the Code with regard to revisions, interpretations, and preparation of new Code Sections.

B31 Pressure Piping Main Committee. Oct. 18, San Antonio, Tex.; Feb. 12, 1985, Phoenix, Ariz.; Week of June 9, 1985, Cincinnati, Ohio; Oct. 8, 1985, Hershey, Pa. ASME Staff Contact: Alan Begner (212) 705-7029

B31 Main Committee. Feb. 12, 1985, Phoenix, Ariz.

ASME Staff Contact: Alan Bagner (212) 705-7029

B31.1 Power Piping Section Committee. Sept. 25–27, New Orleans, La.; Jan. 28–31, 1985, Tucson, Ariz.; May 13–16; 1985, Clearwater Beach, Fla.; Sept. 30–Oct. 3, 1985, San Francisco, Calif.

ASME Staff Contact: Mark Sheehan (212) 705-7819

831.3 Chemical Plant and Petroleum-Refinery Piping Section Committee. Nov: 26-29, Clearwater Beach, Fla.; March 18-21, 1985, Scottsdale, Ariz.; July 22-25, 1985, Newport, R.I.; Oct. 28-31, 1985, Williamsburg, Va.

ASME Staff Contact: Joseph Brzuszkiewicz (212) 705-7818

831.4 Liquid Petroleum Transportation

Piping Section Committee. Oct. 16-17, San Antonio, Tex.; March 12-13, 1985, Kansas City, Mo.; Oct. 22-23, 1985, Dellas, Tex.

ASME Staff Contact: Paul Stumpf (212) 705-7096

831.8 Gas Transmission and Distribution Piping System Section Committee. Sept. 11-13, Savannah, Ga.; Jan. 22-24, 1985, New Orleans, La.; April 23-25, 1985, Las-Vegas, Nev.; July 16-18, 1985, Denver, Colo.; Nov. 5-7, 1985, Clearwater Beach, Fla.

ASME Staff Contact: Chris Nielsen (212) 705-7028

831.11 Sturry Pipeline Section Committee. Nov. 3-4, Orlando, Fla.; May 14-16, 1985, Selt Lake City, Utah; Nov. 12-14, 1985, San Antonio, Tex.

ASME Staff Contact: Paul Stumpf (212) 705-7096

831 Mechanical Design Technical Committee. Oct. 19, San Artonio, Tex.; Merch 21–22, 1985, Scottsdale, Artz. ASME Staff Contact: Alan Baoner (212)

ASME Staff Contact: Alan Bagner (212) 705-7029

831 Fabrication and Examination Technical Committee. Ors. 17, San Antonio, Tex.

ASME Staff Contact: Alan Bagner (212) 705-7029

ASME Gas Piping Technology Committee. Oct. 22–26, Santa Fe, N.M.; March 25–28, 1985, Dellas, Tex.

Purpose of Meetings: Maintenance and revision of the "Quide for Gas Transmission and Distribution Piping Systems" with respect to the most recent federal proposals, notices, and rule making.

ASME Staff Contact: Alan Roby (212) 705-7808

Solar Energy Committee. Sopt. 24-25, Las. Vegas, Nev.

Purpose of Meeting: Development of an ASME code for solar thermal power generation.

ASME Staff Contact Michael Hogan (212) 705-7799

Reinforced Thermoset Plastic Corrosion Resistant Equipment Committee. Nov. 1-2, Columbus, Oh.

Purpose of Meeting: Review of latest draft of prepared new document for reinforced thermoset plastic corrosion resistant equipment.

ASME Staff Contact. Joseph Brzuszkiewicz (212) 705-7818

Boffer and Pressure Vessel Code Committee. Boller Code Weeks: Sept. 17-21, Nov. 12-16, United Engineering Center, New York, N.Y.

SC! Power Bollers, Thurs. (meeting on all above dates)

SC 3 Material Specifications, Tues. (meeting on all above dates)

SC Nuclear Power, Thurs.
(meeting on all above dates)

SC IV Heating Bollers, Tues. (meeting only on Sept.

17-21)

SC V Nondestructive Examination, Wed. (meeting on all above

SC VE: Pressure Vessels, Thurs.
(meeting on all above dates)

SC IX Welding, Tues. (meeting on all above dates)

SCD Design, Tues. (meeting on all above dates)

SCP Properties of Metals, Tues.
(meeting on all above dates)

Main Com- Public Session, Fri. (meeting mittee on all above dates)

Purpose of Meetings: To consider revisions

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TENNESSEE VALLEY AUTHORITY

Watts Bar Nuclear Plant P. O. Box 2000 Spring City, Tennessee

July 25, 1986

Mr. Lynn Williamson, US NRC 101 Marietta Street Suite 2900 Atlanta, Georgia 30321

Dear Mr. Williamson:

Enclosed is the tube turns radiographic film packs which you requested from John W. Self, supervisor of our N-5 Unit, to furnish to you. An index of the weld identification for each radiographic film pack is attached. The original radiographic evaluation report completed by a tube turns inspector is enclosed in each radiographic film pack.

Please acknowledge receipt of the radiographic film packs for the tube turns welds identified on the attachment by signing below.

If we can be of further assistance, please let us know.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

Cuenter Wadewitz, Project Manager

Watts Bar Nuclear Plant

Attachment:

I acknowledge receipt of the radiographic film packs for the tube turns welds identified on the attachment.

	Tube Turns	Tube Turns
PENX IDENTIFICATION #	MFG Shop	HELD
1 K- 14	70122 60	
1 K -15	79432-60	12
1K-16	79432-69	12.
18-17	79432-62	12
1X-8A	79432-63	12 €€
1 X- 8B	79432-191 79432-192	• •
1 I- 8C	79432-193	90
1 X- 8D	79432-194	€ €.
1 X- 12 A	79432-5	16
1X-12B	79432-6	15
1 X- 12C	79432-7	15
1X-12D	79432-8	17
1X-13A	79432-1	15,16
1X-13B	79432-2	15,16
1 X- 13C	79432-3	15,16
11-13D	79432-4	15,16
1X-14A	79432-11	* IV
1X-14B	79432-12	• IV
1 X- 14C	79432-13	# IY
1X-14D	79432-14	• IY
1%-15	79432-15	• IV
1 X- 16	79432-41	1
1 X-1 7	79432-9	30
1 X- 20 A	79432-19	12
1 1- 20B	79432-20	12
1 X-2 1	79432-21	12
1 X- 22	79432-22	12
1 X-2 4	79432-23	12
1X-30	79432-16	₹ <u>TV</u>
1 X-3 2	79432-24	12
11-33	79432-25	12
1X-34	79432-29	• <u>VI</u>
1 X-40 A	79432-46	1
1X-40B	79432-47	1
1X-41	79432-30	• <u>YI</u>
11-42	79432-42	1
1X-43 A	79432 - 31	• YI
1X-43B	79432-32	• <u>YI</u>
11-430	79432-33	• <u>VI</u>
1X-43D	79432-34	• <u>YI</u>
1 X -44	79432-43	1
1 X-4 5.	79432-17	• <u>IY</u>
1X-46.	79432-26	12
1X-47 A	79432-27	12
1X-47B	79432-28	12
1X-48 A	79432-48	1
1X-48B 1X-49A	79432-49	1
1 X-49B	79432-50	1
1 X- 77	79432-51	1
1X-61	79432-35	• <u>vi</u>
1X-82	79432-18 70432-84	• IĀ
1X-83	79432-44	1
1X-90	79432-45	1 //
1X-91	79432 – 36 79432 – 37	EXHIBIT VI CY
	13736-31	س منه
	•	PAGE CF PAG

Unit 1

PENT IDENTIFICATION #	Tube Turns MFG Shor #	Tube Turns WELD
11-97	79432-38	• 27
12-98	79432-39	• 🎞
12-99	79432-40	• 🎞
1X-107	79432-10	30
1 X- 108	79432-67	8
11-109	79432-68	8

MFGU1.DB

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	Tube Turns	. Tube Turns	
PENY IDENTIFICATION	MFG Shop #	Weld #	•
2-K-14	79432-135	12	
2-K-15	79432-136	12	•
2- K- 16	79432-137	12	
2-K-17	79432-138	12	
2-X-8A	79432-195	⊕ ⊕ ⊕ ⊕	
2-X-8B	79432-196	8 €	
2-X-8C	79432-197	₩ 2	
2-X-8D	79432-198	15	
2-X-12A	79432-80 79432-81	15	
2- I -12B 2- I -12C	79432-82	15	
2-X-12D	79432-83	15	
2-X-13A	79432-76	15 & 16	
2-X-13B	79432-77	15 & 16	
2-X-13C	79432-78	15 & 16	
2-X-13D	79432-79	15 & 16	
2-X-14A	79432-86	• 11	
2-X-14B	79432-87	* <u>IV</u>	
2-X-14C	79432-88	• 17	
2-X-14D	79432-89	• 17	
2+X-15	79432-90	• 🏋	
2 -X- 16	79432-116	1	
2- X -17	79432-84	30	
2-X-20 A	79432-94	12	
2- X- 20B	79432-95	12	
2-1-21	79432-96	12	
2-X-22	79432-97	12	
2-1-24	79432-98	12	
2-1-30	79432-91	• 👿	
2 -1 -32	79432-99	12	•
2 -1 -33	79432-100	12	
2-1-34	79432-104	• ***	
2-X-40A	79432-121 79432-122	1	
2-X-40B 2-X-41	79432-125	• 📆	
2-X-42	79432-117	1	
2-X-43A	79432-106	• 🏋	
2-X-43B	79432-107	• 📆	
2-X-43C	79432-108	• 📆	
2-X-43D	79432-109	• <u>YX</u>	
2-X-44	79432-118	1	
2- X- 45	79432 -9 2	• 11	
2- X-4 6	79432-101	12	
2-X-47 A	79432-102	12	
2-X-47 B	79432-103	12	
2- X- 48 A	79432-123	1	
2 -X- 48B	79432-124	1	
2-X-49A	79432-125	1	
2-X-49B	79432-126	1	
2 -X- 77	79432-110	• 🞞	
2-X-81	79432-93	• ፲૫	
2-X-82	79432-119	114	
2 ~X~ 83	79432 - 120 79432 - 111	EYHIP!T	_
2-X-90 2-X-91	79432-112	PARE 4 OF	2 PA
Z-A-Y1	17434-114	PASE U	

PENX IDENTIFICATION #	Tube Turns MFG Shop #	Tube Turns Weld #
2 ~1~9 7	79432-113	· YI
2-X-98.	79432-114	
2-1-99	79432-115	• 📆
2-1-107	79432-85	30
2-X-108	79432-142	8
2- X- 109	79432-143	8

^{*}Penetration type $\overline{\mathbf{IY}}$ and $\overline{\mathbf{YI}}$ are fillet weld and do not require R.T.

TTU2.DB

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^{**}RT film not yet received from tube turns



NUCLEAR REGULATORY COMMISSION

REGION N .: 101 MARIETTA STREET, N.W.

MEMORANDUM FOR:

E. Williamson, OI:RII

FROM:

B. Uryc, EICS

SUBJECT:

WATTS BAR NUCLEAR PLANT - ALLEGED COERCION OF ANIS BY

HARTFORD AND TVA MANAGEMENT

CASE NO:

2-85-034

ALLEGATION NO:

RII-85-A-0216

REFERENCE:

Memo, E. Williamson to B. Uryc, dated 7/9/86

I have enclosed the technical staff's response to your referenced request. If we can of any further assistance, or if there are questions, please contact me.

Enclosure: Memo, A. Herdt to B. Uryc,

8/14/86

PAGE(S)



UNITED STATES NUCLEAR REGULATORY COMMISSION REGION II 101 MARIETTA STREET, N.W. ATLANTA, GEORGIA 30323

AUG 1 4 1986

MEMORANDUM FOR: Bruno Uryc, Investigation/Allegation Coordinator

FROM:

Alan R. Herdt, Chief, Engineering Branch, Division of

Reactor Safety

SUBJECT:

WATTS BAR NUCLEAR PLANT: ALLEGED COERCION OF ANI BY

HARTFORD AND TVA MANAGEMENT (OI CASE NO. 2-85-034) -

ALLEGATION NO. RII-85-A-0216

In accordance with your memorandum, dated July 9, 1986, and OI's memoranda, dated June 18 and July 9, 1986, the Engineering Branch has reviewed Tube Turns (TVA's vendor) quality documentation and radiographic (RT) film for Watts Bar containment piping penetration welds. The review was to determine the general quality or structural soundness of the welds.

A sample of weld documentation consisting of the following was reviewed:

For the following welds, detailed fabrication drawings, Tube Turns "Weld Control Record," and RT film including reader sheets were reviewed:

1X17 30 12"x1.125" 1X12A* 16 16"x.843" 1X12D** 17 16"x.843" 1X13A 15 32"x1.375" 1X13A 16 32"x1.375" 2X17 30 12"x1.125" 2X40A 1 4½"x.337"	
1X12D** 17 16"x.843" 1X13A 15 32"x1.375" 1X13A 16 32"x1.375" 2X17 30 12"x1.125" 2X40A 1 4½"x.337"	
1X13A 15 32"x1.375" 1X13A 16 32"x1.375" 2X17 30 12"x1.125" 2X40A 1 4½"x.337"	
1X13A 16 32"x1.375" 2X17 30 12"x1.125" 2X40A 1 4½"x.337"	
2X40A 1 4½"x.337"	
04400 418 4078	
2X40B 1 4½"x.337"	
2X107 30 14"x.438"	
2X13A 15 32"x1.375"	
2X13A 16 32"x1.375"	
1X16 1 3½"x.430"	
2X20A 12 8½"x.813"	
2X48B 1 10 3/4"x.36	כ" כ
1X13C 15 32"x1.375"	
1X13C 16 32"x1.375"	
1K17*** 12 12 3/4"x.37!	5"
1K14 12 14"x.438"	
1x24 12 4½"x.237"	
1X46 12 3½"x.216	
1X20B 12 8 5/8"x.906"	
1X32 12 4½"x.531"	
1 X82 1 8 5/8"x.280	

^{*}No film available for weld 15

^{**}No film available for weld 16

^{***}Weld control record not rendible

For the following welds, RT film only were reviewed:

Penetration		Weld
1X20A 1X44 1X47B		12 1 12
1X48A 1X49B		1
1X49B 1K15		1 12
1K16 1X12B	•	12 15
1X12C 1X13B		15 15 16
1X13B 1X13C		15 16
1X13C 1X107 1X108	•	30 8
1X109 2K14		8 12
2K15 2K16		12 12
2X12A 2X13C		15 15
2X13C		16

The RT film were reviewed to the degree necessary to determine weld quality and RT film quality and not to determine that every film met every RT parameter. The "Weld Control Records" were copied from microfilm and in some cases, 100% review was not possible. The copies were adequate to verify that a good weld record system was used and the records reviewed were complete.

In general, the review showed that:

a good weld record system was used

in many cases, the RT sensitivity was better than code requirements

the welds were very clean (defect free) and above average quality

The above sample review indicates that the piping penetration welds are structurally sound and in general meet code requirements. Although not a 100% review, the sample is considered adequate to verify the quality of similar welds on all watts Bar Tube Turns piping penetrations.

Jank Jape

A. R. Herdt

EXHIBIT <u>45</u> PAGE <u>3</u> OF <u>3</u> PAGE(S



UNITED STATES NÜCLEAR REGÜLATORY COMMISSION WASHINGTON, D.C. 20555

August 17, 1988

Docker (390/391)

It has come to our attention pages were missing in the Report of Investigation, Case No. 2-85-034, transmitted by letter to S. A. White, TVA, from James G. Partlow, Subject: Alleged Harassment and Intimidation (H&I) of Authorized Nuclear Inspectors (ANIs) by Hartford Steam Boiler Inspection and Insurance Company at Watts Bar Nuclear Plants (WBN), dated August 2, 1988.

Please replace those pages with the attached.

SYNOPSIS

On November 25, 1985, this investigation was requested by the Regional \\Administrator, U.S. Nuclear Regulatory Commission, Region II, Atlanta, Ga., based on information provided to Region II staff by the Office of Investigations Field Office, Region II (OI:RII), that allegations had been made that the Hartford Steam Boiler Inspection and Insurance Company (HSBII) Authorized Nuclear Inspectors (ANIs) at Tennessee Valley Authority's (TVA) Watts Bar Nuclear Plant (WBN), Spring City, TN, had been coerced and directed by HSBII management to accept resolutions to problems which they (ANIs) considered to be unacceptable. These allegations included assertions that TVA management personnel were applying pressure to the HSBII management to override decisions made by ANIs at the WBN which would require corrective action by TVA. These allegations primarily dealt with Non-conformance Condition Reports (NCRs) regarding the inaccessible vendor welds on flued head piping penetrations in Units 1 and 2.

During the initial phase of an unrelated TVA Nuclear Safety Review Staff (NSRS) investigation in August 1985, the alleger, a member of NSRS, learned that ANIs at WBN were, in their opinion, not being given the independence required by the American Society of Mechanical Engineers (ASME) Code. During the conduct of the NSRS investigation, four ANIs were interviewed by the alleger and documentation from their daily diaries was collected and provided to OI:RII for review.

On November 21, 1985, the alleger was reinterviewed and related that the problem of the ANIs with their management was not a new issue. He stated that in April 1985, in a letter to the TVA Board of Directors, an NSRS engineer informed the Board that the WBN ANIs were being coerced. The alleger provided a chronology of events to include dates and TVA personnel apprised, but indicated he was not currently pursuing any investigative leads.

The scope of this OI investigation included, but was not limited to, the allegation that ANIs were being coerced by their supervision to accept TVA's disposition of non-conforming conditions that failed to meet the requirements of the ASME Code. The investigation included the interview of nine current and former ANIs assigned to WBN; numerous TVA WBN site personnel; HSBII, Atlanta Regional Office, management personnel; and TVA's Codes, Standards and Materials (CSM) personnel in Knoxville, TN.

During the course of the interviews of nine ANIs, four acknowledged that they felt either coercion, harassment or intimidation from HSBII management, including one ANI who had been directed by his management to accept TVA's disposition for a non-conforming condition that failed to meet the requirements of the ASME Code. In some cases they felt this could have been a result of influence imposed on HSBII management by members of TVA's CSM group to accept TVA's disposition on deficient items or else lose their contract with TVA. The five remaining ANIs did not feel that they had been subjected to any coercion or pressure from HSBII management to accept any work they felt was deficient.

Interviews with the WBN Project Manager and personnel from the TVA N-5 group produced testimony that with some minor exceptions, a good working relationship existed between the TVA site personnel and the ANIs. They claimed any problems that arose were adequately resolved between the parties involved.

HSBII regional management personnel were interviewed and denied that they coerced or pressured any ANI to accept a condition that the ANI did not feel met the requirements of the ASME Code. They also denied HSBII had received or succumbed to any pressure from TVA. However, HSBII management personnel were not able to logically explain why two nearly identical NCRs were handled very differently by HSBII.

Interviews of TVA CSM group personnel disclosed that the two aforementioned NCRs on separate units were dispositioned differently; one to "use as is", while the second required additional examination efforts of systems during hydrostatic testing. According to CSM personnel, these NCRs were dispositioned differently because of WBN scheduling. In the spring of 1984, WBN was preparing to load fuel and efforts to inspect inaccessible welds during hydrostatic testing was not considered because, in the opinion of TVA, the welds were determined through evaluation to be technically adequate and posed no threat to public health and safety. However, none of those individuals could deny that without visual inspection as required by code, the welds in question were anything other than indeterminate with regard to leakage.

A sample review of the Tube Turns, Inc. final weld documentation packages, weld maps and radiographs was conducted by Region II Engineering Branch personnel. The review disclosed that the required welding and NDE documentation appeared to be in order and the radiographs did not reveal any defects that would adversely affect the structural integrity of the welds.

In conclusion, a preponderance of testimonial, documentary, and circumstantial evidence established that four of nine ANIs were either coerced, pressured, harassed, intimidated, and/or threatened by HSBII management. This included one ANI who was directed by his management to accept the disposition of an NCR which did not meet code requirements. Furthermore, it appears that responsible TVA managers searched for avenues to avoid the delay of fuel loading and the expense of inspecting the hidden welds, and may have pressured HSBII management to accept the disposition of this NCR that violated code requirements.

ACCOUNTABILITY

The following portions of this ROI (Case No. 2-85-034) will not be included in the material placed in the PDR. They consist of pages 3 through 40.

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APPLICABLE REGULATIONS

Allegation: Alleged Coercion of ANIs by Their Management and TVA to Accept Non-Conforming Conditions

10 CFR 50, Appendix B, Criterion I

"The persons and organizations performing quality assurance functions shall have sufficient authority and organizational freedom to identify quality problems; to initiate, recommend, or provide solutions; and to verify implementation of solutions...."

"Activities affecting the safety-related functions of structures, systems and components . . . including both the performing functions of attaining quality objectives and the quality assurance functions. The quality assurance functions are those of (a) assuring that an appropriate quality assurance program is established and effectively executed and (b) verifying such as by checking, auditing and inspection, that activities affecting the safety-related functions have been correctly performed." (Emphasis supplied)

10 CFR 50, Appendix B, Criterion X

A program for inspection of activities affecting quality shall be established and executed by or for the organization performing the activity to verify conformance with the documented instructions, procedures and drawings for accomplishing the activity.

TVA Final Safety Analysis Report (FSAR)

Applicable Codes, Standards and Specifications 3.8.2.2.1 <u>Codes</u> - states all containment penetrations including the fuel transfer, purge and mechanical within the jurisdiction of NE-1140 are designed to Section III, Class MC of the 1971 ASME Code. The penetration assemblies for those penetrations which attach to the nozzles out to and including the valve or valves required to isolate the system and provide a pressure boundary for the containment function are designed to Section III, Class 2 of the ASME Code.

Review of American Society of Mechanical Engineers Code, Section III

A review of applicable sections of the American Society of Mechanical Engineers (ASME) Code, Section III (Nuclear Plant Construction), was conducted including Article NC-6000, Testing; Article NCA-5000, Authorized Inspection, and Article IWA-2000, Examination and Inspection. Under Article NC-6000, Section NC-6121 "Exposure of Joints," it states "all joints including welded joints shall be left uninsulated and exposed for examination during the test. Section NC-6224 "Examination for Leakage After Application of Pressure" states "... all joints, connections and regions of high stress such as regions around openings and thickness transition sections shall be examined for leakage." Article NCA-5000 "Authorized Inspection" states in NCA-5280 "Final Test," "the Inspector (ANI) shall witness final hydrostatic, penumatic or structural integrity test required by this section and examination performed during such test by the Certificate Holder. Section NCA-5210 "General Inspection Duties" states "the Inspector who performs the detailed inspections in compliance with

this section shall witness or otherwise verify all examinations and make all inspections required by this section. He shall also make any other inspections and witness or verify any other examinations and additional investigations which, in his judgment are necessary to ascertain whether the item being inspected has been constructed in compliance with the rules of this section. Article IWA-2000, Subsection 2100 "Definitions" states "Examinations" - denotes the performance of all visual observations and nondestructive testing... "Inspection" - denotes verifying the performance of examinations and test by an Inspector representing an Authorized Inspection Agency..." (Emphasis supplied)

Additionally, a review of WBN Quality Control Test (QCT), Revision 4, entitled "Hydrostatic Testing," Section 6.4.8.4.1, states "All joints, connections, and regions of high stress such as areas around openings and thickness transition areas are visually inspected for leakage."

INVESTIGATORS' NOTE: During the initial hydrostatic testing phase of the flued head piping penetrations in Unit 1, the TVA QC Inspectors were not aware of the hidden welds because they were not on the TVA design drawing or weld maps. However, the systems were accepted based on the welds inspected.

DETAILS OF INVESTIGATION

Purpose of Investigation

This investigation was initiated to determine if Authorized Nuclear Inspectors (ANIs) employed by the Hartford Steam Boiler Inspection and Insurance Company (HSBII) had been coerced, pressured, harassed, or intimidated by their management or the Tennessee Valley Authority (TVA) personnel to accept work that did not meet the requirements of the American Society of Mechanical Engineers (ASME) Code. Additionally, the investigation was conducted to determine if any collusion existed between TVA and HSBII with regard to the maintenance of their contract.

Background

On November 25, 1985, this investigation was initiated by the Office of Investigations Field Office, Region II (OI:RII), based on a request by the Regional Administrator, NRC, Region II (Exhibit 1). The investigation was initiated based on information received by OI:RII from an investigator, Mansour GUITY (Exhibit 6), assigned to TVA's Nuclear Safety Review Staff (NSRS). During this interview with GUITY on November 5, 1985, he stated that ANIs employed as third party independent inspectors by HSBII and contracted to TVA, were being coerced by HSBII and TVA to accept work that did not meet ASME Code requirements.

GUITY indicated that he initiated his investigation in August 1985, when TVA received an "extortion" letter from unidentified sources, demanding that ANIs be given pay comparable to that of TVA Quality Control (QC) Inspectors or a list of deficiencies at the TVA nuclear plants would be revealed to the NRC (Exhibit 2). TVA subsequently referred the issue to the Federal Bureau of Investigation (FBI), Knoxville, TN, for investigation and, according to the alleger, he never heard any more of the "extortion" issue.

The concern that ANIs were being coerced was brought to the attention of NSRS management as well as the TVA Office of General Counsel (OGC) on October 9, 1985, by GUITY after preliminary investigation revealed potential problems. According to GUITY, numerous subsequent discussions were held with NSRS management regarding the ANIs' concerns. Efforts were made by GUITY to have some of the ANIs granted confidentiality and assured employment with TVA as a means of establishing credibility with TVA if the ANIs were terminated by HSBII. Subsequent correspondence from NSRS to OGC was generated wherein the specific background information was provided to OGC (Exhibit 3). However, investigative efforts by TVA were apparently cancelled after OI:RII initiated its investigation. There was no investigative report generated by NSRS or OGC.

On or about November 1, 1985, two ANIs were called to the HSBII Atlanta office for a conference with Regional Management wherein the ANIs were reportedly criticized and castigated by the Regional manager for causing TVA and HSBII problems. The ANIs were reportedly informed that HSBII would do whatever was necessary to maintain the TVA contract, and they were threatened with

termination if they stood in the way and did anything to adversely affect TVA's contract with HSBII. A summary of that meeting was prepared by HSBII management and provided to the concerned ANIs (Exhibit 4). This summary also contained a form which the ANIs were directed to complete whenever they had discussions with anyone outside their company to document the time that was expended and the information/material which was provided. Numerous discussions regarding the ANI issue were held by NSRS managers and OGC without substantive action being taken by TVA. As a result of this inaction, GUITY asked to be taken off the investigation.

Prior to 0I:RII involvement, and before the "extortion" letter, the primary concern expressed by one former ANI was that he had been directed to accept the "use as is" disposition of WBN Non-conformance Condition Report (NCR) 5609 regarding Unit 1 which did not meet the minimum requirements of the ASME Code. This occurred in April-May 1984 and again in October 1985 when the same deficiency, documented in WBN NCR 6420, was identified on Unit 2 with regards to hidden welds on flued head containment piping penetrations. TVA offered the same disposition on Unit 2, "use as is," which again was not acceptable to the ANI involved and was subsequently not accepted by the HSBII Atlanta management personnel. Later meetings between TVA and HSBII resulted in the decision that TVA would use fiberoptics to review the hidden welds in Unit 2 and, when necessary, cut away the insulation to enable an examination for leakage during hydrostatic testing. No plans were made for any re-examination of Unit 1.

Because of the "extortion" letter received by TVA, TVA communicated with the Hartford corporate office and expressed a general "lack of confidence" in HSBII to perform adequate, acceptable inspection activities. This, however, apparently did not have an impact on the existing contract HSBII had with TVA and has not affected the current contract. The concerns raised by the ANIs were not new since they were voiced by a TVA employee in April 1985 (Exhibit 5, page 7) during a personal appearance before the TVA Board of Directors.

Interview with Mansour GUITY, Nuclear Engineer, Investigations Group, Nuclear Safety Review Staff (NSRS)

On November 5, 1985, GUITY was interviewed (Exhibit 6) in response to his telephonic contact with OI. GUITY stated that in August 1985 he was assigned to investigate an "extortion letter" (Exhibit 2) sent to TVA by an anonymous source. The letter expressed the need for comparable pay between TVA Quality Control (QC) Inspectors and third party independent Authorized Nuclear Inspectors (ANIs) contracted to TVA by HSBII, Atlanta, GA. He said that while conducting his investigation, he discovered that the ANIs at the Watts Bar Nuclear Plant (WBN) were being "overridden" on inspection decisions by TVA through the HSBII management. He indicated that this was primarily being done with Non-conformance Condition Reports (NCRs). GUITY explained that when a question would arise at WBN concerning the acceptability of a weld, test or system, personnel in TVA's Code, Standards and Materials (CSM) Group would contact the HSBII management in Atlanta and apply pressure to have final decisions changed. He said this pressure would then be placed on the WBN ANIs by Atlanta HSBII management. GUITY related that the ANIs kept daily diaries and copies of NCRs, some of which reflected personal notes about work being

accepted at the direction of someone in the HSBII management chain. He said even though he had only conducted preliminary interviews, he felt there was evidence that rejectable work had been accepted because of pressure placed on the WBN ANIs from TVA CSM group through HSBII, Atlanta. This primarily pertained to the inaccessible vendor welds on flued head piping penetrations in Unit 1 at the WBN.

GUITY stated he questioned the ANIs independence because TVA had conducted hydrostatic testing on flued head piping penetrations that contained vendor welds which were inaccessible to examination for leakage. He said the ASME Code required these welds be examined for leakage during hydrostatic testing, and added that TVA had waived the requirement for the vendor to test the inaccessible welds in order to save money. GUITY indicated that there was evidence that the WBN ANIs were directed by HSBII management to accept this ASME Code violation. GUITY stated that one of the problems he had encountered in pursuing the ANI issue was that Marc BRESSLER, Staff Specialist, Codes, Standards and Material Group (CSM), TVA, was on the ASME National Board and has a great deal of influence in the nuclear industry. He asserted that if BRESSLER was putting pressure on HSBII to have ANIs accept work that was unacceptable, HSBII would be inclined to accept BRESSLER's guidance because they are under contract to TVA. GUITY stated that TVA had acknowledged there were some problems in the area of flued head penetrations that have vendor welds. According to GUITY, these welds are now covered with insulation, in many cases are inaccessible, and have never been visually examined for leakage during hydrostatic testing by TVA or the ANIs. He said the welds, as well as the systems they are part of, can be hydrostatically tested, but because of their inaccessibility, the welds cannot be visually inspected for leaks. GUITY related that he had also received information that TVA calls HSBII, Atlanta, reporting ANI activities on site and questioning HSBII management about how much time the ANIs had been spending with NSRS and Quality Technology Company (QTC).

INVESTIGATORS' NOTE: QTC is a consulting firm which was contracted by TVA to identify and resolve employee concerns. Coordination by OI:RII with QTC established that ANIs had registered complaints with QTC regarding the issues which predicated this OI investigation. Copies of statements obtained by QTC were released to OI and utilized in the OI investigation; and they are retained in the OI:RII Field Office. The QTC investigation was held in abeyance pending the results of the OI investigation, and no report was prepared.

GUITY stated that when an ANI identified a questionable area, WBN management called BRESSLER or Walter JOEST, Metallurgical Engineer, CSM group, and complained about the ANI's refusal or reluctance to accept TVA's disposition. He said BRESSLER or JOEST then called HSBII Atlanta and discussed with either William HIGGINBOTHAM, Regional Manager, Harold ROBISON, Assistant Regional Manager, or Charles IRELAND, Site Supervisor, the performance of the ANIs and the problems identified by ANIs.



On November 21, 1985, GUITY was reinterviewed and related that the issue of coercion of ANIs was not new, and explained that it was first brought to the attention of TVA's Board of Directors by Jerry SMITH, an NSRS engineer, in April 1985 (Exhibit 5). GUITY provided a chronology of events and identified those individuals from TVA that he advised of his concerns. They are set forth in the attached Results of Interview (Exhibit 6).

INVESTIGATORS' NOTE: GUITY's initial concern regarding the extortion letter received by TVA was monitored by OI:RII and is addressed in Case No. Q2-85-35, closed on April 9, 1986. Additionally, an agreement was reached with GUITY and William MASON, TVA OGC, on November 21, 1985, to reproduce and provide to OI copies of all the documentation GUITY had compiled and reviewed during his investigation. Accordingly, GUITY furnished all this documentation to OI:RII. It consists of rough notes and statements pertaining to GUITY's interviews of 4 ANIs, 4 daily diaries maintained by these ANIs, and pertient extracts from these diaries. This information was evaluated and utilized by OI during the course of its investigation; and it is retained in the OI:RII Field Office. GUITY did not continue his investigation and, therefore, was unable to fully substantiate the concerns and allegations he had been investigating.

Interview with Stephen B. HEATER, Boiler Inspector, HSBII

On November 20, 1985, HEATER was interviewed (Exhibit 7) and questioned about the allegation that ANIs had been coerced by HSBII management into accepting work that they (ANIs) considered rejectable. HEATER stated he did not personally feel compelled or coerced by his management to accept work that was unacceptable or did not meet ASME Code requirements. He said he was aware of vendor welds on flued head piping penetrations in the containments of Units 1 and 2 at WBN that had not been visually inspected during hydrostatic testing because they have metal sleeves (guard pipes) around them. He said the ASME Code requires that all safety-related welds be visually inspected during hydrostatic testing and the code will allow inspection up to a distance of 30 inches. He said if the inspections are not performed, the code is violated and the systems cannot be accepted. He related that he thought this issue had been addressed by an NCR but he was not sure of the resolution. HEATER stated that as an Authorized Nuclear Inspector-Inservice (ANII), he was only concerned about in-service tests and never had to sign off (accept) on N-5 data packages; and added that all work performed in his presence was conducted to his satis-He said differences between ANIs, their management and TVA were usually resolved by discussing the concern and reaching a mutual agreement. said the differences were usually a matter of interpretation, which could be resolved with dialogue. HEATER stated that he had never been told not to talk to QTC, NSRS or the NRC, and he felt WBN was safely constructed and posed no risk to public health and safety.

Interview with Henry W. BEST, Authorized Nuclear Inspector

On November 21, 1985, BEST was interviewed (EXHIBIT 8) regarding his knowledge of possible attempts on the part of HSBII management to coerce ANIs assigned to the TVA nuclear plant sites to approve violations of ASME Code requirements that the ANIs considered to be rejectable. BEST stated that in his opinion, a serious problem had developed between the ANIs at WBN, the TVA CSM group and his regional supervision at HSBII in Atlanta, GA. He related that several items in N-5 data packages submitted to the ANIs at WBN have been rejected. This resulted in the entire package not being certified by the ANI until TVA took the necessary corrective action required to bring the rejectable item into compliance with the ASME Code. He acknowledged that some rejections are based on the individual ANI's interpretation of the ASME Code requirements and that someone else may have a different interpretation of the code. He stated that it appears that someone in TVA management (CSM group) may be applying

pressure on HSBII Regional Managers to have the ANIs "buy off" or "accept" some of the items rejected by the ANIs without the ANIs' approval of the corrective action being taken by TVA. BEST explained that on at least two occasions (September 26, 1985 and November 1, 1985) during meetings, he was castigated by HIGGINBOTHAM for various reasons, to include talking to QTC, and was told by HIGGINBOTHAM that he (BEST) was part of the problem at WBN and it would be better if he (BEST) quit. He said HIGGINBOTHAM stated that BRESSLER told him (HIGGINBOTHAM) that he (BEST) may be the cause of HSBII losing their contract with TVA. BEST stated that according to HIGGINBOTHAM, BRESSLER thought he (BEST) was the most incompetent, unreliable and unprofessional inspector he (BRESSLER) had dealt with in years. BEST explained that on a later occasion he was summoned by HSBII management to Atlanta and was told by HIGGINBOTHAM that they (HIGGINBOTHAM and BEST) had some serious problems to discuss (Exhibit 4). He said they talked about NCR 6420, flued head piping penetrations in Unit 2 at WBN. He related that HIGGINBOTHAM said HSBII did not agree with TVA's proposed disposition and they (ANIs) were instructed not to sign off on the N-5 data package associated with the flued heads. BEST related that this seemed unusual to him because the "use as is" disposition of NCR 5609, which addressed the same problem in Unit 1 at WBN, had been accepted by HSBII. He added that Howard HASTON, a former ANI, was directed to sign off on NCR 5609 by ROBISON, and noted that TVA had informed HSBII that if the ANI could not accept TVA's disposition, they would delete the welds from the N-5 data package. BEST stated that at the same meeting, HIGGINBOTHAM complained about a "serious problem" with the WBN ANIs spending a lot of time with QTC and NSRS. He said Walt JOEST had complained and HIGGINBOTHAM told him (BEST) that he (BEST) was the culprit. He related that according to HIGGINBOTHAM, JOEST complained about being tired of answering questions about ANIs from both QTC and NSRS, and commented that he (BEST) had "diarrhea of the mouth." BEST explained that he later learned from HASTON that JOEST had "chewed out" HIGGINBOTHAM because he (BEST) and DEATON were causing too many problems at WBN.

BEST explained that he did not feel TVA handled document control problems or the flued head issues in accordance with the ASME Code requirements. BEST stated he felt some of the problems the ANIs experienced were a result of TVA CSM personnel (BRESSLER and JOEST) applying pressure to HSBII management and demanding that certain actions be taken to remedy some of the issues surfaced by the ANIs at WBN. He said he did not feel he was alone in his opinion of the situation at WBN. He said he felt TVA created the current problems with HSBII by trying to influence the decision of the site ANIs by putting pressure on HSBII management, using HSBII's contract with TVA as leverage.

INVESTIGATORS' NOTE: BEST resigned from HSBII in May 1986 and assumed a position in a non-nuclear occupation in Chattanooga, TN.

Interview with Ernest L. FARROW, Authorized Nuclear Inspector-In Service

On January 23, 1986, FARROW, ANII at Sequoyah Nuclear Plant, was interviewed (Exhibit 9) regarding his knowledge of HSBII or TVA management personnel attempting to pressure him into accepting work that did not conform with ASME Code requirements. FARROW related that he did have a problem (Exhibit 10) with required documentation known as Exhibit "D", that certifies that an individual (inspector) has completed adequate on-the-job training (OJT) to qualify them for certification as a Level II inspector. He said some